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1 AMENDMENTS

April 27, 2016: Academic Status:
The revised text is in italics.

There are four kinds of academic standing: In Good
Standing; On Probation; On Suspension; Refused Further
Registration. The following regulations apply to students
who have attempted at least 0.5 credits at the university.

1. Students who are neither on probation, suspended,
   nor refused further registration are described as
   being in good standing. Their cumulative GPA is at
   least 1.50.
2. Students shall be on academic probation if they:
   (a) have a cumulative GPA of less than 1.50, or
   (b) return from suspension, or
   (c) have been admitted on academic probation.
3. Students who, at the end of any session (Winter or
   Summer) during which they are on probation:
   (a) have a cumulative GPA of 1.50 or more shall be
      in good standing;
   (b) have a cumulative GPA of less than 1.50, but a
      sessional (Summer) or annual (Fall-Winter) GPA
      of 1.70, or more, shall continue on probation;
   (c) have a cumulative GPA of less than 1.50, and a
      sessional (Summer) or annual (Fall-Winter)
      GPA of less than 1.70, shall be suspended for
      one calendar year unless they have been
      suspended previously, in which case they shall
      be suspended for three calendar years.
4. Students who return from a three-year suspension
   and are again liable for suspension shall be refused
   further registration to the University of Toronto.

NOTES:

1. There are two sessions (Summer and Fall/Winter) in
   each calendar year and status is assessed at the end
   of each session. Status is not assessed following the
   Fall term.
2. Courses attempted are those in which a student was
   enrolled on the deadline to drop a course without
   academic penalty unless an LWD (Late Withdrawal
   After the Drop Date) or a WDR (Late Withdrawal) has
   been approved for the course.
3. Cumulative GPA and sessional GPA/annual GPA will
   be calculated for students who have course grades
   pending due to SDF, GWR or NGA. Academic status
   will be assessed excluding these courses.
4. Students who finish the Fall-Winter session or the
   Summer session on probation and who have been
   granted deferred standing in a course, are advised to
   enrol in a maximum of 5.0 further courses
   (Fall/Winter) minus the weight of the course in which
   they have been granted a further deferral. Students
   on academic probation (less than 1.50 CGPA) are
   advised NOT to enrol in summer session courses.

May 9, 2016: Exclusion for BIO202
Typo corrected: BIOB23H3 was listed as an exclusion; it
should be BIOB32H3

May 16, 2016: Digital Enterprise Management
(ERSPE1307)
Delete: 456H5/ 460H5 from list of Third and Higher Years
courses. That section now reads:

Third and Higher Years:

1. CCT401H5, 404H5, 424H5, 460H5, MGD421H5,
   426H5, 428H5 and 0.5 credit from CCT410H5,
   MGD415H5, 422H5, 423H5, 427H5, 429H5
2. In addition, 2.0 credits from any 300/400 CCT level
courses.

May 30, 2016: Consistency/correction for Specialist
Program ERSPE2722 Financial Economics (Science)
The marks indicated in the first year box were corrected to
be consistent with the marks listed in the "limited enrolment"
statement above it. i.e. ECO100Y1/ 100Y5; 63% in
MAT134Y5/ 135Y1/ 135Y5 or 60% in MAT137Y1/ 137Y5/
157Y1.

June 21, 2016: Academic Status:

Good Standing; Probation; Suspension

REVISED PARAGRAPH: There are four kinds of academic
standing: In Good Standing; On Probation; On Suspension;
Refused Further Registration. For the 2016 Summer
Session, the following regulations apply to students who
have attempted at least 4.0 credits at the university.
Effective the 2016-17 Fall-Winter session and onward, the
following regulations apply to students who have attempted
at least 0.5 credits at the university.

June 23, 2016

(1) Clarification of credits required for ERMIN1540 and
ERSPE1540
(2) Clarification of pre-requisites for HSC404H5.

July 18, 2016: Three new combined-degree programs
added to Psychology

GSCOBSPYMA: Combined Degree Program: Psychology
(Specialist), Honours Bachelor of Science/Child Study and
Education, Master of Arts

GSCOBMPYMA: Combined Degree Program: Psychology
(Major), Honours Bachelor of Science/Child Study and
Education, Master of Arts

GSCOBSHLMA: Combined Degree Program:
Exceptionality in Human Learning (Specialist), Honours
Bachelor of Science/Child Study and Education, Master of
Arts
2 Important Information

This calendar provides information for the University of Toronto Mississauga only. Every effort is made to have this information complete and correct at the time of publication; however, contents may change. Check www.utm.utoronto.ca/regcal for updates or consult the Office of the Registrar.

Staff and faculty are always available to give guidance to students; however, it must be clearly understood that the ultimate responsibility rests with the student for completeness and correctness of course selection; for compliance with prerequisite, corequisite and exclusion requirements, or other course entry requirements; for completion of program requirements; for proper observance of distribution requirements; and for observance of regulations, deadlines, etc. Students are responsible for seeking guidance from a responsible university officer if they are in any doubt regarding information in this calendar. Misunderstanding or incorrect advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, program or degree requirement.

Please note that not all courses listed in this calendar are offered every year. For a complete listing of courses offered this academic year, see the timetable at www.utm.utoronto.ca/timetable.

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. If the University 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, 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, prerequisites and corequisites, grading policies, requirements for promotion and timetables without prior notice.

Regulations and Policies
As members of the University of Toronto community, students assume certain responsibilities and are guaranteed certain rights and freedoms. The University has several policies that are approved by the Governing Council and 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 University are listed in this calendar. In applying to the University, the student assumes certain responsibilities to the University and, if admitted and registered, shall be subject to all rules, regulations and policies cited in the calendar, as amended from time to time.

University policies can be found at www.governingcouncil.utoronto.ca/policies

Those which are of particular importance to students are:

- Code of Behaviour on Academic Matters
- Code of Student Conduct
- University Assessment and Grading Practices Policy
- Policy on Official Correspondence with Students

More information about students’ rights and responsibilities can be found at http://life.utoronto.ca/get-help/rights-responsibilities

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

Obligations of a Registered Student
Students who enrol in courses agree by virtue of that enrolment to abide by all of the academic and non-academic policies, rules and regulations of the University as set out in the academic calendar. By virtue of enrolment they also accept responsibility for payment of associated fees, and agree to ensure that the accuracy of personal information such as their current mailing address, telephone number, and utoronto.ca email address is maintained.

A student’s registration is not complete until he or she has paid tuition and incidental fees, or has made appropriate arrangements to pay. Students who defer fee payment or whose payment is deferred pending receipt of OSAP or other awards, acknowledge that they continue to be responsible for payment of all charges, including any service charges that may be assessed. For details see the Student Accounts website at www.fees.utoronto.ca

Student I.D. Number
Each student at the University is assigned a unique identification number. The number is confidential. The University, through the Policy on Access to Student Academic Records, strictly controls access to Student I.D.
numbers. The University assumes and expects that students will protect the confidentiality of their Student 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 admissions, registration, academic programs, university-related student activities, activities of student societies, safety, financial assistance and awards, graduation and university advancement, and reporting to government. In addition, the Ministry of Training, Colleges, and Universities has asked that we notify you of the following: The University of Toronto is required to disclose personal information such as Ontario Education Numbers, student characteristics and educational outcomes to the Minister of Training, Colleges and Universities under s. 15 of the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, Chapter M.19, as amended. The ministry collects this data for purposes such as planning, allocating and administering public funding to colleges, universities and other post-secondary educational and training institutions and to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the ministry for purposes that relate to post-secondary education and training. Further information on how the Minister of Training, Colleges and Universities uses this personal information is available on the ministry’s website. 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.

Eligibility for Registration
Receipt of registration material, or any campus publication, submission of a registration form, or payment of fees, does not necessarily constitute eligibility to register in the coming session. Students who are suspended will be so informed and will not be permitted to register. Any fees paid toward the session will be refunded in full.

The Academic Calendar
The U of T Mississauga Academic Calendar serves as an academic information guide and statement of the most important rules and regulations for students seeking to obtain the degrees of Honours Bachelor of Arts, Honours Bachelor of Science, Bachelor of Commerce or Bachelor of Business Administration from the University of Toronto Mississauga.

Course descriptions, complete curriculum information, prerequisites, corequisites, exclusions, academic advisory information and information on each program area are available in this calendar. Students should read all information regarding the programs they are interested in, including all course descriptions, prerequisite and exclusionary information and degree requirements. This information will help students select the courses they need to complete their program(s) of choice. Academic advisors are available at the Office of the Registrar and faculty advisors or undergraduate assistants are available in each academic department. When researching courses and programs, students are encouraged to pay particular attention to exclusions, prerequisites and corequisites.

Amendments (if any) to this calendar will be posted under the "Amendments" section of the html version.

Registration Guides
Supplementary registration guides are available at www.utm.utoronto.ca/guides. These guides contain specific registration and enrolment instructions. The information contained in these guides is as important as that in this calendar.
3 Sessional Dates

The contents of this calendar apply to the Summer 2016 and 2016-2017 Fall-Winter sessions.

Sessional Dates

This list contains key Academic Deadline dates. Students should also consult the complete listings of REGISTRATION, FINANCIAL and PETITION deadline dates that are published in the Summer and Fall/Winter Registration Guides. These guides are available at www.utm.utoronto.ca/guides.

2016

May 09 Summer Session classes begin in all F and Y Courses
May 15 Last day to add F & Y courses for Summer Session.
May 23 Victoria Day Holiday - University closed
June 20 Classes end in F courses for Summer Session
June 21 - July 03 Study Break for Summer Session Y courses
June 22 - 24 Final Exams for F courses for Summer Session
July 01 Canada Day Holiday - University closed
July 04 Summer Session classes begin in S courses; Y courses resume
July 10 Last day to add S courses for Summer
August 01 Civic Day Holiday - University closed
August 15 Classes end in S and Y courses, Summer Session
August 17 - 19 Final Exams for S and Y courses, Summer Session
September 05 Labour Day Holiday - University closed
September 06 Fall-Winter Session classes begin in F and Y courses
September 19 Last day to add F & Y courses for Fall-Winter Session
October 10 Thanksgiving Day Holiday - University closed
October 11 - 14 Fall Reading Week - No classes University is open
December 05 Last day of classes for S & Y courses
December 06 - 07 Study Break
December 08 - 20 Final Exams for F Session courses. Term tests may be held in Y courses
December 21 - 30 December Holiday - University closed

2017

January 02 Fall-Winter Session S courses begin and Y courses resume
January 15 Last day to add S courses for Winter
February 20 Provincial Holiday (Family Day) - University closed
February 21 - 24 Reading Week - No Classes University is open
March 31 Last day of classes for S & Y courses
April 01 - 05 Study Break
April 06 - 22 Final Exams for S & Y courses
April 14 Good Friday Holiday - University closed
4 Admission Information

4.1 General Admission Information

Information on admission requirements and applications can be found at www.adm.utoronto.ca/admissions or by contacting the University of Toronto Mississauga’s Student Recruitment and Admissions Office at:

Student Recruitment and Admissions
University of Toronto Mississauga
Room 1270, Innovation Complex
3359 Mississauga Road
Mississauga, ON L5L 1C6
Canada
Tel: 905-828-5400
Fax: 905-569-4448

Applications may be considered from candidates whose qualifications do not meet the minimum requirements, but such candidates will have to offer written evidence of exceptional ability or extenuating circumstances.

4.2 English Language Requirement

Applicants whose first language is not English (i.e. the language learned at home as a child), and who have studied full time in an English language school system for less than four years in a country where an official language is English, must present proof of English facility. For details, please visit www.adm.utoronto.ca.

Some students whose first language is not English, and whose language proficiency test scores fall within a discretionary range for admission, may be admitted with the condition that they successfully complete an Academic Culture and English (ACE@UTM) program. More information is available at http://uoft.me/ace.

Students who do not meet language proficiency requirements and are not offered the ACE@UTM program for admission should consider completing the Academic English Course at the School of Continuing Studies English Language Program (ELP). Students who successfully complete level 60 of this program will be considered for admission. Visit http://english.learn.utoronto.ca for more information.

4.3 Admission to Undergraduate Degree Studies from Secondary School

Ontario

Applicants must be eligible to receive the Ontario Secondary School Diploma, with six Grade 12 U or M courses (or equivalent) including 12U English/Anglais (ENG4U/EAE4U – applicants from French-language high schools may substitute FEF4U/FIF4U or equivalent), and meet any prerequisites for their intended program of study.

Canada (Outside Ontario)

Applicants from Quebec must present the Diplôme d’études collégiales (DEC) with 12 academic CEGEP subjects including English/Anglais (two terms) or the Quebec high school diploma with six Grade 12 academic subjects, including English. Students from other Canadian provinces and territories must present Grade 12 graduation. Details of specific requirements can be found at www.adm.utoronto.ca.

United States

Applicants studying in the US high school system must present Grade 12 graduation with high scores in SAT Reasoning or ACT examinations and at least two SAT Subject Tests and/or IBs/APs in subjects appropriate to their proposed area of study. Details are available at www.adm.utoronto.ca.

Countries Outside Canada and the United States

Students who have studied in a country outside of Canada and the United States should go to www.adm.utoronto.ca for specific admission requirements.

4.4 Admission with Previous Post-secondary Studies

Candidates who have acceptable standing at other universities, colleges of applied arts and technology and/or other post-secondary institutions may be considered for admission with transfer credit provided that the content of the studies previously taken is considered appropriate for including in a degree program offered at U of T Mississauga.
U of T Faculty of Arts and Science (FAS) and U of T Scarborough (UTSC)

Candidates admitted for transfer from FAS and UTSC will have all FAS or UTSC courses and grades included in their University of Toronto Mississauga academic record, and will have University of Toronto Mississauga rules and regulations applied to these; e.g., academic status, degree regulations, Dean's List, Credit/No-credit, LWD. Note: A limit of six 100-level/A-level credits is applied. All 300+ level credits may apply to the 6.0 credit requirement for the degree at the University of Toronto Mississauga.

Candidates from FAS and UTSC who are admitted to U of T Mississauga do not need to apply for a Transfer Credit Assessment. Instead their courses and grades will automatically be retained when they transfer to U of T Mississauga.

Students admitted to U of T Mississauga cannot retain FAS or UTSC Subject POSts, whether complete or incomplete. Only U of T Mississauga Subject POSts may be used to complete degree requirements at the U of T Mississauga.

Other Divisions at U of T

Candidates who have acceptable standing at other undergraduate divisions of U of T (i.e. John H. Daniels Faculty of Architecture, Landscape and Design, Faculty of Applied Science and Engineering, Faculty of Kinesiology and Physical Education, Faculty of Music) may be considered for admission with transfer credit provided that the content of the studies previously taken is considered appropriate for inclusion in a degree program offered at U of T Mississauga.

Please note: Grades for courses from these divisions will not be retained and are not included in the Cumulative Grade Point Average (CGPA) of the U of T Mississauga degree. Grades for any Faculty of Arts and Science (FAS) and/or U of T Scarborough (UTSC) courses that have been completed will be retained and will be included in the CGPA.

Colleges of Applied Arts & Technology (CAAT)

U of T Mississauga grants a maximum of 3.0 transfer credits to students who have studied at a publicly-funded Ontario CAAT for four full-time semesters (or equivalent) and a maximum of 5.0 transfer credits to students who have studied for six full-time semesters (or equivalent). Exceptions occur where students are completing CAAT programs with specific collaborative transfer agreements with U of T Mississauga. Visit www.utm.utoronto.ca/collegepathways for more information.

Other Universities

Students who have studied at an accredited university (or other equivalent post-secondary institution) can receive a maximum of 10.0 transfer credits, however, those who have already received a university degree (or completed the equivalent of three or more years of full-time study) may only receive a maximum of 5.0 transfer credits.

Transfer Credit Assessment and Appeals

Admitted students must apply and pay for transfer credit assessment for any previous post-secondary studies. For information about the Transfer Credit Assessment process, including application and payment, visit www.utm.utoronto.ca/transfer.

Note: Regardless of the number of transfer credits granted, five of the six 300-/400-level credits required for an Honours Bachelor of Arts, Honours Bachelor of Science, Bachelor of Business Administration, or Bachelor of Commerce Degree, must be completed at U of T with suitable standing.

Students have one year from the date of their Transfer Credit Assessment, or from the date of their first registration at U of T Mississauga, whichever is later, to request a reassessment or adjustment. The same time limit applies to all departmental interviews and submission of course outline and syllabi.

4.5 Second Undergraduate Degree

U of T Mississauga

Students who have completed their first degree at U of T Mississauga and wish to be admitted to a second undergraduate degree program should seek academic advising in the Office of the Registrar.

See also Second Degree Requirements (Page 30)

Previous Degree Outside of U of T Mississauga

Applicants who hold a bachelor’s degree, or equivalent, from another post-secondary institution, and who wish to complete a second undergraduate degree in a different field of study, may apply for admission into a degree program at U of T Mississauga. Before applying, external candidates are urged to determine whether a second degree is actually required for their purposes. For example, a "make-up" or additional year as a non-degree student may satisfy admission requirements for a graduate or professional program. To apply, check the University of Toronto’s admissions website at www.adm.utoronto.ca, the University of Toronto’s School of Graduate Studies website at www.sgs.utoronto.ca, or the Ontario Universities’ Application Centre website at www.ouac.on.ca.
Note: Students may not complete a second degree in the same field of study as their first degree. For example: students who have a degree with a Major/Specialist in Commerce, Management, or Economics cannot pursue a Bachelor of Commerce or Bachelor of Business Administration as a second degree. This is due to the extensive overlap of courses between these degrees.

4.6 Admission to Non-degree Studies

Non-degree students

Non-degree students are those who are registered in degree courses, but are not progressing toward a degree.

Non-degree students are students with permission to register in courses at the University of Toronto at the discretion of the head of the academic division, usually the Dean or as delegated.

Non-degree students have no admission to or association with a program of study. Accordingly, they have no ongoing rights to register for courses. Registration in a particular course remains a matter of divisional discretion in every case.

Non-degree students (with the exception of those with previous U of T degrees) are not eligible to take courses at other U of T campuses. Students will be withdrawn from courses at anytime if their registration violates this rule.

The policy governing non-degree students is the Governing Council policy "Association, Admission and Registration" - uoft.me/nondeg

Please note: The University of Toronto Mississauga may not always have sufficient capacity to admit non-degree students. Management (MGM and MGT) courses are not available to non-degree students.

Previous Degree Completed

Non-degree students have completed degree studies at an accredited institution and are taking further courses for their own purposes, including admission to graduate studies or professional programs. Students admitted as degree students cannot become non-degree students at U of T Mississauga until they have completed an honours degree. Further information and applications are available at www.adm.utoronto.ca

Visiting Student

Students with valid "Letters of Permission" and a transcript showing they are in good academic standing from another accredited North American university may apply to the University of Toronto Mississauga as non-degree visiting students, taking courses for transfer credit at their home university. Non-degree visiting student status does NOT imply future acceptance as either a degree student, or a non-degree student at U of T Mississauga. Non-degree visiting students registered at U of T Mississauga are not permitted to take courses at other divisions of the University of Toronto. Returning Non-degree visiting U of T Mississauga students must re-apply for admission to each session. Further information and applications are available at www.utm.utoronto.ca/prospective.

*Former UTM students, who are currently registered at another North American university, and wish to take UTM courses to count towards their degree at their home university, must apply to UTM as a Visiting Student.

Mature or Non-traditional Students

Prospective students who do not meet the published admission requirements may be eligible to pursue one of the non-traditional pathways for admission for non-matriculants. Consult the Student Recruitment and Admissions Office to determine which pathway is the most appropriate at 905-828-5400.

General Arts and Science College Pathways

U of T Mississauga has partnered with local college General Arts & Science diploma programs to simplify and enhance the transfer process from these institutions. Students can earn a diploma before transferring to UTM with advanced standing for degree studies. For participating institutions and more information visit www.utm.utoronto.ca/collegepathways.

UTM Bridging Pathway

Canadian Citizens, Permanent Residents or Convention Refugees who are at least 20 years of age, and who have been away from formal education for at least 3 years, may be eligible for the UTM Bridging Pathway. Visit www.utm.utoronto.ca/bridging for more information.

Senior Citizen

Canadian citizens or Permanent Residents of Canada who are at least 65 years of age by the first day of a term may register at U of T Mississauga as part-time, non-degree students. They do not have to meet the academic requirements for admission. Applicants should contact the Student Recruitment and Admissions Office (905-828-5400) for admission and tuition fee information.

Please note: Senior citizens must pay tuition fees, but are eligible for an exemption from compulsory non-academic incidental fees.

4.7 Admission with Restrictions

Admission "On Probation"

Applicants who do not meet U of T Mississauga's requirements for admission may, on appeal, be admitted
because of extenuating circumstances. They may be given a clear offer of admission or they may be subject to the following conditions:

- They may be admitted "On Probation," in which case they will be "On Probation" until the end of the first Fall-Winter session in which they are registered.
- At the end of the first Fall-Winter session they will be assessed as follows:
  1. Students with a cumulative grade point average (CGPA) of 1.50 or more will be in good standing;
  2. Students with a CGPA of less than 1.50 will be suspended for one calendar year. Upon return they will remain "On Probation," and will be under the regulations for academic status outlined in Academic Status of the University of Toronto Mississauga Calendar.
- While on probation, students are not eligible to enrol in courses for transfer credit at another university or postsecondary institution.
- Students on probation are at risk of academic suspension. They are strongly urged to consult an academic advisor in the Office of the Registrar before registering for courses. They should consider a reduced course load during the Fall-Winter session and should avoid compressed, intensive summer courses.

### 4.8 Deferring Admission

Applicants who are considering taking a year off between high school and university may request a one year deferral of admission. All conditions of the offer of admission must be satisfied before a deferral request will be considered. If granted, the deferral of admission will include a deferral of any entrance scholarship(s) awarded and the residence guarantee if applicable.

To request a deferral, a student must complete a Deferral Request Application form found on the Enrolment Services website ([www.adm.utoronto.ca](http://www.adm.utoronto.ca)) and send it directly to Enrolment Services no later than September 1st or as soon as official final results are available. A copy of a final transcript or report card must be received by Enrolment Services or attached to the deferral request form.

Students who attend any post-secondary institution while their offer of admission is deferred will be required to reapply to U of T Mississauga. Any post-secondary studies, regardless of which (if any) courses are completed, may change the basis of admission and the original offer will be invalid.

### 5 Fees

#### 5.1 Definition of Fees

Domestic student and international student fees are established by the Governing Council and set out in detail on the Student Accounts website ([www.fees.utoronto.ca](http://www.fees.utoronto.ca)). Fees normally consist of tuition, incidental and ancillary fees (including items such as shuttle bus, Health and Counselling Centre, athletics, student services, and student organizations). Fees are subject to change at any time by approval of the Governing Council.

Fee levels are based on the normal length of time it takes to complete a full-time program, i.e. four consecutive years for a BBA/BCom/HBA/HBSc. Students who stay for more than the normal length of time for their program may face higher tuition fee levels in the subsequent years.

This information is intended only as a general guide. For detailed information please consult the Student Accounts website ([www.fees.utoronto.ca](http://www.fees.utoronto.ca)).

#### 5.2 Types of Tuition Fees

Tuition fees are assessed by program or by course, depending on the program(s) of study you are registered in.

**Course Fees**

Course fees are assessed based on the number of credits in which a student is enrolled. When a course is added, the course fee is charged immediately, regardless of when the course begins. When a course is cancelled, the course fee is reversed in accordance with the refund schedule.

**Program Fees**

Program fees are assessed when a student is registered in a specialized deregulated fee program, and enrols in a minimum number of credits.

Students who are in the Commerce Specialist or CTEP are charged a flat program fee if enrolled in 3.0 credits or more, and a deregulated per course fee if enrolled in 2.5 credits or less.

Students who are in Bioinformatics; Commerce (major); Communication, Culture, Information & Technology (CCIT); Computer Science; Digital Enterprise Management; Human Resource Management and Industrial Relations; Information Security; Interactive Digital Media; Management; and Visual Culture and Communication are
charged a flat program fee if enrolled in 4.0 credits or more, and a deregulated per course fee if enrolled in 3.5 credits or less.

Students with a documented, permanent disability who are registered with the AccessAbility Office, may opt to pay the deregulated per course fee instead of the deregulated program fee by speaking with the AccessAbility Office.

Students who accept a deregulated program Subject POSt (Program of Study) will be back-charged deregulated fees for all courses commencing with the session after 4.0 credits were completed.

5.3 Invoices, Payments, and Refunds

Fees invoices are available on a student’s ACORN account.

Tuition fees are paid through the bank (online banking, telephone banking or in-person at the bank). Students must take a printout of their ACORN invoice to the bank if they pay their fees in person. Fees cannot be paid at the Office of the Registrar. It is the student’s responsibility to pay fees by the deadline.

Students who cancel one or more courses may be eligible for a fee refund or reversal depending on the course cancellation date(s) recorded on ACORN. Refund schedules for program fees and course fees are different. Fee refund schedules are available on the Student Accounts website (www.fees.utoronto.ca).

5.4 Fee Deferral

Students who are not able to pay fees by the registration deadline may request to register without payment if they will be receiving OSAP, other government student loans, or a scholarship that is greater than their fees. Information on fee deferrals can be found on the Student Accounts website (www.fees.utoronto.ca).

Students must not have any outstanding fees from a previous session in order to be eligible for a fee deferral.

5.5 Outstanding Fees

Payment or official deferral of fees is required to complete registration. Students who do not pay or defer their fees will be removed from their courses. Help and details on how to avoid losing a place in classes are outlined in the U of T Mississauga Summer and Fall-Winter Registration Guides (www.utm.utoronto.ca/guides).

Fees that remain unpaid by the published deadlines will incur a monthly service charge of 1.5% compounded (19.56% per annum). Payments made by continuing or returning students will first be applied to outstanding university debts and then to current fees.

The following are recognized University obligations:

1. Tuition fees
2. Academic and other incidental fees
3. Residence fees and charges
4. Library fines
5. Bookstore accounts
6. Loans made by colleges, faculties or the university
7. Health and Counselling Centre account
8. Office of the Registrar accounts
9. Unreturned or damaged instruments, materials and equipment;
10. Orders for the restitution, rectification or 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 will be imposed on students with outstanding University obligations:

1. Official transcripts of record will not be issued.
2. The University will not release either the official document (normally called a diploma) which declares the degree, diploma or certificate earned nor provide oral confirmation or written certification of degree or enrolment status to external enquirers. Indebted graduands will be allowed to participate in convocation and have their names appear in the convocation program.
3. Registration will be refused or withdrawn to continuing or returning students.

Students are responsible for paying their fees as shown on ACORN. Outstanding fees are transferred to an external collections agency. For more information on outstanding fees, visit the Student Accounts website (www.fees.utoronto.ca).

6 Scholarships and Financial Aid

6.1 Scholarships and Awards

Recognition of Exceptional Academic Achievement

Dean’s List designation is given to U of T Mississauga degree students having a Cumulative Grade Point Average (CGPA) of 3.50 or higher, at the end of the Fall-Winter or Summer Session in which the fifth, 10th, 15th and 20th credit offered by the university has been passed. The Dean sends a letter of commendation to each student having achieved this level of performance.
High 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.

Distinction
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.

Scholarships
U of T Mississauga scholarships are awarded to degree students on the basis of one or more of the following criteria: academic merit, volunteer experience, student involvement and/or financial need. Awards may be in the form of a monetary gift, medals or certificates. Many of U of T Mississauga’s awards recipients are automatically selected based on specified criteria, however, some awards require applications. Additional information on scholarships and other awards is available through the Office of the Registrar Awards website (www.utm.utoronto.ca/awards).

6.2 OSAP and Government Financial Aid

Ontario Student Assistance Plan (OSAP) and the Ontario Tuition Grant (OTG)

The online application for the Ontario Student Assistance Program (OSAP) is available to Ontario residents who are Canadian citizens, permanent residents, or Protected Persons. OSAP is designed to assist with educational and living expenses in the form of loans, grants and bursaries. OSAP loans for full-time students are interest-free and non-repayable while the student remains enrolled in at least a 60% course load at all times throughout the year, or a 40% course load for a student with a documented permanent disability. No averaging of course loads is permitted. For example, if a student enrols in 80% of a course load in the first term and 40% in the second term, the course loads cannot be averaged to 60%. In this case, the student would be ineligible for loans or interest relief in the second term.

Students who apply for OSAP are automatically considered for the Ontario Tuition Grant. Students who are not applying for OSAP funding may apply separately for the Ontario Tuition Grant.

Information concerning OSAP may be obtained from Financial Aid Advisors in the UTM Office of the Registrar, or the University of Toronto Enrolment Services Office (www.adm.utoronto.ca/financial-aid/), or from the OSAP website (osap.gov.on.ca).

Other Government Financial Aid

Students from other Canadian provinces or the United States should apply through their provincial or governmental financial aid authority. Links to financial aid programs are available at the Enrolment Services website (www.adm.utoronto.ca/financial-aid/).

Bursaries for Students with Disabilities

Non-repayable assistance is available for OSAP recipients who have educational expenses as a result of a documented permanent disability. Information and applications are available from the U of T Mississauga AccessAbility Resource Centre (www.utm.utoronto.ca/accessability/) or the University of Toronto Enrolment Services Office (www.adm.utoronto.ca/financial-aid/financial-aid-for-students-with-permanent-disabilities).

Part-Time Assistance

A number of programs are available to students who study on a part-time basis. Forms of assistance include Part-time OSAP and the Noah Meltz Bursary. More information can be obtained at the University of Toronto Enrolment Services website (www.adm.utoronto.ca/financial-aid/information-for-part-time-students).

6.3 Grants

Students who have explored all other avenues of financial assistance (e.g., family support, OSAP lines of credit, part-time employment, etc.) and still have unmet financial need may apply for a University of Toronto Mississauga Grant. Visit the www.utm.utoronto.ca/registrar/financial-aid-awards/grants-bursaries for information.

6.4 University of Toronto Advance Planning for Students (UTAPS)

University of Toronto Advance Planning for Students (UTAPS) is a financial aid program for full-time students who are Canadian citizens, permanent residents or protected persons (recognized convention refugees) and are eligible for need-based government student assistance or funding from a First Nations band.

The University’s Policy on Student Financial Support states that students should have access to the resources required to meet their financial needs as calculated by the Ontario Student Assistance Program (OSAP). UTAPS funding is based on OSAP methodology as it provides a uniform, verified way of assessing student need.
For students who are assessed by OSAP as requiring maximum assistance and whose assessed need is not fully covered by government aid, the University will ensure that the unmet need is met. Students receiving funding from another province/territory or a First Nations band are also eligible for consideration.

Visit the UTAPS website (www.adm.utoronto.ca/financial-aid/u-of-t-advance-planning-for-students-utaps) for additional information.

7 Support for Student Success

7.1 Office of the Registrar

The Office of the Registrar provides information related to degree requirements, university rules and regulations, interpretation of the Academic Calendar, and personal or academic concerns that influence academic performance from admissions to graduation. www.utm.utoronto.ca/registrar

7.2 Departmental Advising

Departmental advisors offer detailed information on their respective programs (specialists, majors and minors) individual courses and instructors. www.utm.utoronto.ca/programs-departments

7.3 Student Affairs and Services

The Division of Student Affairs is committed to providing a living and learning environment that promotes student success both inside and outside of the classroom. There are many elements that contribute to student success. The Dean of Student Affairs leads a team of professionals who provide services in these areas:

- AccessAbility Resources & Disabilities
- Career & Employment Resources
- Diversity & Equity
- Orientation & Transition Programs
- Health & Counselling
- Student Housing & Residence Life
- International Student Support & Study Abroad
- Leadership Programs
- Community Service Learning
- Indigenous Student Supports
- Physical Education, Athletics & Recreation.

www.utm.utoronto.ca/sas

7.4 Student Organizations (Ulife)

Ulife is a one-stop website listing a large and diverse directory of student clubs, organizations, activities and opportunities on all three campuses. The many student organizations include student governments, academic societies and clubs spanning social, academic, service, culture, faith and athletic interests. www.ulife.utoronto.ca

7.5 Office of the University Ombudsperson

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

8 General Regulations

8.1 Responsibilities of Students

Student success at U of T Mississauga depends upon the student’s response to the opportunities provided. Instructors, advisors, counsellors and support services can help, however it is the responsibility of students to ensure:

- they monitor their own records using Degree Explorer and ACORN;
- course selection is correct, timely and complete, with particular attention to deadlines;
- all course, program and degree requirements are met;
- adherence to the university’s policy on academic honesty;
- contact information is correctly recorded on ACORN; and
- information sent to them via their utoronto e-mail account is monitored, read and understood.
General Regulations  Registration Regulations

Misunderstanding, misapprehension or incorrect advice received from another student will not be accepted as a reason for exemption from any regulation, deadline, program or degree requirement.

Students with questions or concerns about course content, tests or assignments within the term should first work directly with the relevant teaching assistant or instructor. If the outcome is unsatisfactory, they should speak with the department's discipline representative and if necessary after that, with the chair of the department in which the course is offered. If there are questions or concerns around a university rule (such as late course withdrawal, deferral of a final exam, suspensions) or about fees or refunds, students should contact the Office of the Registrar.

Please note: Students who are still registered in a course after the final date to cancel (or drop) will receive a grade for that course, even if they have never attended, have stopped attending or did not write the final examination. They are responsible for applicable fees regardless of any subsequent changes.

Personal Information

Personal information provided at the time of admission becomes part of your student record and should be kept up-to-date at all times. This information is a vital part of the student's official university record and is used to issue statements of results, transcripts, graduation information, diplomas and other official documents and information. The university is also required by law to collect certain information for the federal and provincial governments; this is reported only in aggregate form and is considered confidential by the university. Any change in the following must therefore be reported immediately to the Office of the Registrar:

1. Legal name
2. Legal status in Canada

Any change of the following must be recorded on ACORN:

1. Permanent address and telephone number
2. Mailing address and telephone number while attending U of T Mississauga (if different than above)
3. Emergency contact information

Student TCard

The student TCard is a wallet-sized card bearing the student's photograph. It is used for identification purposes within the university, such as evidence of registration, as a library card, for participation in student activities, athletic association privileges, signing up for academic and financial advising, identification at examinations, on Mississauga Transit and to utilize the campus meal plan. The loss of the student TCard must be reported promptly to the TCard Office (www.utm.utoronto.ca/tcard). The card becomes invalid when a student is not actively registered with the university. There is a fee of $12 for replacement cards. The university is not responsible for funds accumulated on the TCard if it has been lost.

utoronto E-mail Account

The university’s official method of corresponding with students regarding registration, enrolment status, student accounts and other important areas of business, is through their University of Toronto e-mail accounts.

It is the student's responsibility to check his/her utoronto e-mail account on a regular basis.

UTORid

A UTORid is a student-specific account name that allows access to a variety of services, such as: ACORN, the UofT Portal, utoronto e-mail, Blackboard, Degree Explorer, online services of the Office of the Registrar, UTMail+ and the on-campus wireless network.

8.2 Registration Regulations

Registration

Registration is a two-step process:

1. enrolling in the courses for which you are eligible; and
2. paying or deferring your fees by the published deadline.

Students should enrol in courses using ACORN.

Any student enrolling in courses after the registration deadline will be charged a late registration fee. (See Outstanding Fees (Page 12))

Students should be aware that permission to register after the end of the registration period may be refused.

Letters Confirming Registration

Students who require written proof of registration may request it online (www.utm.utoronto.ca/forms). A fee is charged. Although U of T Mississauga is not on a formal year-by-year system, for the purpose of letters of confirmation of registration, the following equivalency chart is used:

<table>
<thead>
<tr>
<th>No. of Passed Credits</th>
<th>Equivalent Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3.5</td>
<td>1</td>
</tr>
<tr>
<td>4.0 - 8.5</td>
<td>2</td>
</tr>
<tr>
<td>9.0 - 13.5</td>
<td>3</td>
</tr>
<tr>
<td>14.0+</td>
<td>4</td>
</tr>
</tbody>
</table>

2016-2017 Calendar
Reactivation of Student Record

Students will need to complete a request to reactivate their student record online (www.utm.utoronto.ca/forms) and pay a fee if they were previously registered as a degree or non-degree student with academic standing (i.e. grades or late withdrawals) at U of T Mississauga and wish to return after an absence of at least 12 consecutive months. All outstanding fees must be paid and any financial holds must be cleared before a student record is reactivated.

Students who were previously registered but did not obtain standing (i.e. grades or late withdrawals) in at least one course must re-apply for admission through the Ontario Universities Application Centre. Students previously registered as non-degree visiting students must submit a new visiting student application by the deadline prior to each session. Students who studied elsewhere during their absence from this university and now wish to have credits transferred should follow the procedure outlined in the section Courses at Other Universities (Page 19).

NOTE: If a student reactivates his or her record, but does not enrol in a course and pay tuition within 12 months, the reactivation becomes invalid.

Dropping Courses

Students who wish to drop a course, or courses (by the academic deadline), must do so by using ACORN before the final date to cancel courses, as specified in the Registration Guide. Students who have been charged or sanctioned with an academic offence may not drop a course. (For information regarding dropping of courses after the deadline dates see below and "Petitions, Appeals, Deferrals (Page 27)."

Deadlines for Dropping Courses

Academic and financial deadlines are very different. Pay close attention to the dates as financial deadlines are much earlier than academic deadlines.

- An academic deadline is the last day to drop a course from your academic record and GPA. See "Important Dates" in the Registration Guide (www.utm.utoronto.ca/guides).
- Students who wish to drop a course after the posted academic deadline must do so online (www.utm.utoronto.ca/forms) by the last day of classes. (See Late Withdrawal after the Drop Date).
- A financial deadline is the last day to drop a course(s) and receive a refund. See "Important Dates" at www.utm.utoronto.ca/guides.

Late Withdrawal after the Drop Date (LWD)

Once the academic deadline for dropping a course has passed, the only method of dropping a course without petition is by using the LWD option. Students may request to withdraw from a course via the LWD option from a total of no more than 3.0 credits, provided such a request is made by the last day of classes in the relevant term and if they have not written the final exam (or final test/assignment, in those courses without final exams). Such requests are made online at registrar.utm.utoronto.ca/student/LWD.

Withdrawals approved under this procedure will be noted on a student’s academic record by the course status LWD (Late Withdrawal after the Drop Date), but will not have an effect on a student’s GPA or other elements of the academic record. A student may not request to have the course reinstated once an LWD has been applied for and granted.

Students who are granted an LWD are still responsible for paying full fees. Non-attendance is NOT the same as dropping a course. If a student does not attend class, he/she is still responsible for all fees associated with that course and will be assigned a grade.

Students who have been sanctioned for committing an academic offence in a course are not permitted to request LWD from a course.

Ineligible Enrolment in Courses

Students who enrol in a course for which they are ineligible (e.g. balloted courses; courses with prerequisites, corequisites and/or exclusions) may be removed from the course. It is the students’ responsibility to check course prerequisites, corequisites and exclusions prior to enrolling.

ACORN (or Accessible Campus Online Resource Network) – Online enrolment services

Students have access to a variety of enrolment services through the U of T’s Accessible Campus Online Resource Network (ACORN). Within established deadlines, students can use ACORN to add, wait-list and cancel (drop) courses, change sections, list current courses, obtain final grades, print tax forms, print invoices and view their financial account balances and detailed charge and payment information. Refer to the Registration Guide (www.utm.utoronto.ca/guides) and www.acorn.utoronto.ca for further information.

Withdrawal from a Session

Students who find it necessary to stop attending all of their courses for the Fall-Winter or Summer session
must drop all of their courses, including those they are wait-listed on, and cancel their registration on ACORN as soon as possible or, at the latest, by the last date to cancel courses without academic penalty.

Not attending classes is not the same as withdrawing from a session. Students will still be given a mark based on work submitted and missed assignments will be marked accordingly. Merely ceasing to attend classes will result in a failing grade for each course.

If students withdraw from a session within a refund period, they must cancel their registration for the session on ACORN before a refund of fees will be issued (see schedule at www.feeds.utoronto.ca). Students should also return any books to the library, pay outstanding fees, vacate any laboratory or athletic lockers and return any equipment in their possession.

If a newly-admitted student withdraws from all courses and cancels their registration, they must reapply for admission should they wish to return to UTM in the future.

8.3 Course Regulations

Definition of a Course

All courses are considered to be for degree credit, unless designated as "extra" courses. (This does not apply to "non-degree" students.)

The word "course" is used in two senses. In reference to a single course (such as "standing in a course," etc.) "course" refers equally to a full course or a half course. In reference to a given number of courses, "courses" refers to full courses, or the equivalent number in full and half courses. To "pass a course," or "obtain standing in a course," normally means to obtain a mark of 50%, or more, in that course.

Each course is assigned a credit value. Full-year courses (indicated by a "Y" in the course code) are normally worth a full (1.0) credit. Half-year courses (indicated by an "F" or an "S" in the course code) are normally worth a half (or 0.5) credit. However, a few courses held over a full year are valued at a half (0.5) credit and a few courses held over one-half a year are valued at a full (1.0) credit. Students should ensure they accurately identify each course’s credit value.

Y = Full credit course (1.0)
H = Half credit course (0.5)

Choosing Courses

1. Students plan their own program, selecting from among all courses offered, subject to the following rules:

(a) The degree and program requirements, distribution requirements and other regulations set out in the calendar, U of T Mississauga Registration Guide (www.utm.utoronto.ca/guides) and departmental handbooks must be satisfied.
(b) All prerequisite, corequisite and exclusion requirements must be met.
(c) No more than 6.0 100-level credits may be taken for degree credit. Additional 100-level credits completed will be designated as "extra" and will not count for degree credit or be included in the Grade Point Average (GPA).

2. 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:

(a) 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.
(b) When students need to demonstrate a level of performance for an external credential or future graduate study.

Students may repeat a specific passed course only once. The repeated course will appear on the student’s academic record, but will be designated "extra" and will not be included in GPA calculations or in the degree credit count. Students who wish to repeat a course under these circumstances should obtain appropriate advising in the Office of the Registrar prior to submitting their Course Enrolment Exception Form online at www.utm.utoronto.ca/forms. Eligible students may enrol provided there is space available and only after other degree students have had an opportunity to enrol.

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

4. Conflicting Courses: Students are discouraged from enrolling in courses where scheduled lectures, tutorials or laboratories conflict with other courses in which they have already enrolled.

Students who enrol in courses with conflicting lectures, tutorials or laboratories may not receive accommodations for conflicting tests, assignments, lecture material, in-class participation, etc.
Exclusions, Prerequisites, Corequisites, Recommended Preparation, Extra Courses, Supplemental Courses

Exclusion: Students should not enrol in a course that lists a current course they are taking, or a course they have already passed, as an exclusion. Where a student needs to take a given course for program requirements, but has already successfully completed a course listed as an exclusion, they should consult with the department sponsor of their program. If the departmental sponsor confirms that the given course is required for program and the exclusion the student has taken is not allowable to fulfill program requirements, then the course may be taken as an extra (EXT). The most recently taken course is assigned as extra (EXT) with one exception. An exception occurs when the required course is a full course and the previously taken exclusion is a half course; in this case, the previously taken half course exclusion becomes extra (EXT) and the current full course retains its degree credit standing.

NOTE: Although it might not be noted in this calendar, some courses offered at other U of T campuses may be exclusions to U of T Mississauga courses and vice versa. If courses have similar titles or content, it is the student’s responsibility to contact the offering department at U of T Mississauga to determine if the course can be taken for credit.

Prerequisite: A course (or other qualification) that a student has successfully completed that is required as preparation for a course. If students consider that they have equivalent preparation, they may ask the department concerned to waive the stated prerequisite. Students who enrol in a course for which they lack the prerequisite may be removed from the course at any time.

Corequisite: A requirement to be undertaken concurrently with another course. The corequisite will be waived if a student has previously obtained standing in it, or if the department consents. A student who withdraws from a course must also withdraw from any course for which the cancelled course is a corequisite, unless the department giving the latter course agrees to waive the corequisite.

Recommended Preparation: Background material, or courses that may enhance a student’s understanding of a course.

Extra Courses appear on official transcripts with the notation "EXT." Extra courses do not count towards the total number of credits required for a degree and are not included in the GPA, but may be used to satisfy distribution, program or prerequisite/corequisite requirements.

Supplemental Courses are courses taken after the maximum number of courses allowed (for degree credit) with the same three-letter designator have been passed. These "supplemental" courses will not count for degree credit but will count in the GPA, program and distribution requirements.

Course Loads and Overloads

Students are encouraged to enrol in the number of courses with which they feel comfortable and which they can reasonably expect to complete successfully. Students who are enrolled in a total of 3.0 or more credits in the Fall-Winter sessions (September to April) are considered to be full time, and should attempt to balance their course load evenly between the Fall and Winter sessions. Students are considered to be part time if they are enrolled in 2.5 or fewer credits in the Fall-Winter session.

The normal course load for the 20.0-credit, four-year honours degree is 5.0 credits per year. Others take 4.0 credits during the Fall-Winter session and take 1.0 credit in the Summer.

It is strongly recommended that, in order to ensure academic success, a student who is on academic probation should not take more than 4.0 credits in Fall-Winter sessions and should not enrol in summer courses.

The maximum credit load in the Fall-Winter session combined is 6.0 credits (a maximum of 3.0 credits per term) and in the Summer session it is 2.0 credits (a maximum of 1.0 credits per term). Students who wish to exceed these limits are required to complete an online course overload petition at www.utm.utoronto.ca/forms, before registering in the course. Enrolment in credits over the maximum must be approved prior to registration but no later than the first day of classes. The Office of the Registrar will make every effort to consult with students in unapproved course overloads. Students who enrol in more than the maximum course load without prior petition approval, may not receive accommodations for conflicting tests, assignments, lecture material, in-class participation, etc.

To calculate course loads, students need to consult the course timetable, www.utm.utoronto.ca/timetable, to determine when the course is offered and the duration of the course.

Auditing Courses

The University of Toronto Mississauga does not recognize the auditing of courses. However, the Committee on Standing may recommend that a current student do so when permission has been received to write a deferred exam and where the instructor and/or course content could be different from when the student originally took the course.

8.4 Enrolling in Courses in other U of T Divisions

U of T Mississauga students are eligible to take courses at other U of T campuses only after they have successfully completed 4.0 U of T Mississauga credits (this does not include transfer credits). Students will be withdrawn from courses at any time if their registration violates this rule.
If taking courses on other U of T campuses toward fulfilling U of T Mississauga program requirements, please check with the U of T Mississauga department to ensure the courses are acceptable toward program requirements.

Enrolment for U of T Mississauga students in UTSC or FAS courses opens when enrolment restrictions are lifted later in the enrolment period providing there is still space available in the course, and providing the course is not restricted.

Non-Degree students (with the exception of those with previous U of T degrees) are not eligible to take courses at other U of T campuses. Students may be withdrawn from courses at anytime if their registration violates this rule.

Students should check their division calendar and timetable for eligibility in individual courses. U of T Mississauga academic and financial deadlines still apply to courses taken at other campuses, with the exception of the Late Withdrawal after the Drop Date (LWD) option.

### 8.5 Courses at Other Universities

#### Letters of Permission

A letter of permission is prior confirmation from U of T Mississauga that an intended course at another Canadian university is acceptable for transfer credit.

Students may take a maximum of 5.0 credits elsewhere for transfer credit on a letter of permission, but only 1.0 transfer credit may be used to satisfy the degree requirement of 300/400 level courses – see Degree Requirements (Page 29).

To be eligible for a letter of permission, and receive credit, students must:

1. have a cumulative GPA of 1.50 or more;
2. have completed a minimum of 4.0 credits at U of T Mississauga; and
3. earn a minimum grade of C- (60%) for the credit to be transferred.

**NOTE:** The grade associated with a transfer credit will not appear on a student’s transcript and is not included in the calculation of GPAs.

Letters of permission are only granted for study at universities in Canada.

Students who study in other countries must apply for Post-admission Transfer Credit Assessment after they have completed the course(s). Before students leave to study at the other institution, they should contact their academic department to determine if the course(s) are appropriate in content. Once they have returned from studying abroad, students should request Post-admission Transfer Credit Assessment at www.utm.utoronto.ca/transfer. **There is no guarantee that they will receive transfer credit for these courses.**

The deadline to apply for a letter of permission is generally four to eight weeks before the start of the semester in which they wish to study elsewhere (refer to registration guides for deadlines at www.utm.utoronto.ca/guides).

After students have completed the courses for which they have been approved for a letter of permission (earning a minimum grade of C- or 60%), they must have a transcript of results sent to U of T Mississauga’s Transfer Credit Unit, Office of the Registrar, from the other institution at which they studied. Students who do not send a transcript of results will not receive credit for the course(s) taken on that letter of permission and **will not be granted** another letter of permission.

If a student fails a course taken elsewhere on a letter of permission, they may not be granted another letter of permission.

Students admitted with transfer credit should consult U of T Mississauga’s Transfer Credit Unit, Office of the Registrar, about the number of courses they may take on a letter of permission. Refer to the regulations on the letter of permission request form for further details. The letter of permission form is available at www.utm.utoronto.ca/lop.

#### Facilitated Credit Transfer

U of T Mississauga has partnered with six other Ontario universities to enhance student choice through facilitated credit transfer; McMaster University, Queen’s University, the University of Guelph, the University of Ottawa, the University of Waterloo, and the University of Western Ontario. Students interested in taking introductory-level courses at one of these institutions on a Letter of Permission, should consult www.utm.utoronto.ca/lop for a current list of equivalencies.

#### Studying Elsewhere Without Prior Letters of Permission

If students do not obtain a letter of permission before they study elsewhere, they must apply afterwards for Post-admission Transfer Credit Assessment for the course(s) completed elsewhere. There is no guarantee that they will be awarded any transfer credit for these courses. (See also Letters of Permission (Page 19).

A student who is suspended from the University will not be eligible to earn transfer credits from another institution during the suspension period.

In order to obtain Post-admission Transfer Credit Assessment, students must apply and pay a processing fee using the form available at www.utm.utoronto.ca/transfer.
8.6 Transcripts

The transcript of a student’s record reports grades of all courses completed by the end of the previous session and courses currently in progress (IPR), along with course average, information regarding academic status (including record of probation, suspension and refusal of further registration) and completion of degree and Subject POS (program of study). Final course results are added to each student’s record at the end of each term.

Individual courses that a student cancels within the normal time limit are not shown. However, when students have been permitted Late Withdrawal after the Drop Date (LWD) or by petition to withdraw from a course after the deadline date (WDR), these courses will appear on the transcript with the respective notation (LWD or WDR).

Copies of the transcript will be issued at the student’s request, subject to reasonable notice. Requests should be submitted, either online at www.acorn.utoronto.ca, in person or in writing, to the address indicated below.

A fee of $12 for each transcript ordered can be charged to your student account (if there is an outstanding tuition balance on your account, service charges will apply). Payment also can be made online using a credit card.

Alternatively, a “Request for Transcript” form can be downloaded at www.transcripts.utoronto.ca, and submitted by fax, mail or in person to:
University of Toronto Transcript Centre
Sidney Smith Hall
Room 1006
100 St. George St.
Toronto, ON M5S 3G3
Fax: 416-978-2487

Transcripts are not issued for students who have outstanding obligations with the university.

Transcripts issued directly to students are issued in a signed and sealed envelope. Students must indicate at the time of the request if the purpose of the transcript is for enclosure in a self-administered application. Such transcripts will be issued in specially sealed envelopes. The U of T Transcript Centre cannot be responsible for transcripts lost or delayed in the mail.

In accordance with the university’s policy on access to student records, a student’s record will not be released without the student’s authorization.

8.7 Term Work Regulations

The following regulations summarize U of T Mississauga’s implementation of the University Assessment and Grading Practices Policy (http://uoft.me/gradingpractices).

Term Work

Both essays (or equivalent work) and examinations (including term tests) are normally required for standing in courses. In courses where only one form of evaluation is used, a single piece of work should not normally count for all of the final mark. Self-evaluation by individual students or groups of students is not permissible unless the specific consent of the Committee on Academic Standards is received.

No later than the first day of classes, a syllabus will be accessible to students via the online timetable. The information on this page will include the methods by which student performance will be evaluated, and their relative weight in the final mark, including any discretionary factor and the due dates. These methods must be in accord with applicable university and faculty policies.

Once the weight of each component of the course work is given, it may not be changed unless approved by a majority of the students present and voting at a regularly scheduled meeting of the class.

After the last date to withdraw from the course without academic penalty, no change in weighting may take place unless there is unanimous consent of all students present. Notice must be given at the regularly scheduled class meeting prior to that at which the issue is to be raised.

Instructors shall return by the deadline one or more marked assignments and/or term tests worth a combined total of at least 15% of the total course mark for H courses and 25% for Y courses. The deadline for returning such marked work shall be the last regular class meeting prior to the academic drop date, with one exception: for courses that run the entire Fall/Winter Session (Y5Y or H5Y courses), the deadline shall be the last regular 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 alternate date is specified by the instructor. Students who for reasons beyond their control wish to seek an extension of this 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 the Office of the Registrar for a further extension of the deadline. (See Petitions, Appeals, Deferrals (Page 27)).

Assignments are the property of the student and must be returned. Students must make any inquiries about the mark on a graded piece of work within one month of the return date of the work. Unclaimed term work must be kept by the instructor/department for one year after the end of the course.

Study Break

Study Breaks take place immediately following the last day of classes of each term.
During study break:

- Optional review sessions may be held; no new content may be introduced
- Students will be allowed to hand in assignments, at the discretion of the instructor
- Make up tests may be held
- Term tests may not be held
- Instructors may offer extended office hours, at their discretion.

Re-marking Pieces of Term Work

A student who believes that his or her written term work has been unfairly marked may ask the person who marked the work for re-evaluation. Students have up to one month from the date of return of an item of term work to inquire about the mark. If the student is not satisfied with this re-evaluation, he or she may appeal to the instructor in charge of the course if the work was not marked by the instructor (e.g., was marked by a TA). Such re-marking may involve the entire piece of work, and may raise or lower the mark.

Any appeal of the mark beyond the instructor in the course may only be made for term work worth at least 20% of the course mark. Such appeals must be made in writing to the department within one month after the work was returned, explaining in detail why the student believes that the mark is inappropriate. The appeal must summarize all previous communications between the student and previous markers of the work. The student must submit the original marked piece of work.

If the department believes that re-marking is justified, the department shall select an independent reader. The student must agree in writing to be bound by the results of the re-reading process or abandon the appeal.

Where possible, the independent reader should be given a clean, anonymous copy of the work. Without knowing the original assigned mark, the reader shall determine a mark for the work. The marking of the work should be considered within the context of the course of instruction for which it was submitted. If the new mark differs substantially from the original mark, the department shall determine a final mark taking into account both available marks.

8.8 Term Tests

No term test, or combination of term tests in an individual course, held in the last two weeks of classes at the end of term, may have a total weight greater than 25% of the final mark.

All term tests must be held on or before the last day of classes, and no term test may be scheduled during study break or the December examination period (with the exception of term tests for Y courses with more than one lecture section, or with special permission of the chair of the department).

Missed Term Tests

Students who miss a term test will be assigned a mark of zero for that test unless they are granted special consideration.

If the term test was missed for reasons entirely beyond the student’s control, a written request for special consideration may be submitted to the instructor within one week of the missed test. This request must explain the reason for missing the test and include appropriate documentation (e.g. Verification of Student Illness or Injury form).

A student whose explanation is accepted by the instructor may be granted a makeup test or a redistribution of weighting of other graded work. If the course has no other term work as part of the evaluation, a makeup test will be given. In no case may the weighting of the final examination in a 100-level course be increased beyond two-thirds of the total course mark.

If the student is granted permission to take a makeup test and misses it, then he or she is assigned a mark of zero for the test unless the instructor is satisfied that missing the makeup test was unavoidable. Students are not automatically entitled to a second makeup test.

8.9 Declaration of Absence

U of T Mississauga students are required to declare their absence from a class, for any reason, through their ACORN accounts in order to receive academic accommodation for any course work such as missed tests, late assignments, and final examinations. Absences include those due to illness, death in the family, religious accommodation or other circumstances beyond their control.

In addition, students must also follow the absence policies of the department and the instructor, which may require additional documentation.

Students declare absences via their ACORN account on the day of their absence (or by the day after, at the latest). Once they have submitted the required information, they will be redirected to specific U of T Mississauga course policies regarding academic accommodation, which may include submission of an official Verification of Student Illness or Injury form or other documentation.

Missed Final Exams

In addition to using the Absence Declaration on ACORN, students are still required to submit proper medical or other documentation to support a formal petition for deferred exams. For more information on petitions, please see Petitions, Appeals, Deferrals (Page 27).

Students should consult with the Office of the Registrar if the period of absence will be lengthy and affect more than one exam.
8.10 Examinations

U of T Mississauga Final Examinations

A final examination, common to all sections of the course, and counting for between one-third and two-thirds of the final mark, must be held in each undergraduate course, unless an exemption has been granted. Department Chairs may grant exemptions to instructors from holding final examinations in 200-, 300- and 400-level courses. In any course where there is a final examination, the Department Chair may allow a reduction in the value of the examination from one-third of the final mark to no less than one-quarter of the final mark.

Final examinations are held at the end of each term. Students who make personal commitments during the examination period do so at their own risk. Students are expected to be available for the entire examination period. Information regarding dates and times of examinations will not be given by telephone. The examination timetable is available at www.utm.utoronto.ca/exams. Please note that students cannot re-write an examination that they have already attempted.

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. Students taking Monday to Friday day or evening courses may be required to write Saturday examinations.

The ratio of term marks to examination mark will be the same for all sections of multi-section courses that have final examinations.

Examination Conflicts

U of T Mississauga students who have:

1. two University of Toronto final examinations in the same time slot, or
2. three consecutive final examinations – e.g. 1 p.m., 5 p.m. on a Monday, and 9 a.m. on a Tuesday (Note: This accommodation does not apply to the deferred examination period), or
3. three examinations on one day,

should submit an online "Examination Conflict(s) & Religious Accommodation Reporting Form" (www.utm.utoronto.ca/forms) to the Office of the Registrar by no later than the deadline listed on the U of T Mississauga examination schedule.

Students who are enrolled in a scheduled course conflict (lecture to lecture) at the time the exam schedule is produced will not be accommodated for scenarios 2 and 3 above.

In the case of a conflict between a final examination and a term test, the final examination takes priority. Students should contact the department offering the term test to make arrangements to write the test at an alternate time.

Accommodation for Religious Reasons

Students must complete an "Examination Conflict(s) & Religious Accommodation Reporting Form" available at www.utm.utoronto.ca/forms. The reporting form must be submitted to the Office of the Registrar by the date listed on the U of T Mississauga examination schedule.

Rules of Conduct for Examinations

1. No person will be allowed in an examination room during an exam except the students concerned and those supervising the exam.
2. Students must appear at the exam room at least fifteen minutes before the posted start time of the exam.
3. Students are required to bring two pieces of photo ID to each exam. One MUST be a valid U of T student ID card (TCard) and the other must be government-issued (e.g. driver’s licence, passport).
4. Bags, purses, coats/jackets, books are to be deposited in areas designated by the Chief Presiding Officer (CPO) and are not to be taken to the exam desk or table. Students may place their wallets in the clear, sealable, plastic bags and put them on the floor under their chairs. The student must not touch or open the bags during the exam.
5. All electronic devices with storage, including but not limited to, cell phones, tablets, laptops, calculators, and MP3 players must be turned off, sealed in the clear, plastic bags provided and placed under the desk for the duration of the examination. The student must not touch or open the bags during the exam.
6. The CPO has authority to assign seats to students.
7. Students cannot communicate with one another, in any manner whatsoever, during the examination.
8. Students may not leave the exam room unescorted for any reason, and this includes using the washroom.
9. No materials shall be brought into the room or used at an exam except those authorized by the CPO or the presiding officer.
10. Students who bring any unauthorized material into an examination room, or who assist or obtain assistance from other students or from any unauthorized source, are liable to penalties/sanctions as listed in the university’s Code of Behaviour on Academic Matters, including the loss of academic credit, suspension or expulsion.
11. Students who are less than 30 minutes late for a final exam may enter the exam room and begin writing. The CPO is not required to give any extra time. Students who are more than 30 minutes late for a final exam must report immediately to the Office of the Registrar, Innovation Complex, Room 1235.
To ensure minimal disruption at the beginning and end of an exam, students must remain seated at their desks for at least the first 30 minutes and the final 10 minutes of an examination.

During the last 10 minutes of an exam, students are to remain in their seats until the exam is over and the CPO has collected all exams.

At the conclusion of an exam, students must stop writing. The CPO may seize the papers of students who fail to observe this requirement. The CPO will write a detailed anomaly (see above) and inform the student that this matter will be reported to the Office of the Dean and a penalty may be imposed.

Exam books and other material issued for the exam cannot be removed from the exam room, except by authority of the CPO.

U of T Mississauga is not responsible for personal property left in exam rooms.

### External Examinations

Students who take online courses and are unable to attend the campus and those students who have an exceptional reason for being unable to take an examination at the University of Toronto may petition for permission to write an examination at an external examination centre. To do so, the student submits an online petition to the Office of the Registrar at U of T Mississauga with supporting documentation. The student is responsible for finding an acceptable university/college and contact person to supervise the examination. If the petition is granted, the student will write the examination at the originally scheduled date and time under the supervision of staff at another university. A fee of $70 per examination plus applicable shipping costs is to be paid to the Office of the Registrar at U of T Mississauga. Students are responsible for any fees charged by the external examination centre. Petitions must be received at least four weeks before the beginning of the examination period. Such permission is granted only in exceptional circumstances.

### Deferred Examinations

Deferred examinations will normally be scheduled in the week following the regular exam period or, in the case of December exams, during Reading Week in February. Students who are granted further deferrals of unwritten final examinations are required to audit the course and write the exam the next academic session in which the course is offered.

### Examination Reproduction and Re-reads

#### Examination Reproduction

After the release of final marks, a reproduction of the examination can be obtained from the Office of the Registrar at U of T Mississauga. There is a non-refundable fee for each examination requested. An “Exam Reproduction Request(s)” form can be found online at [www.utm.utoronto.ca/forms](http://www.utm.utoronto.ca/forms).

#### Examination Re-reading

Requests for examination re-reads must be made within six months of the date of the exam. A clerical re-check of course marks must be done at the relevant department within six months of the end of the term in which the course was taken. After that date, all examinations are destroyed.

1. Students who feel there is merit for additional marks should complete an “Exam Re-Read Request(s)” form available at [www.utm.utoronto.ca/forms](http://www.utm.utoronto.ca/forms).

2. In completing the request, students must demonstrate that their answer is substantially correct, using evidence other than their own opinion, such as: lecture notes, textbooks, similar questions in tests, etc.

3. The fee to have an exam re-read is refundable if the overall course grade changes.

4. Once the Office of the Registrar is satisfied that a clear case for the re-reading of an exam has been made, the form will be attached to the original examination and sent to the department. If a valid case has not been made, the request for re-read will not be forwarded to the department for review, and the fee will be refunded.

The following are the possible results of re-read requests:

- the overall course grade may increase
- there will be no change in the overall course grade
- if another error is detected during re-reading, the overall course grade may decrease.

Any new grade that has been approved by the department chair is final: there will be no appeal for re-marks.

### 8.11 Statement of Results

Final grades are normally available on ACORN within two weeks following the end of each examination period.

GPAs are available on ACORN and are generally calculated only after all final grades have been posted.

Academic Status is also available on ACORN and is assessed following GPA calculations. Academic status is assessed only two times during the year, at the end of the Fall-Winter session and the end of the Summer session. Students whose academic performance has resulted in probation, suspension or refusal of further registration will be notified by e-mail. If students who are suspended or refused further registration have already enrolled in the next session before their status was known, the Office of the Registrar will cancel the student’s registration in that session and refund their tuition fees. See Academic Status for more details on how status is assessed and its implications.

Office of the Registrar staff will not give final marks to students or their designates by telephone.
8.12 Academic Honesty

Honesty and fairness are considered fundamental to the university’s mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with – and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of cheating and plagiarism very seriously.

Examples of offences for which you will be penalized include (but are not limited to):

- Using any unauthorized aids on an exam or test (e.g., “cheat sheets,” cell phones, electronic devices, etc.)
- Representing someone else’s work or words as your own – plagiarism
- Falsifying documents or grades
- Purchasing an essay
- Submitting someone else’s work as your own
- Submitting the same essay or report in more than one course (without permission)
- Looking at someone else’s answers during an exam or test
- Impersonating another person at an exam or test or having someone else impersonate you
- Making up sources or facts for an essay or report.

As a student it is your responsibility to ensure the integrity of your work and to understand what constitutes an academic offence. If you have any concerns that you may be crossing the line, always ask your instructor. Your instructor can explain, for example, the nuances of plagiarism and how to use secondary sources appropriately; he or she will also tell you what kinds of aids – calculators, dictionaries, etc. – are permitted in a test or exam. Ignorance of the rules does not excuse cheating or plagiarism.

This information is taken from a series of University of Toronto policies written to help students understand the university’s rules and decision-making structures. To view these policies, please go to www.governingcouncil.utoronto.ca/policies.htm. All of the policies and procedures surrounding academic offences are dealt with in one policy: “The Code of Behaviour on Academic Matters.” The full text is located in the back of this calendar. Students should also thoroughly review the information at the Academic Integrity web page, www.utm.utoronto.ca/academic-integrity
## 8.13 Grades

### Grading Scheme

Students are assigned a grade in each course as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
<th>Value</th>
<th>Grade Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100</td>
<td>A+</td>
<td>4.0</td>
<td>Excellent</td>
</tr>
<tr>
<td>85 - 89</td>
<td>A</td>
<td>4.0</td>
<td>Strong evidence of original thinking; good organization, capacity to analyze and synthesize; superior grasp of subject matter with sound critical evaluations; evidence of extensive knowledge base.</td>
</tr>
<tr>
<td>80 - 84</td>
<td>A-</td>
<td>3.7</td>
<td>Excellent</td>
</tr>
<tr>
<td>77 - 79</td>
<td>B+</td>
<td>3.3</td>
<td>Good</td>
</tr>
<tr>
<td>73 - 76</td>
<td>B</td>
<td>3.0</td>
<td>Evidence of grasp of subject matter, some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.</td>
</tr>
<tr>
<td>70 - 72</td>
<td>B-</td>
<td>2.7</td>
<td>Adequate</td>
</tr>
<tr>
<td>67 - 69</td>
<td>C+</td>
<td>2.3</td>
<td>Adequate</td>
</tr>
<tr>
<td>63 - 66</td>
<td>C</td>
<td>2.0</td>
<td>Student who is profiting from their university experience; understanding of the subject matter; ability to develop solutions to simple problems in the material.</td>
</tr>
<tr>
<td>60 - 62</td>
<td>C-</td>
<td>1.7</td>
<td>Adequate</td>
</tr>
<tr>
<td>57 - 59</td>
<td>D+</td>
<td>1.3</td>
<td>Marginal</td>
</tr>
<tr>
<td>53 - 56</td>
<td>D</td>
<td>1.0</td>
<td>Some evidence of familiarity with subject matter and some evidence that critical and analytic skills have been developed.</td>
</tr>
<tr>
<td>50 - 52</td>
<td>D-</td>
<td>0.7</td>
<td>Marginal</td>
</tr>
<tr>
<td>0 - 49</td>
<td>F</td>
<td>0.0</td>
<td>Inadequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Little evidence of even superficial understanding of subject matter; weakness in critical and analytical skills, with limited or irrelevant use of literature.</td>
</tr>
</tbody>
</table>

*Credit CR No Value

* As used in a Credit/No Credit evaluation
Other notations that do not have grade point values and are not included in GPA calculations are:

- **AEG**
  - AEGROTAT STANDING: For graduating students who have missed their final exam, credit may be assigned on the basis of term work and medical evidence. Authorized only by the Committee on Standing by petition. This option occurs only in extreme circumstances and is rarely offered.

- **CR/NCR**
  - CREDIT/NO-CREDIT: CR denotes a final mark of at least 50%. Marks below that will be assessed as NCR.

- **EXT**
  - EXTRA COURSE: Not-for-degree credit.

- **GWR**
  - GRADE WITHHELD PENDING REVIEW: Applied to students charged with an unresolved academic offence.

- **IPR**
  - COURSE IN PROGRESS

- **LWD**
  - LATE WITHDRAWAL AFTER THE DROP DATE: without academic penalty in an incomplete course that a student drops by the last day of classes and only if the request is made online. Student remains responsible for applicable tuition fees.

- **NGA**
  - NO GRADE AVAILABLE

- **SDF**
  - STANDING DEFERRED: Completion of course delayed by petition. Authorized only by the Committee on Standing. Student remains responsible for applicable tuition fees.

- **WDR**
  - LATE WITHDRAWAL: Without academic penalty in an incomplete course after the relevant deadline, due to circumstances beyond the student’s control. Authorized only by the Committee on Standing by petition. Student remains responsible for applicable tuition fees.

### Credit/No Credit

Students at the University of Toronto Mississauga may select up to a total of 2.0 credits to be assessed on a Credit/No Credit basis.

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. These courses may be used to meet Distribution Requirements, but cannot be used to satisfy Subject POST requirements.

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

Students may exercise this option for a total of 2.0 credits within the total number of credits required for a degree. CR/NCR requests are made on ACORN. The choice is not restricted as to year, level of course or campus. This option is not available to non-degree students.

The Credit/No Credit option must be chosen or cancelled no later than the last day to cancel that course without academic penalty. The Credit/No Credit 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.

**Warning:** Some programs specify that courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry. Program entry requirements are detailed in departmental listings in this calendar.

### Grade Point Average

Grade point average (GPA) is the weighted sum (full courses are weighted as 2 and half courses are weighted as 1) of the grade points earned, divided by the number of courses in which grade points were earned. Any courses taken as non-degree and non-degree visiting student will be included.

Courses noted as “AEG” or “CR” or “NCR” or “EXT” or “GWR” or “IPR” or “PASS” or “LWD” or “NGA” or “SDF” or “WDR” are not included in the average nor are transfer credits or courses taken on a letter of permission.

There are three types of grade point averages:

- **Sessional GPA** takes into account all passed and failed courses completed in a single term or session. Sessional GPA is calculated at three times during the academic year: Fall term (September-December), Winter term (January-April), or Summer session (May-August).

- **Annual GPA** takes into account all passed and failed courses completed in the Fall-Winter session only. This is calculated at the end of the Winter term.

- **Cumulative GPA** takes into account all passed and failed courses that you have taken.

An online CGPA calculator is available at registrar.utm.utoronto.ca/student/cgpa. A student’s UTO Rid is required to login.

GPAs are calculated at the end of each session only after the majority of final grades have been approved. Final grades are available on ACORN at the end of each session as soon as they are approved. Final grades are normally available on ACORN within two weeks of the last day of the exam period.

The minimum cumulative GPA required to remain in good standing is 1.50. More information on grade calculation can be found in the Grades (Page 25) section of this calendar.

The minimum grade requirement to graduate with an honours degree is a cumulative GPA of 1.85. More information on degree requirements can be found in the Degree Requirements (Page 29) section of this calendar.

Every course in which students remain registered after the LAST DATE TO WITHDRAW WITHOUT ACADEMIC PENALTY will appear on their grade statement and be a permanent part of their transcript.
Academic Status

Good Standing; Probation; Suspension

There are four kinds of academic standing: In Good Standing; On Probation; On Suspension; Refused Further Registration. For the 2016 Summer Session, the following regulations apply to students who have attempted at least 4.0 credits at the university. Effective the 2016-17 Fall-Winter session and onward, the following regulations apply to students who have attempted at least 0.5 credits at the university.

1. Students who are neither on probation, suspended, nor refused further registration are described as being in good standing. Their cumulative GPA is at least 1.50.

2. Students shall be on academic probation if they:
   (a) have a cumulative GPA of less than 1.50, or
   (b) return from suspension, or
   (c) have been admitted on academic probation.

3. Students who, at the end of any session (Winter or Summer) during which they are on probation:
   (a) have a cumulative GPA of 1.50 or more shall be in good standing;
   (b) have a cumulative GPA of less than 1.50, but a sessional (Summer) or annual (Fall-Winter) GPA of 1.70, or more, shall continue on probation;
   (c) have a cumulative GPA of less than 1.50, and a sessional (Summer) or annual (Fall-Winter) GPA of less than 1.70, shall be suspended for one calendar year unless they have been suspended previously, in which case they shall be suspended for three calendar years.

4. Students who return from a three-year suspension and are again liable for suspension shall be refused further registration to the University of Toronto.

NOTES:

1. There are two sessions (Summer and Fall/Winter) in each calendar year and status is assessed at the end of each session. Status is not assessed following the Fall term.

2. Courses attempted are those in which a student was enrolled on the deadline to drop a course without academic penalty unless an LWD (Late Withdrawal After the Drop Date) or a WDR (Late Withdrawal) has been approved for the course.

3. Cumulative GPA and sessional GPA/annual GPA will be calculated for students who have course grades pending due to SDF, GWR or NGA. Academic status will be assessed excluding these courses.

Grades Review Procedure

The Office of the Vice-Principal, Academic and Dean administers the grading regulations and reviews course grades submitted by department chairs. The department is responsible for assigning the official course grades, which are communicated to the students through ACORN.

Each chair may appoint 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 course. Both the departmental review committee, through the chair, and the divisional 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 university. Final marks are official, and may be communicated to the student 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.

Issues Pertaining to Term Work and Instructional Activities

Issues arising within a course that concern the pedagogical relationship of the instructor and the student, such as essays, term work, term tests, grading practices, or conduct of instructors, fall within the authority of the department. Students are entitled to seek resolution of these issues, either orally or in writing to the course instructor and, if needed, the department chair for resolution.

Following a response from the department chair, students may submit an appeal, in writing, to the Vice-Principal, Academic and Dean.

8.14 Petitions, Appeals, Deferrals

What is a Petition?

A petition is a student’s formal request for an exception to the normal rules and regulations of the university. A request must be submitted via the online petition system at http://registrar.utm.utoronto.ca/student/petitions.
The reasons that support the petition must be clear and concise and supporting documentation must be submitted to the Office of the Registrar. The onus is on the petitioner to demonstrate the validity of the request(s). All petitions are considered in confidence by or on behalf of the Committee on Standing.

Students who feel they have genuine difficulties complying with a particular regulation(s) should consult an academic advisor in the Office of the Registrar as soon as they are aware that a problem exists.

**Deadlines for Petition Submission**

Petitions requesting late withdrawal from courses must be filed within six months of the end of the term in which the course was taken. Late withdrawal petitions are not granted if the student has completed the course (i.e., written the final examination or completed the final major assignment/test in a course without a final exam). Students who have been sanctioned for committing an academic offence in a course are not permitted to request late withdrawal from a course. Please note that when late withdrawal without academic penalty is granted, a permanent notation of "WDR" is placed on the academic record in lieu of a course grade.

Petitions concerning extensions of time to complete term work later than the end of the exam period must be filed by the last day of the examination period. (Instructors have the authority to grant an extension of time to submit term work that will be completed before the end of the examination period). Students are expected to consult the instructor about a proposed deadline before petitioning for an extension of time and are also expected to continue to work on assignments while awaiting the petition decision.

Petitions for deferred examinations must be filed online (http://registrar.utm.utoronto.ca/student/petitions) within 72 hours following the examination. All supporting documents and payment must be made at the same time.

**Appeals**

Students may appeal petition decisions through the following steps:

1. Committee on Standing: The Committee on Standing will review an appeal with new information not presented in the original petition request within 90 days of the original petition decision date. Appeals must be submitted in writing to the Office of the Registrar.

2. U of T Mississauga Academic Appeals Subcommittee: To appeal the second decision of the Committee on Standing. Appeals must be submitted in writing to the Office of the Registrar within 90 days of the second decision.

3. Academic Appeals Committee of the Academic Board of Governing Council: Appeals of the U of T Mississauga Academic Appeals Subcommittee must include a Notice of Appeal Form (http://uoft.me/appealsform). Students looking to file an appeal to the Academic Board of Governing Council should carefully read and follow the instructions outlined here www.adfg.utoronto.ca/processes/acappeals.htm

**Petitions to Defer Final Examinations**

In case of illness or extenuating circumstances at the time of a final examination, afflicted students should consider not writing. Instead, they should seek medical attention on the day of the exam, declare their absence on their ACORN account, and petition online within 72 hours of the missed examination. Students cannot re-write an examination that they have already attempted.

The examination period is published well in advance and students are expected to be available during this period. Students who make personal commitments during the examination period do so at their own risk.

Successful petitions will not excuse students from any of the work of the course, but may allow them to write their examination at a later date and/or have an extension of time to complete term work.

Students will be required to pay a non-refundable fee of $70 for each deferred examination.

Students who miss a deferred examination will receive a mark of zero for the examination in the calculation of the final grade. Only under exceptional circumstances (e.g. hospitalization, severe personal emergency), and when supported by strong documentation, will a petition for a second deferred exam be granted. Students should seek academic advising in the Office of the Registrar when submitting a request for a further deferral of their unwritten final examination. Students who are granted further deferrals of unwritten final examinations are required to audit the course and write the exam the next academic session in which the course is offered.

**SDF (Standing Deferred) Notation**

When a student successfully petitions for a deferred examination or extension of time for term work in a given course, an “SDF” notation is assigned in place of the original grade on a student’s transcript. Courses with the notation SDF are not included in grade point average calculation. If the student does not write the deferred examination or hand in the term work by the deadline, the “SDF” notation will be replaced by the original grade with a
Supporting Documentation for Petitions

Petitions must be supported by original documentation; photocopies and faxes are not acceptable.

It is the responsibility of the student to provide medical or other supporting documentation. Any cost incurred in obtaining documentation (e.g. a doctor’s note) is the responsibility of the student.

If illness is cited as the reason for the petition, it must be accompanied by an original U of T Verification of Student Illness or Injury form (available at www.utm.utoronto.ca/forms) stating that the student was examined and diagnosed at the time of the illness and, in the case of exams, on the day of the exam or immediately after (i.e. the next day), and must indicate a serious degree of incapacitation on academic functioning (e.g. unable to attend classes, write a test/examination). A statement from a physician that merely confirms a report of illness and/or disability made by the student is not acceptable.

If support has been obtained from someone other than a practitioner listed on the U of T Verification of Student Illness or Injury form (www.utm.utoronto.ca/forms) then a Verification of Extenuating Circumstances form (www.utm.utoronto.ca/forms) is acceptable.

Other documentation can include, but is not limited to: letter of support from AccessAbility, automobile collision or police reports, death certificate, and supporting documentation from employers, lawyers and other related personnel.

9 Degree Requirements

9.1 Degrees Offered

U of T Mississauga offers the following undergraduate degrees:

- Honours Bachelor of Arts - HBA
- Honours Bachelor of Science - HBSc
- Bachelor of Commerce - BCom
- Bachelor of Business Administration - BBA

The requirements for the Honours Bachelor of Arts, Honours Bachelor of Science, Bachelor of Commerce and Bachelor of Business Administration degrees are listed beginning in Section 8.6 of this calendar. Whether a student receives an "Arts" degree or a "Science" degree depends on the program(s) the student completes. In the Program Section, each program lists the degree received (for instance, "ENGLISH (Arts)," "GEOGRAPHY (Science)," etc.).

The word "credit," as used in the listing of degree requirements, means a full course or two half courses. In order to "obtain standing" in a course, a student must receive at least a passing grade (50%) in that course.

Students who graduated with a BA or BSc and then continue their studies may upgrade to an Honours degree. When upgrading to an Honours degree, the Honours must be in the same field; i.e., a BA may be upgraded to an Honours BA and a BSc may be upgraded to an Honours BSc. When upgrading, participation in the graduation ceremony is only allowed for the conferral of the initial BA or BSc.

Students who graduate with their HBA/HBSc/BBA/BCom may have additional Subject POSts (Programs of Study) added to their transcript as long as they complete at least one additional half course towards each desired program following the granting of their degree. Students who have graduated and would like to have additional Subject POSts added to their transcript should obtain advising from the relevant departments. Please note that completing additional courses in some areas may not be possible as graduated students become non-degree students following the session after their fourth credit was completed.

9.2 Graduation

Students who appear as though they have met (or will meet) the basic degree requirements required to graduate (i.e. 20.0 complete/in-progress credits for an HBA/HBSC/BCom/BBA degree) will have a request to
graduate entered on their ACORN record. Students who confirm their request to graduate and are assessed as "complete" will have their degrees conferred at the next available convocation ceremony whether or not they are able to attend. Completing a degree requires the completion of program and degree requirements.

Using Degree Explorer, the University of Toronto’s degree planning tool (degreeexplorer.utoronto.ca), students can review their academic history, degree requirements or use the planner to determine how future course choices might meet their program and/or degree requirements. Students who have confirmed their request to graduate can check Degree Explorer at the end of March (for June Convocation)/September (for November Convocation) to see if their Subject POSIs have been confirmed by the relevant department(s). They can view their eligibility to graduate in early May (for June Convocation)/October (for November Convocation).

Students should meet regularly with their program advisor(s) and an academic advisor in the Office of the Registrar to make sure all program and degree requirements are being met. This is especially recommended during their final year.

PLEASE NOTE: Parchments, transcripts and letters of eligibility to graduate are withheld until all outstanding U of T fees, library fines, health service missed appointments fees, damaged departmental equipment fees and payment for all deferred exams have been paid in full. Degree parchments are held by the Office of Convocation for pick up one year following each graduation ceremony.

9.3 Academic Information Sources

Students requiring assistance should:

- Consult with academic advisors in the Office of the Registrar regarding degree requirements (including acceptable program combinations);
- Consult the relevant department regarding specific program requirements;
- Utilize the online tool, Degree Explorer.

9.4 Second Degree Requirements

Students beginning a second degree at U of T Mississauga are normally exempted from the first year of the degree requirements by being granted 5.0 credits, 4.0 at the 100 level and 1.0 at the 200 level, regardless of the number of previous degrees held. Students who already hold a University of Toronto degree may complete a second degree only of an alternate type (i.e., if a student has a U of T HBA degree, then he/she may not complete a second U of T HBA degree). Students who are graduates of another university may apply to take a similar degree in a different area of study.

Current students from another division of U of T should contact Enrolment Services concerning admission to U of T Mississauga.

Students applying to U of T Mississauga with a completed degree from another institution should refer to the Admission Information (Page 8) in Section 3.

Students who have completed their first degree at U of T Mississauga and wish to be admitted to a second degree should seek academic advising in the Office of the Registrar.

NOTE: Students who have a degree with a Major/Specialist in either Commerce, Management or Economics cannot do a BCom or a BBA as a second degree. This is due to the extensive overlap of courses in these degree programs.

Also see Admission from Other Divisions at U of T.

9.5 Distribution Requirements

To qualify for a degree, students must complete at least 1.0 credit from each of the following divisions: Humanities, Social Sciences, Sciences. Distribution requirements are noted in the course title with the following codes:

- HUM = Humanities
- SSc = Social Science
- SCI = Science
- NDA = No Distribution Assigned

If you are unsure about your distribution requirements or need information on another U of T campus, please contact the Office of the Registrar. Please note that not all courses offered fulfill distribution requirements. Courses used to fulfill program requirements may also be used to fulfill distribution requirements.

For information on Transfer Credit and Distribution Requirements see Sections 3.6.

9.6 Honours Bachelor of Science – HBSc – Degree Requirements

The degree received depends upon the combination of programs a student completes and specific degree requirements. Consult an academic advisor in the Office of the Registrar regarding degree requirements. Exceptions to degree requirements may only be granted by petition through the Office of the Registrar. Consult the departmental program advisors regarding program requirements. Departmental program advisors may only grant exceptions to program requirements that are not needed towards fulfilling degree requirements. To qualify for an Honours Bachelor of Science (HBSc) degree, a student must meet the following requirements:
COURSE REQUIREMENTS:
Obtain standing in at least 20.0 credits (i.e. complete with a grade of 50% or more or CR), meeting the following criteria:

- No more than 6.0 credits may be 100 level;
- At least 6.0 credits must be 300/400 level (no more than 1.0 300/400 level transfer credit may be counted with the exception of courses taken through an official university exchange program); and
- No more than 15.0 credits may have the same three-letter designator (e.g. "ANT," "ENG," etc.).

DISTRIBUTION REQUIREMENTS:
- Complete the distribution requirement, which consists of at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences.
- See Distribution Requirements (Page 30) for further explanation of what distribution requirements are. Each course in the calendar has a distribution assignment to help you select courses that fulfill these requirements.

GRADE REQUIREMENT:
- Achieve a Cumulative GPA of 1.85 or more by the time of graduation. Students who meet all the requirements for the Honours BA/Honours BSc except for the GPA requirement may elect to graduate with a 4-year BA/BSc degree provided they are in Good Standing (i.e. CGPA is 1.50 or more).

PROGRAM REQUIREMENTS FOR AN HONOURS BSc DEGREE:
- One specialist in a Science area, OR
- Two Major programs in a Science area (two Majors must include at least 12 distinct credits), OR
- One Major in a Science area plus one Major in an Arts area leads to either an HBSc or an HBA – it is the student's choice, however, the default shall be an HBSc unless notification is given to the Office of the Registrar (two Majors must include at least 12 distinct credits), OR
- One Major and two Minors. At least one Major, or both the Minors, must be in the Science area for an HBSc (combinations must include at least 12 distinct credits)

9.7 Honours Bachelor of Arts – HBA – Degree Requirements

The degree received depends upon the combination of programs a student completes and specific degree requirements. Consult an academic advisor in the Office of the Registrar regarding degree requirements. Exceptions to degree requirements may only be granted by petition through the Office of the Registrar. Consult the departmental program advisors regarding program requirements. Departmental program advisors may only grant exceptions to program requirements that are not needed towards fulfilling degree requirements. To qualify for an Honours Bachelor of Arts (HBA) degree, a student must meet the following requirements:

COURSE REQUIREMENTS:
Obtain standing (i.e. complete with a grade of 50% or more or CR) in at least 20.0 credits, meeting the following criteria:

- No more than 6.0 credits may be 100 level;
- At least 6.0 credits must be 300/400 level (no more than 1.0 300/400 level transfer credit may be counted with the exception of courses taken through an official university exchange program); and
- No more than 15.0 credits may have the same three-letter designator (e.g. "ANT," "ENG," etc.).

DISTRIBUTION REQUIREMENTS:
- Complete the distribution requirement, which consists of at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences.
- See Distribution Requirements (Page 30) for further explanation of what distribution requirements are. Each course in the calendar has a distribution assignment to help you select courses that fulfill these requirements.

GRADE REQUIREMENT:
- Achieve a Cumulative GPA of 1.85 or more by the time of graduation. Students who meet all the requirements for the Honours BA/Honours BSc except for the GPA requirement may elect to graduate with a 4-year BA/BSc degree provided they are in Good Standing (i.e. CGPA is 1.50 or more).

PROGRAM REQUIREMENTS FOR AN HONOURS BA DEGREE:
- One specialist in an Arts area, OR
- Two Major programs in an Arts area (two Majors must include at least 12 distinct credits), OR
- One Major in an Arts area plus one Major in a Science area. This combination leads to either an HBA or an HBSc – it is the student's choice, however, the default shall be an HBSc unless notification is given to the Office of the Registrar (two Majors must include at least 12 distinct credits)
- One Major and two Minors. At least one Major, or both Minors, must be in the Arts area for an HBA (combinations must include at least 12 distinct credits).
9.8 Bachelor of Commerce – BCom – Degree Requirements

This is a four-year, honours degree program. The degree received depends upon the combination of programs a student completes and specific degree requirements. Consult an academic advisor in the Office of the Registrar regarding degree requirements. Exceptions to degree requirements may only be granted by petition through the Office of the Registrar. Consult the departmental program advisors regarding program requirements. Departmental program advisors may only grant exceptions to program requirements that are not needed towards fulfilling degree requirements. To qualify for a Bachelor of Commerce (BCom) degree, a student must meet the following requirements:

COURSE REQUIREMENTS:
Obtain standing in at least 20.0 credits, meeting the following criteria:

- No more than 6.0 credits may be 100 level.
- Complete 5.0 credits from disciplines other than Management (MGD/MGT/MGM/RSM) and Economics (ECO). Courses taken to fulfill program and distribution requirements may also be counted towards meeting this requirement.
- At least 6.0 300/400 level credits (no more than 1.0 300/400 level transfer credit may be counted with the exception of courses taken through an official university exchange program).
- No more than 15.0 credits may be taken for degree credit from the following: COM(G), MGD, MGT, MGM and ECO (see Commerce (BCom, HBA) (Page 107) Program). The following course combinations are counted as ECO courses: STA250H5, STA255H1/STA257H5, STA258H5/STA258H5, STA261H5/STA256H5, STA258H5/STA256H5, STA260H5

PROGRAM REQUIREMENTS:
- Complete the requirements of a specialist program in Commerce (BCom, HBA) (Page 107).

DISTRIBUTION REQUIREMENT:
- Complete the distribution requirement, which consists of at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences
- See Distribution Requirements (Page 30) for further explanation of what distribution requirements are. Each course in the calendar has a distribution assignment to help you select courses that fulfill these requirements.

GRADE REQUIREMENT:
- Achieve a Cumulative GPA of 1.85 or more by the time of graduation. Students who meet all the requirements for the BCom except for the GPA requirement may elect to graduate with a BA degree provided they are in Good Standing (i.e. CGPA is 1.50 or more).

9.9 Bachelor of Business Administration – BBA – Degree Requirements

The degree received depends upon the combination of programs a student completes and specific degree requirements. Consult an academic advisor in the Office of the Registrar regarding degree requirements. Exceptions to degree requirements may only be granted by petition through the Office of the Registrar. Consult the departmental program advisors regarding program requirements. Departmental program advisors may only grant exceptions to program requirements that are not needed towards fulfilling degree requirements. To qualify for a Bachelor of Business Administration (BBA) degree, a student must meet the following requirements:

COURSE REQUIREMENTS:
Obtain standing in at least 20.0 credits, meeting the following criteria:

- No more than 6.0 credits may be 100 level.
- Complete 5.0 credits from disciplines other than Management (MGD/MGT/MGM/RSM) and Economics (ECO). Courses taken to fulfill program and distribution requirements may also be counted towards meeting this requirement.
- At least 6.0 300/400 level credits (no more than 1.0 300/400 level transfer credit may be counted with the exception of courses taken through an official university exchange program).
- No more than 15.0 credits may be taken for degree credit from the following: COM(G), MGD, MGT, MGM and ECO (see Commerce (BCom, HBA) (Page 107) Program). The following course combinations are counted as ECO courses: STA250H5, STA255H1/STA257H5, STA258H5/STA258H5, STA261H5/STA256H5, STA258H5/STA256H5, STA260H5

PROGRAM REQUIREMENTS:
- Complete the requirements of a specialist program in Management (HBA, BBA) (Page 285).

DISTRIBUTION REQUIREMENT:
- Complete the distribution requirement, which consists of at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences
- See Distribution Requirements (Page 30) for further explanation of what distribution requirements are. Each course in the calendar has a distribution assignment to help you select courses that fulfill these requirements.

GRADE REQUIREMENT:
Achieve a Cumulative GPA of 1.85 or more by the time of graduation. Students who meet all the requirements for the BBA except for the GPA requirement may elect to graduate with a BA degree provided they are in Good Standing (i.e. CGPA is 1.50 or more).

10 Course Descriptions

10.1 Course Key

The word "courses" refers to full courses, or the equivalent in full and/or half courses.

Course Designations

"ANT," "AST," "BIO," etc. To the best of our ability, all courses are listed in the Academic Calendar using the three letter prefix as the alpha link. Most courses are listed under the departmental that is responsible for this area. i.e. ANT = Anthropology courses.

Course Number

The course number generally indicates the level of difficulty, e.g., a 100 level course normally indicates an introductory course, a 400-level course is an intensive course at the senior level.

Course Sections (In the Time Table)

The first 3 characters denote type of section

- LEC = Lecture
- PRA = Practical (Lab)
- TUT = Tutorial

The last four characters are the section number. When the first two numbers are 99, it denotes an online offering.

Campus Code

Each course code includes a campus code that indicates on which campus a particular course is offered.

- 1 = St. George
- 3 = U of T Scarborough
- 5 = U of T Mississauga

Course Suffixes

The "Y" or "H" following the Course Number in this calendar indicates only the credit value:

- "Y" = a full course, for which one credit is given.
- "H" = a half-course, for which one-half credit is given.

To determine the periods of instruction, refer to the course timetable on the U of T Mississauga website, www.utm.utoronto.ca, where the following course suffixes apply:

F Course given in the Fall term or the first term of the Summer session.
S Course given in the Winter term or the second term of the Summer session.
Y Course extending over both the Fall and Winter Session or over the entire Summer Session.

NOTE: Not all courses listed in this calendar will be offered in any one single session. Check the timetable for each session for the specific courses offered in that session.

Types and Duration of Instruction

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

In the Fall+Winter Sessions, the normal period of instruction is 24 weeks, with each session being 12 weeks. Total hours of instruction are indicated by codes at the end of the course description; for instance, "48L" = 48 lecture hours, "24T" = 24 tutorial hours.

NOTE: Please note that the number of hours listed is approximate only. The actual contact hours of a course, or of different sections of a course, may vary somewhat 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. The variation is at the discretion of the department sponsoring the course. Any questions concerning the allotment of hours in a course should be addressed to the course sponsor.
10.2 Symbols Used in Course Descriptions

(P.I.) Permission of instructor required to enrol.
(I) Open to first-year students (shown after 200+ course number).
(1) Course available on the St. George campus; i.e., ANT100Y1 (shown at the end of course number)
(3) Course available on the U of T Scarborough campus; i.e., ANTA01Y3 (shown at the end of course number)
(5) Course available on the U of T Mississauga campus; i.e., ANT100Y5 (shown at the end of course number)

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

NOTE: In the biological and science teaching programs there may be occasions when anatomical, biochemical, physiological and pharmacological observations are made by students on themselves or on fellow students. These include some 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 teaching program, participation is voluntary.

10.3 Experiential Learning Designation (EXP)

Courses designated as EXP involve a minimum of 10 hours per 0.5 credits and 20 hours per 1.0 credits of experiential learning.

Experiential learning is learning by doing through carefully chosen experiences that are supported by reflection, critical analysis and synthesis, and includes feedback on the effectiveness of students' learning efforts.

Experiential learning can occur inside or outside the classroom and will typically involve a relationship that goes beyond an individual instructor and student.

Within the classroom, lab or tutorial, experiential learning can take place in laboratory experiences that involve student-initiated projects and experiments, participation in case studies, role-playing, simulations or debates, in circumstances that require students to reflect on what they have learned in these experiences.

Experiential learning often promotes strong relationships between academic studies and either career exploration or community involvement through creative interactions with a business, community group, research project or the physical environment.

Outside the classroom, experiential learning can occur in field trips, service learning, courses that involve assisting faculty with research projects, internships and practicum.

11 Experiential Learning Programs

11.1 Research Opportunity Program (299Y, 399Y and 499Y)

The Research Opportunity Program (ROP) provides an opportunity for students to earn 1.0 full credit by participating in a faculty member’s research project.

The ROP application and approval process (ROPAPP) is online. Descriptions of ROP299Y, 399Y and 499Y projects will be available late February to early March of each year. Students wishing to apply for placement in an ROP project must log in to the ROPAPP using their UTORid. Access to the application is through the ROP website, www.utm.utoronto.ca/rop. Students will be notified by e-mail if they are successful in obtaining placement in the program. Successful students will be automatically registered in their approved ROP course during the normal registration periods for both Summer and Fall-Winter sessions, respectively. NOTE: The ROP is an instructor-based approval program.

Students will not be permitted to accept more than one 299Y5 course. However, they will be permitted to accept more than one 399Y5 or 499Y5 course, as long as they are not in the same discipline. Students are not permitted to register in more than one ROP course in the same academic session. A list of the prerequisites and exclusions can be found on the ROP website. Students are responsible for reading and understanding the rules and prerequisites required for acceptance into the program.

Each #99Y5 course will bear the three-letter designator of the academic discipline concerned, i.e., ENG399Y5, SOC399Y5 etc. Not all departments will necessarily participate in the ROP each year.

If you have any questions concerning prerequisites and exclusions or about program and degree requirements with respect to the ROP, arrange to speak with an academic advisor in the Office of the Registrar or the undergraduate advisor for the program.

For more information visit www.utm.utoronto.ca/rop

11.2 Summer Abroad Program

Administered through the University of Toronto’s Woodsworth College (Faculty of Arts & Science), the Summer Abroad programs are designed to give students an exciting and educational international experience.

Students complete a University of Toronto undergraduate degree course, equivalent to one full-year credit (1.0 FCEs), in three to six weeks. Courses are relevant to the host site, and include field trips that complement the lectures, enabling them to observe and experience what they study in the classroom. Most instructors are University of Toronto
professors and, with the exception of language courses, all teaching is done in English.

Typically, Summer Abroad courses are at the second- and third-year level, and are offered in disciplines such as environmental studies, history, political science, literature, art, management, architecture, criminology, archeology and languages. Hands-on research experience in international laboratories is offered through the scienceAbroad program. Most courses have no prerequisites, and all University of Toronto students in good standing are eligible to apply. The courses and grades show on students’ transcripts as regular University of Toronto credits and are calculated into their cumulative GPA.

For further information contact:
The Professional & International Programs Office
Woodsworth College, University of Toronto
119 St. George Street, 3rd Floor
Toronto, ON
M5S 1A9
Tel: 416-978-8713
summer.abroad@utoronto.ca
www.summerabroad.utoronto.ca

11.3 International and Canadian Student Exchanges

Students from all faculties and departments are encouraged to participate in the exchange programs offered at U of T’s partner institutions and co-ordinated through the Centre for International Experience. These exchanges allow students to experience new cultures and languages in an academic setting while earning credits towards their U of T degree. Exchanges may be for one or more terms, typically up to a full year.

International exchanges are available around the world. Check cie.utoronto.ca for a listing of our exchange partners in 39 countries and in other Canadian institutions including McGill University, Acadia University and the University of British Columbia.

Funding support is available for many international opportunities.

Deadlines, applications and more information at:
Student Exchange Program
Centre for International Experience
33 St. George Street
Toronto, ON M5S 2E3
Tel: 416-978-1800
Email: student.exchange@utoronto.ca
Web: cie.utoronto.ca

11.4 Professional Experience Year

The Professional Experience Year (PEY) provides students with an opportunity to gain work experience in fields related to their programs of study. Full-time students with a cumulative GPA of at least 2.0, with a minimum of 10.0 credits, and a maximum of 15.0 credits, may apply to spend 12 to 16 months working in a related industry. This internship period normally occurs after second or third year for students enrolled in an Honours BA or Honours BSc.

Students must seek approval from their department chair before applying to PEY. Students pay a non-refundable application fee at the time of application. If a position is accepted, a placement fee will be required from the student at the time of fall registration, no later than the first Friday after classes begin in September. Incidental fees granting part-time student status and allowing continued access to university facilities and services are also required at fall registration.

The PEY program strives to provide opportunities for all students registered in it, but cannot guarantee employment. For further information, contact the PEY Office at 416-978-6649. Applications will be available in September at the U of T Mississauga Career Centre, William G. Davis Bldg, Room 3094. For specific departmental requirements, contact the department.

Students do not get degree credit for PEY200Y5 (the Professional Experience Year).

11.5 Language Citation Program

The Language Citation at the University of Toronto Mississauga is an official notation on a student’s transcript that the student has progressed to an advanced level in the study of a language. The Language Citation will consist of a notation on the transcript that reads: "Completed Requirements of Language Citation in [name of language]." Students should visit www.utm.utoronto.ca/language-studies/language-courses/language-citation for details on earning a citation.

12 Programs

12.1 Definition

A program is a sequence of courses in one or more disciplines that are grouped together to form a cohesive area of study. A Program of Study is also referred to as a Subject POST.

12.2 Categories of Programs Available

Specialist Programs: consist of 10.0 to 18.0 credits (out of the total of 20.0 credits required for a degree) including at least 4.0 300/400 level credits, 1.0 of which must be at the 400 level. A Specialist program is allowed within any Honours (BA or BSc) degree or BCom or BBA degree.
**Major Programs**: consist of 6.5 to 9.0* credits, including at least 2.0 300/400 level credits.

**Minor Programs**: consist of 4.0 to 4.5* credits, including at least 1.0 300/400 level credit.

*Courses may have prerequisites not listed in the program, but which must also be taken.

**NOTES:**

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

2. **Programs at other U of T Campuses/Divisions:** While U of T Mississauga students may take courses at other U of T campuses/divisions, they may not enrol in programs at other campuses/divisions.

**12.3 Program Enrolment**

All degree students must enrol in a program (Subject POST). Students must enrol in at least one and no more than three programs or Subject POST(s) (of which only two can be Majors and/or Specialists), in the session in which they have completed (or anticipate completing) 4.0 credits. If admitted with transfer credit for 4.0 credits or more, they must enrol in a program when they first register. Students admitted as "non-degree students" are not permitted to enrol in a program. Some programs also require specific standing in individual courses and/or a minimum grade point average. See Alphabetical Listing of Programs and Courses (Page 38) for detailed information.

Completion of a program is only one part of the degree requirements. Exceptions made to program requirements by departments for individual students do not in any way affect completion of the rest of the degree requirements. Students should be aware that completion of program requirements does not ensure that degree requirements have been met. Students are required to complete 6.0 credits at the 300/400 level for an Honours BA/BSc degree or BCom or BBA degree, including courses required for a program. If the program requires fewer courses at this level, other 300/400 level courses may be counted to fulfill this degree requirement. See Degree Requirements (Page 29).

Students can enrol in programs using ACORN, the online student information system. For limited enrolment programs, see the registration guide for dates and deadlines for program enrolment. The guide is available online at www.utm.utoronto.ca/guides.

**12.4 Program Requirements**

1. Students must enrol in the appropriate combination of programs or Subject POST(s) in the session in which they have completed, or will complete, 4.0 credits.

2. Students must meet all enrolment requirements for a program as stated in the calendar.

3. The program/Subject POST(s) completed determines whether a student receives a science, arts, business or commerce degree. In the calendar each program states whether it is an arts, science, business or commerce program and whether it has a Specialist, Major or Minor option.

To receive an Honours BSc, for example, students need to achieve:

- One specialist in a Science area
- One Major in a Science area plus one Major in an Arts area leads to either an HBSc or an HBA – the choice is the student’s (two Majors must include at least 12 distinct credits)

- In combinations of one Major and two Minors, at least one Major, or both the Minors, must be in the Science area for an HBSc (combinations must include at least 12 distinct credits)

Students who graduate with their HBA/HBSc/BBA/BCom may have additional Subject POSTs (Programs of Study) added to their transcript as long as they complete at least one additional half course towards each desired program following the granting of their degree. Students who have graduated and would like to have additional Subject POSTs added to their transcript should obtain advising from the relevant departments. Please note that completing additional courses in some areas may not be possible as graduated students become ‘non-degree students’ following their graduation and priority in course enrolment is always given to degree students.

**12.5 Self-Designed Program of Study**

Students wishing to pursue a program other than, or in addition to, those listed in this section may propose a Self-Designed Program of Study. Students considering this alternative should discuss their proposal with the related department(s). If the proposal involves more than one department, it must first be presented to the Office of the Vice-Principal, Academic and Dean. Consultation should take place as early as possible in the student’s academic career and proposals must be submitted no later than upon completion of 8.5 credits.

Students will be required to present a coherent grouping of courses designed to meet their individual needs, and substantially different from any program existing in the U of T Mississauga calendar. All proposals will need to be approved by the Office of the Vice-Principal, Academic and Dean on the basis of academic rigour, breadth and
coherence. If the proposal is approved, successful completion of the courses will be accepted as fulfilling the degree requirement and noted on the transcript with the appropriate Subject POST code as indicated below.

**Self-Designed Program of Study (Arts)**
Specialist Program - ERSPE0408
Major Program - ERMAJ0408

**Self-Designed Program of Study (Science)**
Specialist Program - ERSPE0755
Major Program - ERMAJ0755

### 12.6 Symbols and Terms Used in Program Descriptions

- **(P.I.):** Permission of instructor required to enrol.
- **(G):** Course available only on the St. George Campus.
- **AND:** Comma (,), Semi-colon (;); Ampersand (&); Plus Sign (+)
- **OR:** The slash (/)
- **"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
- **200 level:** Courses numbered in the 200s ONLY
- **200+ level:** Courses numbered in the 200s, 300s, 400s
- **300+ level:** Courses numbered in the 300s or 400s
12.7 **Alphabetical Listing of Programs and Courses**

**Anthropology (HBA, HBSc)**

*Professors Emeriti*
- M. Kleindienst, B.A., M.A., Ph.D.
- B. Sigmon, B.S., M.S., Ph.D.

*Professors*
- F.P. Cody, B.A., M.A., Ph.D.
- G.W. Crawford, B.Sc., M.A., Ph.D.
- T. Galloway, B.Sc.N., B.A., M.A., Ph.D.
- S.M. Hillewaert, B.A., M.A., Ph.D.
- H.M.-L. Miller, B.A., M.Sc., M.A., Ph.D.
- A. Muehlebach, B.A., M.A., Ph.D.
- E. Parra, B.Sc., M.Sc., Ph.D.
- T.L. Rogers, B.A., M.A., Ph.D.
- T. Sanders, B.A., M.A., M.Sc., Ph.D.
- S. Scharper, B.A., M.A., Ph.D.
- J. Sidnell, B.A., M.A., Ph.D.
- D.G. Smith, B.A., M.A., Ph.D.
- L. Xie, B.A., M.A., Ph.D.

*Chair*
- Heather M.-L. Miller

*Undergraduate Administrator*
- Angela Sidorak
- HSC396
- 905-828-3726
- utm.anthro@utoronto.ca

What is anthropology? Derived from the Greek anthropos (human) and logia (study), anthropology is the study of humankind from its beginnings to the present day.

Nothing human is alien to anthropology. Indeed, of the many disciplines that concern themselves with humans, only anthropology seeks to understand the whole panorama of human existence – in geographic space and evolutionary time – through comparative and holistic study.

Our programs focus on the four traditional subfields of anthropology: biological, archaeological, socio-cultural and linguistic. We also have strengths in forensic anthropology (which includes human biology, archaeology and ethnohistory). Our faculty studies a broad array of topics that range from the exploration of ancient pyrotechnologies in South Asia to the study of rainmaking, gender and ritual in Tanzania; from the structures of social interaction and the co-ordination of language, gesture and gaze in the Caribbean to the use of plants in ancient China; from information in Iroquoian pottery to signatures and citizenship in contemporary India; from the relationship between genetics and human evolution to research related to crime scene investigation.

The common goal that links our vastly different projects is to advance knowledge of who we are and how we came to be that way. We are all dedicated to disseminating anthropological knowledge though teaching, research, writing and other forms of outreach. Our goal as a department is to train our anthropology students in the fundamentals of all the discipline’s subfields. We aim to produce students who are curious about the world in its complexity, and who are well versed in the skills, theories and databases of one or more of our discipline’s subfields.

Apart from being employed as faculty in universities and colleges, anthropologists find jobs in national and international governmental bodies, in international agencies dedicated to, for example, human rights, as well as in business and industry. For additional information see *Anthropology as a Career* by Wm. C. Sturtevant and *The Study of Anthropology* by Morton Fried, available at the library in the Hazel McCallion Academic Learning Centre.

The following upper-level courses are recommended for Anthropology majors and specialists interested in pursuing the topical interests listed. These are not required courses for the degree, but are recommended by faculty as key courses for students interested in pursuing these fields of interest as careers. These lists are intended to provide some guidance when choosing among the many upper-level courses offered.

**Archaeology:** ANT210H5, 327H5 & 310H5, 312H5, 314H5, 318H5, 320H5, 300-level prehistory courses for regions of interest (309H5, 313H5, 316H5, 317H5), 358H5 and/or 364H5, 414H5, 415H5, 416H5, 460H5 (breadth of knowledge in the other subfields of anthropology is highly recommended for archaeologists). Students may also want to consider courses available through Biomedical Communications, Geography, History and Classics, Geology and other physical sciences, and the life sciences.

**Bioarchaeology and/or Forensic Anthropology:** ANT205H5, 306H5 or 318H5, 312H5, 314H5, 334H5, 340H5, 414H5, 415H5, 434H5, 436H5, 438H5, 439H5, 441H5, and prehistory courses for regions of interest (e.g., 317H5 for Ontario & Eastern North America). Students may also want to consider courses available through the Forensic Science program, Biomedical Communications, and Biology.

**Biological Anthropology, Evolutionary Anthropology, and/or Anthropology of Health:** ANT220H5, 312H5, 331H5, 332H5, 333H5, 334H5, 337H5, 338H5, 340H5, 341H5, 415H5, 434H5, 436H5, 437H5, 438H5, 462H5. Students may also want to consider courses available through Biomedical Communications and Biology.

**Linguistic Anthropology:** ANT362H5, 364H5, 365H5, 401H5, 460H5; JAL253H5, JAL353H5, JAL355H5. Students may also want to consider courses available through Linguistics.

**Sociocultural Anthropology:** ANT355H5, 351H5 or 354H5, 357H5, 358H5, 360H5, 364H5, 365H5, 460H5

**Generalist Anthropology** (broad grounding in the various subfields, for maximum career flexibility): Take all seven first-year courses: ANT200H5, 201H5, 202H5, 203H5, 204H5, 206H5, 207H5; Advanced courses: ANT312H5, 314H5, 318H5, 331H5 & 335H5, 334H5,
Programs

Anthropology (HBA, HBSc)

337H5, 338H5, 358H5, 362H5, 364H5, 365H5, 438H5, 460H5

Each course description includes an indicator of whether a course is a Science (SCI) or a Social Science (SSC) course for distribution purposes. To learn more about distribution rules and regulations, see Distribution Requirements (Page 30).

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
HSC Biomedical Communications (page 88)
JAL Linguistics (page 280)

Specialist Program ERSPE0105 Anthropology (Science)

10.0 credits are required.

Limited Enrolment – Enrolment in this program is limited. To qualify, students must have completed 4.0 credits (including ANT101H5 and ANT102H5), achieved a cumulative grade point average of at least 2.00. Students applying to enrol after second year must have completed 8.0 credits, and achieved a CGPA of at least 2.00.

First Year: ANT(101H5, 102H5)
Second Year:
1. ANT(200H5, 201H5), ANT(202H5, 203H5)
2. ANT204H5 and 0.5 from ANT206H5/ 207H5

Higher Years: 6.0 additional ANT credits, of which at least 5.0 must be ANT science courses. At least 4.0 of the 6.0 credits must be at the 300/400 level, including 1.0 at the 400 level.

Note: HSC403H5 and HSC404H5 are counted as ANT science credits.

Specialist Program ERSPE1775 Anthropology (Arts)

10.0 credits are required.

Limited Enrolment – Enrolment in this program is limited. To qualify, students must have completed 4.0 credits (including ANT101H5 and ANT102H5), achieved at least 65% in both ANT101H5 and ANT102H5, and achieved a cumulative grade point average of at least 2.00. Students applying to enrol after second year must have completed 8.0 credits, achieved at least 65% in any two of ANT204H5, ANT206H5, or ANT207H5, and achieved a CGPA of at least 2.00.

First Year: ANT(101H5, 102H5)
Second Year:
1. ANT(200H5, 201H5)/ (202H5, 203H5)
2. ANT204H5, 206H5, 207H5

Higher Years: 6.5 additional ANT credits. At least 4.0 of these must be at the 300/400 level, including 1.0 at the 400 level.

Note: JAL253H5, JAL353H5, and JAL355H5 are counted as Social Science credits.

Major Program ERMAJ0105 Anthropology (Science)

7.0 credits are required.

Limited Enrolment – Enrolment in this program is limited. To qualify, students must have completed 4.0 credits (including ANT101H5 and ANT102H5), and achieved a cumulative grade point average of at least 2.00. Students applying to enrol after second year must have completed 8.0 credits, and achieved a CGPA of at least 2.00.

First Year: ANT(101H5, 102H5)
Second Year:
1. ANT(200H5, 201H5), (202H5, 203H5)
2. ANT204H5 and 0.5 from ANT206H5/ 207H5

Higher Years: 3.0 additional ANT credits of which at least 2.5 must be ANT science courses. At least 1.0 of the 3.0 credits must be at the 300 level and 0.5 at the 400 level.

Note: HSC403H5 and HSC404H5 are counted as ANT science credits.
Major Program ERMAJ1775 Anthropology (Arts)

7.0 credits are required.

**Limited Enrolment** – Enrolment in this program is limited. To qualify, students must have completed 4.0 credits (including ANT101H5 and ANT102H5), achieved at least 65% in both ANT101H5 and ANT102H5, and achieved a cumulative grade point average of at least 2.00. Students applying to enrol after second year must have completed 8.0 credits, achieved at least 65% in any two of ANT204H5, ANT206H5, or ANT207H5, and achieved a CGPA of at least 2.00.

**First Year:** ANT(101H5, 102H5)

**Second Year:**
1. ANT(200H5, 201H5)/ (202H5, 203H5)
2. ANT204H5, 207H5, 206H5

**Higher Years:** 3.5 additional ANT credits. At least 1.0 of these must be at the 300 level and 0.5 at the 400 level.

Note: JAL253H5, JAL353H5, and JAL355H5 are counted as Social Science credits.

Minor Program ERMIN1775 Anthropology (Arts)

4.0 credits are required.

**First Year:** ANT(101H5, 102H5)

**Second Year:**

Please be aware of the upper year prerequisite requirements when choosing your second-year courses for the minor. Students must have completed all published prerequisites in order to enrol in 300 and 400 level Anthropology courses. Students without prerequisites can be removed at any time. No waivers will be granted.

**Higher Years:** 1.5 additional ANT credits. At least 1.0 must be at the 300/400 level.

Note: JAL253H5, JAL353H5, and JAL355H5 are counted as Social Science credits.

HSC403H5 and HSC404H5 are counted as Science credits.

Students without pre- and co-requisites or written permission of the department can be de-registered from courses at any time.

List of Courses

**ANT101H5 Introduction to Biological Anthropology and Archaeology (SCI)**
Anthropology is the global and holistic study of human biology and behaviour, and includes four subfields: biological anthropology, archaeology, sociocultural anthropology and linguistic anthropology. The material covered is directed to answering the question: What makes us human? This course is a survey of biological anthropology and archaeology. [24L, 12P]
Exclusion: ANT100Y1, ANTA01H3

**ANT102H5 Introduction to Sociocultural and Linguistic Anthropology (SSc)**
Anthropology is the global and holistic study of human biology and behaviour, and includes four subfields: biological anthropology, archaeology, sociocultural anthropology and linguistic anthropology. The material covered is directed to answering the question: What makes us human? This course is a survey of sociocultural and linguistic anthropology. [24L]
Exclusion: ANT100Y1, ANTA02H3

**ANT199H5 First Year Seminar in Anthropology (SSc)**
This course is designed to offer ambitious students a rigorous introduction to the field of sociocultural anthropology - the study of people as social and cultural beings, and how people order their lives and give meaning to their experiences. It is a reading, writing, and discussion-intensive seminar in which students explore core topics in the study of humanity-power, identity, self, culture, and society-by focusing on issues which may include but are not limited to war, human rights, development, immigration, and religion. [24S]
Prerequisite: ANT102H5
NOTE: This course is restricted to first year students only. Students permitted to enrol must achieve a grade of 80% or higher in ANT102H5.

This is a seminar course with an enrolment cap of 25. Interested students must apply directly to the department.

**ANT200H5 Introduction to the Practice of Archaeology (SCI)**
Archaeological theory, method and technique. Principles of scientific research will be applied to archaeological information. The course will cover the following topics: how archaeology applies the scientific method; how archaeological projects are planned and organized; how archaeological data are recovered through survey, excavation and other means; how archaeological data are organized and analyzed to produce information about the human past; the major theoretical paradigms that archaeologists use to interpret the human past. [24L, 12P]
Exclusion: ANT200Y5, ANT200Y1
Prerequisite: ANT101H5
ANT201H5 World Prehistory (SCI)
Survey of human cultural development over 2.5 million years. The course will cover the following topics: the nature and origins of material culture; the nature and development of hunter-gather-fisher economies; the nature and development of resource production; and the nature of development of complex societies. [24L, 12P]
Exclusion: ANT200Y5, ANT200Y1
Prerequisite: ANT101H5
Recommended Preparation: ANT102H5

ANT202H5 Biological Anthropology: Human Variation and Adaptation (SCI)
Biological anthropology deals with the diversity and evolution of human beings and their living and fossil relatives, and how they have adapted to their environments. This course will introduce students to basic concepts of human genetics and Mendelian inheritance. The course will also describe the biological and evolutionary factors that have produced the fascinating diversity observed in human populations, and illustrate different ways in which humans have adapted to their environments. [24L, 12P]
Exclusion: ANT203Y5, ANT203Y1, ANTB15H3
Prerequisite: ANT101H5/ BIO152H5

ANT203H5 Biological Anthropology: Primatology and Palaeoanthropology (SCI)
Biological anthropology deals with the diversity and evolution of human beings and their living and fossil relatives, and how they have adapted to their environments. This course will introduce students to the remarkable biological diversity of our taxonomic order: the primates. The course will also discuss the rich fossil evidence for human evolution and its interpretation. [24L, 12P]
Exclusion: ANT203Y5, ANT203Y1, ANTB14H3
Prerequisite: ANT101H5/ BIO153H5

ANT204H5 Sociocultural Anthropology (SSc)
A general introductory course emphasizing social and political organization, economics, and the development of theory. Specific cases of social dynamics are drawn from both traditional and contemporary societies. [24L, 12T]
Exclusion: ANT204Y5, ANT207H1, ANTB19H3
Prerequisite: ANT102H5

ANT205H5 Introduction to Forensic Anthropology (SCI)
Introduction to the field of forensic anthropology. Outlines the areas in which forensic anthropologists may contribute to a death investigation and introduces basic concepts relating to the recovery and analysis of human remains. [24L, 12P]
Prerequisite: ANT101H5/ BIO152H5

ANT206H5 Culture and Communication (SSc)
Introduction to linguistic anthropology and sociolinguistics. This includes: the issue of meaning in language, the role of language in context, the role of language in the organization of human activity, language and identity, the sequential organization of talk-in-interaction. [24L, 12T]
Exclusion: ANT206Y5, ANT253H1, ANTB21H3
Prerequisite: ANT102H5

ANT207H5 Being Human: Classic Thought on Self and Society (SSc)
The question of what it means to be human has been at the core of anthropology for over two centuries, and it remains as pressing now as it ever was. This course introduces students to some classic attempts at addressing this question with specific reference to the nature of personhood and social life. By engaging with the writings of Marx, Weber, Freud, and DeBeauvoir among other great thinkers of the modern age, students will develop deeper knowledge of the major theories guiding anthropological research. We will pay close attention to how arguments are constructed in these texts and focus on the methodologies that these pioneers of social thought developed in their inquiries. The course covers enduring topics ranging from the production of social inequality, what it means to be an individual, how collective life is shaped by economic markets, and the role of religion in shaping human experience, to develop an understanding of central issues facing the world today.[24L]
Exclusion: ANT204Y5
Prerequisite: ANT102H5

ANT208H5 The Culture Machine: The Anthropology of Everyday Life (SSc)
This course will introduce students to culture and social theory via the lens of popular culture. Commodities, advertising, and new technologies will be considered in light of their cultural content. The course may consider the marketing of identities, gender, sexualities, bodies, ethnicity, religion, and ideology, as well as resistance. [24L]

ANT209H5 War, Trade and Aid: The Anthropology of Global Intervention (SSc)
This course explores how anthropology approaches the study of various interventions into human life and society. These forms of intervention—nation building, human rights, and development—differ in the scale and scope of their projects and in what they hope to accomplish. They also have much in common. Each is explicitly concerned with improving the conditions under which people live, and yet each has also been criticized for making things worse rather than better. This course will explore why this might be the case by focusing on examples taken from around the world. [24L]
ANT210H5 Fantasies, Hoaxes and Misrepresentations of the Ancient World (SCI)
The anatomy of significant hoaxes, outrageous claims, and archaeology in popular culture are examined. Why are these claims so popular? How do we critically evaluate potential hoaxes and fictional accounts of the past? What role has racism played in these views? This course provides the tools for evaluation of these claims as well as for the lifetime enjoyment of what is truly exciting about archaeology. [24L]

ANT211H5 Sex, Evolution and Behaviour (SCI)
This course provides an introduction to the evolutionary significance of mating behaviours and sexual reproduction in modern humans. Students will explore human sexual behaviour with an emphasis on the evolutionary explanations for our mating strategies in relation to other primates. Through lectures, films and readings students will examine such topics as sexual selection, anatomy, sexual development, social organization, and mating patterns. [24L]
Exclusion: ANT331H5

ANT212H5 Who am I? Topics in Identity and Difference (SSc)
Who am I? This course gives a sociocultural anthropological answer to this question by focusing on culture as a fundamental means by which humans make society. In particular, it considers how the symbolic systems through which humans conceptualise the world and communicate with one another play a fundamental role in defining identity (who you are) and difference (who you aren’t). Through cross-cultural comparison, the course shows how the identities and differences we often consider ‘natural’ - sex, gender, age, race, ethnicity and others - are in fact the product of culture and society. Thus, who you are is a question that must be answered in relation to categories others will recognise and allow you to be. [24L]

ANT214H5 Anthropology of Food and Nutrition (SCI)
This course explores human food use and nutrition from a broad anthropological perspective. It examines archaeological and osteological evidence of dietary patterns of human ancestors. It explores significant food ‘revolutions’, from the origins of agriculture to the relatively recent phenomenon of biotechnological food production. It uses a wide range of theoretical approaches from biological and sociocultural anthropology to understand the patterns of food production, distribution and consumption observed today. The goal of the course is to provide students with a broad understanding of the many anthropological approaches to the study of food and nutrition. [24L]

ANT220H5 Introduction to the Anthropology of Health (SCI)
This course introduces the diverse approaches used by anthropologists to examine human health and illness. Archaeological, biological, sociocultural and medical anthropology examine health and disease in past and present populations using a wide variety of theoretical and methodological tools. The concept of health will be explored using these various and often complementary approaches. The goal is to provide students with a broad theoretical foundation for further study in the anthropology of health. [24L, 12T]
Exclusion: ANT208H1
Prerequisite: ANT101H5, ANT102H5

ANT241Y5 Aboriginal Peoples of North America (SSc)
Overview of the prehistory, ethnohistory, and ethnology of aboriginal cultures, exploring kinship, social organization, political structure, trade relations, economics, technology, art and religion. [48L]

ANT299Y5 Research Opportunity Program (SSc,SCI)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

ANT306H5 Forensic Anthropology Field School (SCI,EXP)
Introduction to the field of forensic anthropological field techniques and scene interpretation. A 2-week field school will be held on the U of T Mississauga campus (Monday to Friday 9 a.m. to 5 p.m., two weeks in August). Weekly 2-hour classes will be held during the fall term. In these classes, students will examine casts, maps, photos and other evidence collected in the field, for the purposes of scene reconstruction and presentation in court. [104P]
Prerequisite: ANT205H5

ANT308H5 Case Studies in Archaeological Botany and Zoology (SCI,EXP)
This course examines human interaction with the environment from the perspective of case studies in zooarchaeology and palaeoethnobotany. Topics include prominent theoretical perspectives, domestication, subsistence organization including hunting and gathering as well as agriculture and its intensification. [24L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5
ANT309H5 Southeast Asian Archaeology (SCI)
Southeast Asia (Thailand, Vietnam, Laos, Myanmar, Cambodia, and South China) hosts some of the greatest ethnic and linguistic diversity in the world. This course charts the early beginnings of human activity in the region to the origins of plant and animal domestication and the subsequent impact of early metallurgy across mainland Southeast Asia. Using both ethnographic and archaeological materials, we explore the range of human adaptations to the maritime, river valley and highland zones in ancient Southeast Asia. The course also considers the dynamic interaction among communities and the introduction of Buddhism and Hinduism in the rise of urbanism at Funan, Dvaravati, Chenla, and Champa. [24L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT310H5 Political Anthropology of Ancient States (SSc)
Today most people live in state-level societies. But 8,000 years ago, no one did. Why such a dramatic change? This comparative analysis of ancient, complexly organized societies is focused on understanding the processes involved in the functioning of states, examining how various political, social, economic, and religious orientations affected state information, cohesion, maintenance and dissolution. What were the range of alternatives explored in the earliest and later complexly organized societies that developed around the world? [36L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT312H5 Archaeological Analysis (SCI, EXP)
This course will introduce the process of archaeological research, from project design through report write-up. The student will create a project proposal and budget, choose methods of survey and excavation, describe and organize data for analysis, and summarize findings in a project report. [12L, 24P]
Exclusion: ARH312Y1
Prerequisite: ANT(200H5, 201H5)/ 200Y5
Limited Enrolment

ANT313H5 China, Korea and Japan in Prehistory (SCI)
The exploration of the remarkable prehistories of China, the Koreas and Japan challenge western thought on agricultural origins, complex hunter-gatherers, urbanization and the development of centralized authority. This course evaluates current thinking about these issues in the three regions and examines the impact of local archaeological practice on the construction of narratives about the past. [24L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT314H5 Archaeological Theory (SCI)
The course examines theoretical approaches to archeological explanation of the human past. The goals for the course are: 1) to trace the emergence and growth of scientific archeology; and 2) to analyze the development of theoretical approaches in the latter half of the 20th century and first part of the 21st century. [24L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT316H5 South Asian Archaeology (SSc)
This course surveys the archaeology of South Asia (modern-day India, Pakistan, Sri Lanka and northern regions) from the Palaeolithic to the Medieval Period (+200,000 ya to ca. 1600 CE/AD) using a comparative framework. South Asia is a place where many external cultural traditions mixed with indigenous traditions to create new socioeconomic and sociopolitical entities and sequences. While we will examine classic examples of hunter-gatherer groups, early villages, urban settlements, regional polities, and large empires through time, we will also stress the contemporaneity of groups of people with very different lifestyles – hunter-gatherers participated in trading networks with town and city dwellers, pastoral nomads moved through settled village regions during their annual migrations. The impact of archaeological research on the region today is seen through the politicization of South Asian prehistory and history that has strongly affected both interpretations of the past and modern political events. Cases such as the debate over the identity of the Harappans and the existence of the Aryans will be evaluated from both an archaeological and a political perspective. [24L, 12P]
Prerequisite: ANT(200H5, 201H5)/ 200Y5/ HIS282H5/ RLG205H5

ANT317H5 Archaeology of Eastern North America (SCI)
Chronology and analysis of the prehistoric culture areas and stages of Eastern North America in a scientific context. [24L]
Exclusion: ANT317H1
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT318H5 Archaeological Fieldwork (SCI, EXP)
Practical experience on an archaeological site during the last two weeks of August, followed by weekly laboratory sessions September to December. [27L, 101P]
Prerequisite: ANT(200H5, 201H5)/ 200Y5
Limited Enrolment
ANT320H5 Archaeological Approaches to Technology (SCI)
This course focuses on insights into social and cultural processes provided by the study of ancient and historical technology. It emphasizes the importance for archaeological studies of archaeological, textual, experimental and ethnographic data. Organization and control of production, style of technology, and the value of objects will be examined. Throughout, social and cultural as well as economic and functional reasons for the development and adoption of new technologies will be discussed. [24L, 12P]
Prerequisite: ANT(200H5, 201H5)/ 200Y5
Recommended Preparation: ANT204H5/ 207H5/ 204Y5

ANT322H5 Anthropology of Youth (SSc)
This course will present various perspectives on the nature and dynamics of youth culture. The course will examine one or more of the following: capitalism and youth cultures, ethnomusicology, and discourses of "youth." Topics may include North American subcultures (such as punk and hip-hop) and/or ethnographies of youth from other parts of the world. The course may also use frameworks from cultural studies and semiotics. [24L]
Exclusion: ANT322H1
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT327H5 Agricultural Origins: The Second Revolution (SCI)
A second revolution in human existence began when people developed agriculture long after the origin of modern humans and Upper Palaeolithic culture. This course critically evaluates the shift to agriculture in the context of current ecological and archaeological perspectives. The concept of "agriculture" is evaluated by considering plant and animal domestication as well as resource management in a broad range of contexts. [24L]
Prerequisite: ANT(200H5, 201H5)/ 200Y5

ANT331H5 The Biology of Human Sexuality (SCI)
Human sexual behaviours will be examined through the lens of evolutionary theory. Through lectures and readings, students will examine such topics as genetic, hormonal, and environmental determinants of sex, sexual selection, and the influence of sex on life history and behaviour. Students will discuss research that has been published in this area, and will develop critical assessments of the literature and films. [24L]
Exclusion: ANT330H5, 331Y5
Prerequisite: ANT(202H5, 203H5)/ 203Y5
Recommended Preparation: ANT211H5

ANT332H5 Human Origins I: Early Ancestors to Homo (SCI)
What does it mean to be human? Paleoanthropologists address this question by using fossil evidence to piece together our evolutionary history. Who we are today is a product of our biological and geological past. We will begin this quest by looking at ourselves as primates, and then we will traverse back through time to study primate origins, evolution, adaptations, and behaviour until we reach our genus, Homo. [24L, 12P]
Exclusion: ANT332Y5, ANT335Y1, ANTC16H3, ANTC17H3
Prerequisite: ANT(202H5,203H5)/ 203Y5

ANT333H5 Human Origins II: The genus Homo (SCI)
What does it mean to be human? This course will examine the evolutionary journey through the genus Homo by examining the fossil evidence and the archeological record. Through this examination we will discover the unique biological and behavioural characteristics of modern humans. [24L, 12P]
Exclusion: ANT332Y5, ANT335Y1, ANTC16H3, ANTC17H3
Prerequisite: ANT332H5

ANT334H5 Human Osteology (SCI)
Includes normal anatomy of the human skeleton, metrical and morphological variation, age and sex determination, and techniques of recovering, preserving and recording human remains. [12L, 24P]
Exclusion: ANT334Y5, ANT334H1, ANT334Y1, ANTC47H3
Prerequisite: ANT(202H5, 203H5)/ 203Y5

ANT335H5 Anthropology of Gender (SSc)
Survey of the function of gender roles from evolutionary and cultural perspectives. Cross-cultural variation in human sexual behaviour and gender will be examined. [24L]
Exclusion: ANT331Y5, ANT343Y1, ANT343H1, ANTC15H3
Prerequisite: ANT204H5/ 207H5/ 204Y5
Recommended Preparation: ANT(202H5, 203H5)/ 203Y5
ANT337H5 Anthropology of Growth and Development (SCI)
This course examines growth and development from a variety of theoretical perspectives. It begins with an examination of the fundamental biological principles of growth and how these are expressed throughout evolution. It explores the evolution of growth patterns among primates and hominins and compares patterns of growth among the living primates. The course examines human growth and development throughout infancy, childhood and adolescence and explores the influence of genetic, epigenetic and endocrine processes on the plasticity of human growth that ultimately produces the variability observed in our species. The goal of the course is to provide students with a complex understanding of how evolutionary and environmental processes interact in the production of growth and health in human populations. [24L]
Prerequisite: (ANT202H5, ANT203H5)/ANT203Y5

ANT338H5 Laboratory Methods in Biological Anthropology (SCI,EXP)
Recommended for those who may specialize in biological anthropology. Students will be introduced to the process of conducting research, including selected laboratory procedures and how they are used to generate and/or analyze data. [12L, 24P]
Prerequisite: ANT(202H5, 203H5)/203Y5

ANT340H5 Osteological Theory (SCI)
Survey of palaeodemography, palaeopathology, palaeonutrition, and techniques of recovering, preserving and recording human remains. [36L]
Exclusion: ANT334Y5, ANTC48H3
Prerequisite: ANT334H5

ANT341H5 Anthropology of Infectious Disease (SCI)
Infection is a significant area of study for anthropologists because it is situated at the intersection of social and biological experience. This course examines why infectious disease occupies such a central position in our contemporary understanding of health. It examines the many theoretical and methodological approaches currently used to understand how humans experience infectious illness. Perspectives from bioarchaeology, demography, environmental anthropology, biocultural anthropology, and medical anthropology are used to examine the way epidemics and infections have been understood throughout human history and how those understandings continue to shape human perceptions of risk, the body and identity. Social inequality is a major focus of inquiry; the course explores how colonialism and injustice lead to significant and persistent health inequalities for many populations. [24L]
Prerequisite: ANT202H5, ANT204H5, ANT220H5

ANT350H5 Globalization and the Changing World of Work (SSc)
The course uses ethnographic material to examine 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. [24L]
Exclusion: ANT350H1
Prerequisite: ANT204H5/207H5/204Y5

ANT351H5 Money, Markets, Gifts: Topics in Economic Anthropology (SSc)
Sociocultural anthropology has, since its inception, questioned the assumption that "the economy" ought to be understood as a domain distinguishable from other fields of human interaction, such as religion and kinship, or from power, politics, affect, and morality. This class offers a set of introductory readings that range from the analysis of non-Western forms of exchange and value to the study of capitalism; from stock-markets to the anti-globalization movement. [24L]
Exclusion: ANT378H1, ANTC19H3, ANTC20H3
Prerequisite: ANT204H5/207H5/204Y5

ANT352H5 Protest, Power and Authority: Topics in Political Anthropology (SSc)
This course explores ethnographically the social and cultural practices through which the exercise of power is legitimized, authorized, and contested, examining such topics as nation-building, non-governmental activism, human rights, and the global "war on terror." [24L]
Exclusion: ANTC32H3
Prerequisite: ANT204H5/207H5/204Y5/POL113H5/POL200Y5

ANT354H5 Capitalism and its Rebels (SSc)
This class explores different forms of rebellion, insurgency, protest and political mobilization from an anthropological perspective, focusing specifically on anti-capitalist mobilizations. Grounded in ethnographies that range from studies of piracy, hacking, and the occupy movements, to struggles against the privatization of water and social movements organizing for "the commons," this course offers key insight into contemporary social movements, their deep groundings in the past, and the implications they might have for the future. [24L]
Exclusion: ANT322H5 in Spring 2014
Prerequisite: ANT204H5/207H5/204Y5
ANT357H5 Nature, People and Power: Topics in Environmental Anthropology (SSc)
This course examines anthropological approaches to the environment and environmentalism. Through key readings on indigenous peoples and conservation, traditional ecological knowledge, community-based natural resource management, ecotourism and the human dimensions of climate change, the course explores the complex social, cultural and political encounters that produce 'the environment' as a resource in need of management. [24L]
Exclusion: ANT351H1, ANT457H5
Prerequisite: ANT204H5/ 204Y5

ANT358H5 Field Methods in Sociocultural Anthropology (SSc)
This course investigates how sociocultural and/or linguistic anthropologists collect data, conduct fieldwork, and interpret research results. The course will benefit students who want to gain an appreciation of research design and practice and those considering graduate-level work in anthropology or another social science. [24L]
Exclusion: ANT369H1, ANTC60H3
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT360H5 Anthropology of Religion (SSc)
This course considers anthropological approaches to western and non-western religions and religious phenomena. [24L]
Exclusion: ANT356H1, ANTC33H3
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT361H5 Anthropology of Sub-Saharan Africa (SSc)
This course considers anthropological approaches to contemporary issues in Sub-Saharan Africa. [24L]
Exclusion: ANT212Y5
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT362H5 Language in Culture and Society (SSc)
Main currents in anthropological thinking about language and social interaction. It aims to introduce students to representative writings and ways for working. Lectures will work through main figures and schools with emphasis on explaining technical concepts and analytic paradigms. [24L]
Prerequisite: ANT204H5/ 207H5/ 204Y5, 206H5

ANT363H5 Magic and Science (SSc)
What's the difference between magic and science? Is there one? This course explores anthropological approaches to magic and science and related topics, raising basic questions about the nature of knowledge: what can we know about the world, and how can we know it? Through close readings of key anthropological texts, we consider what—if anything—differentiates magic and science, belief and truth, subjectivity and objectivity, irrationality and rationality. [24L]
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT364H5 Fieldwork in Language, Culture, and Society (SSc, EXP)
This course will give students hands-on experience in methods for recording, transcribing, coding, and analyzing ethnographic data in linguistic anthropology. Students will synthesize weekly reading materials focused on these methods with actual, collaborative, in-class practice on a designated topic in the anthropology of everyday social interaction. Through this synthesis students will come to discern the relationship between everyday instances of communication between people and what the patterns of speech in this interaction may say about larger society. Students will be expected to develop their own analyses of the data collected under the guidance of the instructor and to formulate a final project. [24L, 12P]
Prerequisite: ANT204H5/ 206H5/ JAL353H5

ANT365H5 Meaning, Self, Society (SSc)
Humans, to paraphrase Clifford Geertz, are suspended in webs of meaning that they themselves have spun. This course introduces students to the tools anthropologists and others have developed in order to analyze and understand these "webs of meaning." Readings in philosophy, cultural theory and ethnography will be used to engage with questions regarding the construction of meaning in relation to ethnic identity, social structure, gender, political economy, personhood, and religion. Drawing on classic texts and the tools of semiotics, students will learn to apply the lens of symbolic analysis to interpret a range of contemporary social phenomena. [24L]
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT368H5 World Religions and Ecology (SSc)
A study of the responses of selected world religious traditions to the emergence of global ecological concerns. Key concepts and tenets of the traditions and their relevance for examination of the environment crisis. [24L]
Exclusion: RLG311H5
Prerequisite: ANT204H5/ 207H5/ 204Y5/RLG101H5

ANT369H5 Religious Violence and Nonviolence (SSc)
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. [24L]
Exclusion: RLG317H5
Prerequisite: ANT204H5/ 207H5/ 204Y5/RLG101H5
ANT30H5 Environment, Culture and Film (SSc)
Our present environmental challenge constitutes of the most pressing areas of contemporary social, cultural, ethical and ecological concern. Acid rain, poisoned air, forest clear-cutting, ozone depletion, global climate change, toxic waste sites—the list goes on—all weigh heavily on our personal and intellectual lives. This course attempts to introduce students to both the scope and seriousness of present ecological concerns, as well as some core principles and concepts in the field of the intersection of environment and culture, through the lens of feature films. Themes such as the precautionary principle, urban/rural dualisms, ecofeminism, deep ecology, and the overwhelming burden placed on poor populations by environmental destruction are but a few of the areas which will be examined through the use of feature films, both classic and contemporary. We will do this in part by touching on some of the major writers and classic essays in the field. Class lectures will be supplemented by audiovisuals, guest lectures and class discussions. [36L]
Prerequisite: ANT204H5/ 207H5/ 204Y5

ANT397H5 Independent Study (SSc,SCI)
This independent study course is designed to offer students advanced supervised reading and initial research planning on an anthropological topic not covered in other courses, or covered only briefly. Students who wish to pursue this option with a specific faculty member should approach the faculty member early - before the start of the academic term - to negotiate the reading and study program. The faculty member should then discuss the proposal with the Chair or designate, prior to further planning. A syllabus must be submitted to the Chair or designate through the online CISS system for approval of the course. Registration by the student online is required.
Prerequisite: Permission of Instructor and Permission of Department

ANT398H5 Independent Reading (SSc,SCI)
This independent reading course is designed to offer students advanced supervised reading on an anthropological topic not covered in other courses, or covered only briefly. Students who wish to pursue this option with a specific faculty member should approach the faculty member early - before the start of the academic term - to negotiate the reading program. The faculty member should then discuss the proposal with the Chair or designate, prior to further planning. A syllabus must be submitted to the Chair or designate through the online CISS system for approval of the course. Registration by the student online is required.
Prerequisite: Permission of Instructor and Permission of Department

ANT399Y5 Research Opportunity Program (SSc,SCI)
This course provides senior undergraduate students who have developed some knowledge of a discipline and its research methods an opportunity to work in the research project of a professor in return for course credit. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early March.

For details see Experiential Learning Programs (Page 34)

ANT401H5 Vocal and Visual Communication (SSc)
Major approaches to the study of visual communication are studied. Bodies of visual materials, both documentary and commercial, are analyzed in terms of social and cultural contexts. Student projects may involve the use of still, movie, video filming and archival sources. [12L, 24P]
Prerequisite: ANT102H5, 204Y5/ 206H5

ANT407H5 Quantitative Methods in Archaeology and Biological Anthropology (SCI)
The fragmentary nature of data recovered from prehistoric sites sets presents many challenges for investigators. Is there meaningful pattern to be found? How do we transform a description of the data set into an interpretation about the society we are studying? This course provides students with an introduction to general statistical principles used by social scientists and the different methods suitable for archaeological exploration. Students will learn how to apply statistical procedures using Minitab software to case studies. Each class will include a lab component. [24L, 12P]
Exclusion: ANTC35H3, BIO360H5, BIO361H5, ECO220Y5, ECO227Y5, PSY201H5, PSY202H5, SOC300Y5, (SOC350H5, SOC351H5), STA218H5, STA220H5, STA221H5, STA256H5, STA258H5, STA260H5
Prerequisite: ANT (200H5, 201H5)/ 200Y5/ (202H5, 203H5)/ 203Y5, 312H5/ 334H5/ 338H5

ANT414H5 People and Plants in Prehistory (SCI,EXP)
The examination of plant remains from archaeological sites addresses many issues, some of which include environmental interaction, plant domestication, and early plant use. Students will learn plant remains identification and interpretation skills through a combination of laboratory and seminar sessions. [12L, 24P]
Prerequisite: ANT(200H5, 201H5)/ 200Y5, 312H5/ 318H5 or P.I.
Limited Enrolment
ANT415H5 Faunal Archaeo-Osteology (SCI,EXP)
Examination and interpretation of faunal material from archaeological sites, to obtain cultural information regarding the site occupants. [36P]
Exclusion: ANT415Y5, ANT415Y1
Recommended Preparation: ANT312H5/ (334H5, 340H5)/ 334Y5

ANT416H5 Advanced Archaeological Analysis (SCI,EXP)
This course will involve students in applied laboratory methods in archaeology. Each student will engage in an individual research project on an archaeological data set. Techniques will include basic description, measurement, quantitative analysis and qualitative analysis. The primary focus will be ceramic and lithic analysis. [12L, 24P]
Exclusion: ANT312Y1
Prerequisite: ANT312H5

ANT418H5 Advanced Archaeological Fieldwork (SCI,EXP)
Fieldwork and analysis of artifacts. [27L, 101P]
Prerequisite: ANT318H5

ANT430H5 Special Problems in Biological Anthropology and Archaeology (SCI)
Special seminar on selected topics in biological anthropology and/or archaeology; focus of seminar changes each year. [24S]
Prerequisite: 1.0 credits in 300 level anthropology courses and departmental approval.

ANT431H5 Special Problems in Sociocultural or Linguistic Anthropology (SSc)
Special seminar on selected topics in sociocultural and/or linguistic anthropology; focus of seminar changes each year. [24S]
Prerequisite: 1.0 credits in 300 level anthropology courses and departmental approval.

ANT432H5 Special Seminar in Anthropology (SSc,SCI)
Special seminar on selected topics in any aspect of anthropology, including one or more sub-fields; focus of seminar changes each year. [24S]
Prerequisite: 1.0 credits in 300 level anthropology courses and departmental approval.

ANT434H5 Palaeopathology (SCI)
The study of diseases and maladies of ancient populations. The course will survey the range of pathology on human skeletons, (trauma, infection, syphilis, tuberculosis, leprosy, anemia, metabolic disturbances, arthritis and tumors). [12L, 24P]
Prerequisite: ANT334Y5/ (334H5, 340H5), ANT338H5

ANT436H5 Theory and Methods in Molecular Anthropology (SCI)
Survey of theory and methods in molecular anthropology, a subdiscipline of anthropology that attempts to understand human evolution and the variation observed in our species using molecular information. [24L, 12P]
Exclusion: ANT336H5
Prerequisite: ANT(202H5, 203H5)/ 203Y5 and 1.0 credits in 300 level ANT courses.

ANT437H5 Advanced Seminar in the Anthropology of Health (SCI)
This course undertakes a critical examination of theory and methods used in the study of human health. It traces the historical development of the powerful biomedical paradigm that dominates health research today and uses a critical lens to examine the systems used to measure and classify health and disease. It explores evolutionary and biological approaches to understanding human health by examining the concepts of adaptation and plasticity, genetic and epigenetic approaches, developmental origins and life history theories, social determinants of health, and critical medical anthropology. The course explores the profoundly influential role of social inequality on the production and reproduction of health in historical and contemporary populations. [24S]
Prerequisite: ANT202H5, ANT204H5, ANT220H5

ANT438H5 The Development of Thought in Biological Anthropology (SCI)
This course will present a world-wide perspective of biological anthropological research and how it developed in different countries. To be discussed will be variation in approaches, subjects studied, philosophical attitudes, and the emergence of common themes in the study of physical anthropology. [24L]
Prerequisite: ANT(202H5, 203H5)/ 203Y5 and 1.0 credits in 300 level courses in Biological Anthropology.

ANT439H5 Advanced Forensic Anthropology (SCI,EXP)
The identification of the remains of victims of homicide, mass disasters and political atrocities. Special methods are used in the recovery and identification of human skeletal remains for presentation in courts of law. [12L, 24P]
Prerequisite: ANT205H5
Corequisite: ANT306H5, 334Y5/ (334H5, 340H5)
ANT441H5 Advanced Bioarchaeology (SCI, EXP)
This course will combine theory learned in ANT340H5, Osteological Theory, with bioarchaeological methods to teach students how to conduct and interpret an osteobiography of human skeletal remains. Lectures and labs will cover techniques of sex determination, age estimation, stature calculation, evaluating health and nutrition, assessing markers of occupational stress, osteometrics, biological distance studies, and paleodemography. [24L, 12P]
Exclusion: ANTD35H3
Prerequisite: ANT334H5, 340H5
Recommended Preparation: ANT434H5

ANT459H5 The Ethnography of Speaking (SSc)
The seminar, Ethnography of Speaking, examines the social use of language, and focuses on the interrelationships between verbal form, social function, and cultural meaning in varying modalities of spoken communicative interaction. [24L]
Prerequisite: ANT206Y5/206H5
Recommended Preparation: ANT460H5

ANT460H5 Theory in Sociocultural Anthropology (SSc)
Survey of major theoretical perspectives developed in social and cultural anthropology. The main ideas and underlying assumptions of each perspective will be critiqued and evaluated for their contributions to the field. [24L]
Exclusion: ANTD24H3
Prerequisite: ANT204H5/207H5/204Y5

ANT461H5 Advanced Seminar in Sociocultural and Linguistic Anthropology (SSc)
This fourth-year seminar is designed for anthropology majors and specialists with an interest in sociocultural and linguistic anthropology. While seminar themes will vary, the aim is to provide a forum in which advanced students interested in graduate school can discuss cutting edge topics in the discipline. [24S]
Prerequisite: 1.0 credits in 300 level anthropology courses and departmental approval.

ANT462H5 Living and Dying: Topics in Medical Anthropology & Global Health (SSc, EXP)
This course is concerned with contemporary medical knowledge practices, with particular emphasis on Western medicine and Public Health. Through a set of key readings in sociocultural medical anthropology, students will explore topics such as the art and science of medicine, end of life rites and rituals, expertise, and the politics and perils of intervention. This is an advanced, writing-intensive seminar that will particularly appeal to sociocultural anthropology students, and those interested in pursuing a career in the health professions. [24L]
Prerequisite: ANT204H5

ANT498H5 Advanced Independent Study (SSc, SCI)
This independent study course is designed to offer students advanced supervised reading, research and planning for a publishable report on an anthropological topic not covered in other courses, or covered only briefly. Students who wish to pursue this option with a specific faculty member should approach the faculty member early - before the start of the academic term - to negotiate the research and study program. The faculty member should then discuss the proposal with the Chair or designate, prior to further planning. A syllabus must be submitted to the Chair or designate through the online CISS system for approval of the course. Registration by the student online is required.
Prerequisite: Permission of Instructor and Permission of Department

ANT499H5 Advanced Independent Research (SSc, SCI)
This independent research course is designed to offer students advanced supervised research and writing of a publishable report on an anthropological topic not covered in other courses, or covered only briefly. Students who wish to pursue this option with a specific faculty member should approach the faculty member early - before the start of the academic term - to negotiate the research and writing program. The faculty member should then discuss the proposal with the Chair or designate, prior to further planning. A syllabus must be submitted to the Chair or designate through the online CISS system for approval of the course. Registration by the student online is required.
Prerequisite: Permission of Instructor and Permission of Department
Art History (HBA)

Professors Emeriti
L.E. Eleen, B.A., M.A., Ph.D.
T. Martone, B.A., M.A., M.A., Ph.D.
B. Welsh, B.A., M.Phil., Ph.D.

Professors
J. Caskey, A.B., M.A., M.Phil., Ph.D.
K. Jain, B.A., M.A., Ph.D.
L. Kaplan, B.A., M.A., Ph.D.
E. Levy, B.A., M.A., M.F.A., Ph.D.
J.P. Ricco, B.A., A.M., Ph.D.
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Assistant Professor, Teaching Stream
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Art History offers students an exciting forum for developing critical skills in interpreting visual imagery and understanding the significance of art in a variety of cultures and historical periods, including the contemporary moment. Courses span the history of art from the ancient to the contemporary worlds, and investigate art from Europe, North and South America, and Asia. The Art History programs (Specialist, Major, Minor) train students in foundational methods of interpretation as well as the newest approaches in the field.

Specialization in this program may lead to curatorial work in galleries, museums, or corporations; careers in illustration, advertising, web design, film, and graphic design; journalism; teaching at the high school or university level following graduate study; independent artistic activities; or simply to deeper engagement with, and enjoyment of, art.

Students registering in their first year in Art History are encouraged to contact the undergraduate counsellor during the registration period for guidance. CCIT students considering double-majoring in an art program should also meet the undergraduate counsellor to discuss their studies.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
FAH Fine Art History (FAH) (page 51)
VCC Visual Culture and Communication (page 371)

Specialist Program ERSPE0615 Art History (Arts)

10.0 credits are required in FAH, VCC, and VST (distributed in 4 areas; see Notes). For the complete list of VCC courses that satisfy Art History requirements, see the departmental website. The 10.0 credits must include: FAH101H5, VCC101H5, 2.5 200-level FAH credits and 4.0 300/400-level FAH/VCC/VST credits, of which at least 1.0 must be at the 400 level. Please note that no St. George courses may be substituted for the required 100- or 200-level courses. (For exceptions see Note 2 below). Students enrolled before Fall 2003 should consult the undergraduate counsellor about completion of their program.

Specialists in Art History are strongly urged to structure their studies as follows:

First Year: 2.0 credits: FAH101H5, VCC101H5, and 1.0 credit in FAH at the 200 level

Second Year: 2.5 credits: 1.5 credits in FAH at the 200-level and 0.5 credit in FAH/VCC at the 300 level

Third Year: 3.0 credits in FAH at the 300/400 level, of which at least 1.5 must be at the 300 level

Fourth Year: 2.5 credits in FAH/VCC/VST at the 300/400 level, of which 1.0 must be at the 400 level

Notes:

1. 2.0 credits from each of the following four areas are required: Ancient & Medieval; 15th-18th centuries; 19th-21st centuries; Visual Culture and Theory. Some courses may satisfy more than one of the distribution requirements. See the departmental website www.utm.utoronto.ca/dvs for the distribution of courses by area.

2. No more than 4.0 FAH credits may be taken at the 200 level. VCC205H5, VCC207H5, and VCC209H5 do not satisfy FAH 200-level requirements. 0.5 credit at the 200 level in FAH may be taken at St. George in an area not covered by U of T Mississauga’s offerings (i.e., one of the following courses: FAH248H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1).

3. Courses which have significant Art History or Visual Culture content in other programs such as CCIT, Cinema Studies, Philosophy, Drama, English, History, East Asian Studies, and Near and Middle Eastern Civilizations, may be substituted for up to 1.0
FAH/VCC credit only with permission, prior to enrolment, from the program director. For possible substitutes see the undergraduate counsellor.

4. RECOMMENDED LANGUAGE STUDY: Students wishing to pursue graduate studies in Art History must acquire a basic reading knowledge of at least two languages. A minimum of 2.0 in one language, or 1.0 in two languages (total 2.0) is recommended. German, French, and Italian are recommended.

5. No more than a total of 16.0 FAH credits may be taken.

Major Program ERMAJ0615 Art History (Arts)

For a major program, 7.0 credits are required from offerings in FAH, VCC, and VST distributed in four areas (see notes). For the list of VCC courses that satisfy requirements for the Art History Major, see the departmental website or the undergraduate counsellor. Courses must include FAH101H5, VCC101H5, plus 2.0 FAH courses at the 200 level (see following) and 3.0 at the 300/400 level, of which 0.5 must be at the 400 level. Please note that no St. George courses may be substituted for the required 100 or 200 level courses. (For one exception see note 2 below). Students enrolled before Fall 2003 should consult the undergraduate counsellor about completion of their program.

Majors in Art History are strongly urged to structure their studies as follows:

First Year: 1.5-2.0 credits: FAH101H5, VCC101H5, and a further 0.5-1.0 credit in FAH at the 200 level

Second Year: 1.5-2.0 FAH credits at the 200 level

Third Year: 2.0 FAH/VCC credits at the 300/400 level

Fourth Year: 1.0 FAH/VCC/VST credit at the 400 level

Notes:

1. A minimum of 1.0 credit at any level must be taken in each of the following four areas: Ancient & Medieval; 15th-18th centuries; 19th-21st centuries; Visual Culture and Theory. It is highly recommended that students take at least one 300- or 400-level H course in at least three of the four areas. Some courses may satisfy more than one of the distribution requirements. See the departmental website for the distribution of courses by area: www.utm.utoronto.ca/dvs

2. VCC205H5, VCC207H5 and VCC209H5 do not satisfy FAH 200-level requirements. 0.5 credit at the 200 level in FAH may be taken at St. George in an area not covered by U of T Mississauga's offerings (i.e., one of the following courses: FAH248H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1).

3. Courses with significant Art History or Visual Culture content in other programs, such as CCIT, Cinema Studies, Philosophy, Drama, English, History, East Asian Studies, and Near and Middle Eastern

Minor Program ERMIN0615 Art History (Arts)

4.0 credits in FAH are required. The following is a list of requirements that must be fulfilled:

1. FAH101H5

2. 2.0 FAH credits at the 200 level, of which at least 0.5 credit must be in Ancient & Medieval, 0.5 credit must be in 15th-18th centuries, and 0.5 credit must be in 19th-21st centuries

3. 1.5 credits in FAH/VCC/VST at the 300/400 level.

See the departmental website at www.utm.utoronto.ca/dvs for the distribution of courses by area. Please note that no St. George courses may be substituted for the required 100-level and 200-level courses. However, 0.5 credit at the 200-level in FAH may be taken at St. George in an area not covered by U of T Mississauga's offerings (i.e. one of the following courses: FAH248H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1).

First Year: 1.0 credits: FAH101H5 and 0.5 credit in FAH at the 200 level

Higher Years: 1.5 credits in FAH at the 200 level

1.5 credits in FAH/VCC/VST at the 300/400 level

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

Most courses are offered in alternate years. Please review the timetable and consult with the undergraduate counsellor in Room 3051, CCT Bldg., or see the Department of Visual Studies website for current offerings.

FAH101H5 Introduction to Art History (HUM)
(Formerly FAH202H5) An overview of western art from the ancient world through the 20th century, as well as an introduction to the discipline of art history and its methodologies. Emphasis on representative monuments and key approaches to interpretation. [24L, 12T]
Exclusion: FAH101H1, FAH102H1, FAH105H5, FAH202H5, VPHA46
VST101H5 Introduction to Visual Studies (HUM)
This foundational course introduces students to the study of visual images and stresses the importance and development of skills involving looking, reading, and writing as they pertain to the study of the visual. Examples will be drawn from a variety of visual media and a number of different geographic regions and historical periods, and thereby will introduce students to the scope and range of visual practices. The course introduces students to advanced concepts, keywords, and core ideas in visual studies as well as historiography, critical theory, and the art of interpreting a work. The course also teaches students to write about works across visual media and to develop critical reading skills of both primary and secondary sources. 
Exclusion: FAH105H5, FAH202H5, FAH101H5, VST100H5

FAH205H5 Art in Antiquity (HUM)
This course offers a survey of the arts of antiquity. Emphasis is placed on major works of sculpture, painting, and architecture. Decorative arts are also treated. [24L, 12T] 
Exclusion: FAH207H1, VPHB52
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5

FAH215H5 Early Medieval Art and Architecture (HUM)
An overview of major monuments and themes in the art and architecture of Western Europe and the Mediterranean World from the third until the eleventh century. [24L, 12T] 
Exclusion: FAH102Y5/ FAH261H1/ FAH267H5/ FAH271H5, VPHB53
Recommended Preparation: FAH101H5

FAH216H5 Later Medieval Art and Architecture (HUM)
An overview of major monuments and themes in the art and architecture of Western Europe and the Mediterranean World from the eleventh through the fifteenth century. [24L, 12T] 
Exclusion: FAH102Y5/ FAH261H1/ FAH267H5/ FAH271H5, VPHB53
Recommended Preparation: FAH101H5

FAH274H5 Renaissance Art and Architecture (HUM)
A selective survey of the major art centres, types of artistic production, personalities, and trends in Italy and the North, from the early fifteenth century to the mid-sixteenth. The creation and diffusion of art are addressed through an understanding of historical techniques (media), cultural determinants such as patronage, and significant works of art. [24L, 12T] 
Exclusion: FAH230H1, VPHB53
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5

FAH279H5 Baroque Art and Architecture (HUM)
An introduction to art and society in Europe, ca. 1600 to ca. 1800 CE. Tensions between the Catholic Church and Protestantism; the rise of powerful, competing courts; the growth of increasingly complex urban centres; and the entry of the “wider public” into the art market all create new roles for representation in Europe. Developments in painting, prints, sculpture, architecture, urban planning, and festivals are considered. [24L, 12T] 
Exclusion: FAH231H1, VPHB64
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5

FAH285H5 Art and Religion (HUM)
An introduction to the art of the major world religions (examples will mostly be taken from Christianity, Hinduism, and Islam but may also extend to Judaism, Buddhism, and religions of indigenous peoples), examining debates within these traditions around the status of the image as well as the relationship of religious images with the secular notion of ‘art.’ [24L, 12T] 
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5

FAH287H5 European Art of the Nineteenth Century (HUM)
Surveys major developments in European art and architecture from the late eighteenth through the end of the nineteenth century, including Neoclassicism, Romanticism, Orientalism, Realism, the Pre-Raphaelite Brotherhood, Impressionism, Post-Impressionism, and Symbolism. Artistic responses to political change, urbanisation, capitalism, colonialism, the Academy, and the Salon will be explored as well as changing constructions of gender, race, class, and national identities through visual media. [24L, 12T] 
Exclusion: FAH208H1, FAH282H1, FAH245H1
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5

FAH288H5 European and North American Art of the Earlier Twentieth Century (HUM)
Surveys principal developments in modern art and architecture from the late 19th century through 1945. Topics covered include key movements, such as Fauvism, Expressionism, Cubism, Futurism, Constructivism, Suprematism, de Stijl, Dada, and Surrealism, and key concepts, such as the avant-garde, abstraction, the readymade, the unconscious, and the primitive. Readings include manifestos and other writings by artists as well as art historical texts. [24L, 12T] 
Exclusion: FAH246H1, VPHB58
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5
FAH289H5 Art Since 1945 (HUM)
Examines many divergent international art movements and controversies in painting, sculpture, video, installation art, performance, and other new forms, from 1945 to the present. [24L, 12T]
Exclusion: FAH246H1, VPHB58
Recommended Preparation: FAH101H5/ FAH105H5/ FAH202H5 and FAH288H5

FAH291H5 History of Photography (HUM)
Examines the history of photography in Euro-American visual culture and explores how this medium of mass communication has transformed our perceptions and conceptions of art, society, and culture over the past two centuries. Reviews key imagemakers and areas of production concluding with the impact of digital imaging. [24L, 12T]
Exclusion: FAH252H5, FAH391H5

FAH292H5 Canadian Art (HUM)
This course examines the history of art produced in Canada, from the pre-contact period to today. Diverse visual traditions and their intersections will be studied, as will the changing roles of art in Canadian society. [24L, 12T]
Exclusion: FAH248H5: Canadian Painting 1665-1960 (formerly FAH286H1), VPHB60H3: Canadian Visual Art
Recommended Preparation: FAH101H5

FAH299Y5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for students in their second year to work on the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods, and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

FAH301H5 History and Practices of Visual Resource Collecting (HUM)
This course investigates the theoretical and philosophical bases and practical realities of digitizing the visual arts in the context of scholarly research, collection development, publishing, information studies, and education in the global environment. Students will examine the historical development and impact of digitization on image collecting as well as current practices and issues facing professionals. A practical, hands-on approach will be an essential part of the course. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and VCC101H5/ VCC201H5 and 1.0 credits in FAH/VCC at the 200 level or PI.

FAH310H5 Introduction to the History and Theory of Curatorial Practice (HUM)
An introduction to the problematics of exhibition spaces. The course will survey curatorial strategies tailored for the white cube as well as the more unconventional sites invested by curators (such as streets, newspapers, broadcast media, domestic spaces). Students will read key texts and analyze a range of projects/sites (including emerging artist-run centres, museum blockbusters, biennials). Students will visit exhibitions and analyze them critically. [24S]
Exclusion: VPSB73, VIS320H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and VCC101H5/ VCC201H5, FAH289H5 and 0.5 additional credit in FAH/VCC
Recommended Preparation: FAH288H5, FAH289H5, FAH388H5

FAH322H5 Romanesque Sculpture (HUM)
A study of architectural sculpture in 11th- and 12th-century France and neighbouring countries: origins; sources of form and style; social, religious, and functional contexts of selected monuments; also historiography. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH267H5/ FAH271H5

FAH329H5 Early Christian Art and Architecture (HUM)
Examines art and architecture during the emergence of Christianity in the West until ca. 600, focusing primarily on Italy. Assesses the connections between polytheistic, imperial Roman art and new Christian traditions in a variety of media, including mosaics, metalwork, wall painting, and sculpture. Also considers the role of primary texts in the interpretation of Early Christian art. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH267H5

FAH332H5 Studies in Baroque Painting (HUM)
Thematically organized treatment of major figures (Caravaggio, Carracci, Poussin) in the context of art theory and viewer response. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH274H5/ FAH279H5

FAH337H5 Court Art and Patronage in the Middle Ages (HUM)
Art and architecture of royal and imperial families from ca. 800 to 1400 in western Europe, including Norman, Capetian, Plantagenet, and Hohenstaufen dynasties. Topics include the role of courts in the development and diffusion of new styles, and monuments as expressions of piety, chivalry, and political propaganda. [24S] May be taken for credit for the Specialist/Major programs in Architecture (St. George).
Exclusion: FAH316H1; FAH327H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH271H5/ FAH267H5
FAH343H5 Pilgrimage (HUM)
Examines the experience of pilgrimage from an interdisciplinary perspective, with focus on major Christian and Islamic shrines in the Middle Ages. Considers monuments associated with sites such as Santiago, Jerusalem, and Mecca, as well as objects collected by pilgrims. [24S] May be taken for credit for the Specialist/Major programs in Religion (U of T Mississauga), Christianity & Culture (St. George), and Architecture (St. George).
Exclusion: FAH316H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH267H5

FAH351H5 Gothic Architecture (HUM)
Study of origins, architecture, and decoration of the Gothic Cathedral in the Ile-de-France, treating function and symbolism, intellectual and social contexts, and initial diffusion of the style to other countries. Considers post-medieval Gothic as well. [24S]
Exclusion: FAH328H1, VPHC42
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH267H5/ FAH271H5

FAH353H5 Rome in the Age of Bernini (HUM)
Architecture, urbanism, and multi-media ensembles of Baroque Rome under Urban VIII, Alexander VII, and Innocent X. With particular emphasis on the work of Borromini and Bernini in palace architecture, churches, piazzas, fountains and at the Vatican. [24S] May be taken for credit for the Specialist/Major programs in Religion (U of T Mississauga), Christianity & Culture (St. George), and Architecture (St. George).
Exclusion: FAH352H5
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH279H5/ FAH274H5

FAH356H5 Colonial Latin American Art and Architecture (HUM)
This course will examine processes of cultural transfer and transformation in the planning of cities, churches, and viceregal palaces from the early days of contact through the Baroque in the Viceroyalties of Mexico and Peru and in Brazil. The persistence of indigenous beliefs and forms will be tracked in painting, sculpture, and architecture alongside the emergence of unique genres (i.e., castas, feather paintings), building types, and forms based on the particular makeup of a colonial society. [24S] Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 or PH.
Recommended Preparation: FAH274H5, FAH279H5, HIS290H5, LAS200Y1, HIS291Y1

FAH360H5 Art and Visual Culture of the Eighteenth Century (HUM)
This course examines European painting, sculpture, architecture, landscape architecture, print culture, decorative arts, exhibition strategies, and art criticism of the eighteenth century. Key artists and writers to be studied from the age of enlightenment and revolution include Blake, Burke, David, Diderot, Fragonard, Girodet, Goya, Hogarth, Reynolds, Vigée-Lebrun, Watteau, Winckelmann, Boulée, Ledoux, and Wright of Derby. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and at least 1.5 credits in FAH at the 200-level
Recommended Preparation: FAH279H5 and FAH287H5

FAH380H5 New Genres in Contemporary Art (HUM)
A study of artistic genres in contemporary art, including: video, performance, installation, site-specificity, and digital media. Such new genres will be studied as alternative modes of artistic practice collaborative, ephemeral, institutionally critical, and discursive, and as a means to address questions and issues such as public space, community, networks of information, and global capitalism and activism. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH288H5/ FAH289H5
Recommended Preparation: FAH289H5

FAH385H5 Modern and Contemporary Art of India (HUM)
This course traces a chronology of South Asian art from its genealogies in late colonial image-making traditions from the 1850s to the present, situating modernist 'high' art in terms of its conversation with the broader field of cultural practice in modern India: cinema, vernacular bazaar prints, rural and tribal craft traditions, practices of popular devotion, and 'classical' artistic traditions. It investigates the theoretical and political concerns animating South Asian cultural practices and their criticism (nationalism, Marxism, secularism, anti-fundamentalism, Islam, feminism, postcolonialism, issues of diaspora and globalization), and addresses the key question of how to approach practices of modernism and postmodernism in the postcolony. [24S]
Exclusion: FAH364H1, FAH365H1, FAH392H5 - Topic: Contemporary South Asian Art
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and VCC201H5, FAH288H5/ FAH289H5 or PI.
Recommended Preparation: VCC302H5

FAH388H5 Theory in Art History (HUM)
Investigates the historical development of the Western discipline of art history through the theories that have shaped it: topics covered include formalism, semiotics, psychoanalysis, the social history of art, feminism, post-colonialism, queer studies, and deconstruction. [24S]
Exclusion: FAH351H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and at least 1.0 credits in FAH/VCC.
FAH392H5 Topics in Modern Art/Architecture (HUM)
An examination of a topic in modern art and architecture. Topics vary from year to year; the content in any given year depends upon the instructor. This will be a lecture course for approximately 30 students. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH287/FAH288H5/ FAH289H5 or P.I.

FAH393H5 Topics in Ancient Greco-Roman Art (HUM)
An examination of a topic in the art and architecture of classical antiquity. Topics vary from year to year; the area of study and content in any given year depends upon the instructor. This will be a lecture course for approximately 30 students. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH203H5/ FAH204H5/ FAH205H5 or P.I.

FAH399Y5 Research Opportunity Program (ROP) (HUM)
This course provides a richly rewarding opportunity for students in their third year or beyond to work on the research project of a professor in art history/theory in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, enhance their research skills, and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Exclusion: FAH299Y5

VST410H5 Internship in the Arts and Visual Studies (HUM, EXP)
This internship course provides an opportunity for students to gain practical experience at an institution or business closely related to the arts and to visual studies. This is especially tailored for mature and self-disciplined students in their final year of study, who are ready to apply knowledge acquired in previous courses and are planning a career in the arts and cultural sector. Students registered in any DVS program are eligible to apply. Students work closely with the DVS internship coordinator to establish suitability. Regular updates and a final report and presentation will be required. The final grade for the course will be based on these, along with the assessment of the employer.
Prerequisite: Minimum completion of 5.5 credits in DVS Programs and 8.0 additional credits; minimum CGPA 2.5; and permission of internship coordinator.

FAH423H5 Advanced Studies in the Art of the Medieval Mediterranean (HUM)
Examines the art and architecture of the Mediterranean basin, including Western Christian, Byzantine, Islamic, and Jewish art, from the first century through the fifteenth. Considers their points of convergence as well as their distinct differences and priorities. Organized around key works of scholarship that have defined the emerging field of Mediterranean studies, along with primary sources. Considers works in all media, from monumental arts to textiles, metalwork, manuscripts, and ceramics. Also makes use of local museum holdings. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH267H5 and at least 1.0 credit in FAH/VCC at the 300/400 level.
Recommended Preparation: FAH105H5, FAH267H5

FAH434H5 Art and Architecture of Medieval Rome (HUM)
This seminar examines the art and architecture of Rome from the first century CE through the fourteenth. It focuses on the city’s art and image in the wake of Christianization and its often ambivalent attitudes toward its classical past. Works in all media, from large-scale churches, wall paintings, and icons will be considered, along with liturgical arts and manuscripts. Medieval texts will figure prominently as well. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH267H5/ FAH271H5/ FAH204H5 and 0.5 at the 300/400 level in Medieval Art or P.I.
Recommended Preparation: FAH267H5/ FAH343H5

FAH435H5 Women and Art in the Middle Ages (HUM)
An interdisciplinary study, including feminist analysis, of the roles of women in the Middle Ages, their representation in medieval art, and their impact on varying aspects of the art as subject, object, patron, or artist. [24S]
Exclusion: FAH425H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH267H5/ FAH271H5 and at least 0.5 FAH at the 300/400 level.

FAH441H5 Reformation and Counter-Reformation Art (HUM)
Considers reformation tracts against images and iconoclastic outbreaks in Northern Europe and the response of the Counter-Reformation with new iconographies, historical accuracy in narrative, Early Christian revival in architecture, and image-based devotional practices. [24S] May be taken for credit for the Specialist/Major programs in Religion (U of T Mississauga) and Christianity & Culture (St. George).
Exclusion: FAH439H1
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH274H5/ FAH279H5 and 0.5 300/400 level course in Renaissance or Baroque Art or P.I.
FAH449H5 Renaissance Narrative Painting (HUM)
A study of Italian Renaissance istoria or narrative painting in light of Alberti’s art theory, devotional modes (Fra Angelico), the eyewitness account (Carpaccio), narrative cycles (Piero della Francesca), etc. The course will examine wide range of 15th-century Italian painting and will include readings in contemporary narrative theory. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH274H5 and 0.5 credit in FAH at the 300/400 level or P.I.
Recommended Preparation: FAH267H5/ FAH271H5

FAH451H5 Curatorial Practice (HUM)
This course will consider the multi-level preparatory stages entailed in the mounting of an exhibition, placing particular emphasis on conceptualization, and on the premise that curatorial practice is an intellectual endeavour that manifests its ideas in form. Contemporary issues (at local, national, and international levels) in curatorial practice will be critically examined. Students will research and produce their own exhibitions (hypothetical or actual) with attendant textual documentation.[24S] FAH451H5 may be counted toward either the FAH or the FAS requirements in the Art and Art History program.
Exclusion: FAH480H, VIS320H5
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH310H5
Recommended Preparation: Intended for advanced students with high standing in the Art History or Art & Art History Program.

FAH453H5 The Archive and the Formless (HUM)
This course is a study of twentieth-century and contemporary art history that draws upon philosophies of the archive (as the formalization of knowledge in terms of origins and ends) and the formless (as a deconstructive force of these very same knowledge formations). Through close readings of key texts by Georges Bataille, Sigmund Freud, Walter Benjamin, Jacques Derrida, and Giorgio Agamben, an understanding of the complex interrelations between the archive and the formless, and their bearing upon twentieth-century and contemporary art history is developed. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH288H5/ FAH289H5 and at least 1.0 in FAH/VCC at the 300-400 level, or P.I.
Recommended Preparation: FAH388H5

FAH454H5 Contemporary Jewish Art (HUM)
This course examines the significance of the visual arts for the study of contemporary Jewish culture, for the construction of Jewish identities, and as an example of Jewish secularization. It does so through a survey of contemporary Jewish artistic production and visual expression with numerous and comparative examples drawn from producers in North America, Europe, and Israel. In addition, the course is attuned to the social and political dimensions and implications of contemporary Jewish art making. It will be organized thematically and cover a range of topics from the challenges faced by visual artists grappling with the Second Commandment and its prohibition of images to the continuing impact of the idea of diaspora on contemporary Jewish artists. The course will also situate its subject matter in relation to larger debates about the emergence of postmodern subjectivities and the place (or displacement) of religion and religious themes in contemporary art in general. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH288H5, FAH289H5, and at least 1.0 credit in FAH or VCC at the 300/400 level.

FAH455H5 Photography and Humour (HUM)
What makes a photograph funny? What are the ways in which photography as a visual and narrative medium induces laughter and provides amusement? This course explores such questions by focusing on major photographic genres and humorists (e.g., Weegee, Parr, Heartfield, Fontcuberta) and by analyzing key historical and contemporary images that mock conventional assumptions about the nature of photography and its claims to truth, identity, and reference. The course will be structured as a seminar featuring directed discussion and class presentations. [24S]
Exclusion: None
Prerequisite: FAH 101H5 or VCC101H5, FAH 291/FAH 391, and 1.0 credit in FAH or VCC at the 300/400 level or P.I.

FAH457H5 Exile and Modern Art (HUM)
Investigates the role of exile, expatriation, and alienation in art of the late 19th and 20th centuries. Considering the idea of psychological and/or physical displacement as key to the condition of modernity and the formation of artistic modernisms, the course analyzes artistic strategies of representing, coping with, and/or enacting displacement and alienation (of the artist, the viewer, the object) in the work of Gauguin, Dada artists, Pollock, Morimura, Hatoum, Wodiczko, Whiteread, and others. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH287H5/ FAH286H5 and a minimum of 0.5 in FAH/VCC at the 300 level, or P.I.
FAH460H5 Art and Animation (HUM)
This seminar examines the age-old dream of creating animate art, from lifelike paintings and moving statues to automatons and androids. In addition to tracing historical shifts in the way Western culture has imagined its artificial counterparts through works of literature, fine arts, and film, a major focus of the course will be the effect these creations have on conceptions of the human. Readings include Castle, Dick, Freud, Hawthorne, Hoffman, Shelley, Stafford, Ovid, and Villiers de l’Isle-Adam. [24S]
Prerequisite: Must be a third- or fourth-year student currently enrolled in one of the following programs: Art History, Art & Art History, Visual Culture and Communication, or Language Studies (English, French, Italian, German). Preference will be given to students in Art History, Art & Art History, and Visual Culture and Communication.

FAH465H5 Icon, Artwork, Fetish (HUM)
This seminar explores the conceptual categories of icon, artwork, and fetish in order to think about the frames of value, desire, and power within which images circulate, and the ongoing relationships between art, religion, and commerce. Readings drawn from critical theory, art history, anthropology, religious studies, film studies and psychoanalysis will prepare students to research case studies on the transcultural and transdisciplinary careers of particular objects/images of their choosing. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5 and FAH288H5/ FAH289H5 and 1.0 credit in FAH or VCC at the 300/400 level or P.I.
Recommended Preparation: VCC302H5/ VCC304H5, FAH388H5

FAH470H5 The History of Art History (HUM)
An introduction for advanced students in art history to the historiography and institutional history of the discipline of art history. This reading-intensive course will focus on major figures and key texts from the 19th century to the present, including Burckhardt, Wöfflin, Riegl, Warburg, Panofsky, Hauser, Baxandall, Schapiro, Alpers, Clarke, Nochlin, and others. [24S]
Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, 1.5 in FAH at the 200-level and at least 1.0 in FAH/VCC at the 300 level or P.I.
Recommended Preparation: FAH388H5

FAH479H5 Studies in Curatorial Practice (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: Six FAH credits including FAH310H and P.I.

FAH480H5 Studies in Ancient Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: FAH105H5/ FAH202H5 and six FAH courses including a 300+ level half course and P.I.

FAH481H5 Studies in Ancient Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH482H5 Studies in Medieval Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH483H5 Studies in Medieval Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH484H5 Studies in Renaissance Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.
Prerequisite: Six FAH courses including a 300+ level half course and P.I.
FAH485H5 Studies in Renaissance Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.

Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH486H5 Studies in Baroque Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.

Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH487H5 Studies in Baroque Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.

Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH488H5 Studies in Modern Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.

Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH489H5 Studies in Modern Art (HUM)
Students who have demonstrated unusual ability in earlier years will be encouraged to undertake, under the supervision of one or more staff members, special research projects culminating in a major research paper. Not more than two half-courses in Independent Studies may be taken in a single year. Students must have written consent of their faculty supervisor(s) and the undergraduate counsellor before registering.

Prerequisite: Six FAH courses including a 300+ level half course and P.I.

FAH490H5 Topics in Ancient Art and Architecture (HUM)
An in-depth examination of a topic in ancient art and/or architecture. Topics vary from year to year, and the content in any given year depends upon the instructor. A seminar course limited to 20 students. [24S]
Exclusion: None. Although equivalent courses are on the books at St. George it is highly unlikely that a topics course would have any significant overlap.

Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH203H5/ FAH204H5/ FAH205H5 and 1.0 in FAH/VCC at the 300/400 level

FAH491H5 Topics in Medieval Art and Architecture (HUM)
An in-depth examination of a topic in Medieval art and/or architecture. Topics vary from year to year, and the content in any given year depends upon the instructor. A seminar course limited to 20 students. [24S]
Exclusion: None. Although equivalent courses are on the books at St. George it is highly unlikely that a topics course would have any significant overlap.

Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH267H5/ FAH271H5 and 1.0 in FAH/VCC at the 300/400 level

FAH492H5 Topics in Modern/Art/Architecture (HUM)
An in-depth examination of a topic in modern art and/or architecture. Topics vary from year to year, and the content in any given year depends upon the instructor. A seminar course limited to 20 students. [24S]

Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH287H5/ FAH288H5 and at least 1.0 in FAH/VCC at the 300/400 level

FAH493H5 Topics in Early Modern Art and Architecture (HUM)
An in-depth examination of a topic in early modern (Renaissance and/or Baroque) art and/or architecture. Topics vary from year to year, and the content in any given year depends upon the instructor. A seminar course limited to 20 students. [24S]
Exclusion: None. Although equivalent courses are on the books at St. George it is highly unlikely that a topics course would have any significant overlap.

Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH274H5/ FAH279H5 and 1.0 in FAH/VCC at the 300/400 level
FAH494H5 Topics in Contemporary Art and Theory (HUM)

An in-depth examination of a topic in contemporary art and/or theory. Topics vary from year to year, and the content in any given year depends upon the instructor. A seminar course limited to 20 students. [24S]

Exclusion: None. Although equivalent courses are on the books at St. George it is highly unlikely that a topics course would have any significant overlap.

Prerequisite: FAH101H5/ FAH105H5/ FAH202H5, FAH288H5/ FAH289H5 and 1.0 in FAH or VCC at the 300/400 level

Recommended Preparation: FAH288H5, FAH289H5, FAH388H5

Art and Art History (HBA)

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T. Martone, B.A., M.A., M.A., Ph.D.
B. Welsh, B.A., M.Phil., Ph.D.

Professors
J. Caskey, A.B., M.A., M.Phil., Ph.D.
K. Jain, B.A., M.A., Ph.D.
L. Kaplan, B.A., M.A., Ph.D.
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Program Co-ordinator (Sheridan)
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TBA

Studio Faculty
J. Armstrong, B.F.A., M.A.
C. Arnoldin, B.F.A., M.F.A.
L. Beaudry, B.F.A., M.F.A.
M. Bell, A.O.C.A., M.A.
L. Carter, A.O.C.A., M.F.A.
M. Clark, B.F.A.
R. Fones, M.F.A. (equiv)
N. Fox, B.F.A., M.F.A
T. Hafkenscheid, M.F.A.
A. Koroshegyi, B.F.A., M.F.A.
C. Lane, B.F.A., M.F.A.
L. Neighbour, A.O.C.A., M.F.A.
L. Noguchi, A.O.C.A., M.F.A.
L. Nurse, B.F.A., M.F.A.
D. Poolman, B.F.A., M.F.A.
L. Rye, B.F.A., M.F.A.
J. Wilson, A.O.C.A., B.Sc., M.F.A

Professors Emeriti
T. Bolliger, B.A., M.S.A.
J. Crossan, A.O.C.A.
P. Kipps, B.A.
R. Sewell, B.A.
The UTM and Sheridan joint Art & Art History program is the longest standing partnership of its type in Canada. It combines the study of art history at UTM with studio art courses at Sheridan College. Incoming students are enrolled immediately in a studio arts curriculum. The program offers six core studios that students complete in their initial two years of study: drawing, painting, sculpture/installation, print media, design, and photography. In these studios, students are introduced to contemporary art practices through problem-based learning, which encourages a range of personal approaches and solutions to visual expression. In the upper-level studios, students go on to further expertise in two of the core-studio streams, developing a body of self-directed artwork in a class environment of discussion and exchange.

At UTM, students in the joint program enrol in Art History courses in the Department of Visual Studies. These courses provide students with the opportunity to engage in the academic study of art and architecture. Students will learn to analyze visual objects, considering their form, materials and techniques, meaning, and historical and political contexts. Courses span the history of art from the ancient to the contemporary worlds, across Europe, North and South America, and Asia.

Students graduate with two prestigious and practical credentials that reflect the program’s dual focus: an Honours Bachelor of Arts from the University of Toronto and a Diploma in Art and Art History from Sheridan College.

Many graduates of the program remain involved with education by teaching at the primary, secondary, or post-secondary level; others have pursued graduate studies in studio art, art history, conservation, curatorial practice, or related fields in the humanities, leading to an M.F.A., M.A., or Ph.D. degree. A number of graduates are practicing artists who exhibit their work in artist-run, public, and private galleries, both nationally and internationally. Graduates have also flourished in commercial art, including graphic design, advertising, illustration, web design, and art direction. With its strong art history component, this program has enabled graduates to pursue administrative or curatorial positions in museums and galleries, as well as work in art criticism and journalism.

Students registering in their first year in Art History or Art & Art History (joint program with Sheridan) are encouraged to contact the program director and Art & Art History program coordinator during the registration period if they have any questions. CCIT students considering double-majoring in an art program should also meet the FAH and FAS faculty and consult with them about their studies.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
FAH  Fine Art History (FAH) (page 51)
FAS  Fine Art Studio (FAS) (page 62)
VCC  Visual Culture and Communication (page 371)

Specialist Program ERSPE0714 Art and Art History (Arts)

At least 12.0 credits are required, comprised of 7.0 in FAS (or CCT courses offered from Sheridan) and 5.0 in FAH/VCC/VST courses offered at U of T Mississauga. For the official list of CCT and VCC courses that satisfy Art and Art History requirements see the departmental website. Required courses are as follows: FAS143H5, FAS145H5, FAS147H5, FAS232H5*, FAS236H5* FAS248H5*; and FAH101H5 and VCC101H5. A minimum of 4.0 300/400-level credits in FAH or FAS of which 1.0 must be at the 400 level (in FAH/VCC/VST or FAS or both). 1.5 credits at the 200 level in FAH must be taken at U of T Mississauga (see Note 1 for the St. George exceptions allowed and Note 2 for required area distribution). See Notes below for distribution details. Students enrolled before Fall 2003 should consult the undergraduate counsellor about completion of their program.

The following progression of courses is strongly recommended:

First Year:  1.5 credits: FAH101H5 and 1.0 credit in FAH at the 200 level
2.0 FAS credits from FAS143H5, FAS145H5, FAS147H5, FAS232H5, FAS236H5, FAS248H5.
All of these courses are open to first-year students.

Second Year: (Any remaining of the required FAS/FAH courses cited above)
0.5 credit: VCC101H5
1.0 FAH credit at the 200 level
1.0 FAS credit at the 200 level

Third Year:  1.0 FAH/VCC credit at the 300/400 level
2.0 FAS credits at the 300/400 level

Fourth Year:  1.0 FAH/VCC/VST credit at the 300/400 level
2.0 FAS credits at the 300/400 level

Notes:
1. Students must take at least 2.0 but no more than 2.5 FAH credits at the 200 level. VCC205H5, VCC207H5, and VCC209H5 do not satisfy FAH 200-level requirements. No St. George courses may be substituted for the 200-level FAH requirements. However, U of T Mississauga students may take 0.5 credits at the 200 level in FAH at St. George in an area not covered by U of T Mississauga’s offerings (i.e., one of the following courses: FAH248H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1).
Programs

Art and Art History (HBA)

The following progression of courses is strongly recommended:

**First Year:**
- 1.0 credits: FAH101H5 and a further 0.5 credit in FAH at the 200 level
- 2.0 FAS credits from the following: FAS143H5, FAS145H5, FAS147H5, FAS232H5*, FAS236H5*, FAS248H5*. All of these courses are open to first year students.

**Second Year:**
- 1.0 remaining credit of the required FAS courses cited above
- 2.0 FAH credits at the 200 level

**Third/Fourth Year:**
- 1.0 FAH/VCC/VST credit at the 300/400 level
- 1.0 FAH credit at the 300/400 level

**Notes:**

1. Students must take at least 2.0 but no more than 2.5 FAH at the 200 level. VCC205H5, VCC207H5, and VCC209H5 do not satisfy FAH 200-level requirements. No St. George courses may be substituted for the 200-level FAH requirements. However, U of T Mississauga students may take 0.5 credit at the 200-level in FAH at St. George in an area not covered by U of T Mississauga's offerings (i.e., one of the following courses: FAH248H1, FAH260H1, FAH262H1, FAH270H1, FAH272H1).

2. At least one 200-level H course in FAH must be taken in each of the following three areas: Ancient & Medieval; 15th-18th centuries; 19th-21st centuries. See the departmental website www.utm.utoronto.ca/dvs for the distribution of courses by area.

3. Of the required 4.0 300/400-level credits, a minimum of 1.0 must be in FAH/VCC/VST.

4. As studio space is limited in the 100-level and 200-level FAS courses, priority will be given during the first registration period to students enrolled in the Art & Art History Major/Specialist, Art History Major/Specialist, CCIT Major, VCC Specialist, and to newly-admitted students who indicated the Art & History code on their application. Students committed to the program should make sure that they are officially registered in the program as soon as possible.

5. All 300-level and 400-level FAS courses are now to be enrolled in on ACORN. Students are required to have completed 1.5 FAH/VCC credits.

6. It is recommended that students take at least one of the following "practicum" courses: FAH451H5, FAS453H5, FAS454H5, or FAS455H5.

7. *FAS232H5, FAS236H5, and FAS248H5 are open to first-year students.

8. No more than a combination of 17.0 FAH and FAS credits may be taken.

9. Students enrolling in any FAS course will be required to pay a fee of $60-$120 per half credit/$120-$240 per full credit. These charges will automatically be added to your University of Toronto student account receivable. This fee covers consumable materials used in studio as well as take-away materials provided to students.

Major Program ERMAJ0714 Art and Art History (Arts)

At least 8.0 credits are required of which at least 4.0 in FAS (or selected CCT courses offered from Sheridan) and 4.0 in FAH/VCC/VST courses offered at U of T Mississauga. For the list of CCT and VCC courses that satisfy Art and Art History requirements, see the departmental website. Required courses are as follows: FAS143H5, FAS145H5, FAS147H5, FAS232H5*, FAS236H5*, FAS248H5*, and FAH101H5. A minimum of 2.0 300/400-level credits in FAH/VCC/VST or FAS or a combination of the two must be included. 2.0 credits at the 200-level in FAH must be taken at U of T Mississauga (see Note 1 for the St. George exception allowed and Note 2 for required area distribution). See Notes below for distribution details. Students enrolled before Fall 2003 should consult the undergraduate counsellor about completion of their program.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
**List of Courses**

All FAS (Fine Art Studio) courses are offered on the Oakville Campus of Sheridan College. As studio space is limited in the 100- and 200-level FAS courses, priority will be given during first registration to students enrolled in the Art & Art History Major/Specialist, Art History Major/Specialist, CCIT Major, VCC Specialist, and to newly admitted students who indicated the Art and Art History code on their application. All 300-level and 400-level FAS courses are now to be enrolled in on ACORN. Students are required to have completed 1.5 FAH/VCC credits.

**Note:** Students enrolling in any FAS course will be required to pay a fee of $60-$120 per half credit/$120-$240 per full credit. These charges will automatically be added to your University of Toronto student account receivable.

**FAS143H5** *Drawing I (HUM,EXP)*  
Drawing 1 introduces core drawing practices at the entry level. This course provides an opportunity for students to develop their drawing skills, visual vocabulary, and understanding of conceptual and formal approaches to both historical and contemporary practices. Drawing is presented as a technical, interpretive, and expressive tool: students make observational drawings from objects, environments, and the figure, and work with imagined and found sources. Sessions include demonstrations, illustrated presentations, and individual assignments. [72P]  
*Exclusion:* VIS205H1, VPSA70

**FAS145H5** *Painting I (HUM,EXP)*  
This course is an exploration of the techniques and subject matter of 20th-century painting in relation to contemporary painting practices. Students work with both observational and conceptual approaches through experimentation with painting’s formal elements, traditional and non-traditional painting materials, montage, and abstraction. [72P]  
*Exclusion:* FAS230Y1; VIS201H1, VPSA61

**FAS147H5** *Photography I (HUM,EXP)*  
This introductory course emphasizes the use photography as a tool for artistic expression. Students will build skills using a manual-operation camera, processing B&W film, creating silver-based photographic prints in the darkroom, and in acquiring basic digital processing and printing techniques in colour photography. Photography is presented as a medium for communication through in-class discussion, analysis, and interpretation. Classes will consist of lectures, demonstrations, lab and studio time, individual consultation, group critiques, and a field trip. [72P]  
*Exclusion:* VIS217H1, VIS218H, VPSB67

**FAS232H5** *Print Media I (HUM,EXP)*  
This course is an introduction to relief and intaglio print media processes within a contemporary context. Students explore and experiment with the materials, techniques, and processes of print, and integrate them with formal and contextual concerns. Projects combine research, presentations, discussions, and critical thinking. [72P]  
*Exclusion:* VIS203H1, 303H1

**FAS234H5** *Print Media II (HUM,EXP)*  
This course is a continuation of FAS232H with an introduction to screenprinting. The integration of handmade and digital imagery is emphasized, while students may incorporate bookworks, drawing, installation, and other media. Focus is placed upon individual development through research and production; students are encouraged to link their ideas with the spectrum of media and skills that are most suited to their individual goals.[72P]  
*Exclusion:* VIS206H1, VIS207H1, VIS309H1  
Prerequisite or Corequisite: FAS232H5/P.I.

**FAS236H5** *Design I (HUM,EXP)*  
This course is an applied investigation of design thinking, theories, techniques, and tools. It addresses a range of design issues through a variety of approaches and media. Creative experimentation is encouraged to broaden students’ conception of design and its application in other design and art-related disciplines. Assignments introduce students to the fundamental principles of design and concept development through projects involving typography, images, colour, layout, and design software for print and the web. [72P]  
*Exclusion:* FAS146H5

**FAS243H5** *Drawing II (HUM,EXP)*  
A continuation of FAS143H, this course uses drawing as a resource to create artwork in a variety of materials and processes. Students develop skills in drawing systems, explore digital technologies, and work in a range of contemporary hybrid practices to extend drawing’s reach. Through assigned projects, illustrated presentations, readings and exhibition reviews, students are presented with issues to research and address in their work. [72P]  
*Exclusion:* VIS205H1, VIS211H1, 305H1, VPSB74  
Prerequisite: FAS143H5/P.I.

**FAS245H5** *Painting II (HUM)*  
This course is a continuation of FAS145H. Illustrated discussion/lectures present Canadian and international contemporary painting practices to contextualize assigned, 3-week projects. Students are introduced to in-depth group critiques, a range of painting media and techniques, and portfolio documentation. [72P]  
*Exclusion:* FAS230Y1, VIS201H1, VIS301H1, VPSB62  
Prerequisite: FAS145H5/P.I.
**FAS246H5 Design II (HUM,EXP)**
A continuation of FAS146H, this course is a further applied investigation of design thinking, theories, techniques, and tools, from conceptual to practical applications. Assignments in a variety of media address contemporary art and design through in-class and term projects. This course also introduces students to some of the factors affecting design decisions such as mode of communication, intended audience, and historical associations. Illustrated presentations, field trips, guest critics, discussions, and critiques augment this course. [72P]

**Prerequisite:** FAS146H5/P.I.

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**FAS247H5 Photography II (HUM,EXP)**
A continuation of FAS147H Photography 1, this course further develops the use of camera handling and lighting techniques, along with light-sensitive and digital-imaging materials for visual communication and personal expression. Students learn a variety of printing methods including fibre-based printing, sequencing, multiples, and other techniques that further develop the creative aspects of the medium. Use of the video camera and basic video editing is introduced. Investigations of historical and contemporary uses of the medium emphasize technical, aesthetic, and conceptual considerations. [72P]

**Exclusion:** VIS318H1, VPSB75

**Prerequisite:** FAS147H5/P.I.

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**FAS248H5 Sculpture I (HUM,EXP)**
This course introduces students to basic sculptural processes and materials, such as casting, mold-making, construction in cardboard, and fabrication in wood, metal, and found objects. A series of conceptual exercises provide opportunity for creative problem-solving and critical analysis while challenging conventional models of sculptural production. [72P]

**Exclusion:** VIS204H1, VIS306H1, VPSA71

**Prerequisite:** FAS248H5

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**FAS258H5 Sculpture II (HUM)**
A continuation of FAS248H. Students begin with armature building and modeling with clay. Using mold making and woodworking techniques, students learn to address the sculptural aspects of space and time at the scale of the human body. Illustrated presentations of historical and contemporary sculpture practices contextualize the skills learned and concepts addressed, alongside readings, discussions and critiques. [72P]

**Exclusion:** VIS204H1

**Prerequisite:** FAS248H5

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**FAS303Y5 Experimentation in Past and Present Techniques (HUM,EXP)**
This course is a practical investigation of techniques in art that have both historical precedents and contemporary applications. Media covered may include some of the following: mosaic, bas-relief in wood, encaustic, metalpoint drawing, and fresco. Students collaborate to create a mural for a public site. [144P]

**Prerequisite:** Any FAS200 level course and 1.5 credits in FAH/VCC and P.I.

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**FAS334Y5 Print Media III (HUM,EXP)**
This course is a continuation of FAS234H with an introduction to stone and plate lithography. Students are asked to complete assigned and self-directed projects, and may choose to consolidate and explore traditional print media, or to work with a combination of print and other two-dimensional, sculptural, or installation media of their choice. Increased refinement and sophistication in conception and execution is expected. Students become familiar with issues and examples of contemporary print practice, and discuss and critique works by contemporary artists. [144P]

**Exclusion:** VIS309H1

**Prerequisite:** FAS234H5, 1.5 credits in FAH/VCC and P.I.

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**FAS343Y5 Drawing III (HUM,EXP)**
A continuation of FAS243H, students examine a range of critical and thematic concerns of artists working in drawing today. The course examines the systems and conventions of drawing in the broadest possible sense and includes both traditional media as well as new technologies for video and animation production. Through readings, student-led presentations, discussions, workshops, topical and independent assignments, and critiques, students develop a body of work that investigates experimental processes in image production. [144P]

**Exclusion:** VIS305H1, VPSC55

**Prerequisite:** FAS243H5, 1.5 credits in FAH/VCC and P.I.

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**FAS345Y5 Painting III (HUM,EXP)**
This course is a continuation of FAS 245H. Students develop independent research habits to support self-directed projects in painting that are reviewed in a critique setting. Also included are demonstrations of painting media and gallery visits. Artist statement, gallery and visiting artist reviews, contemporary Canadian or international artist presentation, as well as portfolio documentation are required. [144P]

**Exclusion:** VIS305H1, VPSC54

**Prerequisite:** FAS245H5, 1.5 credits in FAH/VCC and P.I.
FAS346Y5 Design III (HUM)
A continuation of FAS246H, this course presents an opportunity for students to acquire and practice the skills necessary to create real-world art and design-related projects. Design assignments require students to create full or partial design mockups, work in teams, and submit proposals to design competitions within or outside the school. Students explore contemporary art and design via simulated workplace assignments, visual presentations, field trips, guest critics, discussion, and critique. [144P] 
Prerequisite: FAS246H5, 1.5 credits in FAH/VCC and P.I.

FAS347Y5 Photography III (HUM)
This advanced photography course integrates the history and theory of photography with the production of original work, and assists students to develop a critically informed photography practice. The course focuses on independent student production of photo and/or photo-based artworks in either an analogue or digital format, as well as the completion of assigned projects. Technical topics include digital still imaging technologies and the production of digital prints, as well as the use of strobe lighting and advanced techniques in exposure for colour and black and white. Students develop further expertise in video production. Studio work is accompanied by regular in-depth critiques, research and presentations on contemporary photographic practice and seminars on theoretical and critical readings. Professional practices for the presentation of photographic work for various applications will also be discussed. [144P] 
Exclusion: VIS318H1 
Prerequisite: FAS247H5, 1.5 credits in FAH/VCC and P.I.

FAS348Y5 Continuing Investigations in Sculpture (HUM,EXP)
This course will guide the student through a transition from assignment-driven sculpture projects to self-directed work. The introduction of conceptual approaches, reflective writing on the artwork produced, and a new range of sculpture techniques and materials will augment the technical skills students acquired in Sculpture I (FAS248H5) and Sculpture II (FAS258H5). Illustrated presentations, short readings, visiting artist reviews, an exhibition review, artist presentation, and field trips to fabrication facilities and galleries will accompany the studio work over the two terms. [144P] 
Exclusion: VIS306H, VPSB63 
Prerequisite: FAS258H5, 1.5 credits in FAH/VCC and P.I.

FAS349Y5 Video, Sound and Performance (HUM,EXP)
This studio-based course investigates issues of identity, gender, activism, and the body within public and private space. Fieldwork will be emphasized: the locus of the classroom becomes part of a critical inquiry of everyday life or specific public events. Assignments take into consideration the temporal nature of performance, video, sound, and interactivity. Students are exposed to a range of interdisciplinary and trans-media approaches such as digital video production and projection, multi-track sound editing, installations and interventions, and online interactivity. Through readings, presentations, discussions, workshops, topical assignments, and critiques, students develop a body of work that investigates experimental time-based processes. [144P] 
Exclusion: VIS302H1 
Prerequisite: Any two second-year FAS courses, one of which can be CCT353H5 or CCT357H5 and 1.5 credits in FAH/VCC and P.I.

FAS359Y5 Video and Sound (HUM)
This studio course focuses on the use of sound and video to investigate contemporary approaches to the production of time-based artwork. Students will work with analogue and digital editing processes, live sound performance, site-specific soundworks, single-channel video, video installation and video mapping, and will develop a professional portfolio website. Illustrated presentations of historical and contemporary video and sound practices contextualize the skills learned and concepts addressed, alongside readings, discussions and critiques. [144P] 
Exclusion: VIS302H1 
Prerequisite: Any two FAS 200 level courses, 1.5 credits in FAH/VCC/VST and P.I.

FAS369Y5 Performance Based Art (HUM)
Studies in this advanced level course integrate history, theory and production and are designed to assist students to develop a critically informed performance practice with documentation in video and still photography. Illustrated presentations of a range of performance art practices contextualize the skills learned and concepts addressed, alongside readings, discussions and critiques. [144P] 
Exclusion: VIS303H1 
Prerequisite: Any two FAS 200 level courses, 1.5 credits in FAH/VCC/VST and P.I.
FAS434Y5 Individual Investigations in Print Media (HUM,EXP)
A continuation of FAS334Y, this course is a self-directed, supervised opportunity to define and develop a student's artistic vision within an inter-media approach. Print Media 4 prepares students to work independently or in a professional print studio after graduation. Through research, gallery visits, and discussion, students focus on defining the content and context of their work. Students are asked to examine their work from a critical perspective and to complete a body of related work accompanied by a written statement. [144P]
Prerequisite: FAS334Y5, 1.5 credits in FAH/VCC and P.I.

FAS446Y5 Individual Investigations in Design (HUM,EXP)
A continuation of FAS346Y, this course emphasizes self-directed design projects with regularly scheduled class critiques, presentations on contemporary art and design, and trips to exhibitions. Design assignments require students to create full or partial design mockups, work collaboratively on large projects, and submit proposals to design competitions within or outside the school. Students learn to integrate professional art and design strategies, and to research, coordinate, and fully realize their own long-term projects. [144P]
Prerequisite: FAS346Y5 and 1.5 credits in FAH/VCC and P.I.

FAS447Y5 Individual Investigations in Photography (HUM,EXP)
This advanced photography course integrates the history and theory of photography with the production of original work, and assists students to develop a critically informed photography practice. The course will focus on independent student production of photo and/or photo-based artworks in either an analogue or digital format. Studio work is accompanied by regular in-depth critiques, research and presentations on contemporary photographic practice, and seminars on theoretical and critical readings. Professional practices for the presentation of photographic work for various applications will also be discussed. [144P]
Prerequisite: FAS347Y5 or FAS349Y5 or FAS359Y5 or FAS369Y5, 1.5 credits in FAH/VCC and P.I.

FAS448Y5 Individual Investigations in Sculpture (HUM,EXP)
This course is a continuation of FAS348Y. Students produce a coherent body of work based on research and written proposals. In their artwork, students explore their own identity and work in the context of contemporary sculpture practices, acknowledging both a theoretical and historical framework. Students should become aware of the relationship between the production and presentation of artwork, and be able to identify the audience for and the specific context within which their artwork might be presented. Class includes lectures, presentations, critiques, workshops, and field trips to studios, galleries, and fabrication facilities. [144P]
Prerequisite: FAS348Y5 or FAS349Y5 or FAS359Y5 or FAS369Y5, 1.5 credits in FAH/VCC and P.I.

FAS450Y5 Advanced Project (HUM,EXP)
In this directed study, students undertake two semesters of independent research under the mentorship of a full-time Art and Art History studio faculty member. Students develop and present a body of artwork and a written and illustrated thesis for discussion, evaluation and critique. The course is modeled on a Master's thesis and as such provides the students with the experience needed to pursue Master of Fine Arts candidacy, their own art, and teaching careers. Advanced Project students must have a B+ standing in the fourth year of the studio discipline in which they intend to submit a proposal. A written proposal must be submitted to, and approved by, the department before registration. [144P]
Exclusion: VIS401H1, 402H1, 403H1, 404H1
Prerequisite: 1.0 FAS 400-level course, FAS451H5, FAS452H5, 1.5 credits in FAH/VCC and Permission of the Department.
FAS451H5 Advanced Project (HUM,EXP)
In this directed study, an independent studio project is chosen by the student and supervised by faculty member(s). A written proposal must be submitted to, and approved by, the department before registration. In addition to the completion of a body of work, students will prepare an illustrated and written account of the impact of research on their artwork. Students wishing to undertake an Advanced Project must have already completed the highest level of their chosen sub-discipline. Advanced Project students must have a B+ standing in the fourth year of the studio discipline in which they intend to submit a proposal. [72P]
Exclusion: VIS311H1, 401H1, 402H1, 403H1, 404H1
Prerequisite or Corequisite: 1.0 FAS 400-level course, Permission of the Department

FAS452H5 Advanced Project (HUM,EXP)
In this directed study, an independent studio project is chosen by the student and supervised by faculty member(s). A written proposal must be submitted to, and approved by, the department before registration. In addition to the completion of a body of work, students will prepare an illustrated and written account of the impact of research on their artwork. Students wishing to undertake an Advanced Project must have already completed the highest level of their chosen sub-discipline. Advanced Project students must have a B+ standing in the fourth year of the studio discipline in which they intend to submit a proposal. [72P]
Exclusion: VIS311H1, 401H1, 402H1, 403H1, 404H1
Prerequisite or Corequisite: 1.0 FAS 400-level course, Permission of the Department

FAS453H5 Art Education Practice (HUM,EXP)
This course will outline principles of educational theory and practice for teaching the visual arts, and explore the realities of learning and the artistry of teaching to various audiences, including children, adolescents, and adults, within a variety of educational settings. Students will have an opportunity to develop teaching skills and observe a practicing educator in action. Studio tasks will relate to the topics covered in this course. [24S, 12P]
Prerequisite: For Art and Art History majors/specialists: 4.0 FAS courses and 1.5 FAH/VCC credits, Permission of the Department.
For Art History majors/specialists: 1.0 credit in FAH at the 300/400 level and Permission of the Department.

FAS454H5 Professional Practice (HUM)
This course outlines the professional and business requirements of establishing a career as a practicing visual artist. Topics covered include portfolio development, exhibition presentation and organization, public art competitions, photo documentation, writing grant proposals, marketing, taxes, and bookkeeping. Guest lectures will augment students’ research into the career paths of a range of arts professionals. [24S, 12P]
Prerequisite: For Art and Art History majors/specialists: 4.0 FAS courses and 1.5 FAH/VCC credits, Permission of the Department.
For Art History majors/specialists: 1.0 credits in FAH at the 300/400 level, Permission of the Department.

FAS455H5 Teaching Art in the School and Community (HUM,EXP)
This practicum course provides fourth-year students with hands-on teaching experience allowing for interaction with administrators, teachers, and community leaders. Students plan workshops and classes, write and deliver curriculum, and work within a budget. As a summary, students then document and evaluate their teaching experiences. [15S, 24P]
Exclusion: None
Prerequisite: For Art and Art History majors/specialists: 4.0 FAS courses, 1.5 FAH/VCC credits and Permission of the Department.
For Art History majors/specialists: 1.0 credit in FAH at the 300/400 level and Permission of the Department.
Corequisite: None
Recommended Preparation: FAS453H5
Astronomical Sciences (HBSc)

Professor Emeritus
J.R. Percy, B.Sc., M.A., Ph.D.

Professors
J.B. Lester, B.A., M.Sc., Ph.D.

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Astronomy, of all the sciences, is perhaps the most wide-ranging in its content and in its implications. It embraces such topics as the origin and evolution of the planets, stars, galaxies and the whole universe; the conditions for the origin of life on earth and elsewhere; the behaviour of matter in environments never experienced on earth, and in general, the influence of the universe on mankind’s thinking down through the ages. Because of its breadth, it has always formed a valuable part of a general education.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
AST Astronomy (page 68)
CSC Computer Science (page 133)
JCP Chemistry (page 94)
MAT Mathematics (page 298)
PHY Physics (page 313)
STA Statistics (page 358)

Specialist Program ERSPE1025 Astronomical Sciences (Science)

14.0 credits are required.

Limited Enrolment - Limited Enrolment -
Enrolment in this program is based on the completion of 4.0 credits, including the following courses:
AST110H5; MAT102H5, MAT135Y5/137Y5, MAT223H5; PHY135Y5/136H5, 137H5 (70% recommended)

Second Year: AST221H1(G), 222H1(G); MAT232H5/233H5, 236H5, 244H5; PHY241H5, 242H5/JCP221H5, 245H5

Third Year: AST320H1(G); CSC108H5, JCP321H5, 322H5; MAT311H5, 334H5; PHY325H5, 347H5

Fourth Year: AST425Y1(G); JCP421H5, PHY451H5, STA220H5/256H5
Astronomy, of all the sciences, is perhaps the most wide-ranging in its content and in its implications. It embraces such topics as the origin and evolution of the planets, stars, galaxies and the whole universe; the conditions for the origin of life on earth and elsewhere; the behaviour of matter in environments never experienced on earth, and in general, the influence of the universe on mankind's thinking down through the ages. Because of its breadth, it has always formed a valuable part of a general education.

Astronomy offers courses that could be of interest to every student at U of T Mississauga. Four of these are introductory courses: AST101H5, 110H5, 201H5, 252H5. AST101H5 and AST201H5 are both intended for students from outside the sciences, while AST 110H5 and AST252H5 are designed for students who have some background in science.

- **AST101H5** introduces students to the historical background of astronomy and continues through to the modern discoveries about the solar system and the development of modern telescopes and observatories, both on the ground and in space.
- **AST110H5** provides an introduction to observing and analysis.
- **AST201H5** surveys the structure and evolution of the stars, galaxies, and the universe as a whole.
- **AST252H5** is a unique interdisciplinary course that examines the broad topics of the origin and evolution of the universe, galaxies, stars, planets, and life. This course is intended for students who have some background in the sciences.

Students interested in either the Astronomical Sciences or the Astronomy program should consult the Astronomy faculty advisor at U of T Mississauga as early as possible in their first year. The faculty advisor can also provide information and advice about the astronomy courses and programs available on the St. George Campus.

**Students should also review the Degree Requirements (Page 29) section prior to selecting courses.**

For courses in this area see:
- **AST** Astronomy (page 68)
- **JCP** Chemistry (page 94)
- **MAT** Mathematics (page 298)
- **PHY** Physics (page 313)

**Major Program ERMAJ2204 Astronomy (Science)**

8.5 credits are required.

**Limited Enrolment** – Limited Enrolment – Enrolment in this program is based on the completion of 4.0 credits, including the following courses: AST110H5; MAT102H5, MAT135Y5/137Y5, 223H5; PHY135Y5/(136H5,137H5)

**First Year:** AST110H5; MAT102H5, 135Y5/137Y5, 223H5; PHY135Y5/(136H5,137H5) (70% recommended)

**Second Year:** AST221H1(G), 222H1(G); MAT244H5, 232H5/233H5, 236H5; PHY241H5, 245H5

**Third Year:** AST320H1(G); JCP321H5; JCP322H5/one 300/400-level half-course approved by the faculty advisor.

**List of Courses**

**AST101H5** Solar System Astronomy (SCI)

This course traces our understanding of solar system objects from prehistoric times to the present. The impact of telescopes and space observatories is outlined. This course is for "non-science" students as defined by the exclusion below. [36L]

**Exclusion:** A 100 or higher level course in Chemistry or Physics with the exception of CHM110H5, CHM101H1, CHM138H1 & PHY100H5; AST252H5; AST101H1, 121H1, 221H1, 251H1; ASTA01H3
AST110H5 Introduction to Astronomical Observations (SCI)
This course gives a quantitative, scientific introduction to observing, concentrating on objects that can be seen with the naked eye or with binoculars. The measurements will be combined with calculations to yield quantitative conclusions and predictions. This is the first course for students following the major in astronomy or the specialist in astronomical sciences, but it is also suitable for students with the appropriate background who want to understand more fully the celestial phenomena visible to them. [24L, 12T]
Exclusion: AST325H1, 326H1
Recommended Preparation: SPH4U; MHF4U; MCV4U

AST201H5 Stars and Galaxies (SCI)
This course surveys current ideas about the structure and evolution of astronomical objects ranging from the stars to the universe as a whole. This course is intended for "non-science" students as defined by the exclusion below. This course does not require AST101H5, but it may be combined with AST101H5 for a full-course credit in science for distribution purposes. [36L]
Exclusion: A 100 or higher level course in Chemistry or Physics with the exception of CHM110H5, CHM101H1, CHM138H1 & PHY100H5; AST252H5; AST121H1, 201H1, 210H1, 251H1; ASTA02H3; ASTB03H3

AST215H5 Astronomical Revolutions (SCI)
An examination of the revolutions that have shaped astronomy from the time of Copernicus to the current day. Emphasis is placed on the process of discovery that has led to major advances in our knowledge about the Universe. The course includes an outline of the puzzles that have inspired the important shifts in our understanding of the Universe. These have been central to the development of astronomy, but also to physics and earth science, as well as philosophy, and the current discoveries of other solar systems is likely to have a major impact on the life sciences. This course is suited for both science and non-science students.
Exclusion: AST101H1, AST101H5, AST121H1, AST201H1, AST201H5, AST210H1, ASTB03H3
Prerequisite: 4.0 full course credits

AST252H5 Cosmic Evolution (SCI)
The origin and evolution of the chemical elements, the universe, galaxies, stars, planets (interiors and atmospheres), and life - on earth and possibly elsewhere. [24L]
Exclusion: AST101H5; AST101H1, 121H1, 201H5, 221H1, 251H1; ASTA01H3; ASTA02H3
Prerequisite: CHM140Y5/ (110H5,120H5)/PHY135Y5/ (136H5,137H5)
Offered in 2013-14.

AST299Y5 Research Opportunity Program (SCI)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

AST399Y5 Research Opportunity Program (SCI) (SCI,EXP)
This course provides third-year undergraduate students (after completing at least 9.0 credits) who have developed some knowledge of astronomical research with an opportunity to assist in a research project of a professor in return for course credit. Students enrolled in this course have the opportunity to enhance their research skills and share in the excitement of acquiring new knowledge and in the discovery process of science. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February, and students are invited to apply in early March. See Research Opportunity Program (299Y, 399Y, and 499Y) (Page nnn) for more details.
Behaviour, Genetics and Neurobiology (HBSc)

Offered through the Department of Psychology

Program Advisors
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Prof. D.A. Monks
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This interdisciplinary program considers physiological and genetic contributions to behaviour. This emerging discipline represents an integrative approach to the study of behaviour that brings together the tremendous gains in knowledge in neuroscience and genetics that have been made in the past few decades. Students will have the opportunity to take lecture and laboratory courses and carry out research projects with faculty members. This program provides an excellent theoretical and empirical background for students interested in pursuing graduate studies in behavioural neuroscience, behaviour genetics and related fields.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
BIO  Biology (page 78)
CHM  Chemistry (page 94)
MAT  Mathematics (page 298)
PSY  Psychology (page 332)

Specialist Program ERSPE2470 Behaviour, Genetics and Neurobiology (Science)

11.0 credits are required, including at least 3.0 300/400 level credits and 1.0 400 level credit.

First Year: PSY100Y5; BIO152H5; BIO153H5; CHM110H5; CHM120H5; MAT134Y5/135Y5/137Y5

Second Year:
1. PSY201H5, 202H5 or equivalent
2. BIO205H5; BIO206H5; BIO207H5; PSY290H5

Second year notes:
- BIO202H5, 203H5 or 204H5 are required for several courses in the Neurobiology stream
- PSY210H5 (Introduction to Developmental Psychology) is required for several courses in the Behavioural stream

Students are encouraged to consider taking these courses depending on their planned course of study.

Third Year: 1.0 credit from each of the following three streams:

Third year note:
- Students interested in taking PSY400Y5 are advised to take PSY309H5.

Fourth Year:
1. One seminar from the following: BIO403H5, 404H5, 406H5, 407H5, 478H5, PSY490H5, 495H5
2. One thesis/ research project from the following: BIO481Y5, PSY400Y5, 403H5/404H5/405H5/406H5

Important notes about Psychology programs and courses.

1. Enrolment in all programs offered by the Psychology Department is limited. Students who do NOT earn a sufficiently high grade in PSY100Y5 to be eligible for enrolment may reapply when they satisfy the second-year requirements and are encouraged to consult with the Undergraduate Advisor. Further information is available on the Psychology Department website. www.utm.utoronto.ca/psychology

2. Access to courses. PSY309H5, 319H5, 329H5, 379H5, 399H5, and all 400 level courses have limited enrolments and are normally restricted. Access to all other 300 level courses will be controlled by the Department. Priority is given to students enrolled in programs offered by the Psychology Department. Spaces are allotted on the basis of CGPA. Highest priority is given to students enrolled in one of the Specialist Programs. Consult the UTM Registration Guide (available at www.utm.utoronto.ca) for specific information.
3. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).

4. Students who wish to take Psychology courses at the St. George campus may do so provided that they have completed the prerequisite courses and have obtained permission from the Psychology Undergraduate Advisor at the St. George Campus. If they wish to use these courses to fulfill UTM program requirements, they must also consult the undergraduate advisor at UTM.

**IMPORTANT:** Students without pre- and co-requisites or written permission of the undergraduate advisor can be de-registered from courses at any time.

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**Bioinformatics (HBSc)**

Offered through the Department of Mathematical and Computational Sciences

**Chair**

Konstantin Khanin  
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**Program Advisors**

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**Undergraduate Counsellor**

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Bioinformatics involves the computational analysis of gene and genome sequences as well as functional genomic data. It is an interdisciplinary science that requires strong backgrounds in computer science and molecular biology, and good knowledge of mathematics, statistics, chemistry, genetics and evolutionary biology.

The Bioinformatics Specialist Program reflects the interdisciplinary nature of the field, and the courses drawn from the offerings in Biology, Chemistry, Computer Science, Mathematics and Statistics.

**Students should also review the Degree Requirements**  
(Page 29) section prior to selecting courses.

**For courses in this area see:**

- **BIO** Biology (page 78)  
- **CBJ** Computer Science (page 133)  
- **CHM** Chemistry (page 94)  
- **CSC** Computer Science (page 133)  
- **JCP** Chemistry (page 94)  
- **MAT** Mathematics (page 298)  
- **STA** Statistics (page 356)
Specialist Program ERSPE1868
Bioinformatics (Science)

Within an Honours degree, 14.0 credits are required.

Limited Enrolment – Enrolment in this program is limited. Students who wish to enrol at the end of the first year (4.0 credits) must have passed all the courses listed for the first year, attained at least 60% in all 100-level computer science and mathematics courses, and have a minimum Cumulative Grade Point Average (CGPA) of 2.0.

Tuition fees for students enrolling in this program are higher than for other Arts and Science programs.

First Year (4.0 credits): BIO152H5; CHM110H5, 120H5; CSC108H5, 148H5; MAT102H5, 134Y5/135Y5/137Y5

Second Year (4.0 credits): BIO206H5, 207H5; CHM242H5; CSC207H5, 236H5, 263H5; MAT223H5/240H5

Third Year (2.0 credits): MAT212H5/242H5, MAT232H5; STA256H5, 258H5

Upper Years (4.5 credits): BIO314H5, 372H5, 477H5; CSC321H5/411H5, 343H5, 373H5; MAT332H5 At least 1.0 credit from the following list of recommended courses, of which at least 0.5 must be at the 400-level: BIO315H5, 341H5, 370Y5, 371H5, 380H5, 443H5, 481Y5; CBJ481Y5; CHM361H5; CSC310H5, 338H5, 363H5; JCP410H5; STA302H5/331H5, 348H5, 442H5

Notes
1. Students need to obtain permission from the instructors to take BIO207H5 without the BIO153H5 prerequisite.
2. If BIO477H5 is not offered in the fourth year of a student's studies, he or she must take an additional 0.5 credit from the recommended 400-level courses.
3. Students intending to take CHM361H5 as one of their recommended courses must take CHM243H5 as a prerequisite course.
4. All third and fourth year CSC courses have a writing requirement. The recommended course for satisfying that requirement is CSC290H5, but students may substitute a different writing course. If a student wishes to substitute another course to satisfy the writing requirement, the student should consult a Bioinformatics Faculty Advisor.
5. The combination of (MAT134Y5/135Y5/137Y5 and MAT232H5) may be replaced by the combination of (MAT133Y5 and MAT233H5).

For information on Biological Chemistry, please refer to the Chemistry (HBSc) (Page 92) program.
Biology (HBSc)

Professors Emeriti
P.W. Ball, B.Sc., Ph.D.
W.R. Cummins, B.Sc., Ph.D.
P.A. Horgen, B.A., M.Sc., Ph.D.
G.K. Morris, B.S.A., M.Sc., Ph.D.
I. Orchard, B.Sc., Ph.D., D.Sc.
W.G. Sprules, B.Sc., M.A., Ph.D.
J. Svoboda, B.Sc., Ph.D.

Professors
J.B. Anderson, B.A., Ph.D.
S. Chatfield, B.Sc., Ph.D.
H.M. Cheng, B.Sc., M.Sc., Ph.D.
N.C. Collins, B.A., Ph.D.
I. Ensminger, B.Sc., Ph.D.
T. Erclik, B.Sc., Ph.D.
G.S. Espie, B.Sc., Ph.D.
D.T. Gwynne, B.Sc., Ph.D.
S. Hinic-Frlog, B.Sc., M.Sc., Ph.D.
M. Johnson, B.Sc., Ph.D.
L.M. Kohn, B.Sc., Ph.D.
P.M. Kotanen, B.Sc., M.Sc., Ph.D.
A.B. Lange, B.Sc., Ph.D.
J. Levine, M.A., Ph.D.
S. McCauley, B.Sc., M.Sc., Ph.D.
R. Ness, B.Sc., Ph.D.
J. Parker, B.Sc., M.Sc., Ph.D., M.B.A.
J. Ratcliffe, B.Sc., M.Sc., Ph.D.
F. Rawle, B.Sc., Ph.D.
R.R. Reisz, B.Sc., M.Sc., Ph.D.
L. Revers, B.A., M.A., Ph.D.
C. Richter, B.Sc., M.Sc., Ph.D.
A. Senatore, B.Sc., M.Sc., Ph.D.
S.M. Short, B.Sc., Ph.D.
S. Stefanovic, B.Sc., M.Sc., Ph.D.
B.A. Stewart, B.Sc., M.Sc., Ph.D.
H. Wagner, M.Sc., Ph.D.
J.T. Westwood, B.Sc., Ph.D.
G. Yang, B.Sc., M.Sc., Ph.D.

Department Chair
Angela Lange

Biology Undergraduate Advisor
Diane Matias
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Note: Faculty advisors are available for consultation about program selection upon request.

Biology is the study of living organisms and involves observation and analysis of the tree of life. The foundation of biology is based upon the core concepts of evolution: natural selection and speciation. The study of biology is applicable to such major problems as conservation, overpopulation, pollution, medicine and disease.

Career opportunities open to graduates in Biology include teaching; governmental research in areas such as environmental problems, natural resources, wildlife management, conservation, pollution and pest control; business and industry, including biological supply companies, pharmaceuticals, food and dairy industries and biotechnology; medical, dental and related fields including physiological or microbiological research.

The Biology undergraduate advisor is available for help with choosing courses and discussing program requirements.

Effective biological training involves careful study of real organisms, both living and dead. Consequently, almost all Biology courses with laboratories involve students in one or more of the following activities with animals, plants, and/or microorganisms: collecting and preserving organisms from the field; dissecting or handling preserved or euthanized specimens (or properly anaesthetized living specimens); observing and making measurements on organisms maintained under laboratory conditions approved by the Canadian Council of Animal Care. Completion of Specialist or Major programs in Biology will require students to participate in many such activities. Therefore, students who have objections to such activities should not attempt to major or specialize in Biology at U of T Mississauga. Students in non-Biology programs who wish to take a Biology course with minimal direct contact with organisms should consult the Biology Undergraduate Advisor.

In obtaining organisms for study in our courses and in studying outdoor natural areas, the Biology Department takes measures to avoid any impacts on threatened organismal groups or rare habitats, and to limit below sustainable levels the impacts of our collecting and measuring on local animal and plant populations.

Students wishing to pursue a program in Biology should take CHM, MAT and a full course equivalent in BIO in their first year.

For biology-related programs see:
- Behaviour, Genetics and Neurobiology
- Bioinformatics
- Biomedical Communications
- Biotechnology
- Forensic Science

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.
Biology (HBSc) Programs

For courses in this area see:

- ANT Anthropology (page 40)
- BIO Biology (page 78)
- CHM Chemistry (page 94)
- CLA Classics (page 103)
- ENV Environment (page 186)
- ERS Earth Science (page 146)
- GGR Geography (page 224)
- JBC Biology (page 78)
- JCB Chemistry (page 94)
- JCP Chemistry (page 94)
- MAT Mathematics (page 298)
- MGM Management (page 288)
- PHY Physics (page 313)
- PSY Psychology (page 332)
- STA Statistics (page 356)
- WRI Professional Writing and Communication (page 326)

Specialist Program ERSPE0482 Comparative Physiology (Science)

14.5 credits are required, including at least 5.0 at the 300/400 level, of which 1.0 must be at the 400 level.

Limited Enrolment — Enrolment is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) with a cumulative grade point average of 2.50.

First Year:
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5/ MAT135Y5/ MAT137Y5
2. 1.0 credit from the following: CLA201H5; ENV100Y5; ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

Second Year: BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5

Third and Fourth Years:
1. BIO304H5, BIO310H5, BIO312H5, BIO360H5, BIO409H5; CHM242H5, CHM243H5
2. At least 2.0 credits from: BIO320H5, BIO354H5, BIO361H5, BIO372H5, BIO404H5, BIO410H5, BIO411H5, BIO412H5, BIO481Y5; CHM361H5, CHM362H5; JCB487Y5; PHY332H5, PHY333H5; PSY290H5, PSY395H5
3. 1.0 additional BIO credit

Limited Enrolment — Enrolment is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) with a cumulative grade point average of 2.50.

First Year:
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5/ MAT135Y5/ MAT137Y5
2. 1.0 credit from the following: CLA201H5; ENV100Y5; ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

Second Year: BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5

Third and Fourth years:
1. BIO313H5 and BIO342H5
2. STA215H5 and BIO360H5
3. 1.0 credit from courses in organismal biology:
   BIO325H5, BIO326H5, BIO335H5, BIO338H5, BIO354H5, BIO356H5, BIO370Y5/ BIO371H5
4. 0.5 credit from field courses: BIO416H5, other 2-week OUPFB** Field Courses
5. 2.5 credits from core ecology/evolutionary biology courses:
   BIO311H5, BIO330H5, BIO331H5, BIO333H5, BIO339H5, BIO373H5, BIO406H5, BIO445H5, BIO443H5, BIO464H5; GGR312H5
6. 1.0 credits from other biology courses at the 300/ 400 level.
7. 1.0 credit from related courses from other departments: MAT212H5, MAT222H5, MAT232H5; STA302H5, STA322H5; GGR227H5, GGR278H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, or from courses listed in #4, #5 and #6

CGPA for enrolment in this program is calculated based on a min. 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).

No substitute statistics course will be allowed for BIO360H5.

Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project / Thesis courses at the 300/400-level for credit toward their Biology program.

Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.

Specialist Program ERSPE1020 Ecology and Evolution (Science)

14.5 credits are required, including at least 6.0 at the 300/400 level, of which 1.5 credits must be at the 400 level.

Limited Enrolment — Enrolment is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) with a cumulative grade point average of 2.50.

First Year:
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5/ MAT135Y5/ MAT137Y5
2. 1.0 credit from the following: CLA201H5; ENV100Y5; ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

Second Year: BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5

Third and Fourth years:
1. BIO313H5 and BIO342H5
2. STA215H5 and BIO360H5
3. 1.0 credit from courses in organismal biology:
   BIO325H5, BIO326H5, BIO335H5, BIO338H5, BIO354H5, BIO356H5, BIO370Y5/ BIO371H5
4. 0.5 credit from field courses: BIO416H5, other 2-week OUPFB** Field Courses
5. 2.5 credits from core ecology/evolutionary biology courses:
   BIO311H5, BIO330H5, BIO331H5, BIO333H5, BIO339H5, BIO373H5, BIO406H5, BIO445H5, BIO443H5, BIO464H5; GGR312H5
6. 1.0 credits from other biology courses at the 300/ 400 level.
7. 1.0 credit from related courses from other departments: MAT212H5, MAT222H5, MAT232H5; STA302H5, STA322H5; GGR227H5, GGR278H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, or from courses listed in #4, #5 and #6
** Ontario Universities Program in Field Biology

CGPA for enrolment into the program is calculated based on a min. 4.0 credits completed at UTM with final percentage grades (i.e. CR/NCR courses are not applicable).

No substitute statistics course will be allowed for BIO360H5.

Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project / Thesis courses at the 300/400-level for credit toward their Biology program.

Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.

Specialist Program ERSPE1118 Biotechnology (Science)

15.0 credits are required, including at least 7.0 at the 300/400 level, of which 1.5 must be at the 400 level.

**Limited Enrolment** – Enrolment in this program is limited. Students who wish to enrol at the end of first year (4.0 credits) must obtain a grade of at least C (63%) in both CHM110H5 and CHM120H5 and a cumulative grade point average of at least 2.50 to qualify. Students who do not meet these criteria after first year can apply to enter the Specialist at the end of second year (8.0 credits) with the following new requirements: a grade of at least 70% in CHM242H5 and a cumulative grade point average of at least 2.50.

First Year: BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5*/MAT135Y5/MAT137Y5; MGM101H5**, MGM102H5**

Second Year: BIO200H5, BIO202H5/BIO203H5, BIO206H5, BIO207H5; CHM211H5, CHM242H5, CHM243H5; STA215H5

Third and Fourth Years:
1. BIO314H5, BIO315H5, BIO360H5, BIO370Y5, BIO372H5, BIO374H5; CHM311H5, CHM361H5; JBC472H5
2. 1.0 credit from: BIO304H5, BIO310H5, BIO312H5, BIO341H5, BIO375H5, BIO380H5, BIO409H5; CHM333H5 (note: CHM231H5 is prerequisite for this course), CHM341H5, CHM345H5, CHM347H5, CHM362H5, CHM372H5, CHM373H5
3. 1.0 credit from CHM/BIO courses at the 400 level.

*MAT134Y5 - Calculus for Life Sciences is highly recommended.

**Please note that while MGM101H and MGM102H are listed as first-year courses, students cannot enrol in these courses until they are admitted into the Specialist Program and therefore will be taking these courses in their 2nd, 3rd or 4th years of study

CGPA for enrolment into this program is calculated based on a min. 4.0 credits completed at UTM with final percentage grades (i.e. CR/NCR courses are not applicable).

NOTE: No substitute statistics course will be allowed for BIO360H5.

It is recommended that students in this program consider taking a research project or internship course in either Biology (BIO400Y5/ BIO481Y5) or Chemistry (CHM489Y5) or JCB487Y5. Other 4th-year courses directly relevant to this program are BIO443H5, BIO476H5, BIO477H5, CHM414H5 and CHM462H5.

Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project / Thesis courses at the 300/400-level for credit toward their Biology program.

Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.

Specialist Program ERSPE1237 Molecular Biology (Science)

14.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited. Students wishing to enrol at the end of first year (4.0 credits) must obtain a grade of at least 'C' (63%) in both CHM110H5, CHM120H5 and a cumulative grade point average of at least 2.50 to qualify. Students who do not meet these criteria can apply to enter the Specialist at the end of second year (8.0 credits) with the following new criteria: a grade of at least 70% in BIO206H5 and a cumulative grade point average of at least 2.50.

First Year: BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5/MAT135Y5/MAT137Y5; plus 1.0 of CLA201H5; ENV100Y5; ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

Second Year: BIO206H5, BIO207H5; CHM242H5, CHM243H5; STA215H5; plus 1.0 credit from BIO202H5, BIO203H5

Third Year: BIO314H5, BIO315H5, BIO360H5, BIO370Y5, BIO372H5; CHM361H5, CHM362H5, CHM372H5, CHM373H5; plus 0.5 of BIO304H5, BIO310H5, BIO341H5, BIO362H5, BIO375H5, BIO380H5; CHM347H5, PHY332H5, PHY333H5; BCH335H1, BCH340H1

Fourth Year: BIO477H5* plus 1.0 of: BIO407H5, BIO411H5, BIO443H5, BIO458H5, BIO476H5, BIO481Y5; BCH441H1; CHM444H5, CHM462H5, CHM489Y5; JBC472H5; JCB487Y5; JCP463H5; CSB435H1,
Biology (HBSc) Program

CSB450H1, CSB459H1, CSB472H1, CSB473H1, CSB474H1, CSB475H1; MGY425H1, MGY428H1, MGY440H1, MGY445H1, MGY451H1, MGY452H1, MGY470H1; MIJ485H1

*In the event that BIO477H5 is not offered during the 4th year of student's studies, the student must take 1.5 credits from the Fourth Year list above. In such a year, MGY420H1 may be taken.

Notes:
1. CGPA for enrolment into this program is calculated based on a minimum of 4.0 credits completed at UTM with final percentage grades (i.e. CR/NCR course are not applicable).
2. Students intending to continue into Graduate Studies should consider including a course in independent research in Year 4.
3. Students may take no more than 2.0 credits combined in ROP, Internship Program, Individual Project/Thesis courses at the 300/400-level for credit toward their Biology program.
4. No substitute statistics course will be allowed for BIO360H5.

Specialist Program ERSPE2364 Biology (Science)

13.5 credits are required, including at least 6.0 at the 300/400 level, of which 1.0 must be at the 400 level.

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits, including 1.0 full credit in Biology with 60% or better, and who have achieved a cumulative GPA of at least 2.5. Students who have not attained the standard required to enter the Specialist Program may enrol in the Major or Minor Programs. If their GPA rises to 2.5, and they have completed CHM110H5, CHM120H5, BIO152H5, BIO153H5, BIO202H5, BIO203H5, BIO205H5, BIO206H5, and BIO207H5, they will then be eligible to switch to the Specialist Program.

First Year:
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5*/MAT135Y5/MAT137Y5
2. 1.0 from the following: CLA201H5; ENV100Y5; ERS120H5; PHY136H5, PHY137H5, PSY100Y5; WRI203H5, WRI307H5

Second Year: BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5; STA215H5


5.5 additional BIO credits. At least 5.0 of these credits must be at the 300 level or above, of which at least 1.0 must be at the 400 level.

It is recommended that students in the specialist program include at least 0.5 credit from each of the following groups:

- **Ecology and Field Biology**: BIO311H5, BIO312H5, BIO313H5, BIO416H5, BIO330H5, BIO331H5, BIO333H5, BIO373H5, BIO412H5, BIO464H5
- **Biology of Whole Organisms**: BIO325H5, BIO326H5, BIO335H5, BIO338H5, BIO354H5, BIO356H5
- **Genetics and Evolution**: BIO341H5, BIO342H5, BIO407H5, BIO443H5, BIO445H5, BIO464H5
- **Physiology and Behaviour**: BIO210Y5, BIO304H5, BIO310H5, BIO312H5, BIO318Y5/BIO328H5, BIO320H5, BIO405H5, BIO409H5, BIO410H5, BIO411H5, BIO434H5

*MAT134Y5 - Calculus for Life Sciences is highly recommended.

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits, including 1.0 full credit in Biology with 60% or better, and who have achieved a cumulative GPA of at least 2.5. Students who have not attained the standard required to enter the Specialist Program may enrol in the Major or Minor Programs. If their GPA rises to 2.5, and they have completed CHM110H5, CHM120H5, BIO152H5, BIO153H5, BIO202H5, BIO203H5, BIO205H5, BIO206H5, and BIO207H5, they will then be eligible to switch to the Specialist Program.

Notes:
1. CGPA for enrolment into this program is calculated based on a minimum of 4.0 credits completed at UTM with final percentage grades (i.e. CR/NCR course are not applicable). Students wishing to emphasize cell biology, molecular biology, microbiology, physiology or genetics, should take CHM242H5 and CHM243H5 in second year. Such students should take MAT134Y5/MAT135Y5/MAT137Y5, a prerequisite, in their first year.
2. No substitute statistics course will be allowed for BIO360H5.
3. Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project/Thesis courses at the 300/400-level for credit toward their Biology program.
4. Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.
Major Program ERMAJ1004 Paleontology (Science)

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) and who have achieved a CGPA of at least 2.0.

First Year: BIO152H5, 153H5; (CHM110H5, 120H5)/CHM140Y5; MAT134Y5/135Y5/137Y5; ENV100Y5/ERS120H5

Second Year: ERS201H5, 202H5, 203H5; ESS261H1

Third Year and Fourth Year: ERS325H5; BIO354H5, 356H5, 360H5; ESS331H1

CGPA for enrolment into this program is calculated based on a min. 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).

Major Program ERMAJ1149 Biology for Health Sciences (Science)

This program focuses on areas of biological science that relate to the health of humans and will provide a strong foundation for students interested in pursuing a career in the health sciences.

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) and who have achieved a CGPA of at least 2.5.

8.5 credits are required including at least 2.0 at the 300/400 level.

1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5*/MAT135Y5/MAT137Y5
2. BIO202H5, BIO206H5, BIO207H5, BIO210Y5, BIO304H5, BIO310H5, BIO380H5; STA215H5**/PSY201H5
3. 1.0 credits from one of the following lists:

   Cell, Molecular, and Biotechnology Stream: BIO200H5, BIO314H5, BIO315H5, BIO360H5, BIO370Y5/BIO371H5, BIO372H5, BIO374H5, BIO375H5, BIO404H5, BIO475H5, BIO476H5, BIO477H5; JBC472H5

   Neuroscience Stream: BIO320H5, BIO360H5, BIO403H5, BIO409H5, BIO411H5

   Genes and Behaviour Stream: BIO315H5, BIO318Y5/BIO328H5, BIO341H5, BIO360H5, BIO361H5, BIO405H5, BIO407H5, BIO443H5

*CENG362H5 - Calculus for Life Sciences is highly recommended.

**Students who plan to take BIO360 or who plan to transfer to a Biology Specialist program should enrol in STA215H5.

NOTES

- CGPA for enrolment into this program is calculated based on a minimum of 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).

- Students should be aware of the distinct credit requirement for their degree (see section 8.6 - HBSc Degree Requirements for full details). Completion of this program with another non-specialist Biology program will not satisfy the min. 12.0 distinct credit requirement for a degree. Please choose programs and courses accordingly.

- As part of your degree requirement the 'Biology for Health Sciences' Major would be academically complemented by a Major in Psychology, Anthropology, Exceptionality in Human Learning, Forensic Science, and Chemistry, as well as other disciplines such as the Major in Management. This major program would also be complemented by a Minor in Biomedical Communications (Science).

Major Program ERMAJ2364 Biology (Science)

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) and who have achieved a CGPA of at least 2.0.

8.0 credits are required including at least 2.0 at the 300/400 level.

1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; MAT134Y5*/MAT135Y5/MAT137Y5
2. BIO202H5, BIO203H5; BIO205H5, BIO206H5, BIO207H5; STA215H5**/PSY201H5
3. 2.0 in Biology from the 300 or 400 level.

*MAT134Y5 - Calculus for Life Sciences is highly recommended.

**Students who plan to take BIO360H5 or who plan to transfer to a Biology Specialist program should enrol in STA215H5.

NOTES

- CGPA for enrolment into this program is calculated based on a min. 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).
• Students should be aware of the distinct credit requirement for their degree (see section 8.6 - HBSc Degree Requirements for full details). Completion of this program with another non-specialist Biology program will not satisfy the min. 12.0 distinct credit requirement for a degree. Please choose programs and courses accordingly.

• PSL201Y1, offered on the St. George campus, will not meet the Physiology requirements for the Biology Major program and cannot be used for this program.

• Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project / Thesis courses at the 300/400-level for credit toward their Biology program.

• Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.

Minor Program ERMIN2364 Biology (Science)

Limited Enrolment – Enrolment in this program is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) and who have achieved a CGPA of at least 2.0

Program requirements:
1. BIO152H5, BIO153H5
2. two courses from BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5, BIO210Y5
3. 2.0 additional Biology credits, at least 1.0 at the 300/400 level.

NOTE:
1. Four of the six courses in requirement 2 (above) require CHM110H5, CHM120H5 as a pre-requisite.
2. If BIO210Y5 is used to complete requirement #2 above, please note that this counts as ONE COURSE. Another course from the list must be completed to fulfill the program requirements.

IMPORTANT: Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

It is strongly recommended that all Biology students meet with the Undergraduate Advisor at the end of their third year of study to review their program progress.

List of Courses

BIO152H5 Introduction to Evolution and Evolutionary Genetics (SCI)
The scientific method and the modern theory of evolution as an introduction to biology. The principles of evolution, transmission and evolutionary genetics are developed in lectures and laboratories. [24L, 15P, 12T]
Exclusion: BIO130H1; BIOA01H3
Prerequisite: Grade 12U Biology
Note: Although 12U CHM and MAT are not prerequisites for BIO152H5, students intending to pursue a major or any specialist program in Biology must note that CHM110H5, CHM120H5 and MAT134Y5/ MAT135Y5/ MAT137Y5 are requirements for these programs.

BIO153H5 Diversity of Organisms (SCI)
The consequences of Darwinian evolution: adaptations of organisms as a product of the main evolutionary mechanism - natural selection. The roles of natural selection and other mechanisms in the diversification of life are reviewed, along with the diversity of structures and life cycles in bacteria, protists, animals, plants and fungi. [24L, 18P, 12T]
Exclusion: BIO120H1; BIOA02H3
Prerequisite: BIO152H5

BIO200H5 Introduction to Pharmacology: Pharmacokinetic Principles (SCI)
Topics include absorption, distribution, biotransformation, elimination, calculation of dosages, variability in drug response and adverse drug reactions. [36L, 12T]
Exclusion: PCL201H1, JBC201H5
Corequisite: (Recommended): BIO206H5
Recommended Preparation: CHM211H5, CHM221H5, CHM242H5

BIO201H5 The Biology Behind the News (SCI)
News stories are used to explore areas of biology, to learn about the process of science, and to find and assess the validity of information. The topics for the course modules will change yearly because the course is designed to give students the tools to explore the biology behind the news, not to teach a comprehensive survey of biological facts. Reading, writing, and research skills are emphasized.
This is a biology course for students in the Humanities and Social Sciences as well as other non-Biology Sciences. [36L]
Exclusion: Any BIO course (except BIO211H5) taken previously or concurrently.
BIO202H5 Introductory Animal Physiology (SCI)
Diversity of structure and function in animals at the tissue and organ system level. Focus is on morphology and processes that sustain life and maintain homeostasis, including water balance, gas exchange, acquisition and transport of oxygen and nutrients, temperature regulation, electrical and chemical signal transmission, sensory processing, and locomotion. Principles and mechanisms of animal form and function are developed in lectures and laboratories. [24L, 15P, 10T]
Exclusion: BIO204H5; (BIO270H1, BIO271H1); (BIOB32H3, BIOB34H3)
Prerequisite: BIO152H5, BIO153H5; CHM110H5, CHM120H5

BIO203H5 Introductory Plant Morphology and Physiology (SCI)
Introduction to the morphology and physiology of plants. Students will learn that plants require energy to support metabolism and growth, and that these processes are highly regulated in order to achieve homeostasis. Topics covered include: biology of the plant cell, plant morphology, plant respiration and photosynthesis, transport processes, regulation of growth and development, and plant ecophysiology. Principles and mechanisms of plant form and function are developed in lectures and laboratories. [24L, 10T, 15P]
Exclusion: BIO204H5; BIO251H1
Prerequisite: BIO152H5, BIO153H5; CHM110H5, CHM120H5

BIO205H5 Ecology (SCI)
An introduction to the scientific study of ecology, emphasizing the structure and dynamics of populations, communities and ecosystems. Topics include population growth and regulation, competition, predation, biodiversity, succession, and nutrient cycling. Classic models and studies will be supplemented with both plant and animal examples. [24L, 10T, 15P]
Exclusion: BIO204H5; BIO251H1
Prerequisite: (BIO152H5, BIO153H5) / (ENV100Y5 for students in Environmental Programs)

BIO206H5 Introductory Cell and Molecular Biology (SCI)
An introduction to the molecular biology of the cell with an emphasis on similarities and differences between prokaryotic and eukaryotic cells. Topics include the structure and function of: macromolecules, membranes, ribosomes, nuclei, intracellular organelles, etc. Other topics include: the central dogma of molecular biology (replication, transcription and translation), protein targeting, organization of the genome, gene regulation and regulation of the cell cycle. Tutorials will emphasize and consolidate concepts from lecture and text through individual and group assignments. [36L, 15P, 5T]
Exclusion: BIO230H1 / BIO255H1; BIOB10Y3 / BIOB11H3 / BIOB12H3
Prerequisite: BIO152H5, CHM110H5, CHM120H5

BIO207H5 Introductory Genetics (SCI)
The principles of Mendelian inheritance and modern genetics are illustrated using examples from medical research, evolutionary biology, agriculture and conservation biology. Topics covered include: chromosome theory of inheritance, basic eukaryotic chromosome mapping, gene and chromosome mutation, the lac system, the extranuclear genome, population and quantitative genetics. In tutorials, students will work through problem sets related to lecture material as well as probability and statistical analysis. [36L, 18T]
Exclusion: BIO260H1; HMB265H1; BIOC15H3
Prerequisite: BIO152H5, BIO206H5
Corequisite: BIO153H5

BIO210H5 Fundamentals of Human Anatomy and Physiology (SCI)
The design of the human body. Topics include locomotory and other major organ systems, integrating structure and function. A comparative approach is taken, placing the design of the human body in an evolutionary context. [48L, 24T]
Exclusion: BIO210H5
Prerequisite: BIO152H5, BIO153H5

BIO211H5 The History of Our Living Planet (SCI)
This course provides a survey of major events in the evolution of life and Earth's geological history. It includes overviews of science as a process, geological principles, climate, and evolution. Special focus will be on major events including origin of life, the Cambrian explosion, plant and animal radiations onto land, the Mesozoic evolution of dinosaurs, and the Cenozoic diversification of mammals. This is a biology course for students in the Humanities and Social Sciences as well as other non-Biology Sciences. [36L]
Exclusion: Any BIO course (except BIO201H5) taken previously or concurrently.

BIO299Y5 Research Opportunity Program (SCI,EXP)
This program provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

BIO304H5 Integrative Animal Physiology I (SCI)
Principles of cell physiology, and the physiology of neurons, the sensory nervous system, and muscle. [36L]
Exclusion: CSB332H1
Prerequisite: BIO202H5 / BIO204H5 / BIO210Y5
NOTE: BIO210H5 (half-course) is not an acceptable pre-requisite for this course.
BIO310H5 Integrative Animal Physiology II (SCI)
Principles of cardiovascular, renal, respiratory and digestive physiology of animals and their control by the neural and endocrine systems. [36L]
Exclusion: PSL301H1
Prerequisite: BIO202H5 / BIO204H5 / BIO210Y5

BIO311H5 Landscape Ecology (SCI)
Landscape ecology asks how spatial patterns originate and how they affect ecological processes like forest dynamics, nutrient cycling, species interactions, and the distribution and population dynamics of plants and animals. Lectures and computer labs introduce students to concepts and methods of landscape ecology and their application to current issues of land-use management and global change. The students will learn to apply GIS, spatial statistics, landscape metrics, and modelling to address problems in conservation, biodiversity, and ecosystem management. [24L, 24P]
Exclusion: GGR311H5
Prerequisite: BIO205H5 and PI.
Corequisite: BIO360H5 / STA215H5 / STA220H5
Students interested in this course will need to meet with the course instructor before being approved and permitted to enroll.

BIO312H5 Plant Physiology (SCI)
This course will focus on the principal physiological processes in plants and their response to environmental factors and global change. By addressing factors involved in global change, including rising atmospheric CO2, alterations of the global nitrogen cycle and global climate warming, and examining their effects on photosynthesis and plant metabolism, the course will provide the basis to understand the implications of global change factors to plants, ecosystems and their impact on carbon sources and sinks in the modern biosphere. [36L, 15P]
Prerequisite: BIO203H5 / BIO204H5

BIO313H5 Field Methods and Statistical Analyses in Ecology (SCI)
This course will provide Biology Majors and Specialists particularly interested in ecology with integrated, practical exposure to field and laboratory research methods on plant, animal, and microbial communities including study design, data collection, statistical analysis, and interpretation of results. [36P, 24T]
Prerequisite: BIO205H5
Corequisite: STA215H5/ PSY201H5/ equivalent

BIO314H5 Laboratory in Cell and Molecular Biology (SCI)
Students are introduced to commonly employed techniques in cell biology such as cellular fractionation, polyacrylamide gel electrophoresis, western blotting, and immunolocalization. Students will also perform some advanced molecular biology techniques including the cloning and transformation of genes, DNA sequencing and the expression of proteins in bacterial and/or model systems. Each week, a two-hour lecture provides an introduction and theoretical basis for the lab. [24L, 48P]
Prerequisite: 2013-14 and prior: BIO215H5; 2014-15 onward: BIO206H5
NOTE: BIO206H5 with NO practical component is not an acceptable pre-requisite for this course without BIO215H5.

BIO315H5 Human Cell Biology (SCI)
This course uses the information learned in prerequisite courses to cover advanced details in specific areas. The course will also introduce students to many exciting new topics in the structure and function of normal and diseased cells. Areas of focus include cell adhesion, intercellular communication, signal transduction, the cytoskeleton, chemotaxis, motor proteins, receptor mediated endocytosis and intracellular trafficking with an eye towards understanding their underlying roles in the disease process. Throughout the course, students will learn about the underlying approaches, methods and experimentations used by biomedical researchers including polyacrylamide gel electrophoresis, western blotting, immunolocalization, pharmacological intervention and various means of localizing proteins within cells. [36L]
NOTE: BIO206H5 with NO practical component is not an acceptable pre-requisite for this course without BIO215H5.

BIO318Y5 Animal Behaviour (SCI,EXP)
This course will cover the adaptive (evolved) behaviours of organisms that result from interactions with the biological environment. We ask why animals behave in a particular way, i.e. how does their behaviour enhance success in survival or reproduction? Examples involve adaptive strategies in competing with rivals, choosing mates, and avoiding parasites. We also ask how adaptive behaviour is controlled; what are the genetic, developmental, and physiological mechanisms underlying behaviour? Assignments involve observing and analyzing (suggesting alternative explanations/ hypotheses) for behaviour, followed by a use of these skills to critique a published scientific paper. [48L, 72P]
Exclusion: BIO328H5; PSY252H5, 352H5
Prerequisite: BIO152H5, BIO153H5
BIO320H5 Sensory and Cognitive Biology (SCI)
Properties, acquisitions, and transduction of environmental information will be explored in the context of determining behaviour. This course focuses on form and function of visual, auditory, tactile, and chemical senses. Post-acquisition, cognitive processes concerned with learning, memory, and decision-making will also be discussed. A comparative approach will be taken to examine how different animals rely on different sources of information as well as a diverse array of sensory and cognitive mechanisms. Fields considered will include sensory physiology, ecology, comparative cognition, and neuroethology, and all topics will be covered in the context of ecology and evolution. [24L, 10T]
Prerequisite: BIO202H5 / BIO204H5
Exclusion: PSY362H5

BIO325H5 Biomechanics (SCI)
From the form of an organism one can read its evolutionary history. This course addresses the use of organ systems to find and process food, escape enemies by locomotion, reproduce by pollination vectors, filter nutrients, exchange gases, coordinate and make decisions. Content includes the mechanics of moving in fluids by swimming and flying, sending and receiving of signals at body surfaces, the microstructure of materials. Forces are seen to have adaptively affected the shape and leverage of skeletons. [24L, 36P]
Prerequisite: BIO152H5, BIO153H5
Recommended Preparation: BIO202H5 / BIO204H5

BIO326H5 Ornithology (SCI,EXP)
Ecology, evolution, form, function, diversity, and conservation of birds. Practical sessions focus on observation and assessment of local avian populations using field ornithology techniques and approaches. [24L, 30P]
Exclusion: EEB386H1
Prerequisite: BIO152H5, BIO153H5, BIO205H5
Recommended Preparation: BIO202H5

BIO328H5 Lectures in Animal Behaviour (SCI)
This course will cover the adaptive (evolved) behaviours of organisms that result from interactions with the biological environment. We ask why animals behave in a particular way, i.e. how does their behaviour enhance success in survival or reproduction? Examples involve adaptive strategies in competing with rivals, choosing mates, and avoiding parasites. We also ask how adaptive behaviour is controlled; what are the genetic, developmental, and physiological mechanisms underlying behaviour? Assignments involve observing and analyzing (suggesting alternative explanations/hypotheses) for behaviour, followed by a use of these skills to critique a published scientific paper. No laboratory or field work is included. [48L]
Exclusion: BIO318Y5; PSY252H5, 352H5
Prerequisite: BIO152H5, BIO153H5
This is a half-credit (0.5) course that is offered over the full academic year.

BIO330H5 Plant Ecology (SCI)
A survey of the population and community ecology of plants. Topics include resource acquisition, growth and reproduction, mutualisms, competition, defence, invasions, disturbance, population dynamics, and community structure. Interactions with other plants, diseases, and animals particularly are emphasized. [24L, 12T]
Prerequisite: BIO203H5 / BIO204H5, BIO205H5

BIO331H5 Ecology of Communities (SCI)
This course will cover the theoretical foundations of community ecology, including the role of species interactions and environment structure on patterns of diversity and implications of community ecology in conservation. It will provide practical experience working with tools used to analyze community structure. Discussion and evaluation of the primary literature is a key component of this course. Students will also complete written assignments. [24L, 12T]
Prerequisite: BIO205H5, BIO360H5 / STA215H5

BIO333H5 Freshwater Ecology (SCI)
A functional analysis of freshwater ecosystems, with emphasis on lakes. Lectures cover water chemistry; the physical structure of lakes; the different ways that algae, zooplankton, benthic invertebrates, and fish have evolved to succeed in these habitats and interact with one another; and the impact of man on freshwater systems. Students must be available to participate in a mandatory weekend field trip to a lake on one of two weekends in late September or early October. Students not available for one of those weekends should not register for this course. Ancillary fees for this course apply. Please check the Departmental website for full details. [24L, 18P, 5T]
Exclusion: BIO332Y5, BIO337H5
Prerequisite: CHM110H5, CHM120H5
Corequisite: BIO205H5

BIO335H5 Mycology (SCI)
A study of the biology of fungi with emphasis on their life histories, morphology, classification, ecology and significance to man. Laboratory sessions include the collection, culture, and identification of a wide variety of fungi. In addition, several experiments illustrating important aspects of fungal physiology and development are performed in the laboratory. [24L, 36P]
Prerequisite: (BIO152H5, BIO153H5) / any 200 level course in BIO.

BIO338H5 Entomology (SCI)
A survey of the Class Insecta, emphasizing the functional morphology, physiology, behaviour and evolution of this highly successful group of animals. Laboratories focus on gaining proficiency in recognizing insect orders, families and genera. Students will carry out a field study and complete an insect collection that illustrates the diversity of insects found in a specified region. [24L, 36P]
Exclusion: BIO334H5
Prerequisite: BIO152H5, BIO153H5

BIO339H5 Plant Identification and Systematics (SCI)
Lectures provide an introduction to principles and underlying philosophy of plant classification, phylogenetic reconstructions, flowering plant, evolution, phylogeny, pollination, breeding systems, and speciation in plants. Laboratories focus on gaining proficiency in recognizing important plant families by sight and identifying unknown plants by using keys and published Floras. [24L, 36P]
Exclusion: EEB337H1
Prerequisite: BIO203H5 / BIO204H5 plus 0.5 credit from BIO205H5, BIO206H5, BIO207H5

BIO341H5 Advanced Genetics (SCI)
The following topics are covered at an advanced level: extensions to Mendelian genetics, linkage and advanced mapping analyses, mutation, extrachromosomal inheritance, quantitative genetics, population and evolutionary genetics and genetics of behaviour. [24L, 12T]
NOTE: BIO206H5 with NO practical component is not an acceptable pre-requisite for this course without BIO215H5.

BIO342H5 Evolutionary Biology (SCI)
An introduction to the concepts and importance of evolutionary biology. The course will focus on how genetic variation arises and is maintained, mechanisms of evolutionary change and how these mechanisms lead to adaptation, sexual selection, speciation and co-evolution. Throughout the course we will consider how fossils, experiments, genetics and molecular systematics can be used to understand evolution. [24L, 12T]
Prerequisite: BIO207H5
Recommended Preparation: BIO360H5/ STA215H5 (strongly recommended)

BIO343H5 Plant Development (SCI)
The course addresses key concepts, with emphasis on unique plant-related aspects. Integrates plant development at the levels of the cell, tissue, organ and organism, with knowledge from diverse fields of Biology. Topics will include embryology, environmental interactions, signaling, developmental transitions, developmental diversity, evolution and development, and tools for discovery research. [24L, 15P, 10T]
Exclusion: CSB340H5
Prerequisite: BIO203H5
Corequisite: None
Recommended Preparation: None

BIO354H5 Vertebrate Form and Function (SCI)
The design and adaptive consequences of vertebrate structure. Mechanisms of locomotion, digestion, gas exchange, circulation and sensory perception are compared at the organ level. Students conduct individual laboratory dissections on selected vertebrates. [24L, 36P]
Prerequisite: BIO152H5, BIO153H5, BIO210Y5

BIO356H5 Major Features of Vertebrate Evolution (SCI)
The evolution of the vertebrates as evidenced by the fossil record. The origin and adaptive radiation of major groups including amphibians and reptiles is emphasized. Principles and knowledge will be demonstrated through written assignments and essays. [36L]
Corequisite: BIO210Y5
Recommended Preparation: BIO360H5/ STA215H5

BIO360H5 Biometrics I (SCI)
This course takes students from hypothesis testing to the application of testing means, chi-square tests, regression analysis and analysis of variance in Biology. Students will learn to choose an appropriate statistical test, independently analyze case studies with R software, and write empirical scientific reports. [24L, 12T, 24P]
Exclusion: ECO220Y5; PSY202H5; STA221H5; STA256H5, STA258H5
Prerequisite: STA215H5
Corequisite: None

BIO361H5 Biometrics II (SCI)
This course is a sequel to BIO360 in which topics in biological statistics are explored at an advanced level. Multiple regression, concepts of power, multi-factor analysis of variance, advanced experimental designs, logistic regression, Monte Carlo techniques, generalized linear models and principal component analyses are explored using R. [24L, 36T]
Exclusion: ECO220Y5; STA258H5; STA260H5
Prerequisite: BIO360H5
BIO362H5 Bioinformatics (SCI)
Bioinformatics uses and develops computational tools to understand biological processes from the level of single molecules to whole genomes and organisms. The biotechnology revolution has meant that bioinformatics is now used in many cutting edge biological research areas from medicine to phylogenetics. This course will introduce core concepts, practices and research topics including DNA/Protein alignment, DNA sequence analysis, interacting with scientific databases, and genome sequencing technology. This course includes computer-based practicals wherein students will apply bioinformatic tools and learn basic computer programming. [12L, 36P]
Exclusion: None
Prerequisite: BIO206H5, BIO207H5, STA215H5/ CSC108H5
Corequisite: None
Recommended Preparation: None

BIO370Y5 Microbiology (SCI)
In-depth discussion of bacterial structure and ultrastructure; physiology and nutrition; growth and cultivation; nature of viruses (bacteriophage and a limited survey of animal viruses and their properties); microbial genetics; immunology; the role of micro-organisms in medicine, industry, agriculture and ecology. [48L, 72P]
Prerequisite: BIO206H5, BIO207H5; 2013-14 and prior: BIO206H5, BIO207H5, BIO215H5;
NOTE: BIO206H5 with NO practical component is not an acceptable pre-requisite for this course without BIO215H5.

BIO371H5 Microbiology Lectures (SCI)
In-depth discussion of bacterial structure and ultrastructure; physiology and nutrition; growth and cultivation; nature of viruses (bacteriophage and a limited survey of animal viruses and their properties); microbial genetics; immunology; the role of micro-organisms in medicine, industry, agriculture and ecology. [48L]
Exclusion: BIO370H5
Prerequisite: BIO206H5, BIO207H5
This is a half-credit (0.5) course that is offered over the full academic year.

BIO372H5 Molecular Biology (SCI)
Exclusion: JBC372H5; CHM360Y5; JLM349H1; MGB311Y1
Prerequisite: BIO206H5; CHM242H5
Corequisite: BIO207H5
Recommended Preparation: CHM361H5

BIO373H5 Microbial Ecology (SCI)
A lecture course on the interaction of microorganisms with other organisms and their environment. As the most abundant form of life, microorganisms have an enormous impact on the Earth. Subject areas include microbial evolution and biodiversity, metabolism and biogeochemical cycling, and how molecular biology has revolutionized our understanding of microbial life. [36L]
Prerequisite: BIO205H5, BIO206H5

BIO374H5 Modern Biotechnology (SCI)
This course is designed to introduce students to biotechnology and its applications in a variety of fields, including medicine, food & beverage, agriculture, forensics, fisheries and environmental protection. The course explores the principles and methods of genetic, tissue and organismal engineering involving species from bacteria to humans. The social and ethical issues associated with biotechnologies such as GMOs, stem cells and cloning will also be discussed. Topics include: Recombinant DNA Technology, Genomics & Bioinformatics, Protein Technology, Microbial Biotechnology, Plant Biotechnology, Animal Biotechnology, Forensic Biotechnology, Environmental Biotechnology, Aquatic Biotechnology, Medical Biotechnology, Biotechnology Regulations, and Careers in Biotechnology. [36L]
Prerequisite: 2013-14 and prior: BIO215H5; 2014-15 onward: BIO206H5
NOTE: BIO206H5 with NO practical component is not an acceptable pre-requisite for this course without BIO215H5.

BIO375H5 Introductory Medical Biotechnology (SCI)
This course reviews a full range of discoveries from medical biotechnology, which includes drugs, smart phone apps, and medical devices. The course reviews a range of biotechnology products with respect to: regulatory path for experiments to support for new biotechnologies; key science concepts behind the technology, patents, and the business context. [36L]
Prerequisite: Completion of 2.0 credits in Biology, plus BIO360H5/ STA215H5 / STA220H5 / PSY201H5

BIO380H5 Human Development (SCI)
Reproduction and embryonic development in humans are emphasized. After a general review of human reproduction, the formation of sperm and eggs is analyzed, followed by an in-depth analysis of fertilization in vivo and in vitro. Early embryonic developmental processes are studied with a view to how the embryo becomes organized so that all of the tissues and organs of the adult body form in the right places at the proper times. The course ends with an in-depth analysis of limb development and organ regeneration. The relevance of the material to such topics as human infertility, contraception, cloning, biotechnology and disease is continually addressed. [36L]
Prerequisite: BIO206H5, BIO207H5
Recommended Preparation: BIO202H5 / BIO204H5 / BIO315H5
BIO399Y5 Research Opportunity Program (SCI,EXP)
This course provides third year undergraduate students (after completion of at least 9.5 but not more than 14 credits), who have developed some knowledge of Biology and its research methods, another opportunity to work in the research project of a professor in return for course credit. Students enrolled have the opportunity to become involved in original research, enhance their research skills and share in the excitement of acquiring new knowledge and in the discovery process of science. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

BIO400Y5 Biology Internship (SCI,EXP)
Through a part-time, unpaid, 200-hour work placement, fourth year students apply biology content and skills. Placements are made throughout the GTA in both the private (e.g. pharmaceutical or biotech companies) or public (e.g. Peel Region Medical Office, hospitals, Great Lakes Laboratory) sector. Biweekly class meetings plus year-end report and presentation are required. Students in a biology specialist program are given priority. Updated application information will be on-line at www.utm.utoronto.ca/intern by February 1st of each year. Please see the Internship Office (DV 3201D) for more information.
Exclusion: JEG400Y5, JEG401Y5; BIO481Y5; JCB487Y5
Prerequisite: Fourth year standing in Biology Specialist or Major Program, 3.0 CGPA and P.I.

BIO403H5 Topics in Neurobiology (SCI)
An advanced student-led course examining contemporary topics in neurobiology. Students will read, criticize, and present on current areas of neurobiology, which could include the cell and molecular basis for neural disease, developmental neurobiology, sensory reception, neurophysiology, neural communication, and information processing. [24L, 12S]
Prerequisite: BIO304H5

BIO404H5 Invertebrate Neurobiology (SCI)
Neurobiology, the biological study of the nervous system, investigates the electrical and chemical processes animals use to regulate internal events and interface with their environments. Invertebrates have provided crucial neurobiological insights and are often more accessible study systems than vertebrates. This course addresses some key historical contributions, and discusses the future of invertebrate systems, where recent technological advances are opening up new ways to explore invertebrate neurobiology and evolution. Students will do practicals, using computer simulations of neurons, to develop an understanding of neurons and other excitable cells. [24L, 24P]
Exclusion: None
Prerequisite: BIO304H5
Corequisite: None
Recommended Preparation: None

BIO405H5 Evolutionary Perspectives on Cognition and Behaviour (SCI)
Neural processes concerned with learning, memory, and decision-making and their ecology and evolution. A comparative approach will be taken as different animals rely on different information and a diverse array of cognitive and behavioural mechanisms. Topics considered will include comparative cognition, behavioural ecology, neuroethology and evolutionary neuroscience. [12L, 24S]
Exclusion: PSY362H5
Prerequisite: BIO318Y5/ BIO328H5/ PSY352H5/ BIO320H5
Corequisite: BIO342H5
Recommended Preparation: BIO342H5

BIO406H5 Current Topics in Ecology and Evolution (SCI)
A combination of lectures and tutorials. The course will emphasize group discussion and critiques of current publications in the field. The theme of the course is expected to be topical and current and to vary from year to year, with the interests of the faculty member(s) teaching the course. Course themes are expected to range from structure and function of whole ecosystems (e.g. the collapse of fisheries) to evolutionary ecology (e.g. the evolution of emergent diseases). [12L, 24T]
Prerequisite: BIO205H5, STA215H5 / BIO360H5
Recommended Preparation: BIO313H5
C. elegans (the worm olfaction, foraging, rhythms and sex in three model systems discussed. We focus on behaviour-genetic analysis of statistical and neurobiological analysis of behaviour are used to shed light on behaviour genetics of non-model organisms including humans. [24L, 12P] 
Prerequisite: BIO207H5, BIO360H5/ STA215H5
Corequisite: BIO318Y5/ PSY252H5
Recommended Preparation: BIO206H5, BIO215H5, BIO304H5

BIO409H5 Laboratory in Animal Physiology (SCI)
Experiments are designed to familiarize students with techniques and experimental design commonly used in the study of physiology. A one-hour lecture each week provides an experimental and theoretical basis for each laboratory. Topics include pharmacology, enzyme kinetics, neurophysiology, respiration, and metabolic rate. [12L, 48P] 
Prerequisite: BIO304H5, BIO202H5 / BIO204H5 / BIO310H5

BIO410H5 Insect Physiology (SCI)
A lecture course with a seminar component designed to introduce the student to the physiological characteristics of insects. The physiology of the integument, metamorphosis, reproduction, diapause and the physiological basis of insect control are discussed in detail. [24L, 24S] 
Prerequisite: BIO202H5 / BIO204H5

BIO411H5 Topics in Molecular and Cellular Physiology (SCI)
An advanced, student-led seminar course on contemporary subjects in cell physiology. Students will examine, review, and present primary literature on fundamental topics such as ion transport, water transport, membrane excitability, intracellular transport, and secretion applied to a variety of physiological systems. Emphasis will be placed on understanding how diverse cell types carry out specific physiological functions. [36S] 
Prerequisite: BIO315H5
Recommended Preparation: BIO314H5

BIO412H5 Climate Change Biology (SCI)
Climate change is affecting life on earth at all levels from cells to ecosystems. As a result, shifts in the distribution of species, the timing of biological events, and large impacts on natural resources, agriculture, and forestry may be seen. This course explores past climate, predictions of future climate, impacts of climate change on biological systems, and potentials for adaptation. Mitigation of climate change impacts on biological systems will also be discussed. [48L] 
Prerequisite: (BIO202H5, BIO203H5) / BIO204H5, BIO205H5; and at least one of GGR377H5, BIO312H5, BIO330H5, BIO331H5, BIO333H5
Recommended Preparation: BIO313H5

BIO416H5 Field Course in Ecology (SCI,EXP)
Students may choose from a variety of field courses offered through a cooperative arrangement among ecologists at ten Ontario universities. Courses involve a two-week period at a field site in early May or late August, and require a major paper or project report be submitted within six weeks of course completion. A fee for room and board is usually charged over and above tuition. Lists of courses available are posted at www.eeb.utoronto.ca. Please check this list early for balloting dates.

BIO434H5 Social and Developmental Determinants of Human Health (SCI)
This course encourages students to explore the relationship between social conditions and health outcomes. Topics may vary across years. Topics include the importance of the early years, interactions between the environment and the genes, epigenetic influences on health, sensitive periods of development, the influence of nutrition on health, the interaction between social policy, medical care, social class and human health. The students direct the learning experience in groups as they engage in case-based and problem-based learning. [24L, 24S] 
Prerequisite: P1.
NOTE: Students interested in this course must contact the Biology Undergraduate Advisor to enroll.

BIO443H5 Phylogenetic Principles (SCI)
Lectures will provide an in-depth coverage of modern methods of phylogenetic reconstruction including molecular systematics based on DNA sequences. The principles and philosophy of classification will be taught with an emphasis on ‘tree-thinking’, one of the most important conceptual advances in evolutionary biology. Tutorials will focus on recent developments in the study of evolutionary patterns while gaining proficiency in reading, presenting, and critiquing scientific papers. [36L, 12S] 
Prerequisite: BIO206H5, 207H5

BIO445H5 Evolutionary Ecology (SCI)
This course focuses on the interface between ecology and evolution. Research has shown that biotic and abiotic ecological factors drive evolution, and in turn, evolution feeds back to influence the ecological processes and patterns of populations and communities. Throughout this course we will focus on this dynamic interplay over short and long time spans in animals, plants, fungi, and other microbes. While covering the concepts and questions of this field we will also consider the theory, methods, and statistics used to bring new insights to evolutionary ecology. Students will be expected to participate in discussions, present methods and concepts to the class, and complete written assignments. [48L] 
Exclusion: EEB324H1
Prerequisite: BIO205H5, BIO207H5, BIO342H5
BIO458H5 Genomics (SCI)
The genome has been referred to as the blueprint of life and consists of the full complement of genes and genetic material carried by an organism. The ongoing revolution in DNA sequencing allows biologists to observe the variety of genetic and genomic structures that underpin the diversity of life. In addition, applications of genomic technologies have facilitated new fields of research such as personalized medicine and evolutionary genomics. The lectures will focus on the diversity of genomic structures, their functions and evolutionary origins. The course also has computer-based practicals that provide hands-on training with cutting-edge bioinformatic tools for analysis of genome-scale datasets and next generation sequencing data. [12L, 36P]
Exclusion: None
Prerequisite: BIO206H5, BIO207H5, STA215H5, BIO362H5/ CSC108H5/ BIO314H5
Corequisite: None
Recommended Preparation: None

BIO464H5 Conservation and Biodiversity (SCI)
Biodiversity is the sum of species diversity, and also the interaction of species at population, at ecosystem and at migration-route levels; it is one barometer of environmental health. Conservation biology applies ecological and genetic principles to the problem of declining biodiversity. We discuss the species concept, quantification and cost-benefit analysis of biodiversity and extinction, causes, consequence, diagnosis and treatment of population declines, as well as the effects of different land uses on biodiversity and reserve design. A key part of this course is a case study by each student. [36L]
Prerequisite: BIO152H5, BIO153H5, BIO205H5 and P.I.
Note: Students from a wide range of programs are encouraged to enrol.

JBC472H5 Seminars in Biotechnology (SCI)
An introduction to current research in biochemistry and biotechnology, through seminars and literature reviews, presented by invited speakers and students. Subject areas include biotechnology, biomaterials, enzyme engineering, biosensors, drug delivery, spectrometry, separations chemistry, and bioinformatics. [36L]
Prerequisite: BIO372H5; CHM361H5, CHM362H5/ BIO315H5

BIO475H5 Virology (SCI)
Virology examines the biology of viruses infecting all forms of life including humans and other animals, plants, eukaryotic microorganisms, and bacteria. The scope ranges from the molecular biology of virus replication to virus evolution and ecology. Current issues surrounding virology and society are incorporated into the course including vaccines, emerging viruses, and even consideration of practical applications of viruses. [24L, 24S]
Exclusion: CSB351Y1
Prerequisite: P.I., BIO370Y5/ BIO371H5/ BIO372H5
Recommended Preparation: BIO373H5

BIO476H5 Molecular Basis of Disease (SCI)
This advanced course explores the primary concepts of pathogenesis and investigates current research in the field of molecular pathology. Specific disease topics include inflammation, injury and repair, neoplasia, immune disorders, infectious disease, cardiovascular disease, and toxicology. Analysis of the primary literature is a key component of this course. [36L]
Prerequisite: BIO310Y5/ BIO315H5
Recommended Preparation: BIO314H5, BIO372H5

BIO477H5 Molecular Biology of Gene Expression and Cancer (SCI)
The first part of the course examines how genes are regulated in eukaryotic cells. It also explores the field of functional genomics and in particular examines how gene expression and genomes can be studied on a genome-wide basis using DNA microarrays and high throughput sequencing. The second part of the course examines the molecular and genetic basis of cancer including the role of oncogenes, tumor suppressor genes and cell cycle regulating proteins in the development of this disease. It also looks at cancer from a functional genomics perspective. Lectures and seminars involve presentation and discussion of recently published research articles. [36L, 12S]
Prerequisite: BIO370Y5/ BIO372H5, P.I.
Recommended Preparation: BIO314H5, BIO315H5

BIO481Y5 Biology Research Project (SCI,EXP)
Students in this course will conduct a research project under the supervision of a faculty member in the Department of Biology. The course is open to third and fourth year students. Students learn how to design, carry out, and evaluate the results of a research project. Students are required to write and present a research proposal, write a term paper, and present a seminar on the results of their research project. All students interested in a research project must approach potential faculty supervisors several months in advance of the beginning of term. Students must obtain permission from the faculty member whom they would like to serve as their project supervisor. Students must meet with the course coordinator periodically throughout the academic year.
Exclusion: BIO400Y5, JCB487Y5
Prerequisite: P.I.
CBJ481Y5 Independent Project in Bioinformatics (SCI, EXP)
This course is intended for students in the Bioinformatics Specialist degree program. Possible areas in which the research may take place include: functional genomics (e.g., microarray and proteomic data analysis); systems biology; and the development of novel analytical methods for large datasets. Students will be required to produce a written document of their project and present it orally. In order to enrol in this course, students must obtain, several months in advance, approval from a faculty member(s) who will serve as supervisor(s).
Prerequisite: P1.
Corequisite: BIO477H5
Recommended Preparation: CSC343H5, BIO372H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

BIO483H5 Selected Topics in Biology I (SCI)
The focus of this advanced course will reflect the expertise and research of the Instructor. Students will actively participate in the discussion, criticism and interpretations of recent scientific papers. Implications and applications of these research advances will be explored. Contact the biology department for information on the current years offering. [36L]
Exclusion: None
Prerequisite: 1.5 BIO courses at the 3/400 level
Corequisite: None
Recommended Preparation: None

BIO484H5 Selected Topics in Biology II (SCI)
The focus of this advanced course will reflect the expertise and research of the Instructor. Students will actively participate in the discussion, criticism and interpretations of recent scientific papers. Implications and applications of these research advances will be explored. Contact the biology department for information on the current years offering. [36L]
Exclusion: None
Prerequisite: 1.5 BIO courses at the 3/400 level
Corequisite: None
Recommended Preparation: None

JCB487Y5 Advanced Interdisciplinary Research Laboratory (SCI, EXP)
Students will work together as members of a multidisciplinary team toward the completion of an interdisciplinary experimental or theoretical research project. Teams will be comprised of at least three students, with representation from at least three areas of specialization, namely, astronomy, biology, chemistry, earth sciences or physics. The interdisciplinary projects will be based on current trends in research and student teams will work to complete their projects with guidance provided by a team of faculty advisors from the Biology Department and the Department of Chemical and Physical Sciences. In addition to the rigorous development of research skills, the course will also provide students with training and practical experience in project management techniques and teamwork skills development. JCB487Y5 requires submitting an application to the department before the end of June, for Fall enrolment. Application forms may be found at http://uoft.me/cpsforms. Application should be submitted to the CPS Undergraduate Assistant. Registration on ROSI/ACORN is also required. [240P]
Exclusion: BIO400Y5, 481Y5, CBJ481Y5, CHM489Y5, ERS470Y5, 471H5, 472H5, PHY489Y5; BCH472Y1, 473Y1, CHM499Y1, CSB497H1, 498Y1, 499Y1, ESS491H1, 492Y1, MGY480Y1, PHY478H1, 479Y1; BIOD98Y3, CHMD90Y3, 91H3, ESSD09H3, 10H3, PSCD10H3
Prerequisite: 2.0 credits 300 level from BIO/CHM/JBC/JCP/ERS(G)/PHY and 1.0 credit from BIO206H5, 314H5, CHM372H5, 373H5, 394H5, 395H5, 396H5, 397H5, ERS201H5, 202H5, PHY324H5, PHY347H5. Normally taken in student's 4th year. To register in this course, students must obtain approval from the faculty member(s) who will serve as the supervisor(s) in advance of the start of the course.
Biomedical Communications (HBSc)

Professors Emeriti
L. Wilson-Pauwels, AOCA, B.Sc.AAM, M.Ed., Ed.D.

Professors
M. Corrin, B.A., B.Sc., M.Sc.BMC
M. Dryer, B.A., M.Sc., M.Sc.BMC
J. Jenkinson, B.A., M.Sc.BMC, Ph.D.
L. Lax, B.A., B.Sc.AAM, M.Ed., Ph.D.
D. Mazierski, B.Sc.AAM, M.Sc.
B. Sutherland, B.A., M.Ed.
S. Wall, AOCAD, B.A., M.A., M.Sc.BMC, Ph.D.

Undergraduate Advisor
Diane Matias
Room 3057, William G. Davis Bldg.
d.matias@utoronto.ca

The minor in Biomedical Communications is for students interested in interdisciplinary studies in health, science and visual communication. Enrolment and completion of the program requires concurrent enrolment in a science major plus an additional minor, or a science specialist program.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 78)
HSC Biomedical Communications (page 88)

Minor Program ERMIN0840 Biomedical Communications (Science)

Biomedical Communications (Science) is offered through the Biology Department.

Limited Enrolment – Enrolment in this program requires the student meet one of the following two conditions: 1) concurrent enrolment in a science major and a minor; or 2) enrolment in a science specialist program. A minimum CGPA of 2.20 is required.

1.5 credits from the following: BIO152H5, BIO153H5, HSC200H5 1.0 credit from the following: HSC300H5/ HSC301H5/ HSC302H5 1.5 credits from the following: HSC401H5/ HSC402H5/ HSC403H5/ HSC404H5/ HSC405H5/ HSC406H5

CGPA for enrolment into this program is calculated based on a minimum of 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).

List of Courses

HSC200H5 Imaging Technologies for Scientific Visual Communication (SCI)
Introduction to image and media technologies central to modern digital communication, with emphasis on their use in science communication and education. Topics include the appropriate use of visual media, design strategies, design for legibility and scientific image conventions. Tutorial sessions will introduce vector and bitmap image creation and manipulation tools. [12L, 24T]
Exclusion: HSC302H5
Prerequisite: Completion of 4.0 credits.

HSC300H5 Written Communication for Health Care (SCI)
This course presents the principles of communicating effective audience-specific health information in both print and electronic media. Students will learn to analyze the form, content, language, and imagery of written health communication; to locate the published research behind health reports in the popular media; and to communicate clear, accurate health information to medical professionals, general audiences, and readers with low literacy skills. [12L, 24S]
Prerequisite: BIO152H5

HSC301H5 Data and Information Visualization (SCI)
This course presents the principles of information design, including the clear, concise and truthful presentation of data in the form of tables, graphs, maps, academic posters, presentations, and user interfaces. Topics will include the accurate representation of numerical and statistical data, information hierarchy, and appropriate use of design elements for clarity and legibility. Practical application of course material will require students to develop and integrate information graphics into a presentation format for peer review and critique. [24L, 12P]
Exclusion: CCT470H5
Prerequisite: HSC200H5

HSC302H5 Biocommunication Visualization (SCI)
This course covers analysis and development of visual media for medical or scientific topics. Lectures include: light/form; proportion/scale; scientific visual conventions; media appropriate for target audience and reproduction. Topics may include: physiology, anatomical/biological subjects, patient education or health promotion. Classes consist of lectures with computer lab explorations. [24L, 12P]
Exclusion: HMB304H1
Prerequisite: HSC200H5

HSC303H5 Biocommunication Visualization (SCI)
This course covers analysis and development of visual media for medical or scientific topics. Lectures include: light/form; proportion/scale; scientific visual conventions; media appropriate for target audience and reproduction. Topics may include: physiology, anatomical/biological subjects, patient education or health promotion. Classes consist of lectures with computer lab explorations. [24L, 12P]
Exclusion: HMB304H1
Prerequisite: HSC200H5
HSC401H5 Health and Science Communication Design (SCI)
This course presents the principles of health and science communication and examines the characteristics of effective audience-specific media design. Included are issues of learning context, target audience analysis, and effective information design in the development of tools that communicate concepts to the general public. Students will analyze existing media, conduct an information needs assessment, and design an "interactive learning tool" on a current health or science-related topic. [12L, 12S, 12P]
Prerequisite: HSC200H5

HSC402H5 E-Learning Environments in Health Care (SCI)
This course focuses on the design, development and evaluation of E-Learning environments for health sciences education or health care practice. An overview of learning management systems, knowledge object design, repositories, collaborative knowledge building environments, communication technologies, surveys, simulations, tutorials, and games will be presented. Individual and group work will explore theory-based design and best practice guidelines for the creation of multimedia/multi modal E-Learning communities. [12L, 24P]
Exclusion: None
Prerequisite: ANT101H5/ BIO152H5/ CCT260H5, HSC200H5
Corequisite: None
Recommended Preparation: None

HSC403H5 Visualization of Forensic Demonstrative Evidence (SCI)
This course examines the visual representation of forensic demonstrative evidence in Canadian courtrooms. A case-based approach simulates professional practice. Forensic anthropology, biology and visual communication theory are explored in new media for presentation. Visual problem solving skills are developed through collaboration. In class, presentations and practica are combined with critical analysis of visualizations. [12L, 24P]
Prerequisite: Completion of 10.0 credits, including one of FSC239Y5/ BIO210H5/ 210Y5/ ANT205H5/ ANT306H5

HSC404H5 Advanced Visual Media for Anthropological Data (SCI)
This course examines the visual representation of physical evidence in archaeology, and physical/biological anthropology. Photography, traditional illustration, and digital rendering are used to produce scientific graphics in support of published research. Through practical and analytical exercises students will gain an understanding of the media and techniques used to visually represent data. [24S, 12P]
Prerequisite: (ANT200H5, ANT201H5) / (ANT202H5, ANT203H5) / ANT203Y5 / BIO152H5

HSC405H5 Digital Forensic Facial Reconstruction (SCI)
This course examines the technical, anatomical, and sociological considerations involved in the three-dimensional digital forensic facial reconstruction. Human facial anatomy, traditional reconstruction techniques, and the use of 3D animation software are the core areas of study. Using this knowledge, students reconstruct the facial identity of an individual known only from cranial skeletal remains. [24S, 12P]
Prerequisite: 10.0 completed credits including ANT203Y5 / AN205H5 / BIO210Y5
Recommended Preparation: ANT334H5

HSC406H5 Advanced Written Communication for Health Care (SCI)
This course builds on skills developed in HSC300H. Topics include: communication of epidemiological data and of best evidence in medical and health science research. Students learn to think critically about health and science research, interpret complex or contentious evidence from the medical literature, and produce in-depth health information documents in a range of formats. [12L, 24S]
Prerequisite: HSC300H5
Biomedical Physics (HBSc)
For information on Biomedical Physics, please refer to the Physics (HBSc) (Page 312) program.

Biotechnology
For information on Biotechnology, please refer to the Biology (HBSc) (Page 73) program.

Canadian Studies (HBA)
Departmental Supervisor
Robert Eberts

Program Director
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Canadian Studies explores the Canadian nation, imagination, and experience from an interdisciplinary perspective. The courses offered as part of the Major and Minor programs present a wide-ranging and diverse view of Canada from both humanities and social science perspectives, including Anthropology, Communications, Drama, English, Economics, Environment, French, Geography, History, Political Science, and Women and Gender Studies. The core courses in the program provide a strong foundation for students who then choose additional courses from a wide variety of electives that fit their own interests and academic goals. The program is flexible and introduces students to several academic disciplines, methods of inquiry, and theoretical approaches to the study of Canada. It provides an excellent foundation for graduate studies and allows students to fulfill the entrance requirements of the Faculty of Education.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
CIN Cinema Studies (page 101)
DRE Drama (page 365)
ECO Economics (page 153)
ENG English (page 166)
FAH Fine Art History (FAH) (page 51)
FRE French (page 210)
GGR Geography (page 224)
HIS History (page 238)
ITA Italian (page 251)
JPE Environment (page 186)
MGT Management (page 236)
POL Political Science (page 319)
SOC Sociology (page 341)
WGS Women and Gender Studies (page 375)

Major Program ERMAJ0728 Canadian Studies (Arts)
7.0 credits are required, fulfilling the following requirements:
1. HIS263Y5 (The History of Canada) or BOTH HIS261H5 (Introduction to Canadian History) and HIS358H5 (Canada Since World War Two); POL214Y5 (Canadian Government and Politics); ENG252Y5 (Canadian Literature) or ENG353Y5 (Canadian Fiction) or ENG354Y5 (Canadian Poetry); GGR202H5 (Geography of Canada) and

2. 3.5 additional credits (at least 2.0 of which must be at the 300/400 level) in courses chosen from the list below or approved by the program advisor.

The following U of T Mississauga courses can be taken to complete the requirements for a Major in Canadian Studies.

Note: Some of the courses listed may have prerequisites and not all are offered every year.

1. ANT241Y5 Aboriginal Peoples of North America
2. CIN205H5 Canadian Auteurs
3. DRE200H5 Canadian Theatre History
4. ECO323Y5 Canadian Economic History
5. ENG215H5 The Canadian Short Story
6. ENG271H5 Diasporic Literatures of Toronto
7. ENG274H5 Native North American Literature
8. ENG352H5 Canadian Drama
9. ENG357H5 New Writing in Canada
10. ENG358H5 Topics in Canadian Literature
12. FAH292H5 Canadian Art
13. FRE312H5 Quebec Novel II: The Quiet Revolution
14. FRE316H5 From Land to Town: Quebec Culture and Literature from its Beginning to 1959
15. FRE417H5 Comedy and Tragedy in Québec Theatre
16. FRE419H5 The Art of Short and Tall Story Telling in Québec: A study of Short Forms of Fiction and Modern Fantasy
17. FRE474H5 Canadian French
18. HIS263Y5 The History of Canada
19. HIS312H5 Canadian Communities 1600-2000
20. HIS313H5 Canadian Working-Class History to 1919
21. HIS314H5 20th Century Canadian Working-Class History
22. HIS318H5 Canadian Environmental History: Contact to Conservation
23. HIS319H5 Canadian Environmental History: Conservation to the Modern Environmental Movement
24. HIS326Y5 History of Women in Canada, 1600-2000
25. HIS367H5 Diasporic Canada
26. HIS368H5 Canada in the First World War
27. HIS402H5 Topics in the History of French Canada
28. HIS416H5 Canada and the Second World War
29. HIS452H5 The Great Depression in Canada
30. HIS461H5 History of Upper Canada
31. HIS487H5 Canadian Social History
32. ITA255Y5 The Italian Canadian Experience
33. JPE250Y5 Environmental Politics in Canada
34. MGT429H5 Canadian Income Taxation
35. POL111H5 Canada in Comparative Perspective
36. POL316Y5 Contemporary Canadian Federalism
37. POL336Y5 Ontario Politics
38. POL353Y5 Canadian Public Policy: From the Golden Age to the Era of Globalization
39. POL490H5 Topics in Canadian Politics
40. POL494Y5 Topics in Canadian Politics
41. SOC371H5 Crime and Delinquency
42. WGS210H5 Women and Work in Contemporary Canada

Minor Program ERMIN0728 Canadian Studies (Arts)

4.0 credits are required, fulfilling the following requirements:

1. 2.0 credits from the following list: HIS263Y (The History of Canada) and HIS261H5 (Introduction to Canadian History) and HIS358H5 (Canada Since World War Two); POL214Y5 (Canadian Government and Politics); ENG252Y5 (Canadian Literature) or ENG353Y5 (Canadian Fiction) or ENG354Y5 (Canadian Poetry); GGR202H5 (Geography of Canada) and

2. 2.0 additional credits (at least 1.0 of which must be at the 300/400 level) in courses chosen from the list above or approved by the program advisor.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
Chemistry (HBSc)

Professors Emeriti
M.K. Georges, B.Sc., Ph.D.
J.K. Reed, B.A., M.Sc., Ph.D.
E.A. Robinson, B.Sc., Ph.D., D.Sc.
I.W.J. Still, B.Sc., Ph.D., D.Sc.

Professors
U.W. Fekl, M.Sc., Ph.D.
P.T. Gunning, B.Sc., Ph.D.
V. Kanelis, B.Sc., Ph.D.
U.J. Krull, B.Sc., M.Sc., Ph.D.
P. A.E. Piunno, B.Sc., M.Sc., Ph.D.
J.C. Poë, A.R.C.S., M.Sc., D.I.C., FCIC
R.S. Prosser, B.Sc., M.Sc., Ph.D.
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Chemistry has a vital role in modern science-based industry and in the improved material well-being and health of our society. It is being applied increasingly to the growth of our understanding of medicine, biology, materials science, geology, and many other branches of science. Chemistry also has a major role to play in solving our world-wide problems of energy conservation, environmental pollution, nuclear waste disposal and, through its important contributions to agriculture, even of famine. Many of our future advances will originate from the kind of interdisciplinary research in which chemists trained to solve problems from the molecular to the bulk level must be involved.

As an academic university-based discipline, Chemistry stands in the centre of the sciences and is recognized as a sound basis for the kind of imaginative and disciplined thinking that has application beyond science to many other occupations and endeavours. At U of T Mississauga, we offer a Chemistry Program that enables a student to complete a Specialist Degree in Chemistry over a four-year period on the campus. A Major Program is also available for students who want a significant background in Chemistry.

The Chemistry faculty are moving strongly towards a distinctive teaching and research specialization in the border regions between Chemistry and Biology and also offers a Specialist Program in Biological Chemistry. Our analytical chemistry has a strong focus in this direction as well and the Department supports Specialist and Major Programs in Environmental Analysis and a Specialist Program in Forensic Science-Chemistry.

The programs in Chemistry offered at U of T Mississauga provide a very suitable preparation for those who intend to prepare for professional programs such as medicine, enter the work force in industry, teach chemistry in high school, or continue into a graduate program. Students are urged to consult the faculty advisor for help in choosing the appropriate courses and programs.

It is very important to plan one's program in advance and to consult regularly (at least once a year) with a faculty advisor. It is particularly desirable to take specific courses in the year of study for which they are designed (e.g., CHM200 level courses in Year 2); serious timetable clashes are likely to arise if this advice is not followed. While some deviations from the Specialist/Major/Minor programs listed are possible, students should consult the program advisor before departing from the recommended programs.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 78)
CHM Chemistry (page 94)
ERI Chemistry (page 94)
FSC Forensic Science (page 203)
JBC Biology (page 78)
JCB Chemistry (page 94)
JCP Chemistry (page 94)
MAT Mathematics (page 298)
PHY Physics (page 313)

Specialist Program ERSPE1995 Biological Chemistry (Science)

14.0 credits are required. This program is accredited by the Canadian Society for Chemistry.

Limited Enrolment – Enrolment in this program is restricted. Selection will be based on completion of 4.0 credits including CHM140Y5 (minimum grade of 65%)/(110H5,120H5) (minimum grade of 65% in CHM120H5); MAT134Y5/135Y5/137Y5 (minimum grade of 65%); and a minimum CGPA of 2.5. Completion of BIO152H5 is recommended.

Year 1: BIO152H5; CHM140Y5/(110H5,120H5); MAT134Y5/135Y5/137Y5; PHY135Y5/(136H5,137H5)
Programs

Chemistry (HBSc)

**Year 2:** CHM211H5, 231H5, 242H5, 243H5; JCP221H5; BIO206H5, 207H5; 0.5 MAT/CSC/STA credit (at any level)

**Year 3:** CHM333H5, 341H5/ 345H5, 347H5, 361H5, 362H5, 372H5, 373H5; BIO372H5

**Year 4:** CHM399Y5/ 489Y5/ JCB487Y5/ (BCH472Y1(G) or BCH473Y1(G) with the permission of the Department of Chemical and Physical Sciences) and 1.5 credits from the following courses CHM412H5, 444H5, 462H5, 485H5 and JCP410H5, 421H5, 422H5, 463H5 plus the selection of 400 level lecture CHM(G) courses.

- Additional 400 level CHM/JCP courses include CHM412H5, 414H5, 416H5, 442H5, 444H5, 462H5, 485H5 and JCP410H5, 421H5, 422H5, 463H5.

- MAT134Y5/ 135Y5/ 137Y5 prerequisite is required for all 200-level CHM courses.

- Students are strongly advised to consult the Program Advisor regarding their course of study.

- Students can not take more than 2.0 credits total in ROP or Individual Project/Thesis courses at the 300-/400-level for credit toward this Chemistry program. Further, these credits may not be taken simultaneously.

**Notes:**

1. Enrolment in certain BCH(G) courses is limited.
2. MAT134Y5/ 135Y5/ 137Y5 prerequisite is required for all 200-level CHM courses.
3. Students can not count more than 1.0 credits total in ROP or Individual Project/Thesis courses at the 300-/400-level for credit toward their Chemistry program.
4. Students are strongly advised to consult the program adviser regarding their course of study.

**Specialist Program ERSPE1376 Chemistry (Science)**

13.0 credits are required. This program is accredited by the Canadian Society for Chemistry.

**Limited Enrolment** – Enrolment in this Program is restricted. Selection will be based on completion of 4.0 credits including CHM140Y5 (minimum grade of 65%)/(110H5, 120H5) (minimum grade of 65% in CHM120H5); MAT134Y5/ 135Y5/ 137Y5 (minimum grade of 65%); and a minimum CGPA of 2.5.

**Year 1:** CHM140Y5/ (110H5,120H5); MAT134Y5/ 135Y5/ 137Y5; PHY135Y5/ (136H5,137H5)

**Year 2:** CHM211H5, 231H5, 242H5, 243H5; JCP221H5; MAT212H5/ 232H5

**Year 3 & 4:** 1.0 credits from (CHM372H5, 373H5) / (CHM394H5, 395H5) / (CHM396H5, 397H5); 2.5 additional 300/400-level CHM/JCP credits, at least 1.5 of which must be lecture courses.

**Notes:**

1. In addition to 300/400 level CHM/JCP courses, ERI398H5 (with permission of the Department of Chemical and Physical Sciences), FSC311H5, JBC472H5 and JCB487Y5 may be used to fulfill 300/400 level program requirements.
2. MAT134Y5/ 135Y5/ 137Y5 prerequisite is required for all 200-level CHM/JCP courses.
3. For a balanced training in Chemistry, students should take CHM311H5, 331H5/ 333H5, 341H5/ 345H5, 361H5, 394H5, 396H5; JCP321H5
4. Students are strongly advised to consult the Program Advisor regarding their course of study.

**Major Program ERMAJ1376 Chemistry (Science)**

8.0 credits are required.

**Limited Enrolment** – Enrolment in the Chemistry Major Program is based on completion of 4.0 credits including CHM140Y5 (minimum grade of 60%)/(110H5,120H5) (minimum grade of 60% in CHM120H5) and MAT134Y5/ 135Y5/ 137Y5.

**Year 1:** CHM140Y5/ (110H5,120H5); MAT134Y5/ 135Y5/ 137Y5

**Year 2:** CHM211H5, 231H5, 242H5, 243H5; JCP221H5

**Years 3 & 4:** 1.0 credits from (CHM372H5, 373H5) / (CHM394H5, 395H5) / (CHM396H5, 397H5); 2.5 additional 300/400-level CHM/JCP credits, at least 1.5 of which must be lecture courses.

**Notes:**

1. In addition to 300/400 level CHM/JCP courses, ERI398H5 (with permission of the Department of Chemical and Physical Sciences), FSC311H5, JBC472H5 and JCB487Y5 may be used to fulfill 300/400 level program requirements.
2. MAT134Y5/ 135Y5/ 137Y5 prerequisite is required for all 200-level CHM/JCP courses.
3. For a balanced training in Chemistry, students should take CHM311H5, 331H5/ 333H5, 341H5/ 345H5, 361H5, 394H5, 396H5; JCP321H5
4. Students are strongly advised to consult the Program Advisor regarding their course of study.

2016-2017 Calendar
Chemistry (HBSc) Programs

Minor Program ERMIN1376 Chemistry (Science)

4.0 CHM/JCP credits are required.

**Limited Enrolment** – Enrolment in the Chemistry Minor Program is based on completion of 4.0 credits including CHM140Y5/(minimum grade of 60%)/(110H5,120H5) (minimum grade of 60% in CHM120H5) and MAT134Y5/ 135Y5/ 137Y5

**Year 1:** CHM140Y5/ (110H5,120H5)

**Years 2, 3 & 4:** 3.0 CHM/JCP credits, at least 1.0 of which must be at the 300/400 level.

**Notes:**

1. MAT134Y5/ 135Y5/ 137Y5 prerequisite is required for all 200-level CHM/JCP courses.
2. CHM299Y5 does not count towards the completion of this program.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

**CHM110H5 Chemical Principles 1 (SCI)**
Matter and its transformations are studied at the macroscopic level. Topics include stoichiometry, phases of matter, equilibria, thermodynamics and electrochemistry. [36L, 18P, 12T]

*Exclusion:* CHM139H1, 151Y1; CHM140Y5; CHMA11H3

*Prerequisite:* Grade 12 Chemistry (SCH4U)(minimum grade of 70); Grade 12 Advanced Functions (MHF4U0)(minimum grade of 70); Grade 12 Calculus and Vectors (MCV4U)

*Recommended Preparation:* MAT134Y5/ 135Y5/ 137Y5 is a prerequisite for all 200 level CHM courses.

**CHM120H5 Chemical Principles 2 (SCI)**
Building on the subject matter of CHM110H5, molecular events are studied at the microscopic level. Topics include atomic and molecular structure, intermolecular forces of attraction, reaction kinetics, and organic chemical reactions and mechanisms. [36L, 18P, 12T]

*Exclusion:* CHM138H1, 151Y1; CHM140Y5; CHMA10H3

*Prerequisite:* CHM110H5

*Corequisite:* Recommended Co-requisite: MAT134Y5/ 135Y5/ 137Y5 is a prerequisite for all 200 level CHM courses.

**CHM211H5 Fundamentals of Analytical Chemistry (SCI)**
A rigorous introduction to the theory and practice of analytical chemistry. Development and applications of basic statistical concepts in treatment and interpretation of analytical data: direct and indirect precipitations; volumetric methods; acid-base, complexometric, redox and precipitation titrations; introduction to instrumental methods; potentiometry and absorption spectroscopy. Applications in biomedical, forensic and environmental areas will be considered. [24L, 48P, 12T]

*Exclusion:* CHM217H1; CHMB16H3

*Prerequisite:* MAT134Y5/ 135Y5/ 137Y5; CHM140Y5(minimum grade of 60%)/(110H5,120H5; minimum grade of 60% in CHM120H5)

**JCP221H5 Thermodynamics and Kinetics (SCI)**
[Replaces CHM221H5] An introduction to equilibrium thermodynamics with application to ideal and non-ideal systems: covering the concepts of work and heat, the laws of thermodynamics, internal energy, enthalpy and entropy, the chemical potential, states of matter, phase rules and phase diagrams, and chemical equilibria. Kinetics topics include rate laws, both differential and integrated, rate constants, activated complex theory, and temperature effects. [36L, 15P, 14T]

*Exclusion:* CHM220H1, 221H1, 225Y1; CHM221H5; CHMB20H3

*Prerequisite:* MAT134Y5/ 135Y5/ 137Y5; CHM140Y5(minimum grade of 60%)/(110H5,120H5; minimum grade of 60% in CHM120H5)/PHY135Y5/ (136H5,137H5) (minimum 60%)

*Recommended Preparation:* MAT212H5/ 223H5/ 232H5/ 242H5. These courses are also prerequisites for JCP321H5

**CHM231H5 Inorganic Chemistry I (SCI)**
Atomic structure; periodic properties of the elements; bonding theories-ionic, covalent (valence bond and molecular orbital) and metallic; structure and bonding in coordination compounds of main group elements and transition metals; descriptive chemistry of the metals. Reaction mechanisms. [36L, 28P, 10T]

*Exclusion:* CHM238Y1; CHMB31H3

*Prerequisite:* MAT134Y5/ 135Y5/ 137Y5; CHM140Y5(minimum grade of 60%)/(110H5,120H5; minimum grade of 60% in CHM120H5)

**CHM242H5 Introductory Organic Chemistry I (SCI)**
Fundamentals of organic chemistry emphasizing reactions of alkanes and alkenes. The first half of a two-course sequence (with CHM243H5) required in the Chemistry major and specialist programs. [36L, 12T]

*Exclusion:* CHM138H1; CHMB41H3; B43Y

*Prerequisite:* MAT134Y5/ 135Y5/ 137Y5; CHM140Y5(minimum grade of 60%)/(110H5,120H5; minimum grade of 60% in CHM120H5)

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CHM243H5 Introductory Organic Chemistry II (SCI)
The chemistry of benzene, alcohols, aldehydes, ketones, carboxylic acid, esters, acid chlorides, amides and amines will be covered. As well, electrophilic aromatic substitution, protection and deprotection of alcohols, nucleophilic acyl substitution, nucleophilic addition, carbonyl alpha-substitution reaction, keto-enol tautomerism, carbonyl condensation and proton NMR will be introduced. The emphasis will be on organic mechanisms and application of organic reactions to multistep synthesis. Continues from CHM242H5. [24L, 48P, 12T]
Exclusion: CHM247H1, 249H1; CHMB42H3
Prerequisite: CHM242H5

CHM299Y5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. This course does not count as one of the requirements in the Chemistry Minor, Chemistry Major, Chemistry Specialist or Biological Chemistry Specialist programs. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of at least 4.0 credits and no more than 10.0 credits, which must include CHM110H5, CHM120H5 with a minimum grade of 60%; MAT134Y5/135Y5/137Y5 and P.I.

FSC311H5 Forensic Chemistry (SCI,EXP)
This course focuses on the analysis of physical evidence based on the principles of analytical chemistry. Students will gain knowledge in the theory and operation of forensically relevant chemical and instrumental techniques used for the analysis of evidentiary items, including drug/alcohol analysis, gunshot residue, explosives, paint analysis, etc. Students will also develop skills relating to the interpretation, limitation, and implications of analytical results in a forensic context. [36L, 36P] (Priority given first to Forensic Science Specialists and Majors; then Minors.)
Prerequisite: (CHM110H5, CHM120H5)/CHM140Y5; CHM211H5
Recommended Preparation: FSC239Y5; CHM311H5

CHM311H5 Instrumental Analytical Chemistry (SCI)
Introduction to the basic theory and practice underlying important techniques in analytical chemistry, chosen from three major areas of instrumental analysis: spectroscopy, electrochemistry and separation science. Specific topics will include fluorescence spectroscopy, atomic spectroscopy, x-ray fluorescence, voltammetry, high resolution gas and liquid chromatography, mass spectrometry, and a brief introduction to computer applications, including Fourier transform methods. A problem-based approach will be used to explore these methods in a wide variety of practical applications. [24L, 12T]
Exclusion: CHM317Y1; CHMC16H3
Prerequisite: CHM211H5
Recommended Preparation: JCP221H5/ CHM221H5

JCP321H5 Introduction to Quantum Mechanics (SCI)
A first course covering basic concepts of quantum chemistry and physics. Topics include: de Broglie waves and wave-particle duality, the postulates of quantum mechanics, the Schrödinger equation, the square potential well and potential barriers, the harmonic oscillator, the rigid rotor, atoms, molecules and solids. [36L]
Exclusion: CHM326Y1, PHY256H1, 356H1; PHYB56H3, C56H3
Prerequisite: PHY135Y5/ (136H5,137H5) (minimum 60%); JCP221H5/ CHM221H5/ PHY245H5; MAT212H5/ 223H5/ 232H5

JCP322H5 Introduction to Statistical Mechanics (SCI)
Statistical methods for bridging the quantum behaviour of atoms and molecules to their macroscopic properties in solid, liquid and gaseous states. The course introduces partition functions, canonical ensembles, and their application to thermodynamic properties such as entropy, heat capacity, equilibrium constants, reaction rates, and Bose-Einstein/Fermi-Dirac distribution functions. [36L]
Exclusion: CHM328H1; CHMC20H3
Prerequisite: JCP321H5

CHM331H5 Inorganic Chemistry II: Advanced Inorganic Chemistry (SCI)
Exclusion: CHM338H1; CHMC31Y3
Prerequisite: CHM231H5, 242H5
Corequisite: CHM243H5
CHM333H5 Bioinorganic Chemistry (SCI,EXP)
Principles of inorganic chemical reactions and their application to biochemical systems: kinetics, mechanisms and thermodynamics of ligand exchange, acid-base and redox reactions involving metalloproteins and their model compounds; mechanisms of catalysis by metalloenzymes and their model compounds; metal ion related diseases; metals in chemotherapy. [36L]
Exclusion: CHM437H1; CHMD69H3
Prerequisite: CHM231H5, 242H5
Corequisite: CHM243H5

CHM362H5 Metabolism and Bioenergetics (SCI)
Exclusion: BCH210H1, 242Y1; BIOC13H3, CHMB62H3
Prerequisite: CHM361H5
Recommended Preparation: BIO206H5; JCP221H5/CHM221H5

CHM331H5 Organic Chemistry: Mechanism and Structure (SCI)
Stereosechemistry and conformational analysis; mechanisms of important types of organic reaction; pericyclic reactions; reactive intermediates. [36L]
Exclusion: CHM348H1; CHMC41H3
Prerequisite: CHM243H5

CHM345H5 Organic Synthesis (SCI)
Methods used for forming carbon-carbon bonds will be reviewed, including reactions of the various types of nucleophilic carbon and the use of organometallic reagents. Other topics include functional group interconversions, oxidation and reduction and the role of elements such as boron, silicon and tin in organic synthesis. [36L]
Exclusion: CHM342H1; CHMC42H3
Prerequisite: CHM243H5

CHM347H5 Organic Chemistry of Biological Compounds (SCI)
The chemistry of selected classes of naturally occurring molecules such as those below, with emphasis on structure, stereochemistry, properties and synthesis. Amino acids, peptides, proteins, carbohydrates, lipids, nucleosides, nucleotides, and nucleic acids. [36L]
Exclusion: CHM347H1; CHMC47H3
Prerequisite: CHM243H5

CHM361H5 Structural Biochemistry (SCI)
An introduction to the molecular anatomy and properties of the major cellular biomolecules: proteins, nucleic acids, carbohydrates and lipids. The course also covers the structural organization of membranes and nucleoproteins. Enzyme mechanisms and membrane transport phenomena will be examined in the context of structure/function relationships. [24L, 12T]
Exclusion: BCH210H1, 242Y1, 311H1; BIOC13H3, CHMB62H3
Prerequisite: CHM243H5
Recommended Preparation: BIO206H5; JCP221H5/CHM221H5

CHM372H5 Techniques in Biological Chemistry I (SCI)
The first in a sequence of two laboratory courses intended to complement CHM361H5 and 362H5. Experiments are designed to familiarize students with techniques commonly used to study the chemical and physical properties of biological molecules. Topics covered in the first half include a wide range of chromatographic methods, and the isolation and characterization of subcellular organelles. (Enrolment limited). [48P]
Exclusion: CHM371H5; BCH370H1, 371H1
Corequisite: CHM361H5

CHM373H5 Techniques in Biological Chemistry II (SCI)
The second in a sequence of two laboratory courses intended to complement CHM361H5 and 362H5. CHM373H5 carries on from CHM372H5 with a particular emphasis on protein purification, enzyme kinetics, and fluorescence methods. (Enrolment limited). [48P]
Exclusion: CHM371H5; BCH370H1, 371H1
Prerequisite: CHM372H5
Corequisite: CHM361H5

CHM394H5 Chemical Synthesis Laboratory I (SCI,EXP)
The first in a sequence of two laboratory courses in synthetic chemistry. This laboratory course comprises the synthesis of inorganic and organic compounds supplemented by physical measurements (e.g., ir, uv, 1H NMR spectra, magnetic susceptibility, etc.) of the products where appropriate. Approximately six weeks each will be spent on two groups of foundational experiments, one in organic and one in inorganic synthesis to illustrate techniques of chemical synthesis. The central role of the carbonyl group in organic synthesis is elaborated, an organic unknown is identified both chemically and spectroscopically and the synthetic chemistry of the first row transition elements is explored. [48P]
Exclusion: CHM393H5Y;
Prerequisite: CHM231H5, CHM243H5
CHM395H5 Chemical Synthesis Laboratory II (SCI,EXP)
The second in a sequence of two laboratory courses in synthetic chemistry that builds on the foundations established in CHM394H5. Students choose their own experiments in this course from offerings comprising the synthesis of organic, organometallic and inorganic compounds and in computational chemistry. Techniques such as working at low temperatures and in inert atmospheres (e.g., glove box) are introduced. Depending on the experiments actually chosen, a mixed organic unknown is separated and identified, organic rearrangements and the synthetic chemistry of elements from across the Periodic Table including main group, transition elements and lanthanides are explored. A highlight is an optional four week independent synthesis project in any area of synthetic chemistry adapting procedures from the published, including recent, research literature. [48P]
Prerequisite: CHM394H5
Corequisite: CHM331H5/ 333H5, 341H5/ 345H5

CHM396H5 Instrumental Laboratory I (SCI,EXP)
This laboratory course represents an integration of the study of fundamental physical chemistry with wide-ranging applications to instrumental methods of analysis, such as separation science, electrochemistry and spectroscopy. The course will provide a solid hands-on grounding in many of the major topics covered in analytical and physical chemistry, and the optimization of instrumental analytical measurements by the application of physical principles. Students select from a variety of instruments to customize their program, and develop their own analytical methods to address analytical problems of interest to the student. [48P]
Exclusion: CHM391H5; CHM317Y1, 410Y1; CHMC16H3
Prerequisite: CHM311H5, JCP221H5
Recommended Preparation: CHM311H5

CHM397H5 Instrumental Laboratory II (SCI,EXP)
This laboratory course carries on from CHM396 to introduce more advanced topics in instrumental methods of analysis, including: instrument design and computer interfacing, emission spectroscopy, microfluidics and lab on a chip technologies. The course will provide practical experience in the optimization of instrumental analytical measurements, experiment design, and topics of relevance to research in analytical chemistry. [48P]
Prerequisite: CHM396H5
Corequisite: CHM311H5

CHM399Y5 Research Opportunity Program (SCI,EXP)
This course provides third-year undergraduate students (after completion of 8.0 credits) who have developed some knowledge of Chemistry and its research methods, an opportunity to work in the research project of a professor in return for course credit. Students enrolled have the opportunity to become involved in original research, enhance their research skills and share in the excitement of acquiring new knowledge and in the discovery process of science. This course does not count as one of the requirements in the Chemistry Minor program. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: completion of at least 8.0 credits which must include CHM110H5, CHM120H5 with a minimum grade of 60%, MAT134Y5/ 135Y5/ 137Y5, 2.0 200 level CHM/JCP courses and P.I.

JCP410H5 Modelling of Biochemical Systems (SCI)
An introduction to mathematical modelling of complex biological systems. The primary focus will be on biochemical kinetic models and the nonlinear dynamics that arise from them. An introduction to and survey of techniques in mathematics (especially nonlinear dynamics and stochastic processes) will be presented, along with an overview of numerical methods for computational simulation, including an introduction to molecular modelling. [24L]
Recommended Preparation: MAT212H5/ 242H5
CHM412H5 Analytical Methods of Biomolecule Analysis (SCI)
An exploration of biomolecule analysis methodologies, with an emphasis on nucleic acid analysis, will be done from the perspective of the Analytical Biochemist. The course will begin with brief reviews of the structure and function of biomolecules, solid-phase synthesis, extraction, pre-concentration and amplification methods. This will be followed by an exploration of established and emerging techniques for target biomolecule determinations, including: bioprobes, microarrays, biosensors and DNA sequencing technologies (including single molecule approaches). Current examples of implementation in the fields of proteomics and genomics will be discussed throughout the course, with an emphasis on life sciences and diagnostic testing applications. Course work will include independent literature reviews and student presentations. [24L, 12T]
Prerequisite: CHM311H5
Recommended Preparation: CHM243H5

CHM414H5 Advanced Topics in Analytical Chemistry (SCI)
An overview of both recent and fundamental developments of instrumentation that are revolutionizing the field of analytical chemistry, with an emphasis on applications in biological chemistry and biotechnology. Topics will include specialized mass spectrometry techniques, including secondary ion, fast atom bombardment and ion cyclotron resonance mass spectrometry methods; GC/MS and LC/MS interfaces; a survey of surface-oriented techniques including x-ray photoelectron spectroscopy, Auger electron spectroscopy, Raman spectroscopy, attenuated total reflection methods, total internal reflection fluorescence methods; Fourier transform theory and methods; microcomputer interfacing and chemometrics. [24L, 12T]
Prerequisite: CHM311H5
Recommended Preparation: JCP321H5

CHM416H5 Separations, Chromatography and Microfluidics (SCI)
Separation science will be explored by building on a survey of fundamental physical principles to understand processes of extraction, and technologies such as solid phase microextraction, supercritical fluid extraction, immunoaffinity extraction and molecularly imprinted polymers. Plate and rate theory will be developed to consider various forms of gas and liquid chromatographic methods, including hyphenated techniques that bridge to information detectors such as mass spectrometers. New opportunities for chromatography and separations by movement to small scale size will be considered by focusing on microfluidics, electro-osmotic flow and chip based microdevice applications. Applications examples will focus on problems in life sciences, forensics and environmental chemistry. [24L, 12T]
Exclusion: CHM416H1
Prerequisite: CHM311H5

JCP421H5 Quantum Mechanics (SCI)
The course offers an in-depth examination of the fundamental principles of quantum theory and a guide to its applications. Topics may vary but will include: time-independent Schrodinger equation, quantum dynamics in Heisenberg and Schrodinger pictures, time-independent perturbation theory, WKB approximation, variational method, spin, addition of angular momentum, time-dependent perturbation theory, scattering. [36L]
Exclusion: PHYC563H3
Prerequisite: JCP321H5, PHY325H5

JCP422H5 NMR Spectroscopy (SCI)
Fundamentals of NMR spectroscopy including classical and quantum descriptions, NMR parameters and relaxation times, product operators, multi-dimensional NMR, and solid-state techniques. [24L]
Prerequisite: JCP221H5/ CHM221H5/ PHY241H5,245H5; MAT212H5/ 221H5/ 258H5
Recommended Preparation: JCP321H5

CHM442H5 Developments in Organic Chemistry (SCI)
Applications of advanced fundamentals to, and recent developments in, multi-step organic synthesis. [24L]
Prerequisite: CHM341H5, 345H5
Recommended Preparation: CHM394H5, 395H5

CHM444H5 An Introduction to Medicinal Chemistry and Molecular Recognition (SCI)
An introduction to drug discovery, design and development. This course will focus on the potential of proteins (enzymes, receptors, receptor structure and signal transduction) as targets for molecular therapeutic intervention. The strategies of finding a drug target, optimizing target interactions and synthetic molecular therapeutic development will all be considered and discussed. The modern technologies of targeting protein-protein interactions will also be covered. [24L]
Prerequisite: CHM361H5

CHM462H5 Advances in Organic Chemistry (SCI)
Discussion course based on published research in biological chemistry and applications of chemistry to study processes of biological significance. [24L]
Prerequisite: CHM361H5
Recommended Preparation: CHM347H5, 371H5

JCP463H5 Techniques in Structural Biology (SCI)
Biochemical and biophysical approaches to studies of protein interactions, structures, and dynamics. Theory and practice of specific experimental approaches will provide a fundamental understanding on information potential and technique limitations. Specific applications from the current literature will be discussed. Student evaluations will include oral presentations describing studies using the techniques. [24L, 12T]
Prerequisite: CHM361H5/ PHY332H5/ 333H5
Recommended Preparation: CHM362H5, JCP221H5
**JBC472H5 Seminars in Biotechnology (SCI)**
An introduction to current research in biochemistry and biotechnology, through seminars and literature reviews, presented by invited speakers and students. Subject areas include biotechnology, biomaterials, enzyme engineering, biosensors, drug delivery, spectrometry, separations chemistry, and bioinformatics. [36L]

**Prerequisite:** BIO372H5; CHM361H5, CHM362H5/ BIO315H5

**CHM485H5 Dissertation Based on Literature Research (SCI,EXP)**
A dissertation will be written based on literature research of a topic of current interest in the field of chemistry. The research will be conducted under the supervision of a chemistry faculty member other than the student's CHM489Y5 supervisor. The research topic must not overlap that of the student's CHM489Y5 project. The goals of this course are to achieve literature research expertise as well as in-depth knowledge of a particular chemistry topic, while perfecting scientific writing and oral presentation skills. Evaluation is based on a final written report describing the aims and results of the research, as well as an oral presentation of the work. The course is normally taken in the student's fourth year, in either the Fall or Winter terms, but may be taken in the Summer term. Enrolment in CHM485H5 requires submitting an application to the department before the end of June, for Fall enrolment. Application forms may be found at http://uoft.me/cpsforms. Application should be submitted to the CPS Undergraduate Assistant. Registration on ROSI/ACORN is also required. [240P]

**Exclusion:** BIO400Y5, 481Y5, CBJ481Y5, CHM489Y5, ERS470Y5, 471H5, 472H5, PHY489Y5; BCH472Y1, 473Y1, CHM499Y1, CSE491H1, 498Y1, 499Y1, ESS491H1, 492Y1, MGY480Y1, PHY478H1, 479Y1; BIOD98Y3, CHMD90Y3, 91H3, ESSD09H3, 10H3, PSCD10H3

**Prerequisite:** 2.5 credits in CHM at 300 level.

**JCB487Y5 Advanced Interdisciplinary Research Laboratory (SCI,EXP)**
Students will work together as members of a multidisciplinary team toward the completion of an interdisciplinary experimental or theoretical research project. Teams will be comprised of at least three students, with representation from at least three areas of specialization, namely, astronomy, biology, chemistry, earth sciences or physics. The interdisciplinary projects will be based on current trends in research and student teams will work to complete their projects with guidance provided by a team of faculty advisors from the Biology Department and the Department of Chemical and Physical Sciences. In addition to the rigorous development of research skills, the course will also provide students with training and practical experience in project management techniques and teamwork skills development. JCB487Y5 requires submitting an application to the department before the end of June, for Fall enrolment. Application forms may be found at http://uoft.me/cpsforms. Application should be submitted to the CPS Undergraduate Assistant. Registration on ROSI/ACORN is also required. [240P]

**Prerequisite:** 2.0 credits 300 level from BIO/CHM/JBC/JCP/ERS/EES(G)/PHY and 1.0 credit from BIO206H5, 314H5, CHM372H5, 373H5, 394H5, 395H5, 396H5, 397H5, ERS201H5, 202H5, PHY324H5, PHY347H5. Normally taken in student's 4th year. To register in this course, students must obtain approval from the faculty member(s) who will serve as the supervisor(s) in advance of the start of the course.
CHM489Y5 Introduction to Research in Chemistry (SCI, EXP)

An experimental or theoretical research topic in chemistry will be investigated under the supervision of a chemistry faculty member other than the student’s CHM485H5 supervisor. The research topic must not overlap that of the student’s CHM485H5 research topic. In addition to learning to plan, conduct and evaluate a research program, students will receive training in written and oral presentation skills. Evaluation is based on interim and final written reports describing the aims and results of the research, as well as interim and final oral presentations of the work. The course is normally taken in the student’s fourth year. Enrolment in CHM489Y5 requires submitting an application to the department in the spring term, with the application due date being the final day of classes. Independent Studies Application Forms may be found at http://uoft.me/cpsforms. Applications should be submitted to the CPS Undergraduate Assistant. Registration on ROSI/ACORN is also required. Acceptance into the course is dependent on the student having achieved a satisfactory GPA, and reaching agreement with a potential supervisor. Students must consult with prospective supervisors before applying for enrolment, and must list at least two faculty members as possible supervisors. [240P]

Exclusion: CHM499Y1; JCB487Y5; CHMD90Y3
Prerequisite: 2.0 300 level credits in CHM/JCP and 1.0 credit from BIO206H5, 314H5; CHM372H5, 373H5, 394H5, 395H5, 396H5, and 397H5; PHY324H5, with 0.5 credits from the 300-level CHM laboratory courses listed.

Cinema Studies (HBA)

Professors
K. Jain, B.A., M.A., Ph.D.
B. Price, B.A., M.A., Ph.D.
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The Cinema Studies program is devoted to the stylistic, historical, and theoretical analysis of film. Students learn about film as a unique mode of communication in the 20th and 21st centuries, while also investigating what it is that film can be said to share with allied art forms. In addition to surveys of major world cinemas, students in the program will also be concerned with many questions about the relation between aesthetics and politics as well as how moving images have an impact on personal and cultural identities and on society in general.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
CIN Cinema Studies (page 101)
DRE Drama (page 365)
FRE French (page 210)
GER Language Studies (page 275)
ITA Italian (page 261)
SPA Language Studies (page 275)
VCC Visual Culture and Communication (page 371)
VST Fine Art History (FAH) (page 51)

Minor Program ERMIN0797 Cinema Studies (Arts)

4.0 credits are required, including at least 1.0 credit at the 300 level.

First Year: 1.0 credit: CIN101H5 and a further 0.5 credit in CIN at the 200 level.

Higher Years: 3.0 credits from the following: CIN203H5, CIN204H5, CIN205H5, CIN207H5, CIN215H5, CIN301H5, CIN303H5, CIN304H5, CIN306H5, CIN307H5, CIN401H5, CIN402H5, VCC205H5, VST410H5, GER353H5, GER354H5.
A maximum of 1.0 credit may be taken from: DRE350H5/
Programs

Cinema Studies (HBA)

352H5, FRE393H5, FRE397H5, ITA242H5, ITA243H5, ITA246H5, ITA247H5, ITA307H5, ITA309H5, ITA342H5, ITA343H5, SPA275H5

Some of the choices listed above are only available to students who are enrolled in a program sponsored by the Department or Unit offering the course, and/or who have completed the specified prerequisites.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

CIN101H5 An Introduction to Cinema Studies (HUM)
Introduction to film analysis, concepts of film style and narrative. Topics include documentary, avant-garde, genres, authorship, ideology, and representation. [24L, 12T, 36P] Exclusion: INI115Y1, NEW115Y1, VIC115Y1, ERI201H5, ERI202H5, CIN202H5, CIN205Y5, CIN105H1, ENGB70

CIN203H5 The Films of Alfred Hitchcock (HUM)
The establishment of film as a serious art form is coincident with the earliest critical writing on Alfred Hitchcock that emerged in the 1950s. Since then, Hitchcock has remained one of the most important filmmakers of all time, spawning not only a massive body of critical scholarship but also legions of imitators. This course will serve as an introduction to both the films (such as Psycho and North by Northwest) and related issues: questions of suspense, authorship, morality, and spectatorship. [24L, 12T, 36P] Recommended Preparation: CIN101H5/ CIN202H5

CIN204H5 The Films of Martin Scorsese (HUM)
This course will examine the films of Martin Scorsese, one of the most influential figures in the history of cinema. Scorsese’s films will be understood in relation to questions about imitation and originality, genre, violence, male hysteria, and also as meditations on the history of film itself. [24L, 12T, 36P] Recommended Preparation: CIN101H5/ CIN202H5

CIN205H5 Canadian Auteurs (HUM)
This course will offer a comparative study of a selection of major contemporary Canadian filmmakers, including Denys Arcand, Atom Egoyan, David Cronenberg, Sara Polley, Denis Villeneuve, Ruba Nadda, Denis Côté, Guy Maddin, Michael Snow, and Joyce Wieland. [24L, 12T, 36P] Recommended Preparation: CIN101H5/ CIN202H5

CIN215H5 Bollywood in Context (HUM)
India has arguably the most popular and prolific film industry in the world. This course contextualizes the relatively recent ‘Bollywood’ phenomenon within the history of Indian commercial cinema and key aspects of modern Indian culture, emphasizing the popular cinema’s role in constructing historically changing ideas of national and gendered identity. It also challenges the assumptions of film theories developed in relation to Hollywood or European cinema by introducing film theory concepts that address South Asian image-cultures (such as darshan, frontality, melodrama, and interruption). [24L, 12T, 36P] Exclusion: VCC390H5 - Topic: Bollywood, CIN302H5 Recommended Preparation: CIN101H5/ CIN202H5 and VCC101H5/ VCC201H5

CIN290H5 Topics in Cinema Studies (HUM)
The course may have a historical, genre, theoretical, auteur, or other focus. See the Department of Visual Studies website at www.utm.utoronto.ca/dvs for the current topic. [24L, 12T, 36P] Recommended Preparation: CIN101H5

CIN301H5 Topics in Cinema Studies (HUM)
The course may have a historical, genre, theoretical, auteur, or other focus. Students should contact the program director for the current topic. [24L, 36P] Recommended Preparation: CIN101H5/ CIN202H5 or at least 1.0 credits in courses that count toward the Cinema Studies minor.

CIN303H5 Global Auteurs (HUM)
This course is devoted to three major international filmmakers: Michael Haneke (Austria), Olivier Assayas (France), and Hou Hsiao-Hsien (Taiwan). While different in many important respects, these filmmakers are nevertheless linked by their tendency to make international films that are themselves meditations on national identity in an increasingly globalized world. Screenings will include Caché, Code Unknown, Carlos, Demonlover, The Flight of the Red Balloon, and Goodbye South, Goodbye, to name just a few. [24L, 36P] Recommended Preparation: CIN101H5/ CIN202H5 or VCC101H5/ VCC201H5

CIN304H5 The Violent Image (HUM)
It is commonly believed that violent images produce violent, or desensitized people. In this class, we will examine the multiple forms of violence in film, television, and videogames as well as the variety of discourses about violence and images. Rather than confirming the moral logic of condemnation of the violent image, we will ask instead what good a violent image might do. [24L, 36P] Recommended Preparation: CIN101H5/ CIN202H5/ CIN205Y5 or at least 1.0 credit in courses that count toward the Cinema Studies minor.
CIN306H5 The Comedic Image (HUM)
Comedies routinely depend on the performance of the unthinkable in the ordinary. Our laughter follows from the saying or doing of the unsayable and the undoable. Comedy is in this way both a form of bad manners and also a uniquely philosophical genre, insofar as saying the unsayable means that we are able to recognize more than what we see or typically say. This course will survey the history of comedy and its relation to thought, perception, and social values. [24L, 36P]
Recommended Preparation: CIN101H5/ CIN202H5 or at least 1.0 credits in courses that count toward the Cinema Studies minor.

CIN307H5 Movement (HUM)
Since the advent of cinema, filmmakers and film theorists have repeatedly attempted to define film as a unique art form on the basis of its most defining characteristic: movement. Painters can represent movement, but film is movement itself. Not surprisingly, many filmmakers who are recognized as significant artists are most easily identified by the distinctive style of their camera movement. This class will be devoted to a consideration of the nature, meaning, and styles of movement in film. [24L, 36P]
Recommended Preparation: CIN101H5/ CIN202H5 or VCC101H5/ VCC201H5

CIN401H5 Topics in Cinema Studies (HUM)
The course may have a historical, genre, theoretical, auteur, or other focus. Students should contact the Department for the current topic. [24L, 36P]
Prerequisite: CIN101H5/ CIN202H5 or at least 1.0 credits in courses that count toward the Cinema Studies minor and 1.0 credits at the 300 level in CIN or P.I.

CIN402H5 Avant-Garde Film and Video (HUM)
This course will look at alternative forms of filmmaking and television production. If there is a defining feature of avant-garde film and video, it is a general resistance to the thematic and stylistic norms of mainstream production and popular culture as way of seeing for all. Thus, in this course, we will be looking at both highly personal and sometimes autobiographical works of art. [24L, 36P]
Prerequisite: CIN101H5/ CIN202H5 and 1.0 credits at the 300 level in CIN or P.I.

Classical Civilization (HBA)

Professor Emeritus
R.L. Beck, B.A., M.A., Ph.D.
C.I. Rubincam, B.A., B.A., Ph.D.

Professors
A. Bendlin, M.A., D. Phil.
B. Chrubasik, M.St., D.Phil.
M. Revermann, M.A., D.Phil.

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Classics is the study of the civilizations of Greece and Rome. These are of interest both in their own right and because their achievements have been the foundation of so many aspects of our own civilization: its art, languages, literature, philosophy and government. Courses in Classics thus present background material that is indispensable for the understanding of many other studies in the Humanities.

The program is designed to meet the needs both of students seeking a broad survey of Greek and Roman culture and of specialists in other Humanities subjects who require background knowledge of Classics for their particular interests, whether literary, historical, religious or philosophical.

U of T Mississauga’s programs in Classical Civilization (CLA) include courses in: (i) Greek and Roman history, (ii) Greek and Latin literature (in translation), (iii) mythology and religion, (iv) the Greek and Latin contribution to modern English scientific and technical terminology. Courses of type (i) may be counted for credit towards History programs. Courses in Latin language (LAT) are offered at U of T Mississauga by the Department of Language Studies (see Language Courses section of this calendar). Greek (GRK) language courses are currently offered only on the St. George Campus.

Courses offered every year: CLA101H5, CLA201H5, CLA204H5, CLA230H5, CLA231H5, CLA233H5, CLA237H5.

For other courses that can be counted for credit to the program in Classical Civilization, see the respective
program descriptions for the Major Program ERMAJ0382 and the Minor Program ERMIN0382.

The department encourages students to take advantage of the various study abroad opportunities available at UTM.

For more information, refer to the Department of Historical Studies website at http://www.utm.utoronto.ca/historicalstudies/

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
CLA Classics (page 103)
DRE Drama (page 355)
FAH Fine Art History (FAH) (page 51)
PHL Philosophy (page 305)

Major Program ERMAJ0382 Classical Civilization (Arts)

7.0 credits are required, including 4.0 at the 300+ level.

Limited Enrolment – Students enrolling at the end of first year (4.0 credits) must obtain a CGPA of at least 1.80. Students applying to enrol after second year (8.0 credits) must obtain a CGPA of at least 2.00.

First Year: 1.0 credits from the following list: CLA101H5, CLA230H5, CLA231H5, CLA233H5, CLA237H5.

Higher Years: 6.0 additional CLA credits at the 200+ level, including at least 4.0 credits at the 300+ level.

Up to 2.0 credits in the following areas may be substituted for CLA courses. DRE356H5, 358H5, 420H5 and 422H5 may be substituted when those courses are taught as ancient drama. RLG courses may be substituted when those courses focus on religion in the ancient Greek or Roman Mediterranean. Courses in Ancient Art (e.g., FAH203H5/ 204H5, 205H5) or ancient Philosophy (e.g., PHL202/ 300H5) may be substituted for CLA courses. Courses in Latin language (LAT), offered at U of T Mississauga by the Department of Language Studies (see p. 219) may be substituted for 200 level CLA courses.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

CLA101H5 Introduction to Classical Civilization (HUM)  
An introduction to ancient Greco-Roman civilization that highlights some of the most salient artistic, cultural, historical, and social achievements of these two societies. [36L]  
Exclusion: CLA160H1, CLAA04H3

CLA201H5 Latin and Greek in Scientific Terminology (HUM)  
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 formed from Latin and Greek elements. [36L]  
Exclusion: CLA201H1

CLA204H5 Introduction to Classical Mythology (HUM)  
A survey of the myths and legends of the ancient Greek and Roman Mediterranean world in ancient art and literature. Consideration may also be given to their reception in modern art and literature and some modern theories of myth. [36L]  
Exclusion: CLA204H1, CLAB05H3

CLA204H5 Introduction to Classical Mythology (HUM)  
A survey of the myths and legends of the ancient Greek and Roman Mediterranean world in ancient art and literature. Consideration may also be given to their reception in modern art and literature and some modern theories of myth. [36L]  
Exclusion: CLA204H1, CLAB05H3

CLA204H5 Introduction to Classical Mythology (HUM)  
A survey of the myths and legends of the ancient Greek and Roman Mediterranean world in ancient art and literature. Consideration may also be given to their reception in modern art and literature and some modern theories of myth. [36L]  
Exclusion: CLA204H1, CLAB05H3

CLA230H5 Introduction to Greek History (HUM)  
A survey of the myths and legends of the ancient Greek and Roman Mediterranean world in ancient art and literature. Consideration may also be given to their reception in modern art and literature and some modern theories of myth. [36L]  
Exclusion: CLA230H1, CLAB05H3

CLA231H5 Introduction to Roman History (HUM)  
A survey of the myths and legends of the ancient Greek and Roman Mediterranean world in ancient art and literature. Consideration may also be given to their reception in modern art and literature and some modern theories of myth. [36L]  
Exclusion: CLA231H1, CLAB06H3

Recommended Preparation: CLA101H5

CLA231H5 Introduction to Roman History (HUM)  
An introduction to the history of Rome, focusing mainly on its political and military history but also tracing the most salient social and cultural developments, from its inconspicuous beginnings in the eighth century BCE to Rome’s Mediterranean Empire in the imperial period and its dissolution in the sixth century CE. [24L,10T]  
Exclusion: CLA231H1, CLAB06H3

Recommended Preparation: CLA101H5

Minor Program ERMIN0382 Classical Civilization (Arts)

4.0 credits are required, including 1.0 at the 300+ level.

First Year: 1.0 credit from the following list: CLA101H5, 230H5, 231H5, 233H5, 237H5.

Higher Years: 3.0 additional CLA courses at the 200+ level, including at least 1.0 at the 300/400 level.
CLA232H5 Ancient Astronomy and Astrology (HUM)
A general survey of Greek and Roman views of the
universe, the origin and development of scientific
astronomy, the history of ancient astrology, and star
worship. [36L]
Exclusion: CLA206H1

CLA233H5 Introduction to Roman Culture & Society
(HUM)
An introduction to the cultural and social history of ancient
Rome and those living in the Roman world. Topics may vary
from year to year but include daily life and demography, the
Roman family, gender and sexuality, the Roman political
system and the army, religion, Roman entertainments (the
circus, gladiatorial games, the theatre), and Latin
literature.[36L]
Exclusion: CLA233H1, CLAB06H3
Recommended Preparation: CLA101H5

CLA234H5 Ancient Science and Technology (HUM)
A general introduction to early technology, its achievements
and limitations, the origins and development of ancient
science, including ancient medicine, and their interaction
with philosophy. [36L]
Exclusion: CLA203H1

CLA235H5 Ancient Visual Culture (HUM)
An introduction to key aspects of visual culture in
Graeco-Roman antiquity: temples, sculpture, vase
paintings, wall paintings, theater buildings, funerary art,
portraits, inscriptions, celebratory monuments. [24L,10T]
Recommended Preparation: CLA101H5

CLA237H5 Introduction to Greek Culture & Society
(HUM)
An introduction to the society and culture of the ancient
Greek world and those who were in contact with it. Topics
may vary from year to year but include daily life and
demography, social customs, gender and sexuality,
literature, art, as well as religion and religious festivals
(such as processions, theatrical performances and athletic
competitions such as the Olympic Games). [24L,10T]
Exclusion: CLA232H1, CLAB05H3
Recommended Preparation: CLA101H5/ CLA204H5

CLA299Y5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for
students in their second year to work in the research project
of a professor in return for 299Y course credit. Students
enrolled have an opportunity to become involved in original
research, learn research methods and share in the
excitement and discovery of acquiring new knowledge.
Participating faculty members post their project descriptions
for the following summer and fall/winter sessions in early
February and students are invited to apply in early
February. See Experiential Learning Programs (Page 34)
for more details.
Prerequisite: Completion of at least 4.0 and not more than
9.0 credits.
This course may be substituted for 1.0 credits at the 300+
level.

CLA300H5 Greek Tragedy and Comedy (HUM)
Greek drama from the origins of tragedy in the sixth century
B.C. to New Comedy, with close study of selected plays of
Aeschylus, Sophocles, Euripides, Aristophanes, and
Menander, and attention to Aristotle’s Poetics. [24L]
Exclusion: CLA382H1, CLA383H1, CLAC01H3
Recommended Preparation: CLA204H5/ CLA205Y5/ CLA237H5

CLA301H5 Greek Epic (HUM)
The Iliad and the Odyssey, with comparative study of related texts. [24L]
Exclusion: CLA236H1, CLAC11H3
Prerequisite: CLA204H5/ CLA230H5/ CLA237H5

CLA302H5 Roman Epic (HUM)
The Aeneid of Virgil and/or other Roman epics with
comparative study of related texts. [24L]
Exclusion: CLA236H1, CLAC11H3
Prerequisite: CLA204H5/ CLA231H5/ CLA233H5

CLA303H5 The Ancient Novel (HUM)
The human and social climate in which prose fiction arose;
the Greek romances of love and adventure (Heliodorus,
Longus, Chariton), and the more ironical and socially
conscious works of the Roman writers (Petronius, The
Exclusion: CLA303H1, CLAC12H3
Prerequisite: CLA204H5/ CLA230H5/ CLA231H5/ CLA233H5/ CLA237H5
CLA308H5 Religion in the Ancient Greek World (HUM)
A study of the religious cults and forms of worship current in the ancient Greek world. The course will consider religion in the ancient Greek city-states, but attention will also be paid to the so-called 'mystery religions', Greek beliefs about the afterlife, and intellectual reflection on religion in Greek literature. [24L]
Exclusion: CLA308H1
Prerequisite: Prerequisite for CLA students: CLA204H5/CLA230H5/CLA237H5; for RLG students: any pertinent RLG course at the 200+ level.

CLA310H5 Religion in the Roman Empire (HUM)
A close study of the religious cults and forms of worship current in the Roman Empire during the first four centuries C.E. The course will concentrate on the so-called 'pagan' cults, but their interaction with Jews and the early Christians, as well as the rise of Christianity, will also be considered. Attention will also be paid to the imperial cult ("emperor worship"); the so-called 'mystery religions' and 'oriental religions'; the diversity of local religion across the empire; oracles, private religiosity and intellectual reflection on religion in the ancient Greek and Roman writers. [24L]
Exclusion: CLA310H1
Prerequisite: Prerequisite for CLA students: CLA231H5/CLA233H5; for RLG students: any pertinent RLG course at the 200+ level.

CLA319H5 Women in Antiquity (HUM)
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. [24L]
Exclusion: CLA219H1, CLA219H5
Prerequisite: CLA204H5/CLA230H5/CLA231H5/CLA233H5/CLA237H5

CLA320H5 The Etruscans (HUM)
A close study of the history, culture, society, religion, art and archaeology of the Etruscans (800-100 BCE), and of their contacts with Greek and Roman society and culture. [24L]
Prerequisite: CLA230H5/CLA231H5/CLA233H5/CLA237H5

CLA348H5 Egypt in the Graeco-Roman World (HUM)
An in-depth exploration of Egypt's history and culture under Greek and Roman rule (332 BCE-395 CE) and of its interaction with the Graeco-Roman Mediterranean. Topics vary from year to year and include (but are not limited to): "Religion in Graeco-Roman Egypt," "Art and Archaeology in Graeco-Roman Egypt," "Isis and Serapis in the Graeco-Roman Mediterranean." [24L]
Exclusion: CLA05H3
Prerequisite: CLA230H5/CLA231H5/CLA233H5/CLA237H5

CLA360H5 Early Greece (HUM)
This course offers an exploration into the early Greek world, tracing political, economical, and social developments from a world of local rulers in the second millennium BCE until the Persian Wars in the early fifth century BCE. An in-depth study of the many forms of available ancient sources will create a vivid picture of early Greek communities, of state organization, and society. [24L]
Exclusion: CLA362H1, CLA363H1
Prerequisite: CLA230H5/CLA237H5

CLA361H5 Classical Greece (HUM)
A close study of the Greek Mediterranean world during the period, which already in antiquity, was described as 'Classical'. Through an in-depth study of ancient sources, this course explores the political, economic, social, religious and cultural developments of the Greek states in the time period from the Persian Wars in the early 5th century to the rise of Macedon in the second half of the fourth century BCE. [24L]
Exclusion: CLA335H5, CLA363H1
Prerequisite: CLA230H5/CLA237H5

CLA362H5 Alexander the Great and the Hellenistic World (HUM)
This course offers an in-depth study of the Hellenistic World from the reign of Alexander the Great in the fourth century BCE to a Greek world under Roman dominance in the first century CE, spanning geographically from the Mediterranean basin via the Levant and Mesopotamia to modern-day Afghanistan. A close examination of different types of ancient sources will trace the political, cultural, economic and social developments of kings, regions and cities that shaped this period. [24L]
Exclusion: CLA347H5, CLA64H1
Prerequisite: CLA230H5/CLA237H5

CLA367H5 The Roman Republic (HUM)
A survey of the salient political, constitutional, social, economic, military, religious, and cultural developments in the Roman Republic, from the late sixth century to the final decades of the first century BC. [24L]
Exclusion: CLA367H1
Prerequisite: CLA231H5/CLA233H5

CLA368H5 Augustus and the Julio-Claudians (HUM)
A survey of the salient political, constitutional, social, economic, military, religious and cultural developments in the Roman Empire in the age of Augustus and during the reigns of the Julio-Claudian emperors (ca. 44 BCE-68CE). [24L]
Exclusion: CLA368H1
Prerequisite: CLA231H5/CLA233H5
Recommended Preparation: CLA367H5
CLA369H5 The High Roman Empire, 68-305 CE (HUM)
A survey of the salient political, constitutional, social, economic, military, religious and cultural developments in the Roman Empire, from the 'year of the four emperors' (68 CE) to the fourth century CE. [24L]
Exclusion: CLA369H1
Prerequisite: CLA231H5/CLA233H5
Recommended Preparation: CLA368H5

CLA370H5 Late Antiquity (HUM)
A survey of the salient political, constitutional, social, economic, military, religious and cultural developments in the Roman Empire from the fourth century to the age of Justinian. [24L]
Exclusion: CLA378H1
Prerequisite: CLA231H5/CLA233H5
Recommended Preparation: CLA369H5

CLA390H5 Topics in Greek History & Culture (HUM)
A detailed study of a topic of Greek history, literature, or material culture. Topics will vary from year to year. [24L]
Prerequisite: At least 1.5 credits in Classics, including CLA230H5/CLA237H5

CLA391H5 Topics in Roman History & Culture (HUM)
A detailed study of a topic of Roman history, literature, or material culture. Topics will vary from year to year. [24L]
Prerequisite: At least 1.5 credits in Classics, including CLA231H5/CLA233H5.

CLA395H5 Topics in Classics (HUM)
An in-depth examination of historical issues. Content in any given year depends on instructor. See Department of Historical Studies web site for more details. [24L]
Prerequisite: At least 1.5 credits in Classics.

CLA399Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of at least 8.0, and not more than 10.0, credits.

CLA404H5 Advanced Topics in Classics (HUM)
A critical exploration of selected topics of Greek or Roman history, literature, philosophy, or material culture. Topics will vary from year to year. [24S]
Prerequisite: At least 2.5 credits in Classics, including at least 1.5 credits at the 300 level.

CLA405H5 Theories of Myth (HUM)
A critical exploration of major modern approaches to the analysis and interpretation of myth with specific reference to their application to ancient Graeco-Roman myths. [24S]
Exclusion: CLA305H1
Prerequisite: At least 2.5 credits in Classics, including at least 1.5 credits at the 300 level, and including CLA204H5.

CLA497Y5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for students in a Major program. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of 1.0 credit in a reading course is permitted.

CLA499H5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for Majors. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of two reading courses, amounting to 1.0 credit, is permitted.
Exclusion: CLA401H5/CLA401Y5
Prerequisite: At least 2.5 credits in Classics, including at least 1.5 credits at the 300 level.

CLA499Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of at least 8.0, and not more than 10.0, credits.
The commerce programs combine economics and the various sub-disciplines of business and management enabling students to develop analytical skills and gain knowledge of institutions. This background is useful for solving problems and making decisions in business and government environments.

Commerce graduates frequently become professional accountants, economists, actuaries, financial analysts, marketing analysts, managers of firms and government, or proprietors of small businesses. Some commerce students choose to do post-graduate studies; law schools and MBA programs have been favoured by recent graduates.

The Specialist Program in Accounting allows students to complete the prerequisite studies for professional accounting qualifications within the BCom. There are also Specialist Programs in Finance and Marketing.

Commerce students have the opportunity to participate in an international exchange program during third year. This is an excellent opportunity for students to enhance their university experience through living and studying in a new and different environment. Exchange programs give commerce students valuable international experience necessary in today's global marketplace.

Commerce is a deregulated fees program and, therefore, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on fee structures.
Professional Skills Development Program (PSDP)
The Professional Skills Development Program (PSDP) has been created exclusively for Commerce and BBA/Management students as a way to encourage skill development beginning in the second year through to final year.

The information and skills gained through participation in this program will help students to:

- Strengthen technical and soft skills necessary for workplace success.
- Increase awareness of marketability on the job market and confidence in abilities
- Effectively make the transition from school to the workplace
- Manage their career by navigating through the working world more effectively

By participating in the program, students will be officially recognized and rewarded for their co-curricular activities through a transcript notation. Students will need to earn a minimum of at least 46 PSDP skill points over the course of their academic program. Upon completion of this requirement, students can submit an application to the PSDP Advisory Committee for transcript notation consideration. For more information and program details, please visit the Commerce or Management Blackboard organization or [www.utm.utoronto.ca/management](http://www.utm.utoronto.ca/management)

NOTES:

1. **The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the Degree requirements.**
2. Students interested in combining a BCom degree with an Economics Specialist Program should refer to the appropriate Program of Study for details.
3. Students are encouraged to take one course towards the Distribution Requirement (see Degree Requirements (Page 29)) in First Year.
4. During the Fall-Winter session, Commerce students must take ECO204Y5 and 209Y5. They will not have access to ECO200Y5 or 202Y5.

Specialist Program ERSPE2273 Commerce (BCom)

This program leads to the Bachelor of Commerce degree and requires 14.0 to 15.0 credits out of a total of 20.0 credits. See Degree Requirements (Page 29).

**Limited Enrolment** – Enrolment in this program is limited to students who meet the following criteria:

1. **Prerequisite Courses:** ECO100Y5 (63%); MGM101H5 (63%); MGT120H5 (63%); MAT133Y5/MAT135Y5 (50%) in a minimum of 4.0 credits.
2. **Cumulative Grade Point Average (CGPA):** Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.
3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

**Note:** Transfer Credits: Students applying to Commerce with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

**Application** for admission to the program for all students is made during the Subject POSt request period in March/April.

Enrolment in 200+ level MGT courses is restricted to students enrolled in the Commerce Programs.

**First year (3.0 credits):** MGM101H5; MGT120H5; ECO100Y5; MAT133Y5/MAT135Y5 (or equivalent)

**Higher Years:** Management (5.0 credits):

1. MGT223H5, 220H5, 338H5, 339H5
2. 1.0 credit from: MGT252H5, 262H5, 353H5, 363H5, 371H5/422H5, 374H5, 393H5
3. 1.0 credit in MGT at 400 level
4. 1.0 credit in MGT at 200/300/400 level

Economics (5.0 credits):

2. ECO220Y5/227Y5/STA(250H1, 256H5)/STA(256H5, 258H5)/STA(256H5, 260H5)
3. 2.0 credits in ECO at 300/400 level, no more than 1.0 of which may be a course in Economic History

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

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<th>Subject</th>
<th>Department</th>
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<td>ECO</td>
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<td>MGT</td>
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<tr>
<td>SOC</td>
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<tr>
<td>STA</td>
<td>Statistics</td>
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</tr>
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</table>
**Writing Requirements**: (2.0 credits) ANT204H5; CLA (except 201H5); one of (ECO320Y5/322Y5/323Y5/324Y5/333Y5/336Y5/343H5/344H5/373Y5/399Y5/412Y5/433H5/435H5/439Y5/456H5/463H5/475H5); ENG; FAH; HIS; HPS(G); LIN; PHL (except 245H5, 246H5, 247H5, 344H5, 345H5, 346H5, 347H5); POL; RLG; SOC (excluding SOC350H5); WRI.

Writing courses must be in the English Language.

**Specialist Program ERSPE1704 Commerce: Accounting (BCom)**

This program leads to the Bachelor of Commerce degree.

<table>
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<tr>
<th>Limited Enrolment</th>
<th>Enrolment in this program is limited to students who meet the following criteria:</th>
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</thead>
<tbody>
<tr>
<td>1. <strong>Prerequisite Courses</strong>: ECO100Y5 (63%); MGM101H5 (63%); MGT120H5 (63%); MAT133Y5/135Y5 (50%) in a minimum of 4.0 credits.</td>
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<tr>
<td>2. <strong>Cumulative Grade Point Average (CGPA)</strong>: Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.</td>
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<tr>
<td>3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.</td>
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</tbody>
</table>

**Note**: Transfer Credits: Students applying to Commerce with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

**Application** for admission to the program for all students is made during the Subject POSI request period in March/April.

**First Year (3.0 credits)**: MGM101H5; MGT120H5; ECO100Y5; MAT133Y5/135Y5 (or equivalent)

**Higher Years**: Management requirements: (8.5 credits)

1. MGT220H5, 223H5, 224H5
2. MGT321H5, 322H5, 323H5, 338H5, 339H5, 393H5
3. MGT420H5, 421H5, 422H5, 423H5, 426H5, 428H5, 429H5, MGT437H5

Economics requirements: (4.5 credits)

1. ECO200Y5/204Y5/206Y5, ECO202Y5/208Y5/209Y5,
2. ECO220Y5/227Y5/STA(250H1, 256H5)/STA(256H5,258H5)/STA(256H5, 260H5)

**Writing Requirements**: Writing Requirements (2.0 credits) from:

1. 1.5 credits in ECO at 300/400 level
2. No more than 1.0 Economic History credit

**Specialist Program ERSPE2034 Commerce: Finance (BCom)**

This program leads to the Bachelor of Commerce degree.

<table>
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<tr>
<th>Limited Enrolment</th>
<th>Enrolment in this program is limited to students who meet the following criteria:</th>
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<tbody>
<tr>
<td>1. <strong>Prerequisite Courses</strong>: ECO100Y5 (63%); MGM101H5 (63%); MGT120H5 (63%); MAT133Y5/135Y5 (50%) in a minimum of 4.0 credits.</td>
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<tr>
<td>2. <strong>Cumulative Grade Point Average (CGPA)</strong>: Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.</td>
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<tr>
<td>3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.</td>
<td></td>
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</tbody>
</table>

**Note**: Transfer Credits: Students applying to Commerce with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

**Application** for admission to the program for all students is made during the Subject POSI request period in March/April.

**First Year (3 credits)**: MGM101H5; MGT120H5; ECO100Y5; MAT133Y5/135Y5 (or equivalent)

**Higher Years**: Management (7.0 credits):

1. MGT252H5, 262H5
2. 1.5 credits from: MGT220H5, 223H5, 353H5, 363H5, 371H5, 374H5, 393H5
3. MGT330H5, 338H5, 339H5
4. 2.0 credits from: MGT430H5, 431H5, 433H5, 434H5, 435H5, 438H5, 439H5
5. 0.5 credit in MGT at 200/300/400 level
6. 0.5 credit in MGT at 400 level

Economics (5.0 credits):
2. ECO220Y5/227Y5
3. 2.0 credits in ECO at 300/400 level, at least one credit must be from: ECO349H5, 365H5, 375H5, 475H5, 460H5, 461H5, 463H5

Writing Requirements:
1. (2 credits) ANT204H5; CLA (except 201H5); one of (ECO320Y5/322Y5/323Y5/324Y5/333Y5/336Y5/343H5/344H5/373Y5/399Y5/412Y5/433H5/349Y5/456H5/463H5/475H5); ENG; FAH; HIS; HPS(G); LIN; PHL (except 245H5, 246H5, 247H5, 344H5, 345H5, 346H5, 347H5); POL; RLG; SOC (excluding SOC300Y); WRI

Specialist Program ERSPE2380 Commerce: Marketing (BCom)

This program leads to the Bachelor of Commerce degree.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria:

1. Prerequisite Courses:
   - ECO100Y5 (63%);
   - MGT120H5 (63%);
   - MGM101H5 (63%);
   - MAT133Y5/135Y5 in a minimum of 4.0 credits.

2. Cumulative Grade Point Average (CGPA):
   - Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.
3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Note: Transfer Credits: Students applying to Commerce with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

Application for admission to the program for all students is made during the Subject POSt request period in March/April.

First Year: (3 credits): MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/135Y5 (or equivalent)

Higher Years: Management: 7 credits
1. MGT220H5, 223H5, 260H5, 262H5
2. MGT338H5, 339H5, 363H5, 461H5, 463H5
3. 1.0 credit from: MGT252H5, 353H5, 371H5, 374H5, 393H5
4. 1.0 credit in MGT at 200/300/400 level
5. 0.5 credit in MGT at 400 level

Economics: 5 credits
2. ECO220Y5/227Y5
3. ECO244Y5
4. 1.0 credits in ECO at 300/400 level
2. ECO220Y5/ 227Y5/ STA(250H1, 256H5)/STA(256H5,258H5)/STA(256H5, 260H5)
3. 2.0 credits in ECO at 300/400 level
   No more than 1.0 Economic History credit

Writing Requirements:: (2 credits) ANT204H5; CLA (except 201H5); one of (ECO320Y5/ 322Y5/ 324Y5/ 333Y5/ 336Y5/ 344H5/ 373Y5/ 399Y5/ 412Y5/ 433H5/ 435H5/ 439H5/ 456H5/ 463H5/ 475H5); ENG; FAH; HIS; HPS(G); LIN; PHL (except 245H5, 246H5, 247H5, 344H5, 345H5, 346H5, 347H5); POL; RLG; SOC (excluding SOC350H5); WRI
Writing credits must be in the English language.

Major Program ERMAJ1111 Commerce (Arts)

7.5 credits are required.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria:

1. Prerequisite Courses: ECO100Y5 (63%); MGT120H5 (63%); MGM101H5 (63%);
   MAT133Y5/ MAT135Y5 (50%) in a minimum of 4.0 credits.
2. Cumulative Grade Point Average (CGPA):
   Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.
3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Note: Transfer Credits: Students applying to Commerce with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

Application for admission to the program for all students is made during the Subject POST request period in March/April.

First Year: MGM101H5; MGT120H5; ECO100Y5; MAT133Y5/ 135Y5 or equivalent

Higher Years:

1. ECO220Y5/ 227Y5/ STA(250H1, 256H5)/STA(256H5,258H5)/STA(256H5, 260H5)
2. MGT223H5, 220H5, 252H5, 338H5, 339H5
The Institute of Communication, Culture, Information and Technology (ICCIT) offers interdisciplinary programs at the University of Toronto: 

- CCIT Major
- Digital Enterprise Management (DEM) Specialist
- Interactive Digital Media (IDM) Specialist

After completion of the first year of studies at U of T Mississauga, ICCIT students take courses at U of T Mississauga and either the Faculty of Information at the St. George campus (IDM) or Sheridan College (CCIT and DEM). ICCIT programs combine academic courses in the arts and sciences with hands-on applied courses in digital media and technology. The focus of these ICCIT programs is on the generation, diffusion, and social impact of new technologies, and complex interactions between media, knowledge and communication technologies and individuals, organizations and society. In addition to receiving an honours degree from the University of Toronto, ICCIT students who successfully complete CCIT Major or DEM Specialist programs have the opportunity to obtain a Certificate in Digital Communications from Sheridan College. Entry into ICCIT programs is limited and students are urged to read the program information in the calendar carefully and to consult the institute. For more detailed information, refer to www.utm.utoronto.ca/iccit.

Certificate in Digital Communication for CCIT and DEM Students

1. Students must take a total of 3.0 credits (2 half credits at the 200 level and 4 half credits at the 300 level) at Sheridan and complete the CCIT Major program in order to qualify for a Certificate in Digital Communications.

2. DEM students can fulfill the requirements for the certificate (with 1 half credit at the 200 level and 5 half credits at the 300/400 level) at Sheridan College. Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

- CCT  Communication, Culture, Information and Technology (page 115)
- MGD  Communication, Culture, Information and Technology (page 115)
- MGM  Management (page 288)
Specialist Program ERSPE1307 Digital Enterprise Management (Arts)

The Digital Enterprise Management (DEM) program offers an exceptional opportunity to combine rigorous study of emerging digital technologies with an integrated set of Management courses. This is a Specialist Program offered through the Institute of Communication, Culture, Information & Technology. Students in DEM explore how technology has both transformed the managerial environment and provided seemingly infinite possibilities for the creation of new enterprises. In addition to studying the traditional managerial disciplines students take courses that are directly relevant to managing organizations that use or develop digital technologies such as project management, entrepreneurship, technology strategy, and collaborative planning and development. With this combined understanding of both technology and managerial challenges and techniques, students will be uniquely prepared to offer value to both traditional and digital enterprises.

14.5 credits are required, including at least 1.0 credit at the 400 level.

Limited Enrolment – Enrolment in this program is highly competitive and will be limited as follows (meeting the minimum requirements does not guarantee admission):

1. Minimum 4.0 credits to include the following: CCT109H5, 110H5; MGM101H5, 102H5
2. Minimum Cumulative Grade Point Average (CGPA) determined annually and is limited to students who have a CGPA of at least 2.4
3. Minimum 63% in both MGM101H5 and MGM102H5
4. Minimum 65% average between CCT109H5 and CCT110H5, with at least 60% in each course.

Tuition fees for students enrolling in any CCIT Specialist/Major programs will be higher than for other Arts and Science programs.

First Year: CCT109H5, 110H5; MGM101H5, 102H5
Second Year: CCT206H5, 208H5, 224H5, 225H5, 226H5, CCT260H5
Third and Higher Years:
1. CCT319H5, 321H5, 322H5, 324H5, 355H5, 356H5, 360H5
2. CCT401H5, 404H5, 424H5, 460H5, MGD421H5, 426H5, 428H5 and 0.5 credit from CCT410H5, MGD415H5, 422H5, 423H5, 427H5, 429H5
3. In addition, 2.0 credits from any 300/400 CCT level courses.

Notes:
1. Students cannot combine the Digital Enterprise Management Program with the CCIT Major program, or the Management Major Program or the Commerce Major program.
2. It is intended that students take CCT224H5, CCT324H5 and CCT424H5 in strict sequence.
3. It is your responsibility to ensure that the prerequisites for courses listed in the calendar have been met. Students without the prerequisites can be removed at any time. Waivers will not be granted.

Specialist Program ERSPE2172 Interactive Digital Media (Arts)

The Interactive Digital Media (IDM) program explores the transformation of knowledge and culture through critical examinations of the social impacts of new and emerging communication and information technologies. IDM is run jointly by the Institute of Communication, Culture, Information and Technology (ICCIT) at the University of Toronto Mississauga (UTM) and the Faculty of Information (iSchool) at the University of Toronto. By integrating critical communication and information studies, the program confronts information and communications technologies (ICTs) as elements of larger social-technical systems of power. Students engage in debates over digital culture, surveillance and privacy, Internet governance and policy, intellectual property, human-computer interaction, information systems design, and the rhetoric of innovation and technological development. IDM takes an interdisciplinary approach to this exploration, addressing telecommunications and other media infrastructure; institutionalized practices of entertainment and sociability; and techniques of data collection, management, and analysis practices.

In addition to the CORE courses, students will be required to take an integrated set of upper level courses providing students with the knowledge and skills necessary to design and critique complex technical, political, and cultural responses to the opportunities and dangers of new and enduring information practices.

Within an Honour’s degree, 13.0 credits are required.

Limited Enrolment – Students may apply to enrol after having completed this program’s requirements in the first year with a grade of 65% in both CCT109H5 and CCT110H5. Students must have a minimum Cumulative Grade Point Average (CGPA) in a minimum of 4.0 credits in order to be accepted into the Specialist Program. The minimum CGPA is determined annually. It is never lower than 2.5.

Tuition fees for students enrolling in any CCIT Specialist/Major programs will be higher than for other Arts and Science programs.
Communication, Culture, Information and Technology (HBA) Programs

First Year: CCT109H5, CCT110H5

Second Year: CCT206H5, CCT207H5, CCT208H5
              CCT210H5, CCT218H5, CCT219H5, CCT222H5,
              CCT285H5, CCT286H5

Third and Fourth Year: CCT301H5, CCT309H5,
                       CCT341H5, CCT365H5, CCT413H5
+ 2 modules comprising:
Knowledge Media Design: CCT372H5, CCT374H5,
                        CCT376H5, CCT414H5, CCT471H5
Immersive Digital Media: CCT381H5, CCT382H5,
                        CCT385H5, CCT480H5, CCT481H5

NOTES:
1. Students cannot combine the Interactive Digital
   Media Program with the CCIT Major program.
2. It is your responsibility to ensure that the
   prerequisites for courses listed in the calendar have
   been met. Students without the prerequisites can be
   removed at any time. No waivers will be granted.

Major Program ERMAJ1034 CCIT (Arts)

The CCIT major program emphasizes the points where
culture, communication, information and technology
converge. Students learn how historical uses of media and
 cultural theory inform current trends and then apply these
 concepts in practical settings - in design and digital media
courses at Sheridan College - and, for some students, in
 experiential learning environments. Since the CCIT Major is
a joint program with Sheridan College, graduates receive
both a Bachelor of Arts degree from the University of
Toronto and a Certificate in Digital Communication from
Sheridan College.

8.0 credits are required including at least 4.0 at the 300/400
level. Program must be taken in combination with another
major or two minors.

Limited Enrolment – Admission is based on
academic performance (CGPA) in a minimum of 4.0
credits that must include CCT109H5, 110H5.
Enrolment in this program is determined annually and
is limited to students who have a CGPA of at least 2.0.
Tuition fees for students enrolling in any CCIT
Specialist/Major programs will be higher than for
other Arts and Science programs.

First Year: (1.0 credit required) CCT109H5, 110H5

Second Year: (3.0 credits required)
1. CCT206H5, 208H5, 210H5 and one other 200 level
   CCT/VCC course taught at UTM.
2. 1.0 credit from any 200 level CCT course taught at
   Sheridan.

Third and Higher Years: (4.0 credits required)
Minimum of 4 half credit courses taught at UTM from any
300/400 level CCT/MDG/VCC course. One of these half
credits must be at the 400 level.

Minimum of 4 half credit courses taught at Sheridan from
any 300/400 level CCT course. One of these half credits
must be at the 400 level.

NOTES:
1. 300/400-level CCT courses are restricted to students
   in CCIT programs only.
2. It is your responsibility to ensure that the
   prerequisites for course listed in the calendar have
   been met. Students without the prerequisites can be
   removed at any time. No waivers will be granted.

Combined Honours Bachelor of Arts/Master
of Information (HBA/MI) program

The combined Honours Bachelor of Arts/Master of
Information (HBA/MI) program is designed for students who
want to combine one of three undergraduate programs at
the University of Mississauga (UTM) – Specialist in Digital
Enterprise Management (DEM), Specialist in Interactive
Digital Media (IDM), or a Major in Communication, Culture,
Information and Technology (CCIT) – with the Master of
Information (MI) in the Faculty of Information.
The combined HBA/MI program allows students to
complete both degrees in five and a half years rather than
the six years it would take to acquire them independently.
Applicants must select one of the following concentrations
when they apply to the MI program:
- Critical Information Policy Studies;
- Culture and Technology;
- Information Systems and Design;
- Knowledge Management and Information
  Management;
- Knowledge Media Design.

Minimum Admission Requirements
1. Applicants must apply to and be accepted by one of
   the HBA programs at UTM and the MI program in the
   Faculty of Information. Applicants must satisfy the
   admission requirements of each program.
   Undergraduate students apply to the master's
   program in the third year.
2. Students must be enrolled full-time in the HBA
   program and be in good standing in the HBA program
   with a CGPA of no less than 3.7 in Year 2 to be
   admissible; students are expected to carry a full
   course load of 5.0 full-course equivalents (FCEs)
   each year.
3. Qualified students in Year 3 of the HBA program may
   apply to the MI program; those accepted will receive
   a conditional offer to commence the MI program
   when the HBA program requirements have been
   completed.
4. Admission into the MI program will have three conditions: students must (1) maintain an A- average (CGPA 3.7) or higher in Year 3 and Year 4 of the HBA, (2) complete BA requirements, and (3) demonstrate HBA degree conferral.

Program Requirements

1. Students in the combined program must meet the full academic program requirements of the HBA program and the MI program.

2. Students must be registered full-time, enrolling in 5.0 full-course equivalents (FCEs) each year, throughout the HBA program.

3. Students who receive conditional offers of admission to the MI program during Year 3 of the HBA program and complete the HBA program requirements in Year 4 will commence the MI during Year 5 of the combined program.

4. In Year 4, students must take 0.5 FCE from the MI program (INF1005H and INF1006H) as electives that will count towards the HBA program.

5. In Year 4, students complete an additional 1.5 FCEs from the MI program, associated with the selected concentration (see below), and these courses will count towards the breadth requirement for the BA.

- Year 4 Concentration courses:
  - Critical Information Studies: INF1001H; INF2181H; INF2198H
  - Knowledge Management and Information Management: INF1003H; INF1230H; INF1341H
  - Information Systems and Design: INF1340H; INF1341H; INF2040H
  - Culture and Technology: INF1501H; INF1502H; INF1240H
  - Knowledge Media Design: KMD1001H; KMD1002H; KMD2001H

6. In Year 5 and 6, students will complete the remaining 6 FCEs from the selected concentration.

List of Courses

(SH) Denotes courses taught at Sheridan College.

(DEM) Denotes courses designed for students in the Digital Enterprise Management Program. Selected courses may be open to students in other CCIT programs.

(IDM) Denotes courses designed for students in the Interactive Digital Media Program. Selected courses may be open to students in other CCIT programs.

CCT109H5 Contemporary Communication Technologies (SSc)
This course examines different information and communication technologies (ICTs) through the analysis of such genres as contemporary written, visual, oral, electronic and musical forms. It illustrates a range of theoretical perspectives that seek to explain the relationship between communication and technology. This course will also examine, briefly, the history of ICTs. [24L, 12T]

CCT110H5 Rhetoric and Media (SSc)
This course critically examines the written, visual, aural, and dynamic rhetoric as it pertains to communications for academic and other purposes across a range of digital and interactive media discourses. [24L, 12T]
Prerequisite: CCT109H5

CCT200H5 Intercultural Communication (SSc)
The route to global cooperation or global collision. This course will use a case-based approach to the study of the impact of globalization and information technologies on the formulation of relationships between people of diverse racial, ethnic, national, linguistic, and religious backgrounds. The challenges that globalization, new information and communication technologies present to traditional, culturally bound beliefs and values. The critical function of socio-cultural, socio-psychological, and historical variables in the creation of belief and value systems. [24L, 12T]
Prerequisite: CCT109H5, CCT110H5

CCT204H5 Design Thinking I (SH) (SSc)
An introduction to the basic concepts and skills of design thinking as an interdisciplinary subject. Emphasizes creative and critical thinking in the design process; provides the student with the theory and operational skills necessary to solve design problems in the realms of symbolic and visual communication, material objects, environments, and organized services and activities. [24L, 12T]
Prerequisite: CCT109H5, CCT110H5

CCT205H5 Digital Innovation and Cultural Transformation (SSc)
An examination of the problems caused by the introduction of digital and computing technologies to modern culture. Topics range from the social and cultural outcomes of media convergence; effects of the digital revolution in communications technologies; the impact of miniaturization on the application of computing technologies; the relevance of virtual environments; the interplay between pre-industrial, industrial and information cultures. [24L, 12T]
Prerequisite: CCT109H5, CCT110H5

CCT206H5 Law, Technology and Culture (SSc)
This course will provide a detailed review of copyright, trademark and patent law with a special emphasis on how they apply to digital media. This course will also review the law of contract as it applies to digital industries and investigate the relevant tort law. In addition, other regulatory issues will be discussed such as telecommunications and broadcasting law both from a Canadian and an international perspective. [24L, 12T]
Prerequisite: CCT109H5, CCT110H5

Formerly Intellectual Property and Copyright
CCT207H5 Introduction to Design (IDM) (SSc)
The communication of information must be designed and this course investigates the methods and processes for doing this. It studies the principles and practices of design and the ways of thinking and working that produce innovative approaches, solutions, and services. The course highlights the processes of creative and critical thinking in exemplary design and offers students foundational theoretical and practical frameworks.
*Prerequisite:* CCT109H5, CCT110H5

CCT208H5 Communications Research Methods (SSc)
The course is a critical survey of research methodologies in the field of communications and media. A central goal of the course is to train students to collect, manage, analyze and interpret social science research data. Assessment will be mostly based on the completion of a small-scale research project. [24L, 12T]
*Prerequisite:* CCT109H5, CCT110H5

CCT209H5 Foundations of Information Studies (SSc)
(Formerly ERI203H5) Drawing upon conceptual foundations in information studies this course provides an introduction to information and scholarly research including theoretical frameworks for the organization of information, critical strategies for acquiring, evaluating and communicating information, and the ethical and legal obligations of using information. [24L, 12T]
*Exclusion:* ERI203H5

CCT210H5 Signs, Referents, and Meaning (SSc)
How written or spoken statements, gestures, and aesthetic objects come to have meanings. How we recognize and fail to recognize such meanings. The nature, systems, and processes of interpretation. The role of mental models. [24L, 12T]
*Exclusion:* CCT213H5, VIC223Y1
*Prerequisite:* CCT109H5, CCT110H5

CCT218H5 Introduction to Information Studies (IDM) (SSc)
This course provides an opportunity for students to develop an understanding of how information is transforming society and shaping a fluid culture. It provides students with the ability to understand the way information technologies are reconfiguring conceptions of representation, community, gender, identity, location, space, and social and cultural narrative and meaning making. The process by which information technology creates new relationships, communities, and identities is explored. During the course students acquire the ability to examine the cultural and social contexts of information and gain an awareness of the different critical methods for studying information systems. [24L, 12T]
*Prerequisite:* CCT109H5, CCT110H5

CCT219H5 Introduction to Policy (IDM) (SSc)
This course introduces students to the policy dimensions of culture. Students will study the theoretical approaches that have informed critical discourses on regulatory structures. Students will have the opportunity to analyze the history and development of information policy through the lenses of critical information studies, critical legal studies, science & technology studies, and culture studies. The class will explore the relationship between information policy on the one hand and culture, community identity, citizen, and economics on the other hand. [24L, 12T]
*Prerequisite:* CCT109H5, CCT110H5, and CCT218H5

CCT222H5 Political Economy of Communication, Culture, and Technology (SSc)
The course analyzes the relationship between media systems, communication technologies, and power. As an introduction to a political economy approach, this course surveys how media, culture, information and technologies are produced, circulated, and consumed, with attention to both historical developments and contemporary practices in the digital era. The course provides a basic understanding of media systems, technologies, and culture production in relation to the market, the state, and civil society. Students will develop a basic understanding of the political, economic, cultural, and regulatory environment in which media, culture, and technologies are produced, and pay particular attention to the implications of processes such as globalization, digitization, marketization, and commodification for social life. [24L, 12T]
*Prerequisite:* CCT109H5, CCT110H5

CCT224H5 Performance Assessment (DEM) (SSc)
This course provides a comprehensive overview of the activities and processes that take place in organizations. Major emphasis is placed on the investigation of the varied measures that can be developed to assess and subsequently improve the performance of the organization. The interpretation of measures in managerial decision-making will also be investigated in detail. [24L]
*Prerequisite:* CCT109H5, CCT110H5

CCT225H5 Information Systems (DEM) (SSc)
This course has been designed to provide students with a basic understanding of the role of computers and communication systems in modern organizations. Unlike programming courses, the focus here is on the application of computer-based systems to support information requirements for problem solving and managerial decision-making. Topics include concepts of information, humans as information processors, survey of hardware and software applications, introduction to information systems analysis and design. [24L, 12T]
*Exclusion:* CCT325H5; MGM371H5; MGT371H5, RSM327H1, MGAC70H3
*Prerequisite:* CCT224H5
CCT226H5 Data Analysis I (DEM) (SSc)
This course introduces students to the basic tools of data analysis, most particularly statistics and modeling that are critical for subsequent courses in Marketing and Data Analysis II. Students are introduced to basic principles of descriptive and inferential statistics with a focus on the types of data that they will typically encounter in a digital environment. [24L, 12T]
*Prerequisite: *CCT109H5, 110H5; MGM101H5, 102H5

CCT250H5 Technology and Creative Expression (SH) (SSc)
Advances in technology have provided users ready access to empowering technologies of creative expression. This emergence of prosumer and amateur production technology has both destabilized and revolutionized established practice in digital imaging, time based media, gaming, and design. This course provides a survey of contemporary theories, technologies and critical challenges in a variety of media of creative expression. [24L, 12P]
*Prerequisite: *CCT109H5, CCT110H5

CCT260H5 Web Culture and Design (SH) (SSc)
The course will explore how the web has influenced culture and how websites are designed and managed. Topics will include the presentation of text, graphics, audio and video on the web. Design, web server concepts, human communication systems and organizational contexts will be considered in creating web sites using scripting languages and web software tools. [24L, 12T]
*Prerequisite: *CCT109H5, 110H5

CCT270H5 Principles in Game Design (SH) (SSc)
An overview of videogame theory, best practices, emergent trends and technology, with strong participation by industry professionals. This course features a variety of guest speakers addressing different facets of game design, supported by later discussion and analysis. Students will experience a broad overview of principles in game design that may inspire further development and design activities in related game design courses. [24L]
*Prerequisite: *CCT109H5, CCT110H5

CCT285H5 Immersive Environment Design (IDM) (SSc)
This course provides students with the opportunity to learn the skills necessary to produce immersive environments. Students will develop skills in the areas of bitmap/vector graphics, audio/video production and editing, 2D/3D modeling and animation, and video game design. [24L, 12T]
*Prerequisite: *CCT109H5, CCT110H5

CCT286H5 Interactive Media Design (IDM) (SSc)
This course provides students with the opportunity to learn the skills necessary to produce responsive web content. Students will develop skills in the areas of website design, interactive and animated web content, mobile app development, and mobile game development. [24L, 12T]
*Prerequisite: *CCT109H5, CCT110H5, CCT285H5

CCT300H5 Critical Analysis of Media (SSc)
Analytical methods and theoretical concepts from communication and rhetoric will be applied to the analysis of contemporary media (art, film, television, journalism, advertising, and web documents). [24L]
*Prerequisite: *CCT210H5/ CCT222H5

CCT301H5 Design for Online Cultures (IDM) (SSc)
This course builds upon the concepts introduced in CCT218H5, Introduction to Digital Culture, through an exploration of the design and development of online information services (e.g. websites, digital libraries). It examines the standards, modeling approaches, and methods for testing. Students will experiment with different approaches to design of websites or other online services for different types of delivery devices (e.g. desktops, mobiles). [24L, 12T]
*Prerequisite: *CCT218H5

CCT302H5 Developing and Managing Communication Campaigns and Projects (SSc)
Communication campaigns and projects, whether they involve marketing, politics, or advertising require the establishment of objectives, tasks, and milestones. Furthermore developing and managing campaigns requires the development of knowledge and skills relating to the management of teams. Students will acquire analytic skills allowing them to understand the development and management of communication campaigns and projects. Current theory and research will comprise an integral part of the course as will study of the appropriate software tools. A significant component of the assessment for this course will be a group project that will involve the design of a communication campaign or project which will be presented to a group of experts. [24L]
*Prerequisite: *CCT222H5, minimum of 8.0 credits.

CCT303H5 Communicating In and Between Organizations (SSc)
This course examines the nature of communications in organizations. Communications are the glue that holds organizations together. Understanding theoretically and practically the multi-faceted functions of communication in and between organizations is essential for anyone seeking to develop a career in an organization whether it be private or public. Students will acquire analytic skills allowing them to understand organizational communication from a variety of different perspectives. They will also be required to develop and actively critique practical examples of organizational communication. [24L]
*Prerequisite: *CCT210H5
CCT304H5 Visual Rhetoric and Digital Environments (SSc,EXP)
This course introduces students to the rhetorical concepts of classical persuasion as they relate to images and visual representations on the web. Students will use rhetorical concepts to interpret, critically analyze, conceptualize and create images to construct a particular argument within a digital context.
*Prerequisite: CCT204H5, CCT210H5/ CCT213H5*

CCT305H5 Design and Implementation of Multimedia Documents (SH) (SSc)
The principles and techniques of user-centered, functional design are introduced and applied to the analysis of software interfaces and the creation of multimedia documents. The roles of shared metaphors and mental models in clear, concise and usable designs are emphasized. Students will produce multimedia documents, which make effective use of text, colour, user input, audio, still, and time-based images. [24L, 12T]
*Prerequisite: CCT109H5, 110H5*

CCT308H5 Advanced Research Methodologies (SSc)
This course provides students with an in-depth study and critical analysis of research methodologies within the discipline of communications and new media. Students will learn to explicitly identify generalizable findings, ethical concerns, study limitations, and new contributions to the field of knowledge using existing studies in qualitative, quantitative and mixed methodologies. Students will also gain experience in identifying and assessing problems within a research design and develop the ability to recommend revisions and/or new contexts and techniques for replicating the studies.
*Exclusion: CCT309H5*
*Prerequisite: CCT208H5*

CCT309H5 Research Methods (IDM) (SSc)
This course provides an introduction to the philosophy, language, lifecycles, and methods of qualitative and quantitative inquiry. The emphasis is on conceptualizing and designing research, based on an appreciation of the philosophical underpinnings of the approaches covered. We will consider the fundamental principles, processes, values, and roles of research for professional application in information organizations. We will explore and learn the basic skills of evaluating, planning, designing, executing, and applying research. As a survey of the more popular research methods used in communications and information-based organizations students will be afforded the opportunity to lead an aspect of research on a question of their choice. [24L, 12T]
*Exclusion: CCT308H5*
*Prerequisite: CCT207H5, 218H5, 219H5, 275H5*

CCT310H5 Mass Communication and Popular Culture (SSc)
How does consumerism affect symbolic production, circulation and transactions? Major modern theories of mass communication will be presented (Fiske, Bourdieu, Benjamin, Jenkins, Frankfurt school, and Marxist approaches). Students will explore new structures of mass communication in relation to popular culture systems, and their economic, technological and institutional dimensions. Topics include Disney, Hollywood, celebrity culture, social media, and user generated content in digital environments. [24L, 12T]
*Prerequisite: CCT204H5, CCT210H5/ CCT213H5*

CCT311H5 Game Design and Theory (SH) (SSc)
This course will address the principles and methodologies behind the rules and play of games. The lectures and practical work will foster a solid understanding of how games function to create experiences, including rule design, play mechanics, game balancing and the integration of visual, tactile, audio and textual components into games. [24L, 12P]
*Prerequisite: Minimum of 8.0 credits to include CCT109H5,110H5*

CCT312H5 Interactive Story Telling for Game Development (SH) (SSc)
This course will address traditional storytelling and the challenges of interactive narrative. Students will develop a solid understanding of traditional narrative theory as well as experimental approaches to storytelling in literature, theatre and film with relevance to game development. [36L]
*Prerequisite: CCT109H5, 110H5/ CCT250H5*

CCT314H5 Representation in Language, Mind and Art (HUM,SSc)
This course will examine philosophical questions surrounding the nature of representation in language, mind and art. Questions to be examined include: How can one thing represent something else? What is the difference between representation by words and representation by pictures? Do we think in a “language of thought”? [24L, 12T]
*Prerequisite: CCT109H5, CCT110H5, minimum of 8.0 credits.*

CCT315H5 Theory of Linguistic Communication (HUM)
A philosophical introduction to the conceptual foundations of the theory of linguistic and non-linguistic meaning and communication. What is communication? How do animals communicate? What is special about language? *Prerequisite: Minimum of 8.0 credits*

CCT316H5 Communication and Advertising (SSc)
A study of theories in communication and meaning with different reference to advertising, advertising messages, and advertising management. [24L]
*Prerequisite: CCT210H5*
CCT319H5 Economics and the Digital Firm (DEM) (SSc)
This course presents economic principles that explain how markets help organize exchange and production among competing but nevertheless cooperating economic units. Theories of consumer demand, the economic nature and function of business firms, optimal business decision rules of monopoly, oligopoly, and anti-competes regulations, as well as game theory, are presented. Efficiency criteria pertaining to the operation of firms and markets, the role of property rights, and the scope for public policy, are also examined. [36L]
Exclusion: ECO100Y5
Prerequisite: CCT224H5; MGM101H5, 102H5

CCT320H5 Communication, Technology, and Social Change (SSc)
This course offers students an opportunity to investigate the evolving relationship between cultural production, social order, and the development of communication technology. Students will critically assess how a wide variety of technological-mediated practices have brought about significant social changes by affecting community structures and notions of individual identity, facilitating cultural exchanges and misunderstandings, impacting public opinion, and enabling new modes of political organization and unrest. As part of that endeavor we will examine various theories of collective action, including collective behaviour theory, resource mobilization, new social movements, gift economies, and class struggle. These theoretical perspectives will be evaluated based on their potential to inform our understandings of historical and contemporary examples of communities of practice. [24L]
Prerequisite: CCT210H5/222H5

CCT321H5 Foundations of Finance and Financial Management (DEM) (SSc)
This course will provide students with an understanding of investment appraisal from a financial standpoint. It will provide them with the necessary tools to construct the financial component of a business plan and analyze the financial performance of a company. It will examine the practical problems of capital budgeting and highlight the techniques of performing ongoing monitoring of a company's financial health and risks. [24L, 12P]
Exclusion: MGM230H5; MGT230H5, 331Y1, 337Y5
Prerequisite: CCT224H5; MGM101H5, 102H5

CCT322H5 Marketing Information Products and Services (DEM) (SSc)
Techniques for developing a comprehensive marketing strategy will be developed with particular emphasis on digital products and services. The nature of digital markets, approaches to advertising, pricing and such areas as versioning will also be discussed. [24L]
Exclusion: MGM252H5; MGT252H5, 352H5
Prerequisite: CCT224H5

CCT324H5 Organizational Theory and Behaviour (DEM) (SSc)
Overview of individual and group behaviour in organizations, including motivation, communication, decision making, influence and group dynamics. Examination of major aspects of organizational design including structure, environment, technology, goals, size, inter-organizational relationships, innovation and change. [24L, 12T]
Prerequisite: CCT224H5; MGM101H5, 102H5

CCT326H5 Communication across the Lifespan (SSc)
Changes in communication from infancy to old age arise from changes in perception and cognition, as well as changes in social and environmental needs and supports. These changes will be characterized and related to relevant theories. Practical implications for information and communication technologies will be suggested.
Prerequisite: PSY100Y, CCT204H5, 210H5

CCT333H5 Social Innovation (SH) (SSc)
This course introduces students to the strategies and processes of social innovation through usability studies, systems analysis, and artifact prototyping for new products or services for underserved groups. Students will learn various techniques of understanding user needs, requirements and design methodologies, and apply this knowledge to create socially innovative prototypes to apply to real world situations. By the end of this course, students will have worked in groups to develop design alternatives for a technological artifact or system of their choosing, gain knowledge of human-centred design strategies and learn how to become change agents through case studies, best practice analyses, and relevant readings.
Prerequisite: CCT109H5, 110H5/ CCT100H5, 101H5

CCT334H5 History and Theory of Game Production (SH) (SSc)
This course will examine the principles, theory and practice behind the production of games. By examining the history and contributions of early founders such as Atari and Activision, all the way to present-day leaders such as Electronic Arts and Sony, students will gain an understanding of how the global video game industry operates. The lectures and practical work will foster an approach to the understanding of game production issues including technology, law, marketplace and audience demand.
Prerequisite: CCT109H5, CCT110H5

CCT335H5 Technology and the City (SH) (SSc)
Technology continues to reshape the physical contours of our built environments as much as it redefines our conceptualization of how we inhabit and interact within them. This course investigates how urban form, space, infrastructure and communication are mediated by new and evolving technologies. [24L, 12T]
Prerequisite: CCT250H5
CCT336H5 Comics and Digital Culture (SH) (SSc)
Examiing the medium of comics and graphic novels and its evolution in an era of digital production and dissemination. Starting from a foundational understanding of the visual grammar of comics, students create their own graphic narratives and later explore the dynamics of digital dissemination by creating viral and memetic content for an Internet audience.
_Exclusion:_ CCT300H5
_Prerequisite:_ CCT109H5, CCT110H5

CCT340H5 Gender, Media and Technology (SSc)
This course brings a gendered lens to the study of media and technology. The course explores the (re)production and (re)presentation of gender through communicative practices in a variety of mediums, including print media, TV, activist media, video games and online platforms. The course develops an understanding of gender ideologies and how media, technologies, and communication help produce gender. The course examines the way gender identities are constructed by mainstream and alternative media; gendered divisions of media and digital labour; the relationship between ICTs and the performance of gender and sexuality; masculinities, gender politics; feminist theory; and the construction and negotiation of gender in relation to mediated environments. [24L]
_Prerequisite:_ CCT109H5, CCT110H5, CCT200/210/222/WRI203H5

CCT341H5 Collaborative ICT Project (IDM) (SSc)
Increasingly work projects and work teams are spread across geographic boundaries and collaboration must be mediated. Computer Supported Collaborative Work (CSCW) is a major area of design and research across many disciplines and contexts. This class takes a theoretical and practical approach to computer supported collaboration by placing students in interdisciplinary teams across traditional geographic boundaries. The class will be focused on project based learning and will look at key literatures in CSCW and project management. [24L, 12T]
_Prerequisite:_ CCT207H5 and CCT218H5

CCT351H5 Theory and Practice of Animation (SH) (SSc)
This course introduces the student to the history of animation from the earliest exploration of the animated image in the early 1900's to the most current computer, traditional and web-based practices. This course will focus on important stylistic, narrative and technological developments. [24L, 12T]
_Prerequisite:_ CCT353H5

CCT352H5 History and Practice of Design (SH) (SSc)
This course examines the historical development of communication design from the industrial revolution to the present. The student will focus on the emergence of design practice and theory in changing economic, technological and social contexts. [24L, 12T]
_Prerequisite:_ CCT204H5

CCT353H5 Digital Media: Video (SH) (SSc)
This course will explore the theoretical and practical aspects of producing narrative time based imagery within a digital environment. The conceptual and digital tools as well as workflows and delivery systems that have been developed to produce images will be explored. [24L, 12T]
_Prerequisite:_ CCT109H5, CCT110H5

CCT355H5 E-Business Technologies (SH)(DEM) (SSc)
This course focusses on foundational information technology systems used in organizations and the role people, process, context and technology play in defining an organization's information ecology. It will explore issues of change management and reformatting business models to leverage technological, economic and environmental change. [36L]
_Prerequisite:_ CCT224H5, 225H5

CCT356H5 Online Advertising and Marketing (SH) (SSc)
This course investigates the industrial practices and tools of effectively marketing and promoting goods and services online. Topics include analysis of contemporary online advertisement design, the effective use of social media technologies in product marketing, planning online campaigns that reinforce and complement existing marketing and advertising efforts, and understanding key metrics used to evaluate a campaign's effectiveness. [24L]
_Prerequisite:_ CCT260H5

CCT357H5 Digital Media: Photography (SH) (SSc)
This course will explore the theoretical and practical aspects of producing theme based single and sequential imagery within a digital environment. We will explore the conceptual and digital tools as well as workflows and delivery systems that have been developed to produce images. [24L, 12T]
_Prerequisite:_ CCT109H5, 110H5

CCT360H5 Intermediate Web Design (SH) (SSc)
This course builds upon the concepts introduced in Web Culture and Design and expands upon them to include the theory and practical aspects of creating modern, compliant standards for websites. Its focus is primarily on the design and presentation of websites on the client side. Students will learn how to develop websites for consumption on various platforms including desktop browsers, mobile devices, etc. [36L]
_Prerequisite:_ CCT260H5
CCT365H5 Introduction to Surveillance (IDM) (SSc)
Surveillance has become an everyday facet of modern life, and a foundational structure of social, political, and technological interrelationships. Studying surveillance can help us more effectively understand how power, identity, persuasion, and control operate in modern life. This course will integrate theory (economic, political, and social) and case studies to investigate how data, economics, militarism, policy, identity, visibility, fear, desire, and risk all interoperate in a global context to create and mediate the world we live in. [24L, 12T]
Prerequisite: CCT109H5, 110H5

CCT372H5 Knowledge Media Design: Contexts and Practices (IDM) (SSc)
Knowledge media are systems incorporating computer and communications technology that enhance human thinking, creativity, communication, collaboration, and learning. This course reviews the emerging field of knowledge media design and the use of digital media for communication, collaboration, and learning. The course includes topics in human-centred design; knowledge media technologies; social implications of knowledge media; examples and applications of knowledge media; and the future of knowledge media, and is organized via themes of design, media, and knowledge. [24L, 12T]
Prerequisite: CCT213H5

CCT374H5 Technologies of Knowledge Media (IDM) (SSc)
The course covers understanding the context in which knowledge media are introduced, understanding the team, group, or work setting for designing collaborative knowledge media. We also explore different techniques for understanding and designing for the individual who uses or engages with knowledge media. Techniques and tools are drawn from a range of design perspectives including traditional user centered design, participatory design, engineering, and industrial design. The appropriateness of each technique and tool for different design problems and settings is discussed and the course concludes with an examination of the development of new techniques and tools for new design challenges. [24L, 12T]
Prerequisite: CCT372H5

CCT376H5 Introduction to Modelling Information (IDM) (SSc)
The analysis and modelling of information is key to being able to develop appropriate information architectures for organizations in particular and society as a whole. Students explore the modelling and analysis of information from a conceptual, technical and practical perspective. [24L, 12T]
Prerequisite: CCT372H5

CCT377H5 Applied Perception: Image and Sound Processing (SCI)
This course will emphasize the theoretical, methodological, and empirical issues in the study auditory and visual signal processing and signal compression. These issues will be examined and illustrated in the context of the requirements of communications applications such as in flight, medical and driving simulators, virtual reality, remote piloting and teleoperation, infrared and indirect vision, image transmission and image retrieval, telemedicine, video teleconferencing, robotics and artificial vision systems. Related human factors and psychophysical research would be explored. [24L, 12T]
Prerequisite: CCT109H5, 110H5; CCT202H5; PSY100Y5

CCT380H5 Human-Computer Interaction and Communication (SSc)
The emphasis in this course will be on theoretical, methodological, and empirical issues in the study of Human-Computer Interaction. Intelligent interface designs, usability assessment, user modeling and the accessibility of the technology for the disabled are among the topics to be examined. Related behavioural investigations concerning the ease and efficiency of users' interactions with computerized environments will also be discussed. [24L, 12T]
Prerequisite: CCT109H5, 110H5/ CCT100H5, 101H5

CCT381H5 Virtual Media Audiences: Imagined and Actual (IDM) (SSc)
Audiences are social constructions which must be imagined to be actualized. In emerging social media space capacity to characterize imagined audiences provides a foundational framework for determining the information representations and presentations necessary to create those virtual audiences. This approach is foundation to personal, commercial and public sector exploration of virtual worlds. Beginning with an exploration of the nature and role of audiences across multiple virtual and electronic media, the students explore the conception, perception and reality of imagined and actual audiences. Broadcast models, interactive models, live audience, audience reading, gender, culture, and audience feedback are investigated.
Prerequisite: CCT213H5, CCT218H5
CCT382H5 Edutainment: Immersive Learning (IDM) (SSc)
In this course, students will be introduced to Multimedia Knowledge Management by working on and building a prototype of an educational interactive knowledge game. Addressing issues of Digital Media design, students in collaborative groups will develop and/or employ appropriate research methodologies, read relevant material to design the game flow, create characters, and design storyboards / wireframes. Students will identify an educational need, define requirements, and develop a web-based interactive game to meet them. Students will conduct iterative usability testing and finally build a website featuring their semi-functional prototype. The course does not require programming experience, but a familiarity with web design, image rendering, and animation software could be an asset.

Prerequisite: CCT218H5, CCT219H5

CCT383H5 The Interactive Society (SSc)
This course introduces students to the theoretical and practical study of how interactive digital media and systems affect, influence and reshape our society and what does it mean to be a "user" in the information-centric society. It will expose students to specific theoretical issues such as privacy by design, usable privacy, marginalized and at-risk user groups, the digital divide, behavioural modification (persuasion) through new media, ICT4D (info tech for development) and empowerment/alienation through intelligent interactive systems. Focus will be on developing skills that will enable students to propose changes (design, policy, framework) to existing and future envisioned interactive technologies that address the issues analyzed.

Prerequisite: CCT109H5, CCT110H5, minimum of 8.0 credits.

CCT384H5 Inclusive Design and Social Responsibility (SH) (SSc)
The course provides an overview of inclusive design, a paradigm that empowers people of all ages and abilities. By analyzing products, buildings and communities from an inclusive perspective and making the needs of people the central focus of the design process this new paradigm seeks to develop form from function to increase the usefulness and responsiveness of our physical world for a wider and more diverse range of people.

Prerequisite: CCT109H5, 110H5

CCT385H5 An Introduction to Immersive Environments (IDM) (SSc)
Innovative user interfaces and powerful information technology services enable individuals to construct and immerse themselves in virtual environments. This course investigates different types of immersive technologies. This is a domain of artistic, scientific, and commercial experimentation and exploration. Students will also be exposed to a variety of these technologies both from a conceptual and a practical perspective; they will explore questions of representation, perception, consciousness, and behaviour. Through the course the students will have an opportunity to appreciate the process of defining, creating, experiencing and evaluating immersive environments.

Prerequisite: CCT213H5, CCT219H5

CCT386H5 Information Practice in Virtual Worlds: Exploration of Information Environments (SSc)
From Webkinz to World of Warcraft, in the past decade immersive, 3D gaming environments have driven the technological and social development of virtual worlds. With or without the gaming aspects, virtual worlds have the potential to support a wide variety of activities related to information creation, distribution, reception, and use in supporting social, economic, and cultural causes. Compared to everyday information practices, however, those enacted in virtual worlds are uniquely characterized by multimodality, synchronicity, digital embodiment, and geographic distribution of users. In this course, students engage in participatory learning in virtual environments such as Second Life and World of Warcraft, using avatars to assess how the world’s technological and social features support and constrain information practices. Using theories of gaming, virtuality, and information lifecycles, students critically analyse how information is produced and used in these environments.

Prerequisite: CCT109H5, CCT110H5, minimum of 8.0 credits.

CCT390H5 Field Experiences in CCIT (SSc)
An opportunity to confront current debates in CCIT through field experience. The type of field experience varies from year to year, but may involve travel and participation in international conferences or other relevant activities. Students are responsible for travel expenses.

Prerequisite: Permission of Instructor.
Formerly Contemporary Issues in CCIT

CCT391H5 Topics in Communication, Culture, Information and Technology (SH) (SSc)
An in-depth examination of selected CCIT topics offered at Sheridan College. Topics will vary from year to year and the content in any given year depends on the instructor.

Prerequisite: Minimum 8.0 credits.
CCT395H5 Topics in Communication, Culture, Information & Technology (Ssc)
An in-depth examination of selected topics in communication, culture and information technology. Topics vary from year to year, and the content in any given year depends upon the instructor. [24L]
Prerequisite: Minimum of 8.0 credits

CCT399Y5 Research Opportunity Program (ROP) (HUM,SSc,SCI)
This course provides an opportunity for third or higher year students to assist with the research project of a professor in return for 399Y course credit. Students have an opportunity to become involved in original research and enhance their research skills. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 24) for more details.
Exclusion: CCT299Y5, VCC399Y5
Prerequisite: A minimum of 10.0 credits

CCT400H5 Advanced Project (SSc)
Majors and specialists are given the opportunity to develop a critical perspective on selected issues in CCIT. Students design and implement an advanced project on a topic of interest by engaging with advanced readings. A central aim is to refine the skills in critical analysis and in oral and written communication. [24S]
Prerequisite: completion of 13.0 credits

CCT401H5 Supervised Reading Course (SSc)
A student initiated reading and research course carried out under the supervision of a faculty member. Students will carry out a research project on a selected topic of their choice which is related to Digital Enterprise Management. Students must obtain permission from the faculty member who they would like to have as their supervisor.
Exclusion: CCT401H5
Prerequisite: Completion of 13.0 credits. Student must obtain written approval of the supervising faculty member and the co-ordinator of the DEM program before enrolling.

CCT402H5 Creating, Protecting and Managing Digital Artifacts (SSc)
Digital artifacts play an increasingly important role in our society. It is essential that in the digitization of these artifacts appropriate attention is paid to their representation, protection and management. Students will review the theories and practices of representation. They will investigate the technologies associated with the storage of digital artifacts as well as investigating appropriate legal perspectives. This varied knowledge will be integrated into a study of best practices in the management of digital artifacts.
Prerequisite: CCT206H5, minimum of 13.0 credits.

CCT403H5 Finance, Innovation and the Digital Firm (SSc)
Students will learn about financial aspects of digital industries. They will gain knowledge about how financial and other incentives shape the decisions of agents in the digital marketplace. Such a knowledge helps to identify industry trends aiding their own decisions when participating in Internet related industries. Topics covered include online and traditional media industries, aspects of e-commerce and marketing, open source software and crowd-sourcing. A highly effective way to gain such knowledge is by covering a relevant topic in an academic essay. This way the students will also improve their writing skills, and learn better how to cover financial aspects of their chosen topic in a scholarly manner. [24L]
Prerequisite: Minimum of 13.0 credits.

CCT404H5 Integrative Design Project (SSc)
This project-based course aims to demonstrate how design principles can be creatively applied to solving problems in areas as varied as business, health care delivery, urban planning and development. Students will study current thinking and practice in design-based approaches to problem solving through seminars, field-based research and a major integrative project. This course is particularly appropriate for DEM and VCC specialist students. [36L]
Prerequisite: A minimum of 13.0 credits.
Recommended Preparation: CCT204H5

CCT405H5 Individual Project (SSc)
A research project carried out under the supervision of a faculty member. Students will carry out a research project on a selected topic related to CCIT. Students must obtain signed permission from the faculty member who they would like to have as their supervisor.
Exclusion: CCT401H5
Prerequisite: Completion of 13.0 credits.
Enrolment is limited

CCT406H5 Capstone Design Project (SH) (SSc)
An applied project-based capstone course in which groups will be paired with an identified client with real-life needs in digital media creation. Students will work in small cross-functional teams to develop and present proposals to client representatives and a panel of industry experts. Students will also be taught the arts of networking, proposal writing and project management.
Prerequisite: CCT204H5/ CCT260H5, minimum of 13.0 credits.
CCT409H5 Special Topics in Work-Based Learning (SSc,EXP)
An advanced unpaid field placement working on specially designed projects that explore collaborative, collective and global approaches to practical knowledge application. The placements may include international internships, collaborative group internships and community-based initiatives. The projects may vary from year to year depending on the external partners. Students will engage with others in the course through an online class component and complete individual reports and critical evaluations of the work experience.
Exclusion: CCT411H5
Prerequisite: Minimum 13.0 credits and minimum CGPA of 2.5.

CCT410H5 CCIT Internship I (SSc,EXP)
This course is a practical internship and is available only upon application from students registered in the CCIT/DEM programs. Through a placement, students will apply the expertise in communication, culture, and information technology that they have gained through previous courses. Students must plan well in advance for the placement and work closely with the placement officer for CCIT to determine eligibility and suitability. A report and presentation will be required at the end of the placement. These, along with the employer’s assessment, will provide the main part of the course mark.
Prerequisite: Completion of 13.0 credits; minimum CGPA 2.5; and permission of internship coordinator.

CCT411H5 CCIT Internship II (SSc,EXP)
This course is a practical internship and is available upon application from students registered in any CCIT program who have completed CCT410H5. The course is intended for students who have the opportunity to continue their CCT410H5 internship for a second semester. A report and presentation will be required at the end of the placement. These, along with the employer’s assessment, will provide the main part of the course mark.
Prerequisite: Completion of 13.0 full credits including CCT410H5, minimum cumulative grade point average of 2.5 and permission of internship coordinator.

CCT412H5 Self-Directed Research Project: Advanced Studio Practices (SH) (Ssc)
This course facilitates a student-led research project to be carried out under the supervision of a faculty member. This is an opportunity to develop a critical and practical perspective on selected issues and practices within CCIT. Students design and implement an advanced project on a topic of interest using advanced creative and critical production skills. The aim is to redefine and articulate critical ideas through the process of making creative work. Students must obtain signed permission from a potential supervising faculty member.
Prerequisite: 1.0 credit from CCT305H5/ 351H5/ 353H5/ 357H5/ 360H5

CCT413H5 Work Integrated Learning (IDM) (SSc,EXP)
This course provides students with the opportunity to apply disciplinary-based knowledge to practical problems in the real work world. Students will complete a minimum of 100 hours of project work through one of the following: an unpaid internship, a faculty research project, a not-for-profit or an industry-based project. The objective is for students to integrate discipline-based content with real world problems while developing professional acumen. Students will be required to keep a reflective learning journal based on their personal, professional and intellectual growth, as well as produce a final report on the completion of their placement or project.
Exclusion: CCT410H5
Prerequisite: A minimum of 13.0 credits.

CCT414H5 Special Topics in Knowledge, Media and Design (IDM) (SSc,EXP)
An in-depth examination of selected topics in interactive digital media with emphasis on knowledge, media and design.
Prerequisite: Minimum 13.0 credits

MGD415H5 E-Business Strategies (SSc)
Electronic business, the extensive use of the web and the Internet, is radically changing existing businesses. New Internet businesses are also being created at an unprecedented rate. New business models, e-business technologies, payment mechanisms, legal and regulatory issues (e.g., intellectual property rights, privacy and security) and the economics of e-business will be investigated from a research and practical perspective. [24L, 12T]
Exclusion: MGT415H5,471H5
Prerequisite: CCT225H5 (or equivalent), CCT355H5; MGM101H5 (or equivalent)

MGD420H5 Global Digital Industries (SSc)
The nature of digital industries will be investigated. The structure and dynamics of various industries, and how they interact with each other, will be emphasized. Topics covered include industries related to traditional media, entertainment, software and other new media. A global perspective will be adopted in this course. [24L, 12T]
Prerequisite: CCT321H5 (or equivalent), 322H5 (or equivalent), 324H5 (or equivalent); MGM101H5 (or equivalent)
CCT420H5 Information Technology and Globalization (SSc)
The variety of ways in which various information technologies influence and are influenced by globalization will be critically examined. The class will explore metaphors or ways of thinking about society and technology to critically examine the complex process and the diverse consequences of globalization. Topics may shift focus yearly but will include the economy, culture, politics, social movements, migration, social identity, war and global conflict, etc.
*Prerequisite:* CCT109H5, CCT110H5, completion of 13.0 credits.

MGD421H5 Technological Entrepreneurship (SSc)
This course considers the role of entrepreneurship in society and the process of initiating and developing a new business venture. Topics include entrepreneurial behaviour, characteristics of entrepreneurial teams, evaluation of new ventures, correlates of success, the business plan, growth strategies, venture capital and financing. [24L, 12T]

MGD422H5 Management of Technological Innovation (SSc)
Technological innovation involves the application of knowledge to create new products, services and organizational processes. This course examines technological innovation from an organizational and strategic perspective. Topics include organizational conditions for innovation, development of organizational knowledge and capabilities, new product development, technological change and evolution, integration of R & D and firm strategy, technology alliances and joint-ventures. [24L, 12T]
*Prerequisite:* CCT321H5/ MGM230H5, CCT322H5/ MGT252H5, CCT324H5/ MGT262H5; MGM101H5

CCT423H5 Game Development Project (SH) (HUM,SSc)
This course will provide the opportunity to develop a practical understanding of the game development cycle. Students will design and develop an original game in support of a specific narrative, set of rules or play mechanics. [24L, 12P]
*Prerequisite:* CCT311H5 or CCT312H5

MGD423H5 Technology in Organizations (SSc)
This course is designed to give students an appreciation of the technology and management issues surrounding the development and use of information technology in organizations. Main themes emphasized are understanding: 1) information technology and its role in organizations; 2) how managers gain a competitive advantage by using information technology; and 3) how they use information technology to redesign their organizations and industries. [24L, 12T]

CCT424H5 Strategic Innovation (DEM) (SSc)
An indepth study of the development of innovative strategies for organizations with an emphasis on digital enterprises. The nature of strategic innovation will be studied and a variety of analytic frameworks introduced. Concepts will be explored through a combination of lectures and case studies. [24L, 12T]
*Exclusion:* MGT400H5; MGM400H5
*Prerequisite:* CCT321H5, 322H5, 324H5; MGM101H5, 102H5

MGD425H5 Macroeconomics and the Knowledge Economy (SSc)
This course will introduce basic macroeconomics concepts such as national income and its determination, monetary and fiscal policy, comparative advantage, international trade and foreign exchange fluctuations. Issues relating to macroeconomic aspects of the knowledge economy will also be addressed. [24L, 12T]
*Exclusion:* ECO100Y5
*Prerequisite:* CCT319H5 (or equivalent), 321H5 (or equivalent), 322H5 (or equivalent), 324H5 (or equivalent); MGM101H5 (or equivalent)

MGD426H5 Enterprise Risk Management (SSc)
This course will address the identification and management of risks that are specific to digital industries such as network penetration, transaction processing interruption and flow disruption, provision of audit and backup facilities. The course will also integrate technical security issues along with managerial and legal considerations. [24L, 12T]
*Prerequisite:* CCT319H5, 321H5, 322H5, 324H5; MGM101H5.

MGD427H5 Advanced Legal Issues (SSc)
This course will build on the foundations established in CCT206H5. Issues relating to the protection of digital rights, taxation, privacy, jurisdiction and regulation will be examined in detail through the use of recent legal scholarship and evolving case law. [24L, 12T]
*Exclusion:* JGM291H5; MGM390H5, 393H5, 394H5, 423H5, 429H5
*Prerequisite:* CCT206H5 (or equivalent); MGM101H5 (or equivalent)
MGT428H5 Project Management (SSc)
Approaches to the management of complex technical projects will be investigated. Topics include project estimating, costing and evaluation, organizing and managing project teams, quantitative methods for project planning and scheduling, introduction to computer-based project management tools. The course may involve an applied field project. [24L, 12T]
Exclusion: MGT328H5
Prerequisite: CCT324H5 (or equivalent), 225H5/325H5 (or equivalent); MGM101H5 (or equivalent)

MGT429H5 Data Analysis II (SSc)
This course builds on CCT226, Data Analysis I, focusing mainly on the data analysis and management in a database context. Topics covered include behavioural modeling, click stream analysis, Web traffic analysis and other modeling and analysis topics that are relevant in a digital context.
Prerequisite: CCT226H5, 322H5

CCT430H5 Networked Life (SSc)
The rise of information and communication technologies in contemporary societies has highlighted the interdependent nature of relationships; person-person, person-machine, machine-person, and machine-machine. Network analysis offers a point-of-view with which we can analyze networks to understand the roles of people and technology, identify the source of existing or potential issues, and the exchange of resources and information. This course applies network theory and methodology to examine how technology is used to maintain and build personal networks. It will further explore how personal networks intersect with larger institutional networks (e.g. corporations and universities) and informal networks (e.g. online communities and sports clubs). In the process, students will be guided in how to identify, measure, and collect data on selected networks, how to then analyze this data using a variety of analytic techniques. [24L]
Prerequisite: CCT208H5

CCT433H5 Sustainable Design (SH) (SSc)
This course immerses students in sustainable design methodologies based upon whole systems analysis, applying the quadruple bottom line of people, profit, planet, and culture to understand and design for environmental issues and social change. During this course, students will apply the process and rhetoric of sustainable systems thinking to the re-design of an object or service applying such methodologies as cradle-to-cradle, ‘design-for-environment’, pricing based on full cost accounting, greening of the supply chain, and corporate responsibility. Throughout the course, students will examine the need for sustainable design through case studies, best practice analyses, and relevant readings.
Prerequisite: CCT204H5/CCT250H5, minimum of 13.0 credits

CCT434H5 Design Thinking II (SH) (SSc)
An advanced project-based seminar on the art and creative directions of design thinking. Combining traditional and innovative creativity methods, a variety of design projects are conceptualized and drafted for proposal or implementation. This course embraces design thinking as a holistic, interdisciplinary approach that integrates methodical creativity and overarching design principles, such as aesthetics, futures-thinking, progress and metadesign.
Prerequisite: CCT204H5

CCT441H5 Online Collaborative Project Management (SSc)
Information Communication Technologies have facilitated a perceptible change in collaborative practices across geographically dispersed teams and projects. Therefore, Computer Supported Collaborative Work (CSCW) is, increasingly, a major area of design and research across many disciplines and contexts. This class takes a theoretical and practical approach to computer supported collaboration by placing students in interdisciplinary teams spread across traditional geographic boundaries. The class covers topics which include: organizing and managing project teams, quantitative methods for project planning and scheduling, introduction to computer-based project management and collaboration tools. The class will be focused on project based learning and will look at key literatures in CSCW and project management.
Prerequisite: Minimum 13.0 credits and minimum CGPA of 2.5.

CCT451H5 Digital Media: Advanced Audio Production (SH) (HUM)
This course explores how to design and produce a soundtrack for film or television. The foundations of technical theory and nomenclature will be provided, as well as aesthetic guidelines. Practical exercises will explore: voice recording, use of library sound effects, creative sound design, sound editing and processing technology and soundtrack mixing. [24L, 12P]
Prerequisite: CCT353H5

CCT452H5 Graphic Design and Popular Culture (SH) (SSc)
This course will continue from where History and Practice of Design leaves off; from the beginning of the Post-Modern period or c.1975. It will study the history of graphic design to the present in roughly chronological order; it will focus on specific topics rather than on movements, schools or chronological events. Topics will highlight how social trends, political forces, technological innovation and continuing folk traditions all contribute to the visual environment we all inhabit today. Topics will emphasize popular culture as a force shaping graphic design while also referring to a theoretical graphic design discourse.
Prerequisite: CCT204H5, CCT352H5
CCT453H5 Digital Media: Advanced Video Production (SH) (HUM)
This course focuses on advanced theoretical and practical aspects of video production and editing. Storytelling techniques, the relationship of form to content, and montage strategies will be investigated. Over the course of the term students will work in teams to direct, film and edit video using digital technologies. [48L]
Prerequisite: CCT353H5

CCT454H5 Advanced Documentary Practices (SH) (HUM)
This course explores the practice, aesthetic and theory surrounding the subject of documentary as a form. Objectivity, ethics, censorship, representation, reflexivity, responsibility to the audience and authorial voice will be examined. Students will engage in preparatory practical exercises, culminating with the production of a short digital video documentary. [24L, 12T]
Prerequisite: CCT353H5

CCT456H5 Web Analytics for Online Marketing (SH) (SSc)
Examines qualitative and quantitative analytical methods used by online advertising and marketing industry professionals. Students will learn about search engine optimization, trend analysis, data mining, quasi-experimental testing, interaction attribution models, and the effect of emerging technologies on tracking and optimizing messaging. [24L, 12P]
Prerequisite: CCT356H5

CCT457H5 Digital Media: Advanced Photography Production (SH) (SSc)
This course focuses on advanced theoretical and practical aspects of digital image production and editing. Production techniques, professional practices and workflows, the relationship of form to content, and digital darkroom strategies will be investigated. Over the course of the term students will work individually and in teams to create and edit images using professional grade digital technologies. [24L, 24P]
Prerequisite: CCT357H5

CCT460H5 Advanced Web Design (SH) (SSc)
This course builds on the client-side web development skill of the Intermediate Web Design courses by adding a server-side programming and database design component. Students will learn the theoretical and practical aspects of implementing a database including data modelling, development, communication and security. Additionally, server-side programming will be introduced as a means of communication and interaction between client-side web pages and database data, allowing students to develop a dynamic database driven website. [24L, 12P]
Prerequisite: CCT260H5, CCT360H5
Recommended Preparation: Solid experience with static HTML is mandatory. Previous exposure to the logic of a programming language is advised.

CCT470H5 Information Visualization (SH) (SSc)
The visualization of data is a powerful tool that increasingly impacts communication, marketing and strategic decision-making. This fourth-year seminar course builds on the design stream in CCIT and will investigate technologies and strategies for conceptualizing and representing information to various user groups. [24L]
Prerequisite: CCT305H5 or CCT360H5

CCT471H5 Knowledge Representation and Reasoning (IDM) (SSc)
This course explores the various formalisms that have been developed to represent knowledge and uncertainty. In addition, since much knowledge is 'created' as a result of reasoning processes, the representation and implementation of reasoning schemes are explored. [24L, 12T]
Prerequisite: CCT372H5

CCT477H5 Culture and Technology I (IDM) (SSc)
Introduction to the wide range of issues and methodologies employed across the academy to identify, understand, analyze, investigate, and critique issues at the intersection of culture and technology. Provides a background in philosophy of information, philosophy of technology, and science and technology studies. Affiliated with the McLuhan Program in Culture & Technology, a program of the Coach House Institute (CHI). Particular focus on socio-technical issues having to do with computing, information systems and services, digital technologies, media, and the internet and social media.
Prerequisite: Minimum of 13.0 credits, permission from the department.
CCT478H5 Culture and Technology I (IDM) (SSc)
Introduction to the wide range of issues and methodologies employed across the academy to identify, understand, analyze, investigate, and critique issues at the intersection of culture and technology. Provides a background in philosophy of information, philosophy of technology, and science and technology studies. Affiliated with the McLuhan Program in Culture & Technology, a program of the Coach House Institute (CHI). Particular focus on socio-technical issues having to do with computing, information systems and services, digital technologies, media, and the internet and social media.
Prerequisite: Minimum 13.0 credits, permission from the department.

CCT480H5 User Integrated Design for Interaction (IDM) (SSc)
The course investigates how people interact with digital systems to enable the production of quality design from the perspective of the user. The course examines how interactive systems are conceptualized, designed, implemented, and deployed to meet users' needs. Students will be also acquire the capacity to evaluate systems and to critically assess different HCI methods and approaches. It begins by developing an understanding of usability and focuses on enabling students to acquire an understanding of the user-centred design process (e.g. user studies, prototyping, and evaluation. [24L, 12T]
Prerequisite: CCT382H5

CCT481H5 Augmented Places and Social Media Spaces (IDM) (SSc)
Increasingly we are seeing a hybridization of information location where media provide a framework or environment for users (participants) to construct reality and relationships. The course explores emergence of new ubiquitous communication cultures and the increasingly pervasive use of technology for the augmentation of people, places, and actual world entities (e.g. objects). In this course, students will explore various mechanisms of visualizing context-based information and the shaping of social media spaces. [24L, 12T]
Prerequisite: CCT382H5

CCT482H5 Interactive Electronic Design (SH) (SSc)
This course investigates the emerging field of critical making, which encourages students to approach social, communication and cultural issues through material engagement versus the literal and oral media more traditionally used in social science research. Students will not only explore core tensions and challenges regarding technology’s role and influence in society, but engage these challenges directly through the design and physical creation of alternative technological prototypes. Basic mechanics, electronics and programming will be taught, with an understanding that thinking materially is rare for many most social science students. No previous knowledge is assumed. [24L, 12T]
Prerequisite: Minimum of 13.0 credits.

CCT483H5 Play, Performance and Community in Digital Games (SSc)
Students will explore the complex relationship between games and play. Starting with an overview of the major play theories, students will learn how cognitive, philosophical and social theories of play are used to guide and inform game design. The increasingly prominent role of the player in the co-creation and performance of digital games will be examined. Students will also explore the emergences of player communities and consider the various issues that this introduces into design and management process, including important new questions about governance, player and creative freedoms, and immaterial labour.
Prerequisite: CCT382H5/ minimum of 13 credits.

CCT485H5 User Experience Design (SSc)
The focus of the course is on understanding the experiences of users and their communities as affected by their interaction with digital technologies in information-centric societies. Students will learn the theoretical framework and practical aspects of advanced user-centred design principles (such as participatory design and techno-centric ethnographies). This course will represent an opportunity for students to enrich their understanding of the deep interconnections between human factors, human needs, interactive technologies, information, as projected on several dimensions: cultural, societal, ergonomic, and economic. [24L, 12P]
Prerequisite: CCT380H5/ 480H5, minimum of 13.0 credits.

CCT487H5 Human Centred Design (IDM) (SSc)
An approach to design grounded in understanding the real-world practices of users and communities. The course draws most heavily from the ‘participatory design’ school, in which the prospective users play a vital collaborative role throughout all stages of the development process. Students work in teams with a ‘real’ user group developing a prototype knowledge media application. The purpose of this course is to provide students with both theoretical foundations and practical experience in developing information systems that are driven by the needs and active participation of users. It will prepare students for collaborating with users in a variety of settings to develop their own systems. In contrast to conventional rationalistic approaches to information systems development (ISD), in this course information systems will be regarded as fundamentally social processes that can be supported by information technologies. System design will therefore be treated not primarily as an engineering problem requiring the application of formalized methodologies and abstract modeling techniques by technical experts. Rather, systems design will be viewed as an on-going, multi-faceted process involving the balancing of conflicting social and technical opportunities and constraints requiring experience within the actual use context.
Prerequisite: Minimum 13.0 credits, permission from the department.
CCT488H5 Human Centred Design (IDM) (SSc)
An approach to design grounded in understanding the real-world practices of users and communities. The course draws most heavily from the 'participatory design' school, in which the prospective users play a vital collaborative role throughout all stages of the development process. Students work in teams with a 'real' user group developing a prototype knowledge media application. The purpose of this course is to provide students with both theoretical foundations and practical experience in developing information systems that are driven by the needs and active participation of users. It will prepare students for collaborating with users in a variety of settings to develop their own systems. In contrast to conventional rationalistic approaches to information systems development (ISD), in this course information systems will be regarded as fundamentally social processes that can be supported by information technologies. System design will therefore be treated not primarily as an engineering problem requiring the application of formalized methodologies and abstract modeling techniques by technical experts. Rather, systems design will be viewed as an on-going, multi-faceted process involving the balancing of conflicting social and technical opportunities and constraints requiring experience within the actual use context.
**Prerequisite:** Minimum of 13.0 credits, permission from the department.

CCT490H5 Topics in Communication, Culture and Information Technology (SSc)
An in-depth examination of selected topics in communication, culture, and information technology. Topics vary from year to year, and the content in any given year depends upon the instructor. [24S]
**Prerequisite:** Minimum 13.0 credits.

CCT491H5 Topics in Communication, Culture, Information and Technology (SH) (SSc)
An in-depth examination of selected CCIT topics offered at Sheridan College. Topics will vary from year to year and the content in any given year depends upon the instructor. [24L]
**Prerequisite:** CCT109H5, CCT110H5, minimum 13.0 credits, approval by instructor

CCT495H5 Topics in Communication, Culture, Information & Technology (SSc)
An in-depth examination of selected topics in communication, culture, information, and technology. Topics vary from year to year and the content in any given year depends on the instructor. [24L]
**Prerequisite:** Minimum of 13.0 credits.

CCT497H5 Technologies for Knowledge Media (IDM) (SSc)
Knowledge media are systems of incorporating computer and communications technology that enhance human thinking, creativity, communication, collaboration, and learning. This course will focus on important skills that are useful in developing knowledge media. The course will cover rapid prototyping design of electronic artifacts, focusing on Websites and blogs (using WordPress), mobile and desktop applications, and online magazine layout. Methods covered in this course will include requirements analysis, user-centred design, rapid prototyping, evaluation, information, architecting, desktop publishing, and web design. Knowledge media are systems of incorporating computer and communications technology that enhance human thinking, creativity, communication, collaboration, and learning. This course will focus on important skills that are useful in developing knowledge media. The course will cover rapid prototyping design of electronic artifacts, focusing on Websites and blogs (using WordPress), mobile and desktop applications, and online magazine layout. Methods covered in this course will include requirements analysis, user-centred design, rapid prototyping, evaluation, information, architecting, desktop publishing, and web design.
**Prerequisite:** Minimum 13.0 credits, permission from the department.

CCT498H5 Technologies for Knowledge Media (IDM) (SSc)
Knowledge media are systems of incorporating computer and communications technology that enhance human thinking, creativity, communication, collaboration, and learning. This course will focus on important skills that are useful in developing knowledge media. The course will cover rapid prototyping design of electronic artifacts, focusing on Websites and blogs (using WordPress), mobile and desktop applications, and online magazine layout. Methods covered in this course will include requirements analysis, user-centred design, rapid prototyping, evaluation, information, architecting, desktop publishing, and web design. Knowledge media are systems of incorporating computer and communications technology that enhance human thinking, creativity, communication, collaboration, and learning. This course will focus on important skills that are useful in developing knowledge media. The course will cover rapid prototyping design of electronic artifacts, focusing on Websites and blogs (using WordPress), mobile and desktop applications, and online magazine layout. Methods covered in this course will include requirements analysis, user-centred design, rapid prototyping, evaluation, information, architecting, desktop publishing, and web design.
**Prerequisite:** Minimum 13.0 credits, permission from the department.
CCT499Y5 Research Opportunity (SSc)
This course provides an opportunity for third or higher year students to assist with the resource project of a profession in return for 499Y credit. Students have an opportunity to become involved in original research and enhance their research skills. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time.
Prerequisite: A minimum of 13.0 credits.
Computer Science (HBSc)

Emeritus Senior Lecturer

Professor Emeritus
C. Rackoff, B.S., M.Sc., Ph.D.

Professors and Lecturers
A.J. Bonner, B.Sc., M.S., Ph.D.
S. Fidler, B.Sc., Ph.D.
A. Petersen, B.Sc., M.Sc.
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Computer science is concerned in the broadest sense with the study of computation and applications of computing. Its development has been stimulated by collaborations with many areas including engineering, the physical and life sciences, mathematics and statistics and commerce. However, computer science is much more than a set of techniques used in these application areas. Computer science as a discipline encompasses a wide range of research areas. For example, "human-computer interaction" is the study of computer usage patterns and the design of interfaces between users and computing systems. "Software engineering" includes both the process of building software and the study of software production as a business. "Systems" (networks, operating systems, databases, compilers) is concerned with the design and analysis of complex computing systems. "Numerical analysis" involves the design, testing, and analysis of numerical methods for solving computational problems in science and engineering. "Cryptography" is the study of the hiding of information. "Theory" encompasses computability – what can and cannot be computed by machines; complexity – the relative effort required to perform various computations; and verification – the formal proof of the correctness of programs.

Course offerings in the Computer Science program are intended to serve a wide variety of students, ranging from those whose primary interest is in information processing to those interested in applying computing to other fields.

Enrolment is restricted in all CSC specialist and major programs. Consult the "Programs" section of the Calendar and the Department for details of how to apply. CSC108H5, CSC148H5, MAT102H5 and MAT135Y5/137Y5 are the standard first year courses for students who plan to continue in a Computer Science program.

Notes:

1. All CSC programs require MAT102H5, MAT135Y5/137Y5, and CSC148H5. To take these courses, you must have obtained a minimum of 70% in Grade 12 Advanced Functions (MHF4U) or equivalent, and you must have completed Grade 12 Calculus and Vectors (MCV4U) or equivalent. A minimum of 70% in MCV4U is recommended.

2. All CSC specialist and major programs have a writing requirement. The recommended course to satisfy that requirement is CSC290H5. All students can also satisfy the writing requirement with any of CCT110H5; ENG100H5, 110Y5; HSC200H5, 300H5; LIN204H5; WRI203H5. If a student wishes to substitute another course to satisfy the writing requirement, the student should consult the Computer Science Faculty Advisor.

3. Students enrolled in any of the Computer Science programs are strongly encouraged to consider participating in the Professional Experience Year (PEY) program. For information, visit www.engineeringcareers.utoronto.ca/internship-programs/pey

4. Students in any University of Toronto program may complete up to 1.5 credits of third and fourth year CSC courses. Enrolment in additional CSC courses is restricted to students in CSC specialist and major programs.

5. CSC courses are offered on all three campuses of the University of Toronto. Some course numbers are unique to a specific campus, and others are shared between campuses. When a course with a common number is offered at U of T Mississauga, students are expected to take the course at the U of T Mississauga, even if that course is offered on a different campus in a different academic term. Due to enrolment pressures, U of T Mississauga students may not always be able to enrol in courses unique to the other campuses.

We welcome inquiries from U of T students at the other two campuses about taking Computer Science courses unique to the U of T Mississauga campus. A reciprocal statement holds: Due to enrolment pressures at the U of T Mississauga campus, U of T students from the other two campuses may not be able to enrol in courses unique to the U of T Mississauga campus.
For more information on Computer Science programs consult www.utm.utoronto.ca/mcs.html.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

- **CCT** Communication, Culture, Information and Technology (Page 115)
- **CSC** Computer Science (Page 133)
- **ENG** English (Page 166)
- **HSC** Biomedical Communications (Page 88)
- **LIN** Linguistics (Page 280)
- **MAT** Mathematics (Page 298)
- **STA** Statistics (Page 356)
- **WRI** Professional Writing and Communication (Page 326)

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### Specialist Program ERSPE1037 Computer Science: Information Systems Option (Science)

As of September 2005, this program is discontinued. Students already in this program may continue to follow it.

### Specialist Program ERSPE1038 Information Security (Science)

12.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited to students who meet the following criteria:

1. **Prerequisite Courses** A minimum of 4.0 credits to include CSC148H5 (65%); MAT102H5 (60%), and one of (MAT134Y5 (60%), MAT135Y5 (60%), MAT137Y5).

2. **Cumulative Grade Point Average (CGPA)** The minimum CGPA is determined annually. It is never lower than 2.0.

The Information Security Specialist is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per-course basis. See www.fees.utoronto.ca for more information on the fee structures.

**First Year:** CSC108H5, 148H5; MAT102H5, 134Y5/135Y5/137Y5

**Second Year:** CSC207H5, 209H5, 236H5, 258H5, 263H5, 290H5; MAT223H5/240H5, 232H5; STA256H5

**Third and Fourth Year:** CSC343H5, 358H5/458H5, 363H5, 369H5, 373H5; Five half courses from any 300/400 level U of T Mississauga CSC courses (including at least 1.0 credit from 400-level courses).

**Notes:** Students in the Computer Science Specialist program are advised to arrange their program so as to complete the requirement for the Major in Computer Science by the end of the third year.
Major Program ERMAJ1688 Computer Science (Science)

8.0 credits are required.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria:

1. Prerequisite courses A minimum of 4.0 credits to include CSC148H5(60%); MAT102H5(60%), and one of (MAT134Y5(60%), 135Y5(60%), 137Y5(50%)).

2. Cumulative Grade Point Average (CGPA) The minimum CGPA is determined annually.

The Computer Science Major is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

First Year: CSC108H5, 148H5; MAT102H5, 134Y5/135Y5/137Y5

Second Year: CSC207H5, 236H5, two of (CSC209H5, 258H5, 263H5), 290H5; MAT223H5/240H5; STA256H5

Third and Fourth Years: Four half courses from any 300/400 level U of T Mississauga CSC courses (including at least 0.5 credit from a 400-level course).

Minor Program ERMIN1688 Computer Science (Science)

4.0 credits are required.

First Year: CSC108H5, 148H5; MAT102H5

Second Year: CSC207H5, 236H5; one of (CSC209H5, 258H5, 263H5)

Third and Fourth Years: Two half courses from any 300/400 level U of T Mississauga CSC courses, except for CSC492H5 and CSC493H5.

Notes: Students in the CSC minor may only complete 1.5 credits of third and fourth year computer science courses. To enrol in additional upper year courses, a student must enter a CSC specialist or major program.

List of Courses

CSC104H5 The Why and How of Computing (SCI) A broad introduction to the field of computer science, intended for non-computer scientists. Topics include: history of computing; digital information representations; computer chip logic design; cryptography; social issues in computing; operating systems; problem solving and algorithms; a challenging programming introduction. This is a rigorous course intended to teach computer science, and will not teach the use of any particular software products. A robust understanding of modern computers and their use is assumed. [24L, 12T] Exclusion: any CSC course

CSC108H5 Introduction to Computer Programming (SCI) 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. List: searching, sorting and complexity. [36L, 24P] Exclusion: CSC108H1, 120H1, 148H5, 148H1, 150H1, CSCA08H3, CSCA20H3 Prerequisite: Grade 12 Advanced Functions (MHF4U).

CSC148H5 Introduction to Computer Science (SCI) Abstract data types and data structures for implementing them. Linked data structures. Encapsulation and information-hiding. Object-oriented programming. Specifications. Analyzing the efficiency of programs. Recursion. This course assumes programming experience in a language such as Python, C++, or Java, as provided by CSC108H5. Students who already have this background may consult the Computer Science faculty advisor for advice about skipping CSC108H5. [36L, 24P] Exclusion: CSC148H1, 150H1, CSCA48H3, CSCA67H3 Prerequisite: CSC108H5 You may not take this course after completing three or more CSC courses at the 200 level or higher.

CSC199H5 Computer Science Seminar (SCI) Introduction to a topic of current interest in computer science intended for a general audience. Content will vary from year to year. Prerequisite: P.I.

CSC207H5 Software Design (SCI) An introduction to software design and development concepts, methods, and tools using a statically-typed object-oriented programming language such as Java. Topics from: version control, build management, unit testing, refactoring, object-oriented design and development, design patterns, advanced IDE usage, regular expressions, and reflection. Representation of floating-point numbers and introduction to numerical computation. [24L, 12T] Exclusion: CSC207H1, CSCB07H3 Prerequisite: CSC148H5
CSC209H5 Software Tools and Systems Programming (SCI)
Software tools and development in a Unix/Linux environment, using a machine-oriented programming language (typically C). Core topics: software tools (shell utilities and make), processes and program execution, the memory model, system calls, file processing, interprocess communication (pipes and signals), and an introduction to concurrency, including multithreading. [24L, 12T]
Exclusion: CSC209H1, CSCB09H3
Prerequisite: CSC207H5

CSC236H5 Introduction to the Theory of Computation (SCI)
Mathematical induction; correctness proofs for iterative and recursive algorithms; recurrence equations and their solutions (including the "Master Theorem"); introduction to automata and formal languages. [24L, 12T]
Exclusion: CSC236H1, 240H1, CSCB36H3
Prerequisite: CSC148H5; MAT102H5

CSC258H5 Computer Organization (SCI)
An introduction to computer organization and architecture, using a common CPU architecture (typically MIPS). Core topics: boolean expressions and logic gates, numerical representations, design and analysis of combinational and sequential circuits, the control unit and datapath, the memory hierarchy, instruction set architectures, and assembly programming. Students will design circuits and program using assembly. [24L, 24P]
Exclusion: CSC258H1, CSCB58H3
Prerequisite: CSC148H5; MAT102H5

CSC263H5 Data Structures and Analysis (SCI)
Algorithm analysis: worst-case, average-case, and amortized complexity. Standard abstract data types, such as graphs, dictionaries, priority queues and disjoint sets. A variety of data structures for implementing these abstract data types, such as balanced search trees, hashing, heaps and disjoint forests. Design, implementation and comparison of data structures. Introduction to lower bounds. [24L, 12T]
Exclusion: CSC263H1, 265H1, CSCB63H3
Prerequisite: CSC207H5, 236H5; STA107H5/256H5

CSC290H5 Communication Skills for Computer Scientists (SCI)
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. This can be used to satisfy the writing requirement in CSC programs. [24L, 12T]
Exclusion: CSC290H1
Prerequisite: CSC148H5

CSC299Y5 Research Opportunity Program (SCI)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply by early March. See Experiential Learning Programs (Page 34) for more details.

CSC300H5 Computers and Society (SCI)
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. [24L, 12T]
Exclusion: CSC300H1, CSCD03H3
Prerequisite: Any CSC half-course; CGPA 2.0
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC301H5 Introduction to Software Engineering (SCI)
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. [24L, 12T]
Exclusion: CSC301H1, CSCC01H3
Prerequisite: CSC209H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC309H5 Programming on the Web (SCI)
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. [24L, 12T]
Exclusion: CSC309H1, CSCC09H3
Prerequisite: CSC209H5, 290H5
Corequisite: CSC343H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC310H5 Information Theory (SCI)
An introduction to reliable and accurate transmission of information. Entropy, lossless and lossy data compression, optimal compression, information channels, channel capacity, error-correcting codes, and digital fountain codes. Course concepts form the basis for practical applications such as ZIP and MP3 compression, channel coding for DSL lines, communication in deep space and to mobile devices, CDs and disk drives, the development of the Internet, as well as linguistics and human perception. [24L, 12T]
Exclusion: CSC310H1
Prerequisite: CSC148H5, 290H5; STA256H5; MAT223H5/240H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC318H5 The Design of Interactive Computational Media (SCI,EXP)
User-centered design of interactive systems. Methodologies, principles, metaphors, task analysis, and other topics. Interdisciplinary design; the role of industrial design and the behavioural sciences. Interactive hardware and software; concepts from computer graphics. Classes of direct manipulation systems, extensible systems, rapid prototyping tools. Additional topics in interactive computational media. Students work on projects in interdisciplinary teams. Enrolment limited, but non-computer scientists welcome.[24L, 12T]
Exclusion: CSC318H1
Prerequisite: Any CSC half-course, CGPA 3.0 or enrolment in CSC specialist or major program
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC320H5 Introduction to Visual Computing (SCI)
A unified introduction to image synthesis and image analysis aimed at students with an interest in computer graphics, computer vision or the visual arts. Focus on three major topics: (1) visual computing principles - computational and mathematical methods for creating, capturing, analyzing and manipulating digital photographs (raster algorithms, image acquisition, basic image processing, image warping, anti-aliasing); (2) digital special effects - applying these principles to create special effects found in movies and commercials; (3) visual programming - using Java and Swing/Graphics2D or C/C++ and OpenGL to create graphical user interfaces for synthesizing and manipulating photographs. [24L, 12T]
Exclusion: CSC320H1
Prerequisite: CSC207H5, 290H5; MAT223H5/240H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC321H5 Introduction to Neural Networks and Machine Learning (SCI)
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 Kmeans, the EM algorithm, Boltzmann machines, and deep belief nets. [24L, 12T]
Exclusion: CSC321H1
Prerequisite: CSC148H5, 290H5; MAT134Y5/135Y5/137Y5, 223H5/240H5; STA256H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC322H5 Introduction to Algebraic Cryptography (SCI)
(Cross list with MAT302H5) The course will take students on a journey through the methods of algebra and number theory in cryptography, from Euclid to Zero Knowledge Proofs. Topics include: block ciphers and the Advanced Encryption Standard (AES); algebraic and number-theoretic techniques and algorithms in cryptography, including methods for primality testing and factoring large numbers; encryption and digital signature systems based on RSA, factoring, elliptic curves and integer lattices; and zero-knowledge proofs. [36L, 12T]
Exclusion: MAT302H5
Prerequisite: MAT224H5/240H5, 301H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC324H5 Principles of Programming Languages (SCI)
Major topics in the development of modern programming languages. Syntax specification, type systems, type inference, exception handling, information hiding, structural recursion, run-time storage management, and programming paradigms. Two non-procedural programming paradigms: functional programming (illustrated by languages such as Lisp, Scheme, ML or Haskell) and logic programming (illustrated by languages such as Prolog, XSB or Coral). [24L, 12T]
Exclusion: CSC24H3, CSCC24H3
Prerequisite: CSC207H5, 236H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC333H5 Forensic Computing (SCI)
Introduction to the tools and techniques of the digital detective. Electronic discovery of digital data, including field investigation methods of the computer crime scene. Focus on the computer science behind computer forensics, network forensics and data forensics. Forensic topics include: computer structure, data acquisition from storage media, file system analysis, network intrusion detection, electronic evidence, Canadian computer crime case law. [24L, 12T]
Exclusion: More than 1.0 CSC credit; CSC233H5
Prerequisite: CSC290H5; FSC239Y5
Priority given to Forensic Science majors and specialists.

CSC338H5 Numerical Methods (SCI)
Computational methods for solving numerical problems in science, engineering and business. Linear and non-linear equations, approximation, optimization, interpolation, integration and differentiation. The aim is to give students a basic understanding of floating-point arithmetic and the implementation of algorithms used to solve numerical problems, as well as a familiarity with current numerical computing environments. Course concepts are crucial to a wide range of practical applications such as computational finance and portfolio management, graphics and special effects, data mining and machine learning, as well as robotics, bioinformatics, medical imaging and others. [24L, 12T]
Exclusion: CSC336H1, 350H5, 350H1, 351H1, CSCC37H3
Prerequisite: CSC148H5, 290H5/ MAT202H5; MAT134Y5/135Y5/137Y5, 223H5/240H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC343H5 Introduction to Databases (SCI)
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. [24L, 12T]
Exclusion: CSC343H1, CSCC43H3
Prerequisite: CSC263H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC347H5 Introduction to Information Security (SCI)
An investigation of many aspects of modern information security. Major topics cover: Techniques to identify and avoid common software development flaws which leave software vulnerable to crackers. Utilizing modern operating systems security features to deploy software in a protected environment. Common threats to networks and networked computers and tools to deal with them. Cryptography and the role it plays in software development, systems security and network security. [24L, 12T]
Prerequisite: CSC209H5, 236H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC358H5 Principles of Computer Networks (SCI)
Introduction to computer networks and systems programming of networks. Basic understanding of computer networks and network protocols. Network hardware and software, routing, addressing, congestion control, reliable data transfer, and socket programming. [24L, 12P]
Exclusion: CSC358H1, 458H1
Prerequisite: CSC209H5, 258H5, 263H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC363H5 Computational Complexity and Computability (SCI)
Introduction to the theory of computability: Turing machines, Church’s thesis, computable and non-computable functions, recursive and recursively enumerable sets, reducibility. Introduction to complexity theory: models of computation, P, NP, polynomial time reducibility, NP-completeness, further topics in complexity theory. [24L, 12T]
Exclusion: CSCC63H3, CSC463H1
Prerequisite: (CSC290H5, 236H5/238H5)/MAT202H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC369H5 Operating Systems (SCI)
Principles of operating systems. The operating system as a control program and as a resource allocator. Core topics: processes and threads, concurrency (synchronization, mutual exclusion, deadlock), processor, scheduling, memory management, file systems, and protection. [24L, 12T]
Exclusion: CSC369H1, CSCC69H3
Prerequisite: CSC258H5, 209H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC373H5 Algorithm Design and Analysis (SCI)
Standard algorithm design techniques: divide-and-conquer, greedy strategies, dynamic programming, linear programming, randomized, network flows, approximation algorithms and others (if time permits). Students will be expected to show good design principles and adequate skills at reasoning about the correctness and complexity of algorithms. [24L, 12T]
Exclusion: CSC373H1, 375H1, CSCC73H3
Prerequisite: CSC263H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC384H5 Introduction to Artificial Intelligence (SCI)
A broad introduction to the sub-disciplines of AI. Core topics: search methods, game playing and rule-based systems. Overview of: natural language understanding, knowledge representation, reasoning, planning, vision, robotics, learning and neural networks. Assignments provide practical experience, both theory and programming, of the core topics. [24L, 12T]
Exclusion: CSC384H1, 484H1, CSCD84H3
Prerequisite: CSC290H5, 324H5, STA256H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC399Y5 Research Opportunity Program (SCI)
This course provides a richly rewarding opportunity for students in their third or fourth year to work in the research project of a professor in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs for more details.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC404H5 Video Game Design (SCI)
An introduction to the concepts and techniques for the design and development of electronic games. Topics include: game history, social issues and story elements. The software engineering, artificial intelligence and graphics elements for video games. Level and model design. Audio elements. Real-world aspects of the gaming industry, including the business of game development, design teams and game promotion. Assignments test practical skills in game development, with a team implementation of a complete video game as a course project. [24L, 12P]
Exclusion: CSC404H1
Prerequisite: CSC290H5, Two of (CSC301H5, CSC318H5, CSC384H5, CSC418H1)
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC411H5 Machine Learning and Data Mining (SCI)
Exclusion: CSC411H1, CSCC11H3
Prerequisite: CSC207H5, 290H5, (MAT134Y5/135Y5/137Y5)/(MAT133Y5, 233H), MAT223H5/240H5; STA256H5
Recommended Preparation: CSC338H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC420H5 Introduction to Image Understanding (SCI)
This class is an introduction to fundamental concepts in image understanding, the sub-discipline of artificial intelligence that tries to make the computers "see". It will survey a variety of interesting vision problems and techniques. Specifically, the course will cover image formation, features, object and scene recognition and learning, multi-view geometry and video processing. It will also feature recognition with RGB-D data. The goal of the class will be to grasp a number of computer vision problems and understand basic approaches to tackle them for real-world applications. [24L, 12T]
Prerequisite: A second-year course in data structures (e.g., CSC263H), first-year calculus (e.g., MAT135Y), and linear algebra (e.g., MAT223H) are required. Knowledge of Matlab or Python is highly recommended.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC422H5 Cryptography and Computational Complexity (SCI)
A rigorous introduction to the theory of cryptography from the perspective of computational complexity. The relationship of cryptography to the "P=NP" question. As time permits, topics will be chosen from: (i) definitions of different kinds of pseudorandom generators, relationships between them, and ways of constructing them; (ii) secure sessions using shared private key cryptography and public key cryptography; (iii) signature schemes. [24L, 12T]
Prerequisite: CSC290H5, 363H5
Recommended Preparation: MAT301H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC423H5 Computer Forensics (SCI)
Introduction to the digital investigation of electronic evidence. The computer as a crime scene and as a party to a criminal offence. Focus on network issues (intrusion detection, sniffer logs) and operating system issues (especially file system issues: hidden data, file metadata, deleted data). This course will build upon your background in operating systems theory and practice, and will introduce you to the tools and techniques of the computer forensic specialist in the Linux and Microsoft environments. Reference to Canadian computer crime case law. [24L, 12T]
Prerequisite: CSC290H5, 347H5, 369H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC427H5 Computer Security (SCI)
Network attacks and defenses, operating system vulnerabilities, application security (e-mail, Web, databases), viruses, spyware, social engineering attacks, privacy and digital rights management. The course will cover both attack techniques and defense mechanisms. [24L, 12T]
Prerequisite: CSC290H5, 347H5, 369H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC428H5 Human-Computer Interaction (SCI) (SCI)
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. [24L, 12T]
Exclusion: CSC428H1
Prerequisite: CSC318H5; STA256H5; CSC207H5/ proficiency in Java; CGPA 3.0/enrolment in a CSC subject POSI.
Recommended Preparation: A course in PSY; CSC209H5.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC448H5 Formal Languages and Automata (SCI)
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. [24L, 12T]
Exclusion: CSC448H1
Prerequisite: CSC236H5, 290H5, 363H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC454H5 The Business of Software (SCI)
For the description of this course, please visit the Academic Calendar for the Faculty of Arts & Science. St. George Campus. www.artsandscience.utoronto.ca/ofr/calendar
Prerequisite: For prerequisites, please visit the Academic Calendar for the Faculty of Arts & Science. St. George Campus. www.artsandscience.utoronto.ca/ofr/calendar
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC458H5 Computer Networks (SCI)
Exclusion: CSC458H1, CSCD58H3
Prerequisite: CSC209H5, 258H5, 263H5, 290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC469H5 Operating Systems Design and Implementation (SCI)
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. [24L, 12T]
Exclusion: CSC469H1
Prerequisite: CSC290H5, 369H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CBJ481Y5 Independent Project in Bioinformatics (SCI,EXP)
This course is intended for students in the Bioinformatics Specialist degree program. Possible areas in which the research may take place include: functional genomics (e.g., microarray and proteomic data analysis); systems biology; and the development of novel analytical methods for large datasets. Students will be required to produce a written document of their project and present it orally. In order to enrol in this course, students must obtain, several months in advance, approval from a faculty member(s) who will serve as supervisor(s).
Prerequisite: PI
Corequisite: BIO477H5
Recommended Preparation: CSC343H5, BIO372H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC488H5 Compilers and Interpreters (SCI)
Compiler organization, compiler writing tools, use of regular expressions, finite automation and content-free grammars, scanning and parsing, runtime organization, semantic analysis, implementing the runtime model, storage allocation, code generation. [24L, 12T]
Prerequisite: CSC258H5, 263H5, 290H5, 324H5
Recommended Preparation: CSC209H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC490H5 Capstone Design Course (SCI,EXP)
This 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. Topics, themes and required preparation will vary by instructor. [24L, 12T]
Exclusion: CSC490H1, 491H1
Prerequisite: Permission of the instructor; CGPA 3.0/enrolment in a CSC Subject POSt, CSC290H5.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC492H5 Computer Science Implementation Project (SCI,EXP)
This course involves a significant implementation project in any area of Computer Science. The project may be undertaken individually or in small groups. The project is offered by arrangement with a Computer Science faculty member.
Exclusion: CSC494H1, 495H1, CSCD94H3, CSCD95H3
Prerequisite: CSC290H5; at least three 300-level CSC half-courses and permission of the department.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC493H5 Computer Science Expository Work (SCI,EXP)
This course involves a significant literature search and expository work in any area of Computer Science. This work must be undertaken individually. It is offered by arrangement with a Computer Science faculty member.
Exclusion: CSC494H1, 495H1, CSCD94H3, CSCD95H3
Prerequisite: CSC290H5; at least three 300-level CSC half-courses and permission of the department.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
Concurrent Teacher Education (HBA, HBSc and BEd)

As of 2014-15, the Concurrent Teacher Education Program is no longer offered. Students currently enrolled in the program will be allowed to continue. Students interested in an education program should consult the following staff:

Education Studies Program Co-ordinator
Dr. Liz Coulson
905-330-3734
liz.coulson@utoronto.ca

List of Courses

CTE388Y5 Anchor Subject Internship (SSc,EXP)
This 150-hour Anchor Subject Internship provides CTEP Teacher Candidates the opportunity to further develop teaching experience in their main area of study. By applying knowledge gained in previous course work, Teacher Candidates will investigate various instructional strategies, incorporate them into teaching, and assess their effectiveness. Students will also develop a foundational knowledge of learning styles through the application of David Kolb’s work.

Exclusion: CTE388H
Prerequisite: EDU310H
Corequisite: EDU310H

NOTE: The Anchor Subject Internship is a program requirement which may be taken in Years 3 or 4. The 100 or 150 hours must be completed at some point between September of one year to September of the next year, i.e.: over one academic term, over the course of two academic terms, or over the course of the summer. Students must either have completed or be enrolled in EDU310H - Principles of Teaching, when registering for the internship. This internship is only open to students enrolled in the Concurrent Teacher Education Program (CTEP).

CTE388H5 Anchor Subject Internship (SSc,EXP)
This internship is a minimum 100-hour experiential learning opportunity. The internship connects the student’s subject specialization to aspects of the teaching/training development profession. It will integrate, extend, and deepen the learning experience as students begin to identify particular academic or professional insights. Prior to enrollment, internship proposals must be approved by the program coordinator.

Exclusion: CTE388Y, EDS388H5
Prerequisite: EDU310H
Corequisite: EDU310H
NOTE: Only open to teacher candidates currently enrolled in the Concurrent Teacher Education Program.
Criminology, Law and Society (HBA)

Professors
E. Berrey, A.B., Ph.D.
R. Contreras, B.A., M.A., Ph.D.
P. Goodman, B.A., M.A., Ph.D.
K. Hannah-Moffat, B.A., M.A., Ph.D.
N. Innocente, B.A., M.A., M.A.
S. Liu, LL.B., M.A., Ph.D.
P. Maurutto, B.A., M.A., Ph.D.
A. Owusu-Bempah, B.A., M.A., Ph.D.
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The Criminology and Socio-Legal Studies Specialist is intended for students who wish to go on to graduate studies in this or a similar area. The Major provides a broad foundation for students who may have an academic or civic interest in law, crime and criminal justice. This might include:

1. students who at a later stage may wish to pursue more advanced work in areas related to, for example, criminology, law or social work;

2. students wanting to know more about the topics of the sociology of crime, particularly as these become issues of public policy.

IMPORTANT NOTES for CRIMINOLOGY, LAW AND SOCIETY PROGRAMS

Program requirements have substantially changed for the Specialist and Major programs. These changes only apply to students registering in any of these programs as of April 2007. Students enrolled in any programs prior to this date should follow the requirements in the U of T Mississauga Calendar for the year that they enrolled in their program.

SOC101Y5 will be accepted in place of SOC100H5
SOC200Y5 is equivalent to SOC221H5 plus SOC222H5
SOC300Y5 is equivalent to SOC350H5 plus SOC351H5
SOC314Y5 is equivalent to SOC231H5 plus SOC232H5

SOC221H5 and 222H5: Students majoring or specializing in Criminology and Socio-Legal Studies should enrol in SOC221H5 and 222H5 in their second year.

SOC350H5 equivalents for Specialists only: For Criminology and Socio-Legal Studies Specialists required to take SOC350H5, the following course is the only acceptable equivalent: STA220H5. In no other circumstance may students count STA220H5 toward a Major in Criminology and Socio-Legal Studies.

Sociology website: For further information about the Criminology and Socio-Legal Studies Program and information about the Sociology Department, consult our website: www.utm.utoronto.ca/sociology

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

Students should also review the Degree Requirements (Page 23) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
FSC Forensic Science (page 203)
PHL Philosophy (page 305)
POL Political Science (page 319)
PSY Psychology (page 332)
SOC Sociology (page 341)
STA Statistics (page 356)
WGS Women and Gender Studies (page 375)

Specialist Program ERSPE0727 Criminology, Law and Society (Arts)

10.0 credits are required.

Limited Enrolment – Students applying at the end of first year (4.0 credits) must have a grade of at least 70 in SOC100H5 and a CGPA of at least 2.0. Students who do not earn a grade of at least 70 in SOC100H5 and a CGPA of at least 2.0 at the end of first year (4.0 credits) must have a grade of at least 73 in each of 2 half SOC courses (1.0 credits) at the 200 level and a CGPA of at least 2.0.

First Year: SOC100H5
Students may enroll in most 200-level SOC courses after successfully completing SOC100H5.
**Higher Years:** Please be aware of the upper year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enroll in 300 and 400 level courses. Students without prerequisites can be removed at any time. No waivers will be granted.

1. SOC205H5, 209H5, 221H5, 222H5, 231H5
2. SOC350H5, 387H5
3. 1.0 credit at the 400 level
4. 5.0 additional credits of which 2.0 credits must be at the 300/400 level

**Optional Courses:** 3.0 credits must be selected from Group A and an additional 1.5 credits from Group A or Group B.

**Group A:**

**Group B:**

**Major Program ERMAJ0727 Criminology, Law and Society (Arts)**

7.0 credits are required.

**Limited Enrolment** – Students applying at the end of first year (4.0 credits) must have a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0. Students who do not earn a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0 at the end of first year (4.0 credits) must have a grade of at least 70 in each of 2 half SOC courses (1.0 credits) at the 200 level and a CGPA of at least 2.0.

**First Year:** SOC100H5

Students may enrol in most 200-level SOC courses after successfully completing SOC100H5.

**Higher Years:** Please be aware of the upper year prerequisite requirements when choosing your courses.
Diaspora and Transnational Studies (HBA)

Professors
H.K. Kwee, B.A., M.A., Ph.D.

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Academic Counsellor
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Where is home? Need it be in one place? Is it always attached to territory? Diaspora and transnational studies examines the historical and contemporary movements of peoples and the complex problems of identity and experience to which these movements give rise as well as the creative possibilities that flow from movement. The program is comparative and interdisciplinary, drawing from the social sciences, history and the arts. Students are required to take two linked half-courses that offer an introduction to a broad array of themes and disciplinary methodologies. The program offers a wide selection of additional courses, giving students the opportunity to learn about a range of diasporic communities as well as key debates in the field. Students will complete the program with 1.0 credit 400 level capstone course (or two linked half-courses).

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
CCT Communication, Culture, Information and Technology (page 115)
CIN Cinema Studies (page 101)
DTS Diaspora and Transnational Studies (page 144)
ENG English (page 166)
FRE French (page 210)
GGR Geography (page 224)
HIS History (page 238)
ITA Italian (page 261)
POL Political Science (page 319)
RLG History of Religions (page 251)
SOC Sociology (page 341)
WGS Women and Gender Studies (page 375)

Major Program ERMAJ1407 Diaspora and Transnational Studies (Arts)

7.0 credits, including at least 2.0 300/400-level credits.
Students must successfully complete the equivalent of 7.0 credits, fulfilling ALL of the following requirements:
1. DTS201H5 and DTS202H5
2. 5.0 credits from the list of electives below
3. 1.0 400-level credits, of which 0.5 must be from the following list of St. George courses: DTS401H1, DTS402H1, DTS403H1, DTS404H1, DTS405H1, DTS406H1 (should be taken in the fourth year of study).

Minor Program ERMIN1407 Diaspora and Transnational Studies (Arts)

4.0 credits, including at least 1.0 300/400-level credits.
Students wishing to do a Diaspora and Transnational Studies Minor Program must successfully complete the equivalent of 4.0 credits, fulfilling ALL of the following requirements:
1. DTS201H5 and DTS202H5
2. 2.5 credits from the list of electives below
3. 0.5 400 level credit (should be taken in the fourth year of study)

Students are responsible for checking the co- and prerequisites for all courses.

U of T Mississauga Courses

Anthropology: ANT209H5, ANT350H5, ANT352H5

Cinema Studies: CIN303H5

Communication, Culture, Information & Technology: CCT200H5, CCT218H5, CCT275H5, CCT300H5, CCT320H5, CCT430H5

English: ENG140Y5, ENG203Y5, ENG250Y5, ENG252Y5, ENG270Y5, ENG271H5, ENG272H5, ENG274H5, ENG370H5, ENG371H5, ENG382H5

Geography: GGR207H5, GGR208H5, GGR210H5, GGR267H5, GGR269H5, GGR287H5, GGR313H5, GGR318H5, GGR325H5, GGR329H5, GGR333H5, GGR349H5, GGR353H5, GGR365H5, GGR381H5, GGR418H5, GGR420H5

History: HIS203H5, HIS306H5, HIS312H5, HIS314H5, HIS318H5, HIS330H5, HIS338H5, HIS364H5, HIS366H5, HIS367H5, HIS369H5, HIS371H5, HIS384H5, HIS385H5, HIS388H5, HIS389H5, HIS390H5, HIS391H5, HIS399H5, HIS394H5, HIS396H5, HIS403H5, HIS416H5, HIS454H5, HIS479H5, HIS487H5, HIS492H5

History of Religions: RLG207H5, RLG208H5, RLG209H5, RLG352H5, RLG356H5, RLG357H5, RLG361H5, RLG374H5, RLG445H5
**Language Studies:** FRE391H5, FRE397H5; ITA234H5, ITA238H5, ITA255Y5

**Political Science:** POL113H5, POL114H5, POL208Y5, POL218Y5, POL303Y5, POL310Y5, POL317Y5, POL320Y5, POL340Y5, POL343Y5, POL346Y5, POL355Y5, POL369Y5, POL446Y5

**Sociology:** SOC236H5, SOC253H5, SOC263H5, SOC330H5, SOC332H5, SOC341H5, SOC349H5, SOC354H5, SOC375H5, SOC380H5, SOC417H5, SOC425H5, SOC432H5, SOC433H5, SOC457H5, SOC460H5

**Women and Gender Studies:** WGS200Y5, WGS215H5, WGS250H5, WGS301H5, WGS335H5, WGS340H5, WGS350H5, WGS355H5, WGS368H5, WGS369H5, WGS420H5, WGS430H5

**Arts & Science courses that can be applied to the program:**

Please refer to [http://www.artsandscience.utoronto.ca/ofr/calendar/crs_dts.htm](http://www.artsandscience.utoronto.ca/ofr/calendar/crs_dts.htm)

Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

**Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.**

**List of Courses**

**DTS201H5 Introduction to Diaspora and Transnational Studies I (HUM,SSc)**
An interdisciplinary introduction to the study of diaspora, with particular attention to questions of history, globalization, cultural production and the creative imagination. Material will be drawn from Toronto as well as from diasporic communities in other times and places. [24L]

*Exclusion:* DTS201H1, DTSB01H3

**DTS202H5 Introduction to Diaspora and Transnational Studies II (HUM,SSc)**
A continuation of DTS201H5. An interdisciplinary introduction to the study of diaspora, with particular attention to questions of history, globalization, cultural production and the creative imagination. Material will be drawn from Toronto as well as from diasporic communities in other times and places. [24L]

*Exclusion:* DTS202H1, DTSB02H3

**DTS301H5 Topics in Diaspora and Transnational Studies (HUM)**
An examination of issues on Diaspora and Transnational Studies. Content in any given year depends on instructor. See Department of Historical Studies website at [www.utm.utoronto.ca/historicalstudies](http://www.utm.utoronto.ca/historicalstudies) for details. [24L]

*Recommended Preparation:* DTS201H5/ DTS202H5

**DTS401H5 Advanced Topics in Diaspora and Transnational Studies (HUM)**
An in-depth examination of issues on Diaspora and Transnational Studies. Content in any given year depends on instructor. See Department of Historical Studies website at [www.utm.utoronto.ca/historicalstudies](http://www.utm.utoronto.ca/historicalstudies) for details. [24S]
Earth Science (HBSc)

Professors Emeriti
H.C. Halls, B.Sc., M.Sc., Ph.D.

Professors
J. Halfar, Diplom, Ph.D., Habilitation
M. Laflamme, Ph.D., B.Sc.(Agr.)
L.M. Schoenbohm, B.A., Ph.D.
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Earth Science is concerned with the origin, evolution and structure of Earth (and other planets), through the analysis of physical, chemical and biological processes.

In the last 40 years the field has been revolutionized by the discovery that the Earth’s surface is a mosaic of plates that is continually moving, growing at mid-ocean ridges, and being consumed beneath mountain ranges. Modern global data sets provided by satellites continue to improve our understanding of these processes and of their environmental impact. Although exploration for natural resources continues to be the traditional vocation of geoscientists in the community, they are now playing a vital role responding to increased public and scientific awareness of environmental problems and issues.

Despite increasing sophistication in computer, satellite and analytical techniques, field observation remains a cornerstone of Earth Science. A career in Earth Science therefore can lead not only to laboratory or office-based opportunities, but also offers scope to work in many parts of the world, under a range of field conditions. Oil and mining companies engaged in exploration and development, and those involved with environmental hazards, such as waste disposal, are all major employers of Earth Scientists. Provincial and Federal Geological Surveys also employ Earth Scientists and offer summer field assistantships. Other employment opportunities are in consulting, universities, and museums.

U of T Mississauga offers Specialist, Major and Minor programs in Earth Sciences. We also offer a Specialist program in Environmental Geosciences (HBSc) (Page 174), which meets the academic requirements for certification as a Professional Geologist in Ontario. These programs have four main aims: (1) to teach the fundamental processes involved in the global Earth system, with emphasis on the interactions between the solid Earth and its oceans, atmosphere and biosphere; (2) to understand the principal aspects of a sustainable and sufficient supply of natural resources; (3) to study the cause and mitigation of hazards such as earthquakes, volcanic eruptions and groundwater contamination, and (4) to learn how to minimize and adjust to global and environmental change. This approach, by focusing on a more global environmental perspective, should appeal to students who have a general interest in geological processes and their fundamental effects on the environment.

Students may combine Earth Science courses with those from other fields. A specialist in Geology is also available for students interested in pursuing careers in the resource industries or graduate studies in Geology. Many of our courses will be useful to students specializing in other fields such as Commerce, Geography, History and Biology.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
CHM Chemistry (page 94)
ENV Environment (page 186)
ERI Chemistry (page 94)
ERS Earth Science (page 146)
GGR Geography (page 224)
JCB Chemistry (page 94)
JEG Geography (page 224)
JGE Geography (page 224)
MAT Mathematics (page 298)
PHY Physics (page 313)

Specialist Program ERSPE1465 Earth Science (Science)

11.0 credits are required, including at least 4.0 at the 300/400 level, of which 1.0 must be at the 400 level.

Limited Enrolment – Limited Enrolment: Enrolment in this program is based on completion of 4.0 credits including ENV100Y5 / (ERS103H5, 120H5) (minimum grade of 60%).

First Year: ENV100Y5 / (ERS103H5, 120H5); CHM140Y5 / (110H5,120H5); MAT134Y5/ 135Y5/ 137Y5; PHY135Y5/ (136H5,137H5)

Second Year: ERS201H5, 202H5, 203H5; GGR217H5, 1.0 credit from GGR214H5/ 227H5/ 276H5/ 278H5

Third Year: ERS313H5, 325H5; 1.5 credits from ERS315H5/ 321H5/ (JGE378H5/ ERS317H5) 0.5 credit

**Fourth Year:** 1.0 credit from ERS419H5/470Y5/(471H5, 472H5)/JEG400Y5/GGR407H5/463H5/464H5/484H5/JCB487Y5/ERI398H5

**Major Program ERMAJ1465 Earth Science (Science)**

7.5 credits are required, including at least 2.5 at the 300/400 level.

**Limited Enrolment** – Enrolment in this program is based on completion of 4.0 credits including ENV100Y5/(ERS103H5, 120H5) (minimum grade of 60%).

**First Year:** ENV100Y5/(ERS103H5, 120H5); MAT134Y5/135Y5/137Y5; CHM140Y5/(110H5,120H5)/PHY135Y5/(136H5,137H5)

**Second Year:** ERS201H5, 202H5, 203H5; 0.5 credit from GGR214H5/217H5/227H5/276H5/278H5

**Third and Fourth Year:** 2.5 credits from ERS313H5/315H5/321H5/325H5/419H5/(JGE378H5/ERS317H5)

**Minor Program ERMIN1465 Earth Science (Science)**

4.0 credits are required.

**Limited Enrolment** – Enrolment in this program is based on completion of 4.0 credits including ENV100Y5/(ERS103H5, 120H5) (minimum grade of 60%).

**First Year:** ENV100Y5/(ERS103H5, 120H5)

**Second, Third and Fourth Year:** ERS201H5, 202H5, 203H5; 1.5 Earth Science credits at the 300/400 level including JGE378H5.

**Notes:** See also the Environmental Science Program, which combines Biology, Earth Science and Geography.

**Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.**
ERS203H5 Rock Forming Processes (SCI)
Many geological processes lead to the wide diversity of rocks found on and in the Earth. Melting of rocks at depth leads to volcanic activity and emplacement of magmas, forming igneous rocks. Weathering, erosion, and transport destroy mountains, carve the landscape we live in, and accumulate sedimentary rocks. Heat and pressure within the Earth metamorphose rocks as they are buried. This course focuses on how these processes can be understood by examination of rocks in the field, hand sample and thin section. [24L, 36P]
Exclusion: ESS222H1
Prerequisite: ERS201H5

ERS299Y5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

ERS313H5 Sedimentology (SCI)
Sedimentology concerns the formation, accumulation, alteration, and preservation of sediments in the geological record. This course will focus on the reconstruction and interpretation of ancient carbonate and siliciclastic paleoenvironments based on the analysis of sedimentary structures, depositional environments, stratigraphic successions, and fossils. The interplay between biological and geological factors responsible for sedimentary deposits will form the core of the course, including the physical transport and biological accumulation of sediments, the effects of climate-driven sea-level change on sediment deposition, and how the evolution of, and innovations within, biological systems have profoundly affected sedimentary processes over the past 3.5 billion years. This course will include a laboratory component in addition to a field trip allowing for first-hand experience with describing and interpreting sedimentological units. [24L, 36P]
Exclusion: ESS331H1, 332H1
Prerequisite: ERS201H5, 203H5
Corequisite: none

ERS315H5 Environmental Geology (SCI)
This course will focus on Earth processes as they relate to human activities. Topics include global climate change on short and long timescales; groundwater flow and contamination/human engineering of Earth processes; geological aspects of pollution and waste disposal; and environmental impact of extracting/using minerals, energy, soil, and other Earth resources. A field trip will give students a first-hand experience in aspects of human/planet interaction. [36L]
Exclusion: ESS205H1, JEE337H1; EESA05H3
Prerequisite: Two of: ERS201H5, 202H5, 203H5

ERS321H5 Past and Present Global Change (SCI)
The goals of this course are to discuss the geologic record of climate change and present an overview of the methods used to reconstruct the earth’s climate history and the techniques used to determine the timing of environmental changes. Topics to be addressed will include paleoclimatic reconstruction, climate and climatic variation, dating methods, and climate proxies. In addition, periods of past climate change will be highlighted with particular emphasis on climate change during the recent past. [36L]
Exclusion: ESS205H1, 461H1; EESB03H3
Prerequisite: Two of: ERS201H5, ERS202H5, ERS203H5

ERS325H5 Field Camp I (SCI,EXP)
This course, held on the north shore of Lake Huron in the summer, covers geological mapping skills, stratigraphic section measurements, and the recognition of rock types, fossils and geological structures in the field in order to interpret ancient geological environments (approx. 12 days of field instruction). Students must pay a course fee, which includes transportation and accommodation at the camp, but does not include the cost of food nor does it cover any course fees charged by the Office of the Registrar.

Note: This course is identical to ESS330H1 (formerly GLG340H1). U of T Mississauga students must register in the Summer Session, and provide consent waivers and the course fee to the Undergraduate Assistant for Earth Sciences in the Department of Chemical and Physical Sciences. This field camp is usually held in early May.

Registration and fee payment deadline: mid-March

For specific yearly course information, consult the ESS330H1 website on the Department of Earth Sciences, St. George Campus, University of Toronto website.
Exclusion: ESS330H1 (formerly GLG340H1); ESSC16H3, D07H3
Prerequisite: ERS202H5, 203H5
JGE378H5 Natural Hazards (SSc,SCI)
Earth is a dangerous place and risk is an inherent feature of life on this planet. Some of the events and processes that we call "hazardous," such as earthquakes, volcanic eruptions, floods, tsunamis, cyclones, and forest fires are natural environmental processes. We define them as hazards only when they pose a threat to human interests. In this course we will examine natural hazards as well as some technological hazards – their causes, their potential impacts on people, and their management and mitigation. [24L, 12T]

Exclusion: GGR378H5, ERS317H5
Prerequisite: Any 8.0 credits
Recommended Preparation: ENV100Y5, ERS103H5, ERS120H5, GGR112H5

ERS399Y5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for third or higher year students to work on the research project of a professor in earth sciences in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, enhance their research skills and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.

ERS419H5 Earth Resources (SCI,EXP)
The formation and global distribution of precious and industrial mineral deposits are introduced. Exploration methods and mining practices are discussed in terms of environmental effects and issues. Basic aspects of the economics and strategic importance of mineral reserves are also covered. Weekly field trips are included. [24L, 48P]
Prerequisite: ERS201H5, 202H5, 203H5

ERS470Y5 Research Thesis (SCI,EXP)
Arrangements for these independent research projects must be made with an Earth Science Faculty member before registration. This course requires the student to submit a completed application to the CPS Undergraduate Assistant. Registration in the course is required. The application form can be downloaded from www.utm.utoronto.ca/cps/undergraduate/resources/independent-studies-application-form. Copies of the completed report must be submitted one week prior to the end of term classes. Students may take both ERS471H5 and 472H5 in the same term. A component of the mark will be based on an oral presentation made at the end of the course.
Exclusion: ERS470Y5; ESS491H1, 492Y1; EESS09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 or GLG300(G) level, plus a 75% average in the last 5 courses taken.
NOTE: This half credit (0.5) course may be offered over the Fall Term (ERS471H5F), Winter Term (ERS471H5S) and over the full Academic Year (ERS471H5Y).

ERS472H5 Research Project (SCI,EXP)
Arrangements for these independent research projects must be made with an Earth Science Faculty member prior to registration. This course requires the student to submit a completed application to the CPS Undergraduate Assistant. Registration in the course is required. The application form can be downloaded from www.utm.utoronto.ca/cps/undergraduate/resources/independent-studies-application-form. Copies of the completed report must be submitted one week prior to the end of term classes. Students may take both ERS471H5 and 472H5 in the same term. A component of the mark will be based on an oral presentation made at the end of the course.
Exclusion: ERS470Y5; ESS491H1, 492Y1; EESS09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 or GLG300(G) level, plus a 75% average in the last 5 courses taken.
NOTE: This half credit (0.5) course may be offered over the Fall Term (472H5F), Winter Term (ERS472H5S) and over the full Academic Year (ERS472H5Y).
JCB487Y5 Advanced Interdisciplinary Research Laboratory (SCI,EXP)

Students will work together as members of a multidisciplinary team toward the completion of an interdisciplinary experimental or theoretical research project. Teams will be comprised of at least three students, with representation from at least three areas of specialization, namely, astronomy, biology, chemistry, earth sciences or physics. The interdisciplinary projects will be based on current trends in research and student teams will work to complete their projects with guidance provided by a team of faculty advisors from the Biology Department and the Department of Chemical and Physical Sciences. In addition to the rigorous development of research skills, the course will also provide students with training and practical experience in project management techniques and teamwork skills development. JCB487Y5 requires submitting an application to the department before the end of June, for Fall enrolment. Application forms may be found at http://uoft.me/cpsforms. Application should be submitted to the CPS Undergraduate Assistant. Registration on ROSI/ACORN is also required. [240P]

Exclusion: BIO400Y5, 481Y5, CBJ481Y5, CHM489Y5, ERS470Y5, 471H5, 472H5, PHY489Y5; BCH497H1, 498Y1, 499Y1, ESS491H1, 492Y1, 497H1, 497Y1; BIOD98Y3, CHMD90Y3, 91H3, ESSD09H3, 10H3, PSCD10H3

Prerequisite: 2.0 credits 300 level from BIO/CHM/JBC/JCP/ERS/G(PHYS) and 1.0 credit from BIO206H5, 314H5, CHM372H5, 373H5, 394H5, 395H5, 396H5, 397H5, ERS201H5, 202H5, PHY324H5, PHY347H5. Normally taken in student's 4th year. To register in this course, students must obtain approval from the faculty member(s) who will serve as the supervisor(s) in advance of the start of the course.

ERS499Y5 Research Opportunity Program (299Y, 399Y and 499Y) (SCI,EXP)

This course provides a richly rewarding opportunity for a fourth or higher year students to work on the research project of a professor in Earth Science in return for 499Y5 course credit. Students enrolled have an opportunity to become involved in original research, enhance their research skills and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 54) for more details.

Exclusion: ERS471H5, 472H5; ESS491H1, 492Y1; ESSD09H3, D10Y3

Prerequisite: Any 2.0 credits from the ERS300 or ESS300 level, plus a 75% average in the last five courses taken.

Recommended Preparation: Completed prog. requirements for entry into fourth year level Earth Science courses.
Economics is a social science that encompasses a particular range of human behaviour and has a strong influence on the structure, well-being, and development of a society.

Much of human activity is directed towards the satisfaction of material wants. In many areas of the world, the greater part of human effort must be directed towards meeting the most elemental demands for food, clothing, and shelter. Even in technologically-advanced societies, where these basic requirements can be met with comparative ease, the desire for more goods and services never appears to be fully satisfied. In consequence, every society - regardless of whether it is capitalist, socialist or communist in political orientation - is both competitive and cooperative. It is competitive because its members contend with one another to satisfy their individual wants from a limited supply of productive resources. It is cooperative because the greatest supply of goods is available when the activity of producing them is coordinated and organized. Economics deals with any issue arising out of the conflict between the demand for goods and services, and a limited supply of resources to satisfy those demands.

Undergraduate training in Economics is intended to familiarize students with the discipline of economic thinking, and to equip them for intelligent appraisal of contemporary economic problems. It is also intended to make students aware of the nature of economic science, and of the directions in which economic theory is moving.

Economic theory now makes considerable use of mathematics in some of its enquiries. A student who chooses to specialize in Economics should take at least one basic course in mathematics. More such courses may be taken, as several Economics courses draw on mathematical analysis.

Owing to 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.

First year preparation: ECO100Y5 and MAT133Y5/134Y5/135Y5/137Y5.

Notes:
The enrolment in most Economics courses above the 100 level and, therefore, in all Economics programs, is based on grades in ECO100Y5 and MAT133Y5/134Y5/135Y5/137Y5. ECO200Y5/204Y5/206Y5 and ECO220Y5/227Y5/STA(250H1,257H5/256H5)/STA(257H5/256H5,248H5/258H5), are required for most 300-level ECO courses. Students should consult this calendar and the U of T Mississauga Registration Guide (available at www.utm.utoronto.ca/reg) which set out the course enrolment criteria. Not all courses are offered each year.

Academic performance requirements are necessary as a condition for enrolment into 200-level ECO courses. (See Prerequisites listed under each course).

Prerequisites must be met before registering in Economics courses. These prerequisites are checked carefully by the department. It is the student's responsibility to ensure that the proper prerequisites have been met. Students may check with the Economics counsellor if they are not sure whether prerequisites are met.

Students wishing to use courses from other institutions for prerequisite purposes must submit a copy of their transcript to the Economics counsellor before classes begin. Students who do not have the relevant prerequisites will be deregistered from those courses after classes have begun. It may then be too late to enrol in another course, consequently an additional term or year may be necessary to meet degree requirements.

Enrolment in Economics programs is based on grades in ECO100Y5 and MAT133Y5/134Y5/135Y5/137Y5.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 40)
- ECO Economics (page 153)
- MAT Mathematics (page 238)
- MGM Management (page 288)
- MGT Management (page 288)
- STA Statistics (page 356)

Specialist Program ERSPE0137 Economics (Commerce)

Within a BCom degree, 15.0 credits are required.

Limited Enrolment – This program may only be taken jointly with the Specialist program in Commerce and Finance and leads to a BCom degree. Students must be accepted in the Commerce and Finance (BCom) Program in order to complete this Economics (BCom) program. Enrolment in this program is limited to students with 70% in ECO100Y5 AND (80% in MAT133Y5 or 63% in MAT134Y5/135Y5 or 60% in MAT137Y5) AND 63% in MGT120H5 AND a minimum cumulative GPA which is determined annually. Students must be accepted in ERSPE2273 to qualify for this program.

First Year: ECO100Y5; MAT133Y5/134Y5/135Y5/137Y5; MGT120H5; MGM101H5

Higher Years:
1. Additional MGT Requirements (5.0 credits)
   (a) MGT223H5, 220H5, 337Y5/ (338H5,339H5)
   (b) 1.0 credit from: MGT252H5, 262H5, 353H5, 363H5, 371H5/422H5, 374H5, 393H5
   (c) 1.0 credit in MGT at 400 level
   (d) 1.0 credit in MGT at 200+ level
   (e) No more than 15.0 credits in COM(G), MGD, MGT, MGM and ECO may be counted toward degree. STA248H5/258H5, 257H5, 261H5 count as ECO credits

2. Additional ECO Requirements (6.0 credits):
   (b) ECO327Y5/375H5
   (c) One Economic History credit from: ECO322Y5/323Y5
   (d) ECO325H5, 326H5, plus 0.5 additional ECO credit at the 300+ level

3. Writing Component (1.0 credit): One credit from the following: ANT204Y5/204H5; CLA (expect 201H5); one of (ECO320Y5, 324Y5, 333Y5, 336Y5, 343H5, 344H5, 373Y5, 399Y5, 412Y5, 433H5, 435H5, 439Y5, 456H5, 463H5, 475H5); ENG: FAH; HIS; HPS(G); LIN; PHL (except 245H5, 246H5, 247H5, 344H5, 345H5, 346H5, 347H5); POL; RLG; SOC (excluding SOC300Y5); WRI.
Specialist Program ERSPE1478 Economics (Arts, B.Com.)

13.0 credits are required.

Limited Enrolment – Enrolment in this program is limited to students with ECO100Y5(70%); MAT(133Y5(80%) + 233H5(63%)) or MAT(134Y5(63%) + 223H5(63%)) or MAT(135Y5(63%) + 223H5(63%)) or MAT(137Y5(60%) + 223H5(63%)); ECO206Y5(60%); ECO208Y5(60%); 227Y5(60%); STA(256H5(60%),258H5(60%)/260H5(60%)).

Students should apply for this program after second year once they have completed the prerequisites listed above.

First Year: ECO100Y5; MAT133Y5/134Y5/135Y5/137Y5

Higher Years:
2. 5.0 additional 300+ level ECO credits, including at least 1.0 at the 400 level

Specialist Programs

Note:
1. Economics Specialist Program ERSPE1478 leads to an Honours BA degree.
2. Economics (Commerce and Finance) Specialist Program ERSPE0137 can only be taken jointly with the Specialist program in Commerce and Finance, and thus leads to a BCom degree.
3. Enrolment in Economics (Commerce and Finance) Specialist Program ERSPE0137 Program is open only to those who have been admitted to the BCom degree program.
4. ECO205Y5, ECO244Y5, and ECO261H5 cannot be used as requirements for this program.

Major Program ERMAJ1478 Economics (Arts, B.Com.)

7.0 credits are required.

Limited Enrolment – Enrolment in the Major program is limited to students with 67% in ECO100Y5 and a CGPA of 2.0, or 63% in ECO100Y5 and a CGPA of 2.5; MAT133Y5(63%)/134Y5/135Y5/137Y5

First Year: ECO100Y5; MAT133Y5(63%)/134Y5/135Y5/137Y5


NOTE:
- ECO205Y5, ECO244Y5, and ECO261H5 cannot be used as requirements for this program.
- MGT437H5 counts as an ECO course and will satisfy the program requirements for an Economics Major.
Minor Program ERMIN1478 Economics (Arts, B.Com.)

4.0 credits are required, including one ECO course at the 300/400 level.

**Limited Enrolment** – Enrolment in the Minor program is limited to students with MAT133Y5(63%)/MAT134Y5/135Y5/137Y5; 67% in ECO100Y5; and a CGPA of 2.0, or 63% in ECO100Y and a CGPA of 2.5.

**First Year:** ECO100Y5; MAT133Y5 (63%)/134Y5/135Y5/137Y5

**Second Year:** One of ECO200Y5/204Y5/206Y5

**Higher Years:** One additional ECO credit at the 300/400 level. No more than one Economic History course is permitted in this program. ECO205Y5, ECO244Y5, and ECO261H5 cannot be used as requirements for this program.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

**ECO100Y5 Introduction to Economics (SSc)**

A survey course with emphasis on the basic concepts and techniques of macro and micro economic theory. The concepts introduced will include: national income and its determination; monetary and fiscal techniques; the derivation and use of supply and demand schedules; the theory of the firm; and principles of comparative advantage and foreign exchange fluctuations. [48L, 24T]

**ECO200Y5 Microeconomic Theory (SSc)**

An intermediate treatment of the basic tools of economic analysis. Applications may include: choice under uncertainty, oligopoly, industrial organization, pricing, resource allocation, externalities, public goods, income distribution and welfare economics. [48L, 24T]

**ECO202Y5 Macroeconomic Theory and Policy (SSc)**

Macroeconomics studies the economy as a whole. The issues it covers include: Why are some countries much richer than others? Why do most Canadians live much better than their ancestors? Why are there recessions in economic activity? What are the causes of inflation and unemployment? What are the consequences of opening up trade and investment with the rest of the world? This course develops a series of models to answer these and similar questions. [48L, 24T]

*Exclusion:* ECO208Y5/209Y5

*Prerequisite:* ECO100Y5 (67%), or ECO100Y5 63% and a CGPA of 2.5.

*Corequisite:* MAT133Y5/134Y5/135Y5/137Y5

**ECO204Y5 Microeconomic Theory and Applications (for Commerce) (SSc)**

The course uses microeconomics to analyze a variety of issues from marketing and finance to organizational structure. Topics include consumer preferences and behaviour; demand, cost analysis and estimation; allocation of inputs, pricing and firm behaviour under perfect and imperfect competition; game theory and public policy, including competition policy. Business cases are used to connect theory and practice and to highlight differences and similarities between economics and accounting, marketing and finance. This course is restricted to students in the B.Com. program. [48L, 24T]

*Exclusion:* ECO200Y5, 205Y5, 206Y5

*Prerequisite:* ECO100Y5 (67%), or ECO100Y5 63% and a CGPA of 2.5; MAT133Y5/134Y5/135Y5/137Y5

**ECO205Y5 Microeconomic Theory and Applications (for Management) (SSc)**

The course uses microeconomics to analyze a variety of issues from marketing and finance to organizational structure. Topics include demand, cost analysis and estimation; allocation of inputs, pricing and firm behaviour under perfect and imperfect competition; game theory and competition policy. Emphasis will be placed upon business cases which 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 Management Specialist Program. [48L, 24T]

*Exclusion:* ECO200Y5, 204Y5, 206Y5

*Prerequisite:* ECO100Y5 (63%)
ECO206Y5 Microeconomic Theory (SSc)
A rigorous mathematical treatment of the basic tools of economic analysis regarding consumer and producer theory. Applications may include but are not limited to: choice under uncertainty, oligopoly, industrial organization, pricing, resource allocation, intertemporal consumption, labour supply, externals, public goods, income distribution and welfare economics. This course is a requirement for certain Specialist Programs and is strongly recommended for students contemplating graduate school. [48L, 24T]
Exclusion: ECO200Y5, 204Y5, 205Y5
Prerequisite: ECO100Y5 (70%); MAT133Y5 (80%)/ 134Y5/ 135Y5 (63%)/ 137Y5 (60%)

ECO208Y5 Macroeconomic Theory (SSc)
This course deals more rigorously with the topics included in ECO202Y5. It is a requirement for certain Specialist Programs and is strongly recommended for students contemplating graduate school. [48L, 24T]
Exclusion: ECO202Y5/ 209Y5
Prerequisite: ECO100Y5 (70%); MAT133Y5 (80%)/ 134Y5/ 135Y5 (63%)/ 137Y5 (60%)

ECO209Y5 Macroeconomic Theory and Policy (SSc)
This course covers the same topics as ECO202Y5, but with emphasis on the applications useful to Commerce students. This course is restricted to students in the B.Com Program. [48L, 24T]
Exclusion: ECO202Y5, 208Y5
Prerequisite: ECO100Y5 (67%), or ECO100Y5 (63%) and a CGPA of 2.5.
Corequisite: MAT133Y5/ 134Y5/ 135Y5/ 137Y5

ECO210Y5 Quantitative Methods in Economics (SSc, SCI)
An introduction to the use of statistical analysis, including such topics as elementary probability theory, sampling distributions, tests of hypotheses, estimation; analysis of variance and regression analysis. Emphasis is placed on applications in economics and business problems. [48L, 24T]
Exclusion: BIO360H5, 361H5; ECO227Y5; MAT(123H1,124H1); PSY(201H5,202H5); STA(218H5/ 220H5, 221H5, 255H1/ 256H5)/ STA(257H5/ 256H5, 258H5)/ STA(257H5/ 256H5, 261H5/ 260H5)/ STA(257H5/ 256H5, 261H5/ 260H5)
Prerequisite: ECO100Y5 (67%), or ECO100Y5 (63%) and a CGPA 2.5; MAT133Y5/ 134Y5/ 135Y5/ 137Y5

ECO227Y5 Quantitative Methods in Economics (SSc, SCI)
This course deals more rigorously with the topics included in ECO220Y5. It is a requirement for certain Specialist Programs and is strongly recommended to adequately prepare students for ECO327Y5. This course is also recommended for students contemplating graduate school. [48L, 24T]
Exclusion: BIO360H5, 361H5; ECO220Y5; PSY(201H5,202H5); STA(218H5/ 220H5,221H5,255H1/ 256H5)/ STA(257H5/ 256H5, 258H5)/ STA(257H5/ 256H5, 261H5/ 260H5), SOC350H5, 351H5
Prerequisite: ECO100Y5 (70%); MAT133Y5 (80%)/ 134Y5/ 135Y5 (63%)/ 137Y5 (60%)

ECO244Y5 Industrial Relations (SSc)
The role, structure, and performance of industrial relations within the framework of Canada's socio-economic-political system. Growth and history of the Canadian Labour movement: its philosophy and structure. Management's strategies and tactics in collective bargaining; public policy in the field of industrial relations; strikes in so-called emergency situations: the role of unions and collective bargaining in inflation. [48L]
Exclusion: WDW244Y1/ 244H1
Prerequisite: Four full credits and a CGPA of a least 2.0.
This course is intended primarily for students in the HRIR Major program and cannot be applied to any Economics programs.

ECO261H5 Labour Market Policies (SSc)
This course is designed to provide students in the Human Resources and Industrial Relations program with knowledge of how the labour market affects the employment relationship. The basic tools of labour economics are developed and applied to various issues of organizational and government policy such as: the incentive effects of compensation arrangements, government income support programs, and minimum wage policy; the determinants of preferences for hours of work including job-sharing, overtime and retirement; the impacts of unions on compensation and productivity; public-sector employment and alternatives to the right to strike; discrimination in employment on the basis of gender and race as well as related government policies such as pay and employment equity. [24L]
Exclusion: ECO361Y5/ (343H5, 344H5), ECO239Y1
Prerequisite: ECO100Y5
This course is intended primarily for students in the HRIR Major program and cannot be applied to any Economics programs.
ECO310Y5 Industrial Organization and Public Policy (SSc)
This applied microeconomics course studies the organization of economic activity in markets and non-market institutions. Emphasis is on the operation of imperfectly competitive markets and the interaction between firms. Strategic decisions by firms, such as pricing, R&D, entry, and patenting, are discussed at length using game theory. Case studies of particular industries supplement the material. Government policies affecting the private sector are also studied in detail: Regulation and deregulation of specific industries, trade policies and antidumping, and competition policy. [48L]
Exclusion: ECO380H5
Limited Enrolment

ECO315H5 Economics of Poverty (SSc)
This course will focus on the microeconomic analysis of the causes and consequences of poverty. The emphasis will be on developing countries but we will also draw parallels to poverty in industrialized countries such as Canada. Psychological, cultural, social, and institutional factors will be considered along with an exploration of policy solutions. Some of the topics we will cover include inequality, nutrition, health, education, fertility, credit, savings, and entrepreneurship. [24L]
Exclusion: ECO324Y5 (20149)
Prerequisite: ECO200Y5/ 204Y5/ 206Y5; ECO202Y5/ 208Y5/ 209Y5; ECO220Y5/ 227Y5/ (STA256H6,STA260H5)

ECO318H5 Economics of Culture and Institutions: Empirical Methods and Applications (SSc)
The purpose of the course is to introduce students to the field of Economics of Culture and Institutions while at the same time introducing students to some powerful empirical methods. We will discuss the role of culture in determining economic choices and the relationship between culture and institutional development. [24L]
Prerequisite: ECO200Y5/ 204Y5/ 206Y5; ECO220Y5/ 227Y5/ STA(256H5,258H5)/STA(257H5/260H5)

ECO320Y5 An Economic Analysis of Law (SSc)
This course examines the economic basis for the Law. The topics covered include economic analyses of property rights, liability rules, contract law, tort law, corporate law, law and financial markets, and bankruptcy law. The appropriate economic measures of damages in tort and contract cases will be discussed. Other topics include tax law, and the choice between regulation and the common law. [48L]
Limited Enrolment

ECO322Y5 History of Economic Thought (SSc)
The course first explores the central ideas that have dominated controversies in the method and history of science in this century. With this material as background, several episodes in the development of economic theory are studied. The goal is an understanding of the structure of economics and its relation to the contemporary understanding of scientific method. [48L]
Exclusion: ECO429Y1
Prerequisite: ECO200Y5/ 204Y5/ 206Y5,202Y5/ 208Y5/ 209Y5
Limited Enrolment

ECO323Y5 Canadian Economic History (SSc)
(Formerly Canadian Economic Development Since Confederation) Canadian economic growth from the 1600s to World War II. The course emphasizes critical analysis, the application of economic theory to historic issues, and the analysis of empirical evidence. Topics include: indigenous people and the depletion of the beaver, employment of women and children in the early 19th century and their role in manufacturing, the consumer durable revolution of the 1920s, and the Great Depression. Some knowledge of statistics is beneficial. [48L]
Exclusion: ECO321Y1/ 221Y1
Prerequisite: ECO200Y5/ 204Y5/ 206Y5
Limited Enrolment

ECO324Y5 Economic Development (SSc)
Economic development and transformation of the low-income countries of Latin America, Africa and Asia. Theory and policy analysis relating to the following economic issues in these countries: higher rates of economic growth, the role of the government in resource allocation, the industrial-agricultural sector interface, inward versus outward looking trade strategies, and the international debt problem. The following problems will also be addressed: food supply, domestic savings, tax revenue, foreign exchange, foreign direct investment, high rates of inflation, benefit-cost analysis and economic planning. [48L]
Exclusion: ECO352H5S: Special Topics Economics of Poverty (20161)
Limited Enrolment
ECO325H5 Advanced Economic Theory - Macro (SSc)
This course studies the economic foundations of macroeconomic theory and develops analytical skills in constructing and solving macroeconomic models. [24L]
**Limited Enrolment**

ECO326H5 Advanced Economic Theory - Micro (SSc)
Content in any given year depends on instructor. Past topics include: advanced analysis of the behaviour of consumers under uncertainty; issues in poverty, inequality and social welfare; game theory and its applications to economics and political economy. [24L]
**Exclusion:** ECO372Y5
**Prerequisite:** ECO200Y5(70%)/ 204Y5(70%)/ 206Y5,220Y5/ 227Y5/ STA(250H1,257H5/ 256H5)/STA(257H5/ 256H5,261H5/ 260H5)/STA(257H5/ 256H5,248H5/ 258H5)
**Limited Enrolment**

ECO333Y5 Urban Economics (SSc)
This is a course on the application of economic analysis to four major areas of urban activity. The areas are land markets, housing and buildings, transportation, and public finance. In each area, we will consider the role of the government and attempt to understand the source of many current urban economic problems. [48L]
**Limited Enrolment**

ECO336Y5 Public Economics (SSc)
This course focuses on market failure and the appropriate role of government in response to market failure. Topics include externalities, public goods provision and public sector reform. The course provides useful conceptual and empirical tools for analyzing policy questions and an understanding of the workings of government in Canada. [48L]
**Exclusion:** ECO236Y1
**Limited Enrolment**

ECO343H5 Labour Economics and Public Policy (SSc)
This course uses both applied microeconomic theory and empirical analysis to examine labour markets in Canada. The course is especially focused on the link between research and public policy. Topics to be covered include: labour supply and demand, minimum wages, immigration, human capital, education production, inter- and intra-generational equality, and peer effects. At the end of the course, students should have a firm grasp of key policy issues involving Canada's labour market and be able to critique the quality of other empirical studies.
**Exclusion:** ECO361Y5, 239Y1, 339Y1

ECO344H5 Labour Economics and Market Frictions (SSc)
This course studies the economic behaviour of employers and employees as they interact in the labour market. The class extends beyond basics of labour supply and demand to consider cases when markets are not always perfectly competitive. The course will cover such topics as segmented labour markets, unionization and collective bargaining, unemployment, monopsony, and discrimination.
**Exclusion:** ECO361Y5, 239Y1, 339Y1

ECO349H5 Money, Banking & Financial Markets (SSc)
This course explores a wide range of topics on the theories of money and banking. The strategy of the course is to develop a series of models to examine the importance of money, banks, and other financial institutions in the way economies work. The topics examined in this framework include: the role of money and the financial system, effects of inflation, bond and stock markets, banks, control of the money supply, and international monetary systems. [24L]
**Exclusion:** ECO349H1

ECO350Y5 Special Topics in Economics (SSc)
(Formerly Seminar on Selected Subjects) This course covers a special topic in Economics. Content relates to instructor’s area of interest, thus the course varies in focus from year to year. Students require specific prerequisites for each course. Details are available from the student advisor or departmental web site. [48L]
**Limited Enrolment**
ECO352H5 Special Topics in Economics (SSc)  
(Formerly Seminar on Selected Subjects) This course covers a special topic in Economics. Content relates to instructor's area of interest, thus the course varies in focus from year to year. Students require specific prerequisites for each course. Details are available from the student advisor or departmental web site. [24L]

Limited Enrolment

ECO353Y5 Special Topics in Economics (SSc)  
This course covers a special topic in Economics. Content relates to instructor's area of interest, thus the course varies in focus from year to year. Students require specific prerequisites for each course. Details are available from the student advisor or departmental website. [48]

ECO358H5 Financial Economics I (SSc)  
This course provides an introduction to capital markets and asset pricing. We will cover the role of financial markets, project valuation, expected utility and risk aversion, financial risk, general equilibrium pricing, the Capital Asset Pricing Model, Arbitrage Pricing Theory, derivatives, option pricing, term structure of interest rates, foreign exchange markets, and market efficiency. [24L]

Exclusion: MGT331Y1, 337Y5, 338H5

*ECO358H5 is not open to Commerce students.*

ECO359H5 Financial Economics II (SSc)  
This course provides an introduction to Corporate Finance. Topics covered include: project valuation, firm’s capital structure, dividend policy, management control and agency problems, public share offerings, debt offerings and auctions, mergers and acquisition, bankruptcy costs, tax-influences and bank runs. This course is the sequel to ECO358H5. [24L]

Exclusion: MTG331Y1, 337Y5/338H5

*ECO359H5 is not open to Commerce students.*

ECO360H5 Economic Growth: Theory and Evidence  
(Formerly ECO353H5) This course examines modern theories of economic growth. Topics include: Growth accounting, theories of physical and human capital accumulation, the economics of ideas, economic institutions and theories of endogenous growth. The discussion will stress the empirical implications of the theories and the relation of these hypotheses to the data and evidence. [24L]

Exclusion: ECO451H1

ECO361H5 International Trade Theory (SSc)  
An analysis of the nature, effects and policy implications of international trade theory; the theories of comparative costs and reciprocal demands, factor reward equalization, international tariffs and customs unions. [24L]

Exclusion: ECO328Y1, 230Y1
Prerequisite: ECO200Y5/204Y5/206Y5, 202Y5/208Y5/209Y5
Limited Enrolment

ECO365H5 International Monetary Economics (SSc)  
An analysis of the nature, effects and policy implications of international finance; balance-of-payments and foreign exchange analysis; liquidity problems and topics related to current problems in international finance. [24L]

Exclusion: ECO328Y1, 230Y1; MGT439H5
Limited Enrolment

ECO370Y5 The Economics of Organizations (SSc)  
The determinants of the boundary between organizations and markets. Problems of centralization vs. decentralization, authority, coordination and motivation within organizations. Incentives, ownership and property rights. The nature of the employment relationship: explicit and implicit contracts, compensation, relative performance evaluation, career paths, job assignments and promotion. [48L]

Exclusion: ECO381H5, 426H1; MGT310Y1
Limited Enrolment

ECO373Y5 The Environment: Perspectives from Economics and Ecology (SSc)  
(Formerly ECO373H5) The course examines the basic principles of environmental economics and ecology and the interaction between ecological and economic factors. It assesses alternative criteria and objectives for environmental policy. Problems associated with the implementation of environmental policy are analyzed and examined through case studies. [48L]

Exclusion: ECO313H1, 373H5
Prerequisite: ECO100Y5(63%), ECO200Y5/204Y5/206Y5, or by permission of instructor.
Recommended Preparation: ENV100Y5
Limited Enrolment
ECO375H5 Applied Econometrics I (SSc)
(Formerly ECO327Y5) 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. [24L]
Exclusion: ECO327Y5, 372Y1, 375H1
Prerequisite: ECO200Y5/204Y5/206Y5; ECO202Y5/208Y5/209Y5; ECO220Y5(70%)/227Y5/STA(256H5,STA260H5)

ECO380H5 Managerial Economics I: Competitive Strategy (SSc)
This is a course in applied microeconomics. This course will use a series of real world examples, together with theoretical insights from game theory, to answer questions like, why are some industries more profitable than others? Why are some firms profitable while others are not? How can firms create, capture and maintain their profits in the face of competition? The first part of the course will be devoted to the building blocks of strategy, including industry analysis, positioning, and sustainability of competitive advantage. Next we will use game theoretical tools to analyze strategic interaction among firms, such as strategic pricing, entry and competitive bidding. Lastly, the course will cover the scope of the firm and technological competition. Students shall learn from the course, the ability to identify and categorize major strategic problems, and suggest and evaluate candidate strategies. [24L]
Exclusion: ECO310Y5; MGT310Y1
Limited Enrolment

ECO381H5 Managerial Economics II: Personnel Economics (SSc)
*ECO380H5 Managerial Economics I: Competitive Strategy is NOT a prerequisite for this course. This course examines selected material on compensation and incentives in hierarchical organizations. Topics include recruitment and hiring, training, turnover, downsizing, motivating workers, teams, allocating authority and task assignment. [24L]
Exclusion: ECO370Y5, 426H1; MGT310Y1
Limited Enrolment

ECO383H5 Introduction to Empirical Methods of Microeconomics (SSc)
Formerly: Economics of Education
For students who would like to learn more about economics data analysis: ECO383 provides an intuitive introduction to empirical methods in microeconomics. The class begins with a self-contained and intuitive treatment of modern methods used in microeconomic data analysis. We then go on to study some interesting current empirical research, focusing on the education field, to see how those methods are applied. The course should prepare you to read current empirical research in microeconomics – without any preparation, empirical papers can seem rather impenetrable. It also serves as a complement to and a foundation for 'Applied Econometrics' (ECO327).
Exclusion: ECO351H5(2007W); ECO338H1
Limited Enrolment

ECO385H5 Economics of Information (SSc)
This course analyses how markets function when market participants have asymmetric information. We will show how asymmetric information may lead to market breakdown and how an appropriately designed contract can help alleviate the adverse effect of asymmetric information on market efficiency. We will cover three types of models: moral hazard, screening and signaling. There are a wide variety of applications, including labour contracts, price discrimination, insurance markets, and marketing. [24L]

ECO399Y5 Research Opportunity Program (SSc)
This course provides senior undergraduate students who have developed some knowledge of a discipline and its research methods, an opportunity to work in the research project of a professor in return for course credit. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter sessions are posted on the ROP website (www.utm.utoronto.ca/428.0.html) in mid-February and students are invited to apply at that time. See also Experiential Learning Programs (Page 34).
Prerequisite: Minimum of 10.0 credits
ECO400Y5 Economics Internship (SSc)
Through a part time, unpaid, 200-hour work placement, fourth year students apply economics content and skills. Placements are made throughout the GTA in both the private and public sectors. Successful candidates gain an opportunity to enhance their University experience through on-site work placements providing the possibility to develop skill sets within a business setting. Monthly class meetings plus year-end and presentation are required. Normally, the 200 hours will be completed by attending the work placement one full day each week from September to April. Students interested in a finance-industry placement are strongly recommended to arrange their course schedule to allow for a two day a week work placement in one semester. This arrangement increases the possibility of placement and enhances the experience although careful course planning is essential.

Apply to Course Director: Professor K. Yu Room #KN 3268 Innovation Complex Email: kathleen.yu@utoronto.ca
Exclusion: BIO400Y5; CCT409H5; CTE388H5; ENV400Y5; FSC481Y5; HIS498Y5; ITA400Y5; JEG401Y5; MGT480H5; CCT410H5/411H5; PSY442Y5; SOC480Y5; WGS435Y5
Prerequisite: Fourth year standing in an Economics Program; recommended CGPA to be determined annually. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance. ECO400Y5 course link for more information: www.utm.utoronto.ca/economics/experiential-learning

ECO412Y5 Human Capital and Education in the Economy (SSc)
This course addresses empirical and theoretical issues in public economics. This course will be especially focused on issues in public economics related to poverty, education, and inequality. Fall semester topics include: growth and inequality, teacher incentives and teacher quality, student incentives, and the racial achievement gap. Spring topics include school competition, social mobility and neighborhood effects, and welfare and social insurance. We will also discuss the tools economists use to measure the causal effects of policies, and consider how statistics often presented in policy debates may be biased. After this course, students should be comfortable reading research papers in economics.

ECO420Y5 Reading Course, Seminar or Workshop (SSc)
Primarily for advanced Specialist students who have exhausted course offerings in a particular subject area. Open only when a faculty member is willing and available to supervise. Students must obtain the written approval of the chair or associate chair before enrolling. See the student advisor for details.
Exclusion: ECO421H5, 422H5

ECO421H5 Reading Course, Seminar or Workshop (SSc)
Primarily for advanced Specialist students who have exhausted course offerings in a particular subject area. Open only when a faculty member is willing and available to supervise. Students must obtain the written approval of the chair or associate chair before enrolling. See the student advisor for details.
Exclusion: ECO420Y5

ECO422H5 Reading Course, Seminar or Workshop (SSc)
Primarily for advanced Specialist students who have exhausted course offerings in a particular subject area. Open only when a faculty member is willing and available to supervise. Students must obtain the written approval of the chair or associate chair before enrolling. See the student advisor for details.
Exclusion: ECO420Y5

ECO433H5 Family Economics (SSc)
Introduces students to the study of the family within the modern economics. Topics include: market production vs. home production; gender wage differentials in labour markets; monogamy, polygamy and marriage markets; non-altruistic behaviour within families; fertility and the demand for children; divorce; and the life cycle of the family. Concepts are applied to current topics within the development and labour literatures. [24L]
Exclusion: ECO332H1
Limited Enrolment
ECO434H5 Forecasting Methods in Macroeconomics & Finance (SSc)
This course introduces time-series forecasting methods for macroeconomics and finance. Topics may include ARMA models, cointegration, vector autoregressions, state-space modeling, and volatility models. Estimation, interference and forecasting using real world data are emphasized. The course makes extensive use of the free statistical software R. No prior knowledge of R is required. [24L]
Exclusion: ECO462H1
Recommended Preparation: MAT223H5 and ECO327Y5
Limited Enrolment

ECO435H5 Growth and Development of the Chinese Economy (SSc)
Both the pace and scale of China’s economic transformation over the last three decades are unprecedented in human history. Understanding the nature and the sources of this great transformation is important for at least two reasons. First, it may provide valuable lessons of economic development for other developing countries. Second, the Chinese economy has become increasingly integrated with the world economy. The growth prospect of China is important for both China and the rest of the world. This course will examine China’s growth and development through the lens of the modern macroeconomic theory. The topics that will be covered in the course include China’s historical growth performance, structural transformation and growth since 1978, resource reallocation and aggregate productivity changes, financial sector development, inflation and business cycles in China.
Prerequisite: ECO200Y5/ ECO204Y5/ ECO206Y5;ECO202Y5/ ECO209Y5/ ECO208Y5;ECO220Y5/ ECO227Y5/ STA256H6,STA260H5

ECO436H5 Measuring Well Being (SSc)
The course concerns itself with measuring societal economic well being. The historical development of the subject is considered together with the conceptual issues (and objections) associated with representing the welfare of economic agents. Different notions of welfare (Poverty, Inequality, Polarization, Equality of Opportunity) and the various empirical techniques for examining them are critically explored and applied using existing datasets.
Limited Enrolment

ECO439Y5 The Economics of Cities & Regions: Productivity, Technology & Jobs (SSc)
Examination of the causes and the consequences of differences in economic outcomes across localities within a country. Despite all the talk about the "death of distance", geography matters more than ever. Regional differences within many countries have increased in the past decades, and where a person lives today has a very large impact on many aspects of his or her life. This course is a journey through the current economic landscape. We will explore places that are growing and places that are declining. For instance, we will discover why the labor market in New York and Boston has been so much better than the one in Detroit and Cleveland in the past 35 years. We will visit the industrial districts of Italy and study how knowledge diffuses among firms located near each other, and the implications for local productivity and innovation. We will study how British and Canadian local labor markets are affected by the fact that certain industries and occupations are dying. We will travel to Africa, and discuss the extent to which investment from Asia serves to catalyze economic development in Ethiopia’s regional economies. In doing so, we will try to understand the economic forces driving trends in wages, productivity and innovation across cities and regions. These are the forces that will define the geography of future jobs and will shape the economic destiny of local communities around the world.
Prerequisite: ECO200Y5/ 204Y5/ 206Y5; ECO220Y5/ 227Y5/ STA(256H5,258H5)/STA(256H5,260H5)

ECO440H5 Advanced Topics in Financial Economics (SSc)
This course deals with the following topics in financial economics: (1) Theoretical and empirical issues concerning the relevance of corporate financial structure; (2) Interactions between corporate investment and financing decisions; and (3) The role of the financial system and the legal system in economic development and growth. There is no required textbook. The course will rely quite extensively on readings of journal articles. A recommended book is: T. Copeland, J. Weston, K. Shastri, Financial Theory and Corporate Policy, Addison-Wesley, 2005, fourth edition.
Prerequisite: ECO206Y5 (70%); ECO208Y5 (70%); ECO227Y5 (70%); ECO358H5; or by permission of instructor.
Limited Enrolment. For further information please contact the Economics Academic Counsellor.
ECO456H5 Public Policy Analysis (SSc)  
(Formerly ECO356H5) This course provides an opportunity for students to work with real-world data to address current public policy questions. The course discusses issues that arise when analyzing non-experimental social science data and will teach students to recognize the types of research designs that can lead to convincing policy conclusions. A hands-on approach will be emphasized. [24L]  
Exclusion: ECO356H5  
Corequisite: ECO327Y5 or at least 70% in ECO220Y5/ECO227Y5

ECO460H5 Introduction to Financial Risk Management (SSc)  
(Formerly ECO460Y5) This course provides an overview of financial risks which include market risk, credit risk and operational risk. It also discusses the importance of managing these risks and introduces students to basic tools for analyzing and managing them. [24L]  
Exclusion: ECO460Y5  
Prerequisite: ECO200Y5(70%)/204Y5(70%)/206Y5,220Y5(70%)/ECO227Y5/STA(256H5,261H5(70%))/STA(256H6(70%),258H5(70%))  
Limited Enrolment

ECO461H5 The Economics of Financial Risk Management (SSc)  
(Formerly ECO460Y5) This course focuses on how to use derivative securities to manage financial risks. It includes a discussion of why firms should hedge financial market risk, identification and quantification of financial risks; the value-at-risk (VaR) measure of risk; credit risk and capital allocation and difference between speculation and hedging. [24L]  
Exclusion: ECO460Y5  
Prerequisite: ECO460H5  
Limited Enrolment

ECO463H5 Financial Market Microstructure (SSc)  
Traditional asset pricing theory focuses primarily on macro-level financial market prices in which the mysterious Walrasian Auctioneer sets prices that equilibrate demand and supply. In reality, security prices evolve through a large number of small-scale bilateral trades, performed by people that have specific, well-regulated and institutionalized roles. This course studies the impact of the trading institutions (e.g. market-makers, investment dealers) on security prices. In the process, it provides insights on the strategic trading behaviour of individual market participants and its relation to market anomalies such as speculative bubbles. Also, the course studies how micro-level irrationality affects such anomalies and when irrational behaviour does not ruin but instead enriches the gambler. This course uses mathematical models and is primarily theoretical, but it applies some of the theories in hands-on exercises.  

ECO475H5 Applied Econometrics II (SSc)  
(Formerly 327Y5) A research-oriented course continuing from ECO375H. The regression model is extended in several possible directions: time series analysis; panel data techniques; instrumental variables; simultaneous equations; limited dependent variables. Students will complete a major empirical term paper, applying the tools of econometrics to a topic chosen by the student. [24L]  
Exclusion: ECO327Y5, ECO327Y1, ECO376H1  
Prerequisite: ECO375H5
Economics and Political Science (HBA)

Program Advisor for Economics Courses
R. Mack
905-828-5404

Program Advisor for Political Science Courses
Norma Dotto
905-828-3921

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 153)
MAT Mathematics (page 298)
POL Political Science (page 319)
STA Statistics (page 356)

Combined Specialist Program ERSPE0751
Economics and Political Science (Arts)

Limited Enrolment – Enrolment in this program is limited. Students enrolling at the end of first year (4.0 credits) must obtain:
1. a mark of at least 70% in 1.0 POL credit and at least 67% in ECO100Y5, and a minimum Cumulative Grade Point Average of 2.00. OR
2. a mark of at least 70% in 1.0 POL credit and at least 63% in ECO100Y5, and a minimum Cumulative Grade Point Average of 2.50.

Students enrolling at the end of second year (8.0 credits) must obtain:
1. a mark of at least 70% in each of 2.0 POL credits and at least 67% in ECO100Y5, and a minimum Cumulative Grade Point Average of 2.30 OR
2. a mark of at least 70% in each of 2.0 POL credits and at least 63% in ECO100Y5, and a minimum Cumulative Grade Point Average of 2.50.

14 credits are required.

Within an honours degree, the following credits must be included in the program:

Economics 7.0 credits
1. ECO100Y5; MAT133Y5/ 134Y5/ 135Y5
3. ECO322Y5/ 323Y5
4. 1.0 additional 300/400-level ECO credit

Political Science 7.0 credits in POL, including at least 1.0 credit at the 400 level.
1. POL200Y5,214Y,309Y5
2. 1.0 credit from two of the following three fields: Comparative Politics International Relations Public Policy and Public Administration
3. 2.0 additional POL credits

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
Students undertaking the Education Studies minor will have the opportunity to develop an understanding of the stages of human development, including variations in that development, and foundational instructional strategies. Students will hone their leadership skills as they participate in field placements, community engagement activities, experiential learning, training opportunities and case studies. They will come to understand the importance of inclusivity/diversity both within an instructional framework and the community. Students will immerse themselves in courses related to equity and diversity; communication and conflict resolution; child, adolescent, and adult development; learning design, and education within a global context. Complementing these foundational courses are education-related and interdisciplinary course offerings. Experiential learning is embedded within the program’s courses and enables students to implement reflective practice based upon inquiry-based research, data gathering and assessment. This program of study develops transferrable skills benefitting a variety of careers that involve educating or training others. Those interested in pursuing a career in teaching may wish to apply to a consecutive initial teaching program or a graduate program in education upon completion of their undergraduate degree. Complementing the Education Studies minor does not qualify a graduate for certification through the Ontario College of Teachers.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

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**Limited Enrolment** – Enrolment into the Education Studies Minor is by special application ONLY and space in the program is limited. To be considered for enrolment, students are required to have completed 4.0 credits with a minimum cumulative grade point average of at least 2.70. Meeting the minimum requirements does not guarantee enrolment into the program. Space within the program is limited due to the experiential learning component.

**First Year:** EDS100H5 (Open to all students. Highly recommended for those applying to the EDS minor.)

**Second Year:** EDS200H5, EDS210H5 and EDS220H5

**Third and Fourth Years:**

1. EDS300H5, EDS310H5

2. 0.5 or 1.0 credits in experiential learning (for example, EDS388H5, EDS377H5) or internship courses in other subject areas as approved by the Education Studies Program Coordinator.

3. 0.5 or 1.0 remaining credits from the following: FRE225Y5, 325H5, 345H5, 352H5, 353H5, 355H5, 382H5, 383H5; LIN358H5, 417H5, 456H5; LTL227H5, 380H5, 417H5, 456H5, 486H5, 488H5; MAT382H5, 392H5; PHL272H5; PSY310H5, 311H5, 312H5, 315H5, 341H5, 345H5, 410H5, 442Y5; SOC224H5, 480Y5; or additional appropriate courses as approved by the Education Studies Minor Coordinator.

NOTE: Students must check prerequisites and exclusions for courses listed above to ensure they meet the requirements for entry.
List of Courses

EDS100H5 Introduction to Education Studies (HUM)
This course explores broad social and cultural issues in education. It will address questions about how we advance knowledge, who controls how and what we learn and what role education has in how societies are shaped, changed and reproduced. Students will evaluate the influence education can have on who we are, how we wish to live and what we aspire to as citizens in a global and digital community. This investigation will also consider how language, race, gender, class and culture intersect with teaching and learning.

EDS200H5 Child, Adolescent and Adult Development in Education (HUM,EXP)
This course focuses on research in human development associated with education. Candidates explore how best to facilitate growth and learning in the area of education and training. This course includes a field experience and entails observation of human development across the various age groups.
Exclusion: CTE100H5

EDS210H5 Communication and Conflict Resolution (HUM)
This course focuses on principles and practices of conflict management and resolution, emphasizing interpersonal communication, including cross-cultural perspectives and communicating across different identities and worldviews, with emphasis on the relevance of these skills, principles and processes to teaching and learning.
Exclusion: CTE250H5

EDS220H5 Equity and Diversity in Education (HUM,EXP)
This course focuses on raising awareness and sensitivity to equity and diversity issues facing teachers and students in diverse schools and cultural communities. It includes a field experience which entails observation of, and participation in, equity and diversity efforts in a community organization.
Exclusion: CTE200H5

EDS300H5 Learning Design (HUM,EXP)
This course provides an opportunity to study and practice the fundamental skills involved in designing learning opportunities, in schools and a variety of other settings. The skills required to organize and deliver educational experiences and monitor learning will be practiced in a range of andragogical and pedagogical practical experiences. A case studies approach will be taken, incorporating a field experience where students will apply their learning.
Exclusion: EDU310H5
Recommended Preparation: EDS200H5 (minimum 70%); EDS210H5; (minimum 70%); EDS220H5 (minimum 70%)

EDS310H5 Education in a Global Context (HUM,EXP)
This course allows students to actively explore issues associated with education and culturally proficient teaching/training from both an Ontario and global perspective. The course addresses two phenomena: the marked and deliberate increase in the number of international students at all levels of Ontario’s educational system, and the global dispersal of Ontario-trained teachers. A practical experience focusing upon working with international students in a support role will provide a concrete experience to test their classroom content.
Exclusion: EDU320H5
Recommended Preparation: EDS300H5 (minimum 70%)

EDS377H5 Why the First Year of University Matters: The Impact of Peer Mentoring (HUM,EXP)
This course explores contemporary issues in higher education with a focus on experiences, issues and challenges commonly encountered by undergraduate students during their first year of university. Interdisciplinary in its focus, topics of exploration include an examination of adult and student development theories, models of student engagement and an investigation into mindset, levels of persistence, habits of mind and personality characteristics that impact student success. An internship component is required. Students taking the course will assume a peer-mentoring role to apply and contextualize theories and skills learned in the course. This is a closed course open only to those students who have successfully secured a peer-mentoring position with the First Year Peer Mentoring program.

EDS388H5 Experiential Learning Opportunity within the Community (HUM,EXP)
This internship is a minimum 100-hour experiential learning opportunity. The internship connects the student’s subject specialization to aspects of the teaching/training development profession. It will integrate, extend, and deepen the learning experience as students begin to identify particular academic or professional insights. Prior to enrollment, internship proposals must be approved by the program coordinator.
Exclusion: CTE388H5, 388Y5
Recommended Preparation: EDS200H5, 210H5, 220H5, EDS300H5 (may be taken as a co-requisite).
English (HBA)

Professors Emeriti
J. Dutka, M.A., Ph.D.
M. Garson, B.A., M.A., Ph.D.
R.R. McLeod, B.A., M.A., Ph.D.

Professors
L. Blake, B.A., M.Phil., M.A., Ph.D.
A. Gillespie, B.A., D.Phil.
R. Greene, B.A., D.Phil.
C. Hill, B.A., M.A., Ph.D.
M.J. Levene, B.A., M.A., Ph.D.
S. Radović, B.A., M.A., Ph.D.
M. Ruti, B.A., M.A., Ph.D.
L. Switzky, B.A., M.A., Ph.D.
D. White, B.A., M.A., Ph.D.
D. Wright, B.A., M.A., Ph.D.

Chair
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Together with the visual arts and music, literature has for millennia provided humanity with the means to depict, reflect on, and understand our existence, from the most personal details of daily life to grand philosophical or religious efforts to comprehend the world as a whole. The literary arts are essential to what it means to be human; their study necessarily plays a central role in the modern university. Our programs specifically focus on how literature in English has developed through the centuries, all over the world, and in a rich variety of different forms and modes, from oral recitations to digital media.

Our degree programs and courses introduce students to the full range of literary genres and traditions in English, from eleventh-century elegies written in Old English to contemporary postcolonial novels. Courses may focus on the development of particular forms (e.g., the lyrical poem), a particular period (e.g., the Victorian age), or a particular author (Shakespeare, for instance, or Jane Austen). Students receive in-depth training in critical reading and writing skills. Perceptive and attentive reading and clear and persuasive writing are key to the craft of literary criticism, and our programs are designed to make students better critics; but these skills are equally crucial in all areas of research, business, and professional activity, and are therefore of lasting value both within and beyond the university.

Courses are arranged in four levels. Courses at the 100-level are introductory; 200-level courses provide broad surveys of a genre, a national literary tradition, or a subject; 300-level courses offer more detailed investigations of texts written at particular moments, in particular places in literary history, or by particular authors; and 400-level courses are small-group, discussion-based seminars on a specific subject. Additional course and program information can be found on the department website, www.utm.utoronto.ca/english-drama/. Guidance is available from the Undergraduate Advisor as well as from members of the English faculty.

English Programs
Enrolment in any English Program of Study requires completion of 4.0 previous courses or their equivalent. Students are responsible for completing all the requirements of the English Program in which they are enrolled.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ENG English (page 166)

Specialist Program ERSPE1645 English (Arts)

Limited Enrolment – Students enrolling in the Specialist Program at the end of first year (4.0 credits) must obtain a CGPA of at least 2.0 and a mark of at least 70% in 1.0 ENG credit. Students applying to enrol after second year (8.0 credits), must obtain a CGPA of at least 2.30 and a mark of at least 70% in each of 2.0 ENG credits.

At least 10.0 ENG credits, including at least 3.0 credits at the 300+ level and 1.0 credit at the 400 level. Only 1.0 ENG course at the 100 level may be counted toward program requirements. ENG100H may not be counted.

Specialists are strongly encouraged to enrol in either ENG201Y5 or ENG202Y5 in their first year in the program.

Courses must fulfill the following requirements:
1. ENG201Y5 or ENG202Y5
2. At least 1.0 credit from Group 1 (Theory, Language, Methods)
3. At least 1.0 credit from Group 2 (Canadian and Indigenous North American Literatures)
4. At least 1.0 credit from Group 3 (American and Transnational Literatures)
5. At least 3.0 credits from Group 4 (British Literature to the 19th Century)
6. At least 1.5 credits from Group 5 (Literature since the 18th Century)

Major Program ERMAJ1645 English (Arts)

At least 7.0 ENG credits, including at least 2.0 credits at the 300+ level. Only 1.0 ENG course at the 100 level may be counted toward program requirements. ENG100H may not be counted.

Majors are strongly encouraged to enrol in either ENG201Y5 or ENG202Y5 in their first year in the program.

Courses must fulfill the following requirements:

1. ENG201Y5 or ENG202Y5
2. At least .5 credit from Group 1 (Theory, Language, Methods)
3. At least 1.0 credit from Group 2 (Canadian and Indigenous North American Literatures)
4. At least 1.0 credit from Group 3 (American and Transnational Literatures)
5. At least 2.0 credits from Group 4 (British Literature to the 19th Century)
6. At least 1.0 credit from Group 5 (Literature since the 18th Century)

• Group 1: Theory, Language, Methods
  ENG201Y5, 205H5, 266H5, 280H5, 382Y5, 384H5, 414H5, 415H5, 416H5
• Group 2: Canadian and Indigenous North American Literatures
• Group 3: American and Transnational Literatures
• Group 4: British Literature to the 19th Century
• Group 5: Literature since the 18th Century

Note: The St. George Department of English offers additional courses in each group. For information consult the Faculty of Arts and Science Calendar at www.artsci.utoronto.ca. Please also consult the U of T Mississauga Calendar for regulations about taking courses on the St. George campus. Exclusions listed for English courses in the Arts and Science Calendar apply also to U of T Mississauga English courses. If you have questions, contact the Undergraduate Advisor for the Department of English and Drama.

Minor Program ERMIN1645 English (Arts)

At least 4.0 ENG credits, including at least 1.0 credit at the 300+ level. Only 1.0 ENG course at the 100 level may be counted toward program requirements. ENG100H may not be counted.

General Note:

100-level courses are designed to increase students’ skills in close reading, interpretation, and effective writing; emphasize the development of analytical and essay-writing skills; and build acquaintance with major literary forms and conventions that students need in more advanced courses. They are open to all students who have standing in no more than one full course in English.

ENG140Y5, our current first-year flagship course, explores how literature responds to the modern world and focuses on some of the most significant works of modern and contemporary literature. ENG110Y5 explores the nature of narrative in a wide variety of fictional and non-fictional, poetic, and cinematic forms. DRE/ENG121H and DRE/ENG122H study drama and performance from classical times to the present. ENG110Y5 and ENG140Y5 are equivalent to one another in that either one can be used in fulfillment of a Specialist, Major, or Minor Program, as can the combination of ENG121H and ENG122H. ENG100H5, a course in general writing skills relevant to a wide range of university subject areas, may not be used to meet the requirements of any English program.

Not all of the courses listed are offered every year. For courses to be offered this year, please consult the English and Drama website.

List of Courses

ENG100H5 Effective Writing (HUM)
This course provides 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 does not count toward any English program. [36L]
ENG110Y5 Narrative (HUM)
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 the kinds of stories we encounter in non-literary contexts such as journalism, movies, myths, jokes, legal judgments, travel writing, histories, songs, diaries, biographies. [48L, 24T]

ENG121H5 Traditions of Theatre and Drama (HUM,EXP)
An introductory survey of the forms and history of world drama from the classical period to the nineteenth century in its performance context. May include later works influenced by historical forms and one or more plays in the Theatre Erindale schedule of productions. May include a research performance component. This course is also listed as DRE121H5. [36L]
Exclusion: ENG125Y1

ENG122H5 Modern and Contemporary Theatre and Drama (HUM,EXP)
An introductory survey of the forms and history of world drama from the late nineteenth century to the present in its performance context. May include film adaptations and one or more plays in the Theatre Erindale schedule of productions. May include a research performance component. This course is also listed as DRE122H5. [36L]
Exclusion: ENG125Y1

ENG140Y5 Literature for Our Time (HUM)
An exploration of how recent literature in English responds to our world. Includes poetry, prose, 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. [48L, 24T]

ENG201Y5 Reading Poetry (HUM)
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. [72L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG202Y5 British Literature: Medieval to Romantic (HUM)
An introduction to influential texts that have shaped 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. [48L, 24T]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG203Y5 British Literature: Victorian to Contemporary (HUM)
An introduction to influential texts that have shaped British literary history since the nineteenth century, covering developments in poetry, drama, and prose, and including such writers as Browning, Tennyson, Elizabeth Barrett Browning, Dickens, the Brontës, George Eliot, Hopkins, Ruskin, Wilde, Joyce, Woolf, Yeats, T. S. Eliot, Beckett, Heaney, Stoppard, Caryl Churchill, Ishiguro, Zadie Smith. The course will address such topics as the increasing diversity of poetic forms, the emergence of the professional novelist, the internationalization of British literature in the twentieth century, literature as social critique, and the Modernism/Postmodernism debate. [72L]
Exclusion: None.
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG205H5 Rhetoric (HUM)
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. [36L]
Exclusion: WRI305H5
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG210Y5 The Novel (HUM)
An introduction to the novel through a reading of ten to twelve texts, representing a range of periods, techniques, regions, and themes. [72L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG213H5 The Short Story (HUM)
This course explores shorter works of nineteenth- and twentieth-century writers. Special attention will be 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. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.
ENG214H5 The Short Story Collection (HUM)
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. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG215H5 The Canadian Short Story (HUM)
An introduction to the Canadian short story, this course emphasizes its rich variety of settings, subjects, and styles. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG220Y5 Shakespeare (HUM)
A study of 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; Henry V; Twelfth Night; Measure for Measure; Hamlet; King Lear; Antony and Cleopatra; The Tempest. Some non-dramatic poetry may be added. [48L, 24T]
Exclusion: DRE221Y
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG234H5 Children's Literature (HUM)
A critical and historical study of poetry and fiction written for or appropriated by children, this course may also include drama or non-fiction and will cover works by at least twelve authors such as Bunyan, Stevenson, Carroll, Twain, Alcott, Nesbit, Montgomery, Milne, Norton, and Fitzhugh. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG235H5 The Graphic Novel (HUM)
The course explores book-length sequential art, this course includes fictional and nonfictional comics by artists such as Will Eisner, Art Spiegelman, Frank Miller, Alan Moore, Chris Ware, Daniel Clowes, Julie Doucet, Marjane Satrapi, Chester Brown and Seth. [36L]
Prerequisite: Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG236H5 Detective Fiction (HUM)
At least 12 works by such authors as Poe, Dickens, Collins, Doyle, Chesterton, Christie, Sayers, VanDine, Hammett, Chandler, Faulkner, P.D. James, Rendell. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG237H5 Science Fiction (HUM)
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. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG239H5 Fantasy and Horror (HUM)
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. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG250Y5 American Literature (HUM)
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. [72L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG252Y5 Canadian Literature (HUM)
An introductory survey of major Canadian works in poetry, prose, and drama from early to recent times. [72L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.
ENG259H5 Literature and the Environment (HUM)
An exploration of the role that literature has played in creating our awareness of “nature” and the "environment." At least six works by writers such as Shakespeare, Marvell, Wordsworth, Coleridge, Thoreau, Emerson, Whitman, Dickens, Hardy, Pratt, Lawrence, Frost, Atwood. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG266H5 The English Vocabulary: Its History, Structure and Meaning (HUM)
A study of the principles underlying the continual change of words and meanings that characterizes a living language. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG270Y5 Colonial and Postcolonial Writing (HUM)
In this course we will study literary and non-literary texts from the nineteenth century to the present day. Colonial texts will be analysed alongside postcolonial interpretations of the nineteenth-century archive, giving students a grasp of colonial discourse and contemporary postcolonial analyses. [72L]
Exclusion: ENG253Y5
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG271H5 Diasporic Literatures of Toronto (HUM)
Toronto is one of the world's most diverse and multicultural cities. This course is a study of literature by writers with strong connections to Toronto who explore issues such as identity, nationality, place, origin, and the multicultural experience. Writers may include: Judy Fong Bates, Dionne Brand, Austin Clarke, Pier Giorgio Di Cicco, Rohinton Mistry, Michael Ondaatje, M. Nourbese Philip, Shyam Selvadurai, M. G. Vassanji. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG272H5 Literature and Exile (HUM)
Explores the complex effects of exile – coerced or chosen – on aesthetic choices within fiction, poetry, and drama, and especially on the nature of literary language. Includes works in English by writers of different origins, such as Conrad, James, Beckett, Joyce, Rhys, Pound, Ionesco, Nabokov, Koestler, Brodsky, Naipaul, Achebe, Kundara, Skvorecky, Rushdie, Gallant, Sebald, Ondaatje, Danticat, Ali, Nafisi. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG274H5 Native North American Literature (HUM)
An introduction to North American aboriginal literature with emphasis on writers from Canada's First Nations. Readings will be considered in the context of aboriginal cultures and oral traditions. Texts may include fiction, poetry, drama, and non-fiction by writers such as Sherman Alexie, Jeannette Armstrong, Michael Dorris, Tomson Highway, Basil Johnston, Thomas King, Lee Maracle, Daniel David Moses, Eden Robinson, Leslie Marmon Silko. [36L]
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG278H5 Critical Approaches to Literature (HUM)
An introduction to literary theory and its central questions, such as the notion of literature itself, the relation between literature and reality, the nature of literary language, the making of literary canons, and the roles of the author and the reader. [36L]
Exclusion: ENG267H5
Prerequisite: All 200-series courses are open to students who are concurrently enrolled in ENG110Y or ENG140Y, or both DRE/ENG121H and DRE/ENG122H, or who have successfully completed at least 4.0 full credits.

ENG299Y5 Research Opportunity Program (HUM,EXP)
This course provides a richly rewarding opportunity for students in their second year to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, learn research methods, and share in the excitement and discovery of acquiring new knowledge. Professors' project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: 1.0 credit of ENG110Y5/ ENG140Y5/ DRE121H5/ ENG121H5/ DRE122H5/ ENG122H5 OR 4.0 credits.
ENG300Y5 Chaucer (HUM)
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. [72L]

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG302Y5 Poetry and Prose, 1500-1600 (HUM)
Considering literature during the reign of the Tudors, this course may include poetry of Wyatt, Sidney, Mary Sidney Herbert, Marlowe, Shakespeare, Spenser, and Donne; prose of More, Askew, Sidney, Hakluyt, Hooker, Elizabeth I, Lyly, and Nashe; and supplementary readings from such writers as Erasmus, Castiglione, and Machiavelli. [72L]

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG303H5 Milton (HUM)
Selections from Paradise Lost and other works. [36L]

ENG304Y5 Poetry and Prose, 1600-1660 (HUM)
Considering literature during the reign of the early Stuarts and the Civil War, with special attention to Milton and Paradise Lost, this course also includes such poets as Donne, Jonson, Lanyer, Wroth, Herbert, and Marvell, and such prose writers as Bacon, Cliford, Donne, Wroth, Burton, Cary, Browne, Hobbes, Milton, and Cavendish. [72L]

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG305H5 Swift, Pope, and their Contemporaries (HUM)
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. [36L]

Exclusion: ENG306Y5

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG306Y5 Poetry and Prose 1660-1800 (HUM)
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. [72L]

Exclusion: ENG305H

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG307H5 Women Writers, 1660-1800 (HUM)
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: 1.0 credit in ENG and 3.0 additional credits

ENG308Y5 Romantic Poetry and Prose (HUM)
Poetry and critical prose of Blake, W. Wordsworth, Coleridge, Byron, P.B. Shelley, Keats; may include brief selections from other writers such as Crabbe, Dorothy Wordsworth, Scott, Landor, Mary Shelley, Clare, De Quincey. [72L]

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG311H5 Medieval Literature (HUM)
This course explores a selection of writings in early English, excluding those by Chaucer. [36L]

Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG312H5 Topics in Medieval Literature (HUM)
A concentrated study of one aspect of medieval literature or literary culture, such as a particular genre or author, a specific theme, or the application of a particular critical approach. [36L]

Exclusion: None.

Prerequisite: 2.0 credit in ENG, including ENG202Y5, and 4.0 additional credits

ENG313H5 Topics in Early Modern British Literature (HUM)
A concentrated study of one aspect of early modern British literature or literary culture, such as a particular subgenre or author, specific theme, or the application of a particular critical approach. [36L]

Exclusion: None.

Prerequisite: 2.0 credit in ENG, including ENG202Y5, and 4.0 additional credits

ENG314H5 Topics in Eighteenth-Century British Literature (HUM)
A concentrated study of one aspect of eighteenth-century British literature or literary culture, such as a particular subgenre or author, specific theme, or the application of a particular critical approach. [36L]

Exclusion: None.

Prerequisite: 2.0 credit in ENG, including ENG202Y5, and 4.0 additional credits

ENG315H5 Topics in Nineteenth-Century British Literature (HUM)
A concentrated study of one aspect of nineteenth-century British literature or literary culture, such as a particular subgenre or author, specific theme, or the application of a particular critical approach. [36L]

Exclusion: None.

Prerequisite: 2.0 credit in ENG, including ENG202Y5 or ENG203Y5, and 4.0 additional credits
ENG316H5 Topics in Modern and Contemporary Literature (HUM)
A concentrated study of one aspect of modern or contemporary literature or literary culture, such as a particular subgenre or author, specific theme, or the application of a particular critical approach. [36L]
Exclusion: None.
Prerequisite: 2.0 credit in ENG, including ENG202Y5 or ENG203Y5, and 4.0 additional credits

ENG322Y5 Fiction Before 1832 (HUM)
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. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG323H5 Austen and Her Contemporaries (HUM)
A study of selected novels by Austen and of works by such contemporaries as Radcliffe, Godwin, Woolstencraft, Wordsworth, Edgeworth, Scott, and Shelley, in the context of the complex literary, social, and political relationships of that time. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG324Y5 Fiction, 1832-1900 (HUM)
Explores the works of a great age of fiction and its responses to moral, social and political dilemmas. At least twelve novels by such authors as Dickens, Trollope, Thackeray, the Brontës, George Eliot and Hardy. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG325H5 Victorian Realist Novels (HUM)
This course explores forms of realism in Victorian fiction and includes at least six novels by such authors as Dickens, Thackeray, George Eliot, Charlotte Bronte, Gaskell, Collins, Trollope and Hardy. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG328Y5 Modern Fiction to 1960 (HUM)
This course explores ten to twelve works by such writers as James, Conrad, Cather, Forster, Joyce, Woolf, Lawrence, Faulkner, Rhys, Hemingway, Achebe, Ellison, Spark, and Lessing. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG329H5 Contemporary British Fiction (HUM)
This course explores six or more works by at least four British contemporary writers of fiction. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG330H5 Early Drama (HUM)
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 is given to social, political, and theatrical contexts. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG331H5 Drama to 1603 (HUM)
This course explores English drama to the end of the reign of Queen Elizabeth I, with attention to such playwrights as Lyly, Kyd, Marlowe, and Shakespeare. [36L]
Exclusion: ENG332Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG335H5 Drama 1603 to 1642 (HUM)
This course explores English drama from the death of Queen Elizabeth I to the closing of the theatres, with attention to such playwrights as Jonson, Middleton, Shakespeare, and Webster. [36L]
Exclusion: ENG332Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG337H5 Drama, 1660-1800 (HUM)
At least twelve plays, including works by Dryden, Wycherley, Congreve, Behn, 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: 1.0 credit in ENG and 3.0 additional credits

ENG338H5 Topics in Shakespeare (HUM)
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. [36L]
Exclusion: None
Prerequisite: 2.0 credit in ENG, including ENG220Y5/DRE221Y5 and 4.0 additional credits

ENG339H5 Modern Drama since World War II (HUM)
A study of plays by such dramatists as Beckett, Miller, Williams, Pinter, Soyinka, and Churchill, with background readings from other dramatic literatures. [36L]
Exclusion: ENG338Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits
ENG342H5 Contemporary Drama (HUM)
A study of ten or more plays by at least six recent dramatists. [36L]
Exclusion: ENG339H5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG347Y5 Victorian Poetry and Prose (HUM)
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." [72L]
Exclusion: None.
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG348Y5 Modern Poetry to 1960 (HUM)
Special study of Hopkins, Yeats, Pound, Eliot, Stevens; selections from other poets. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG349H5 Contemporary Poetry (HUM)
Works by at least six contemporary poets, such as Dickey, Ginsberg, Heaney, Howard, Larkin, Lowell, Plath, Warren. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG352H5 Canadian Drama (HUM)
Canadian plays, with emphasis on major playwrights and on developments since 1940, but with attention also to the history of the theatre in Canada. [36L]
Exclusion: ENG223H5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG353Y5 Canadian Fiction (HUM)
A study of twelve or more Canadian works of fiction, primarily novels. [72L]
Exclusion: ENG216Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG354Y5 Canadian Poetry (HUM)
A study of major Canadian poets, modern and contemporary. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG357H5 New Writing in Canada (HUM)
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. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG358H5 Topics in Canadian Literature (HUM)
A concentrated study of one aspect of Canadian literature or literary culture, such as a particular subgenre, author, period, or theme, or the application of a particular critical approach. [36L]
Exclusion: None
Prerequisite: 2.0 credit in ENG, including ENG252Y5, and 4.0 additional credits

ENG360H5 Early American Literature (HUM)
This course explores writing in a variety of genres produced in the American colonies in the seventeenth and eighteenth centuries, such as narratives, poetry, autobiography, journals, essays, sermons, and court transcripts. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG363Y5 Nineteenth-Century American Literature (HUM)
This course explores American writing in a variety of genres from the end of the Revolution to the beginning of the twentieth century. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG364Y5 Twentieth-Century American Literature (HUM)
This course explores twentieth-century American writing in a variety of genres. [72L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG365H5 Contemporary American Fiction (HUM)
This course explores six or more works by at least four contemporary American writers of fiction. [36L]
Exclusion: ENG361H5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG366H5 Topics in American Literature (HUM)
A concentrated study of one aspect of American literature or literary culture, such as a particular subgenre, author, period, or theme, or the application of a particular critical approach. [36L]
Exclusion: None
Prerequisite: 2.0 credit in ENG, including ENG250Y5, and 4.0 additional credits

ENG370H5 Postcolonial and Transnational Discourses (HUM)
This course focuses on recent theorizations of postcoloniality and transnationality through readings of fictional and non-fictional texts, along with analyses of contemporary films and media representations. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits
ENG371H5 Topics in Postcolonial Literature (HUM)
A concentrated study of one aspect of postcolonial literature or literary culture, such as a particular genre, author, period, regional or national context, or theme, or the application of a particular critical approach. [36L]
Exclusion: None
Prerequisite: 2.0 credit in ENG, including ENG270Y5, and 4.0 additional credits

ENG380H5 History of Literary Theory (HUM)
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. [36L]
Exclusion: ENG367Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG382Y5 Contemporary Literary Theory (HUM)
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. [72L]
Exclusion: ENG366Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG384Y5 Literature and Psychoanalysis (HUM)
An introduction to psychoanalysis for students of literature, this course considers major psychoanalytic ideas through close readings of selected texts by Freud and related psychoanalytic thinkers. The course also explores critiques and applications of Freud's work and examines a selection of literary texts that engage psychoanalytic theory. [36L]
Exclusion: ENG290Y5, ENG384Y1
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG391Y5 Individual Studies (Creative) (HUM,EXP)
A project in creative writing chosen by the student and supervised by a faculty member. The form of the project and the manner of its execution will be determined in consultation with the supervisor. All project proposals must be submitted to the Undergraduate Advisor by May 15. Proposal forms are available in Room 309, Erindale Hall or from the department website.
Prerequisite: 3.0 credits in English, including ENG369Y5

ENG399Y5 Research Opportunity Program (HUM,EXP)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled will become involved in original research, develop their research skills, and share in the excitement and discovery of acquiring new knowledge. Professors' project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 54) for more details
Prerequisite: 1.0 credit in ENG and 3.0 additional credits

ENG414H5 Advanced Studies: Theory, Language, Methods (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG415H5 Advanced Studies: Theory, Language, Methods (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG416H5 Advanced Studies: Theory, Language, Methods (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG424H5 Advanced Studies: Canadian and Indigenous North American Literatures (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG425H5 Advanced Studies: Canadian and Indigenous North American Literatures (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG426H5 Advanced Studies: Canadian and Indigenous North American Literatures (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits
Environmental Geosciences (HBSc)

Offered through the Department of Chemical & Physical Sciences and the Department of Geography.

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Faculty Student Advisor - Chemical & Physical Sciences
Professor Daniel Schulze
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Program Advisor - Geography
T. Duval
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tim.duval@utoronto.ca

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 78)
CHM Chemistry (page 94)
ENV Environment (page 186)
ERS Earth Science (page 146)
GGR Geography (page 224)
JGE Geography (page 224)
MAT Mathematics (page 298)
PHY Physics (page 313)
STA Statistics (page 356)

Specialist Program ERSPE1253
Environmental Geosciences

Completion of this program provides ALL academic requirements for certification as a Professional Geoscientist (P. Geo.) in conformity with the stipulations of the Association of Professional Geoscientists of Ontario (APGO) and the Canadian Council of Professional Geoscientists (CCPG).

Limited Enrolment — Enrolment in this program is restricted. Selection will be based on completion of 4.0 credits including CHM110H5, CHM120H5, PHY136H5, PHY137H5, MAT134Y5/135Y5/137Y5 and ERS120H5/ENV100Y5 and a minimum CGPA of 2.5.
Within an Honours degree, 14.5 credits are required.

Year 1: BIO152H5, 153H5; CHM110H5, 120H5; ERS120H5/ENV100Y5; MAT134Y5/135Y5/137Y5; PHY136H5, 137H5; STA107H5

Year 2: ERS201H5, 202H5, 203H5; GGR217H5, 278H5


Notes:
1. Students are strongly advised to consult the Program Advisors in CPS and/or GGR regarding the program of study.
2. Additional 400-level courses include ERS470Y and GGR417Y

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**Environmental Management (HBA)**

Environment at U of T Mississauga offers a choice of two program paths:

- Environmental Science (HBSc) (Page 181)
- Environmental Management (HBA) (Page 175)

These interdisciplinary programs are administered by the U of T Mississauga Geography Department, which advises students and coordinates participating departments, faculty and programs.

The curriculum stresses the integrative nature of the study of the environment. Students will develop the environmental problem-solving skills required for some of the most dynamic areas of today's job market. Environment faculty members encourage students to become involved in basic enquiry and critical thinking, cross-disciplinary collaboration, and the application of concepts to real-life problems.

The Environment programs begin with a first-year Science course, ENV100Y5 (The Environment). The programs offer students abundant opportunities to become involved in environmental practice, research and fieldwork (e.g., ENV299Y5 Research Opportunity Program, ENV332H5 Practicum in Environmental Project Management, ENV331H5 International Environmental Sustainability–Mexico, ENV497H5/498Y5 Environmental Research Project, and discipline-based research projects). Students may also have the opportunity to complete a practical work placement course related to their specific area of interest (JEG400Y5/401Y5 Environmental Internship).

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Political Science
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The Environmental Management programs focus on environment, society, and public policy. The cornerstone course ENV201H5 (Environmental and Resource Management) in the second year provides students with an introduction to the political and socioeconomic framework of environmental management. Students then have the opportunity to develop specialized skills in resource management, environmental assessment, and the social, economic, and policy aspects of environmental change. One possible pathway through Environmental Management would rely mainly on Social Science course selections (e.g., Environmental Politics in Canada, Sociology of the Environment, The Environment: Perspectives from Economics and Ecology). An alternative pathway would rely more heavily on Humanities course selections (e.g., Environmental Ethics, Canadian Environmental History, Literature and the Environment). Experiential learning and research opportunities are important to all of the Environmental Management programs. No matter which pathway is followed, some basic Science courses are also required. The premise is that those who will set environmental policy and lead society through our current environmental challenges must have some foundation in natural science. Students who have concerns about identifying which pathway is best for them are encouraged to visit the Program Advisors and Academic Counsellor early and often.

Professional Advancement for Geography and Environment Students (PAGES)
The program is based on a series of workshops, career events and related activities designed to help students develop: an awareness of research, career and graduate possibilities; skills required to apply successfully for employment and graduate studies; and personal skills to improve self-confidence and potential within the workplace, professional direction and self-awareness. On successful completion of the program students receive a transcript annotation. Please contact Sabrina Ferrari (sabrina.ferrari@utoronto.ca) for details on registering for this program.

Combined Degree Programs in Environmental Management (HBA) and Master of Science in Sustainability Management (MScSM) Students in either the Specialist or Major program in Environmental Management with an interest in pursuing a Master of Science in Sustainability Management (MScSM) (offered at the UTM campus) have the opportunity to participate in a Combined Degree Program. Combined Degree Programs in Environmental Management and MScSM will allow students to complete an undergraduate degree with an early admission offer to the MScSM program in their fourth year of study. Students will be able to complete 1.0 FCE of MScSM graduate level courses in their final undergraduate year, which will count as credit toward undergraduate degree requirements and the MScSM Program. At the end of the Combined Degree Program, students will have earned a four-year undergraduate degree and an MScSM.

Students interested in pursuing a Combined Degree Program will apply to the program at the end of their third year of study. As part of the application, students will be required to apply and interview for early conditional admission to the MScSM Program. Once accepted into the Combined Degree Program, students will work with the MScSM Director to choose appropriate graduate level courses to complete during their final undergraduate year.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 40)
- BIO Biology (page 78)
- ECO Economics (page 159)
- ENG English (page 168)
- ENV Environment (page 186)
- ERS Earth Science (page 146)
- GGR Geography (page 224)
- HIS History (page 238)
- JEG Geography (page 224)
- JGE Geography (page 224)
- MAT Mathematics (page 259)
- MGT Management (page 268)
- PHL Philosophy (page 305)
- POL Political Science (page 319)
- SCI Science (page 339)
- SOC Sociology (page 341)
- STA Statistics (page 356)
- WRI Professional Writing and Communication (page 326)

Specialist Program ERSPE1425
Environmental Management (Arts)

12.0 credits are required, of which at least 4.0 must be at the 300-400 level, including at least 1.0 at the 400 level.

Limited Enrolment – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher, and who have a CGPA of at least 2.5.

First Year: 3.0 credits:
1. Introduction: ENV100Y5
2. Economics: ECO100Y5
3. Foundation: 1.0 credit chosen from this list: ANT102H5; GGR111H5; PHL105Y5; POL112H5, 113H5, 114H5; SOC100H5

Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.

Second Year: 4.0 credits:
1. Environmental Management Core: ENV201H5
2. Social Science/Humanities Core: 1.5 credits chosen from this list: ANT204Y5, 241Y5; ECO200Y5; ENG259H5; GGR202H5, 207H5, 208H5, 209H5,
Programs

Environmental Management (HBA)

210H5, 267H5, 269H5, 287H5, 288H5; MAT102H5, 133Y5, 134Y5, 135Y5; PHL273H5; ENV250Y5

3. **Science Core**: 1.0 credit chosen from this list:
   - BIO201H5, 205H5; ERS201H5, 202H5, 203H5;
   - GGR201H5, 214H5, 217H5, 227H5; PHY237H5

4. **Statistics**: 0.5 credit chosen from this list:
   - GGR276H5; STA220H5 or other 200/300 statistics course with permission from Program Advisor.

5. **Analytical & Research Methods**: 0.5 credit chosen from this list:
   - GGR277H5, 278H5; STA221H5; or another program-relevant 200/300-level Research Methods course, with permission of the Program Advisor.

**Upper Years: 5.0 credits:**

1. **Environmental Management Perspectives**: 1.5 credit chosen from this list: ANT357H5; ENV310H5, 393; HIS318H5, 319H5

2. **Social, Economic & Policy Perspectives**: 2.0 credits chosen from this list: ANT357H5, 368H5, 370H5; ECO373Y5; ENV310H5, 393; HIS318H5, 319H5, 329H5, 333H5, 348H5, 349H5, 361H5, 365H5, 370H5, 418H5, 419H5, 426H5, 493H5; GGR318H5, 329H5, 333H5, 348H5, 374H5; JGE378H5, JUG320H1; MGT394H5; PHL373H1; POL343Y5; SOC339H5, 349H5, 356H5; WRI375H5

3. **Scientific Perspectives**: 0.5 credit chosen from this list: BIO333H5, 464H5; ENV495H5, 496H5; ERS313H5, ERS315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 317H5, 337H5, 374H5, 377H5, 384H5, 484H5; ERS313H5, JGE378H5; SCI395H5, SCI396H5

4. **Field, Project-based & Research Perspectives**: 1.0 credit chosen from this list: ENV299Y5, 331H5, 332H5, 399Y5, 497H5, 498Y5; GGR379H5, 389H5; JEG400Y5, 401Y5; SCI495H5, 499H5; or another program-relevant Field, Experiential, or Research course, with permission of the Program Advisor.

**Note**: This is intended to be an interdisciplinary program. At least four different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + GGR + HIS + PHL is acceptable, but a course list selected only from ENV + GGR + HIS is not; a course list selected from ENV + ENG + ECO + POL is acceptable, but a course list selected only from ENV + ECO + POL is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

Specialist Program GSCOBASU1 Combined Specialist in Environmental Management and MScSM

**Limited Enrolment** – Enrolment in this program is limited to students who:

- Are currently enrolled in the Specialist Program in Environmental Management (ERSPE1425);
- Have either completed or are currently enrolled in a min. of 15.0 total credits;
- Have a min. annual GPA of 3.7 in the most recent year of study;
- Have been offered conditional early admission to the MScSM Program Meeting the minimum requirements does not guarantee admission to the program. There are a limited number of spaces available in this program; thus, the actual GPA requirement in any particular year may vary from the 3.7 value in order to achieve a proper balance between enrolments and teaching/learning resources.

**First Year:**

1. Introduction: ENV100Y5
2. Economics: ECO100Y5
3. Foundation: 1.0 credit chosen from this list: ANT102H5; GGR111H5; PHL105Y5; POL112H5, POL113H5, POL114H5; SOC100H5

**Second Year:**

1. Environmental Management Core: ENV201H5
2. Social Science/ Humanities Core: 1.5 credits chosen from this list: ANT204Y5, ANT241Y5; ECO200Y5; ENG259H5; GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR287H5, GGR288H5; MAT102H5, MAT133Y5, MAT134Y5, MAT135Y5, PHL273H5; ENV250Y5
3. Science Core: 1.0 credit chosen from this list: BIO201H5, BIO205H5; ERS201H5, ERS202H5, ERS203H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5; PHY237H5
4. Statistics: 0.5 credit chosen from this list: GGR276H5; STA220H5 or other 200/300-level statistics course with permission from Program Advisor
5. Analytical & Research Methods: 0.5 credit chosen from this list: GGR277H5, GGR278H5; STA221H5; or another program-relevant 200/300-level research methods course, with permission of the Program Advisor

**Third & Fourth Years:**

First Year:

1. Introduction: ENV100Y5
2. Economics: ECO100Y5
3. Foundation: 1.0 credit chosen from this list: ANT102H5; GGR111H5; PHL105Y5; POL112H5, POL113H5, POL114H5; SOC100H5

Second Year:

1. Environmental Management Core: ENV201H5
2. Social Science/ Humanities Core: 1.5 credits chosen from this list: ANT204Y5, ANT241Y5; ECO200Y5; ENG259H5; GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR267H5, GGR269H5, GGR287H5, GGR288H5; MAT102H5, MAT133Y5, MAT134Y5, MAT135Y5, PHL273H5; ENV250Y5
3. Science Core: 1.0 credit chosen from this list: BIO201H5, BIO205H5; ERS201H5, ERS202H5, ERS203H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5; PHY237H5
4. Statistics: 0.5 credit chosen from this list: GGR276H5; STA220H5 or other 200/300-level statistics course with permission from Program Advisor
5. Analytical & Research Methods: 0.5 credit chosen from this list: GGR277H5, GGR278H5; STA221H5; or another program-relevant 200/300-level research methods course, with permission of the Program Advisor

Third & Fourth Years:
Environmental Management (HBA) Programs

1. Environmental Management Perspectives: 1.5 credit chosen from this list: ANT357H5; ENV310H5, ENV393H5; HIS308H5, HIS319H5

2. Social Economic & Policy Perspectives: 2.0 credits chosen from this list: ANT357H5, ANT368H5, ANT380H5; ECO373Y5; ENV320H5, ENV345H5, ENV351H5, ENV420H5, ENV425H5, ENV452H5; GGR318H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR418H5, GGR419H5, GGR426H5, GGR493H5; GGR321H1; JGE378H5; JUG320H1; MGT395H5; PHL373H1; POL343Y5; SOC339H5, SOC349H5, SOC356H5; WRI375H5

3. Scientific Perspectives: 0.5 credit chosen from this list: BIO333H5, BIO464H5; ENV495H5, ENV496H5; ERS315H5, ERS321H5; GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5; ERS313H5; JGE378H5; SCI395H5, SCI396H5

4. Field, Project-Based & Research Perspectives: 1.0 credit chosen from this list: ENV299Y5, ENV331H5, ENV332H5, ENV399Y5, ENV497H5, ENV498Y5; GGR379H5, GGR389H5; JEG400Y5, JEG401Y5; SCI498H5, SCI499H5; or another program-relevant field, experiential, or research course, with permission of the Program Advisor

5. MScSM Courses: 1.0 credit chosen from this list: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H; ECO2908H; EES1107H, EES1124H, EES1125H; ENV1002H, ENV1704H, ENV1707H; JPG1407H, JPG1408H; or another program-relevant graduate course with permission of the MScSM Director

Fifth & Sixth Years:


2. Elective Courses: 3.0 credits of either Science or Management, Economics, and Social Electives

3. Internship: SSM1110H

Notes:

1. Students must complete a min. 15.0 credits before they can enroll in this Combined Degree Program

2. Students must also complete their remaining Environmental Management Specialist program requirements and undergraduate degree requirements before conditions of acceptance to the MScSM Program are removed and student can begin graduate studies.

3. Students will retain 1.0 credit of graduate MScSM courses that were completed during their undergraduate. These courses do not need to be repeated to fulfill MScSM program requirements.

4. Sample Science elective courses for MScSM: JPG1407H, JPG1408H; EES1107H, EES1117H, EES1125H; ENV1002H, ENV1704H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.

Major Program ERMAJ1425 Environmental Management (Arts)

8.0 credits are required, of which at least 2.0 must be at the 300-400 level.

Limited Enrolment — Enrolment in this program is limited to students who have completed ENV100Y with a mark of 65% or higher.

First Year: 2.0 credits:

1. Introduction: ENV100Y5

2. Foundation: 1.0 credit chosen from this list: ANT102H5; ECO100Y5; GGR111H5; PHL105Y5; POL112H5, 113H5, 114H5; SOC100H5

Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.

Second Year: 2.5 credits:

1. Environmental Management Core: ENV201H5

2. Social Science/Humanities Core: 1.0 credit chosen from this list: ANT204Y5, 241Y5; ENO259H5; GGR202H5, 207H5, 208H5, 209H5, 210H5, 267H5, 269H5, 287H5, 288H5; PHL273H5; ENV250Y5

3. Science Core: 0.5 credit chosen from this list: BIO205H5, ERS201H5, GGR201H5, 214H5, 217H5, 227H5; PHY237H5

4. Analytical & Research Methods: 0.5 credit chosen from this list: GGR276H5, 277H5, 278H5; STA220H5; or another program-relevant 200/300-level Research Methods course, with permission of the Program Advisor

Upper Years: 3.5 credits:

1. Environmental Management Perspectives: 1.0 credit chosen from this list: ANT357H5; ENV310H5, ENV393H5; HIS318H5, 319H5

2. Social, Economic & Policy Perspectives: 1.5 credit chosen from this list: ANT357H5, 368H5, 370H5; ECO373Y5; ENV310H5, 320H5, 345H5, 351H5, 420H5, 425H5, 452H5; GGR318H5, 329H5, 339H5, 348H5, 349H5, 361H5, 365H5, 370H5, 418H5, 419H5, 426H5; JGE378H5; MGT394H5; PHL373H1; POL343Y5; SOC339H5, 349H5, 356H5; WRI375H5

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3. **Scientific Perspectives**: 0.5 credit chosen from this list: BIO333H5, 464H5; ERS313H5, ERS315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 317H5, 337H5, 374H5, 377H5, 384H5, 484H5; ENV495H5, 496H5; ERS313H5; JGE378H5

4. **Field, Project-based & Research Perspectives**: 0.5 credit chosen from this list: ENV299Y5, 331H5, 332H5, 399Y5; GGR379H5, 389H5; JEG400Y5, 401Y5; or another program-relevant Field, Experiential, or Research course, with permission of the Program Advisor.

Note: This is intended to be an interdisciplinary program. At least four different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + GGR + HIS + PHL is acceptable, but a course list selected only from ENV + GGR + HIS is not; a course list selected from ENV + ENG + ECO + POL is acceptable, but a course list selected only from ENV + ECO + POL is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

### Major Program GSCOBBASU2 Combined Major in Environmental Management and MScSM

**Limited Enrolment** – Enrolment in this program is limited to students who:

- Are currently enrolled in the Major Program in Environmental Management (ERMAJ1425);
- Have either completed or are currently enrolled in a min. of 15.0 total credits;
- Have a min. annual GPA of 3.7 in the most recent year of study;
- Have been offered conditional early admission to the MScSM Program Meeting the minimum requirements does not guarantee admission to the program. There are a limited number of spaces available in this program; thus, the actual GPA requirement in any particular year may vary from the 3.7 value in order to achieve a proper balance between enrolments and teaching/learning resources.

**First Year**:
1. Introduction: ENV100Y5
2. Foundation: 1.0 credit chosen from this list: ANT102H5; ECO100Y5; GGR111H5; PHL105Y5; POL112H5, POL113H5, POL114H5; SOC100H5

**Second Year**:
1. Environmental Management Core: ENV201H5

**Third & Fourth Years**:
1. Environmental Management Perspectives: 1.0 credit chosen from this list: ANT357H5; ENV310H5, ENV393H5; HIS318H5, HIS319H5
2. Social Science/ Humanities Core: 1.0 credit chosen from this list: BIO305H5, GGR315H5, ERS201H5, ERS207H5, GGR214H5, ENV217H5, ENV227H5, PHY237H5
3. Scientific Perspectives: 0.5 credit chosen from this list: BIO333H5, BIO464H5; ERS315H5, ERS321H5; GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR317H5, GGR337H5, GGR374H5, GGR377H5, GGR384H5, GGR484H5; ENV496H5, ENV496H5; ERS313H5; JGE378H5; SCI395H5, SCI396H5
4. Field, Project-Based & Research Perspectives: 0.5 credit chosen from this list: ENV299Y5, ENV331H5, ENV332H5, ENV399Y5; GGR379H5, GGR389H5; JEG400Y5, JEG401Y5; or another program-relevant field, project-based or research course, with permission of the Program Advisor.
5. MScSM Courses: 1.0 credit chosen from this list: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H; ECO2908H; EES1107H, EES1124H, EES1125H; JPG1407H, JPG1408H; or another program-relevant graduate course with permission of the MScSM Director.

**Fifth & Sixth Years**:
2. Elective Courses: 3.0 credits of either Science or Management, Economics, and Social Electives
3. Internship: SSM1110H

Notes:
1. Students must complete a min. 15.0 credits before they can enroll in this Combined Degree Program.

2. Students must also complete their remaining Environmental Management Major program requirements and undergraduate degree requirements before conditions of acceptance to the MScSM Program are removed and student can begin graduate studies.

3. Students will retain 1.0 credit of graduate MScSM courses that were completed during their undergraduate. These courses do not need to be repeated to fulfill MScSM program requirements.

4. Sample Science elective courses for MScSM: JPG1407H, JPG1408H; EES1107H, EES1117H, EES1125H; ENV1002H, ENV1704H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.

5. Sample Management, Economics, and Social elective courses for MScSM: SSM2010H, SSM2020H; ENV1707H; EES1124H; ECO2908H; MGT2918H; RSM2216H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.

**Minor Program ERMIN1425 Environmental Management (Arts)**

4.0 credits are required, of which at least 1.0 must be at the 300 level.

**Limited Enrolment** – enrolment in this program is limited to students who have completed ENV100Y with a mark of 60% or higher.

**First Year: 1.0 credit:**

1. Introduction: ENV100Y5

*Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.*

**Second Year: 1.5 credits:**

1. Environmental Management Core: ENV201H5

2. Social Science/Humanities Perspectives: 0.5 credit chosen from this list: ANT204H5; ENG259H5; GGR202H5, 207H5, 208H5, 209H5, 210H5, 267H5, 269H5, 287H5, 288H5; PHL255H5, 273H5; ENV250Y5

3. Scientific Perspectives: 0.5 credit chosen from this list: BIO201H5, 205H5; ERS201H5; GGR201H5, 214H5, 217H5, 227H5; PHY237H5

**Third Year: 1.5 credits:**

1. Field, Project-based & Research Perspectives: 0.5 credit chosen from this list: ENV299Y5, 331H5; GGR379H5, 389H5; JEG401Y5; or another program-relevant Field, Project-Based, or Research course, with permission of the Program Advisor

2. 1.0 additional credit chosen from this list: ANT357H5, 368H5, 370H5; ECO373Y5; ENV310H5, 320H5, 345H5, 393H5, 420H5, 425H5, 490H5, 491H5; GGR318H5, 333H5, 348H5, 349H5, 361H5, 365H5, 370H5, 418H5; HIS318H5, 319H5; HPS328H1; JGE378H5; MGT394H5; PHL373H1; POL343Y5; SCI395H5, SCI396H5; SOC339H5, 349H5, 356H5; WRI375H5

**Note** This is intended to be an interdisciplinary program. At least three different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + GGR + HIS is acceptable, but a course list selected only from ENV + GGR is not; a course list selected from ENV + ECO + POL is acceptable, but a course list selected only from ENV + HIS is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

**Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time. Students may take no more than 2.0 credits combined in ROP, individual project courses, or thesis courses at the 300/400 level for credit toward their Environment program.**
**Environmental Science (HBSc)**

Environment at U of T Mississauga offers a choice of two program paths:

- Environmental Science (HBSc) (Page 175)
- Environmental Management (HBA) (Page 175)

These interdisciplinary programs are administered by the U of T Mississauga Geography Department, which advises students and coordinates participating departments, faculty and programs.

The curriculum stresses the integrative nature of the study of the environment. Students will develop the environmental problem-solving skills required for some of the most dynamic areas of today’s job market. Environment faculty members encourage students to become involved in basic enquiry and critical thinking, cross-disciplinary collaboration, and the application of concepts to real-life problems.

The Environment programs begin with a first-year Science course, ENV100Y5 (The Environment). The programs offer students abundant opportunities to become involved in environmental practice, research and fieldwork (e.g., ENV299Y5 Research Opportunity Program, ENV232H5 Environmental Sustainability Practicum, ENV331H5 International Environmental Sustainability–Mexico, ENV497H5/498Y5 Environmental Research Project, and discipline-based research projects). Students may also have the opportunity to complete a practical work placement course related to their specific area of interest (ENV400Y5 Environmental Internship).

**Professional Advancement for Geography and Environment Students (PAGES)**

The program is based on a series of workshops, career events and related activities designed to help students develop: an awareness of research, career and graduate possibilities; skills required to apply successfully for employment and graduate studies; and personal skills to improve self-confidence and potential within the workplace, professional direction and self-awareness. On successful completion of the program students receive a transcript annotation. Please contact Sabrina Ferrari (sabrina.ferrari@utoronto.ca) for details on registering for this program.

**Academic Counselor**

Geography
Ms. Sabrina Ferrari
Room 3282, William G. Davis Bldg.
905-828-5465
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**Director and Program Advisor**

Geography
Barbara Murck
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The Environmental Science programs offer an opportunity to study the interdisciplinary sciences that are required to understand complex environmental problems involving the natural world and human impacts. Students can tailor the scientific focus of the program to their own interests, by choosing courses from Geographical and Earth Science Perspectives; Biological/Ecological Perspectives; and Physical/Chemical Perspectives. For example, one possible pathway through Environmental Science focuses on the relationships among biota, land, water, and air, the structure and function of natural and managed ecosystems, and processes in the biogeochemical environment. This pathway would rely mainly on courses chosen from the Geographical and Ecological Perspectives. An alternative, more analytical pathway is better suited to students with a strong interest in laboratory sciences, who wish to apply their knowledge to problems of chemical, physical, and biotechnical remediation and the control of environmental problems. This pathway would involve more course choices in the Physical and Chemical Sciences. Fieldwork, experiential learning, and research opportunities are important to all of the Environmental Science programs. No matter which pathway is followed, some courses on Social and Policy Perspectives are also part of the program. The premise is that those who will develop our scientific knowledge and technological capacities must also have a basic understanding of environmental management, policy, and the human-environment relationship. Students who have concerns about identifying which pathway is best for them are encouraged to visit the Program Advisors and Academic Counselor early and often.

**Combined Degree Programs in Environmental Science (HBSc) and Master of Science in Sustainability Management (MScSM)**

Students in either the Specialist or Major program in Environmental Science with an interest in pursuing a Master of Science in Sustainability Management (MScSM) (offered at the UTM campus) have the opportunity to participate in a Combined Degree Program. Combined Degree Programs in Environmental Management and MScSM will allow students to complete an undergraduate degree with an early admission offer to the MScSM program in their fourth year of study. Students will be able to complete 1.0 FCE of MScSM graduate level courses in their final undergraduate year, which will count as credit toward undergraduate degree requirements and the MScSM Program. At the end of the Combined Degree Program, students will have earned a four-year undergraduate degree and an MScSM.
Students interested in pursuing a Combined Degree Program will apply to the program at the end of their third year of study. As part of the application, students will be required to apply and interview for early conditional admission to the MScSM Program. Once accepted into the Combined Degree Program, students will work with the MScSM Director to choose appropriate graduate level courses to complete during their final undergraduate year.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 40)
- BIO Biology (page 78)
- CHM Chemistry (page 94)
- ECO Economics (page 153)
- ENV Environment (page 186)
- ERS Earth Science (page 146)
- GGR Geography (page 224)
- HIS History (page 238)
- JCP Chemistry (page 94)
- JEG Geography (page 224)
- JGE Geography (page 224)
- MAT Mathematics (page 298)
- MGT Management (page 288)
- PHL Philosophy (page 305)
- PHY Physics (page 313)
- POL Political Science (page 319)
- SCI Science (page 339)
- SOC Sociology (page 341)
- STA Statistics (page 356)
- WRI Professional Writing and Communication (page 326)

Specialist Program ERSPE1061 Environmental Science (Science)

Within an Honours degree, 12.0 credits are required, of which at least 4.0 must be at the 300-400 level, including at least 1.0 at the 400 level.

Limited Enrolment – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher, and who have a CGPA of at least 2.5.

First Year: 4.0 credits:
1. Introduction: ENV100Y5
2. Quantitative and Basic Scientific Foundation: 3.0 credits chosen from this list: BIO152H5, 153H5; CHM110H5, 120H5, GGR112H5, ERS120H5, MAT134Y5, 135Y5, 137Y5, PHY135Y5, 136H5, 137H5

Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.
Note: This is intended to be an interdisciplinary program. At least four different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + GGR + CHM + ERS is acceptable, but a course list selected only from ENV + GGR + HIS is not; a course list selected from ENV + CHM + BIO + ERS is acceptable, but a course list selected only from ENV + CHM + ERS is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

Specialist Program GSCOBBSU3 Combined Specialist in Environmental Science and MScSM

**Limited Enrolment** – Enrolment in this program is limited to students who:
- Are currently enrolled in the Specialist Program in Environmental Science (ERSPE1061);
- Have either completed or are currently enrolled in a min. of 15.0 total credits
- Have a min. annual GPA of 3.7 in the most recent year of study
- Have been offered conditional early admission to the MScSM Program Meeting the minimum requirements does not guarantee admission to the program. There are a limited number of spaces available in this program; thus, the actual GPA requirement in any particular year may vary from the 3.7 value in order to achieve a proper balance between enrolments and teaching/learning resources.

**First Year:**
1. Introduction: ENV100Y5
2. Quantitative and Basic Scientific Foundation: 3.0 credits chosen from this list: BIO152H5, BIO153H5, CHM110H5, CHM120H5, ERS120H5, GGR112H5, MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, PHY136H5, PHY137H5

**Second Year:**
1. Environmental Management Perspectives: ENV201H5
2. Biological & Ecological Perspectives: 0.5 credit chosen from this list: BIO202H5, BIO203H5, BIO205HS, BIO206H5
3. Geographical Perspectives: 0.5 credit chosen from this list: GGR201H5, GGR214H5, GGR217H5, GGR227H5
4. Earth Science Perspectives: ERS201H5
5. Physical & Chemical Perspectives: 1.0 credits chosen from this list: CHM231H5, CHM242H5; JCP221H5; ERS202H5, ERS203HS, PHY237H5
6. Analytical & Research Methods: 1.0 credit: 0.5 credit chosen from this list: BIO360H5, BIO361H5; CHM211H5, GGR276H5, STA220H5, STA221H5; plus an additional 0.5 credit of Analytical & Research Methods courses, including GGR278H5, GGR337H5, GGR308H5

**Third & Fourth Years:**
1. Environmental Science Core: ENV330H5
2. Field Perspectives: 0.5 credit chosen from this list: ANT318H5, BIO313H5, BIO329H5, BIO416H5; ERS325H5; ENV331H5, GGR379H5, GGR390H1; or another program-relevant field course (SCI), with permission of the Program Advisor
3. Field, Project-Based & Research Perspectives: 1.0 credit chosen from this list: BIO400Y5, ENV332H5, ENV399Y5, ENV497H5, ENV498Y5, GGR417Y5; JEG400Y5, JEG401Y5; SCI395H5, SCI396H5, SCI498H5, SCI499H5; or another program-relevant project-based or research course (SCI), with permission of the Program Advisor
4. Biogeochemical Perspectives: 1.5 credits chosen from this list: BIO311HS, BIO312H5, BIO318Y5, BIO328H5, BIO330H5, BIO333H5, BIO373H5, BIO405H5, BIO406H5, BIO436H5, BIO464H5; CHM310H1, CHM311H5, CHM331H5, CHM333H5, CHM347H5, CHM361H5, CHM362H5, CHM391H5, CHM393H5, CHM416H5; ENV490H5, ENV491H5, ENV495H5, ENV496H5; ERS313H5, ERS315H5, ERS321H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR312H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR377H5, GGR384H5, GGR403H1, GGR406H5, GGR407H5, GGR409H1, GGR413H1, GGR463H5, GGR464H5, GGR479H5, GGR484H5; JGE378H5; PHY331H5
5. Social, Economic & Policy Perspectives: 0.5 credit chosen from this list: ANT357H5, ANT368H5; ECO373Y5; ENV250Y5, ENV310H5, ENV320H5, ENV345H5, ENV351H5, ENV393H5, ENV420H5, ENV425H5, ENV452H5; ECO290H5, GGR318H5, GGR348H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR420H5, GGR426H5; JGE378H5; HIS318H5, HIS319H5; MGT394H5; PHL273H5, PHL373H1; POL343Y5; SOC226H5, SOC339H5, SOC356H5; WRI375H5
6. MScSM Courses: 1.0 credit chosen from this list: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H; ECO290H5; EES1107H, EES1124H, EES1125H; ENV1002H, ENV1704H, ENV1707H; JPG1407H, JPG1408H; or another program-relevant graduate course with permission of the MScSM Director

**Fifth & Sixth Years:**
Environmental Science (HBSc)

2. Elective Courses: 3.0 credits of either Science or Management, Economics, and Social Electives
3. Internship: SSM1110H

Notes:
1. Students must complete a min. 15.0 credits before they can enroll in this Combined Degree Program
2. Students must also complete their remaining Environmental Science Specialist program requirements and undergraduate degree requirements before conditions of acceptance to the MScSM Program are removed and student can begin graduate studies.
3. Students will retain 1.0 credit of graduate MScSM courses that were completed during their undergraduate. These courses do not need to be repeated to fulfill MScSM program requirements.
4. Sample Science elective courses for MScSM: JPG1407H, JPG1408H; EES1107H, EES1117H, EES1125H; ENV1002H, ENV1704H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.
5. Sample Management, Economics, and Social elective courses for MScSM: SSM2010H, SSM2020H; ENV1707H; EES1124H; ECO2908H; MGT2918H; RSM2216H; or another program-relevant Field, Experiential, or Research course (SCI), with permission of the Program Advisor

Upper Years: 2.5 credits:
1. Environmental Science Core: ENV330H5
2. Field, Project-Based & Research Perspectives: 0.5 credit chosen from this list: ANT318H5, BIO313H5, 329H5, 416H5; ERS325H5; ENV299Y5, 331H5, 332H5, 399Y5; GGR379H5; JEG400Y5, JEG401Y5; SCI395H5, 396H5, 498H5, 499H5; or another program-relevant Field, Experiential, or Research course (SCI), with permission of the Program Advisor
3. Biogeochemical Perspectives: 1.0 credit chosen from this list: BIO311H5, 312H5, 318Y5, 328H5, 330H5, 333H5, 373H5, 405H5, 406H5, 436H5, 464H5; CHM310H1, 311H5, 314H5, 333H5, 347H5, 361H5, 362H5, 391H5, 399H5; ENV495H5, 496H5; ERS313H5, 315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 312H5, 315H5, 316H5, 317H5, 338H5, 372H5, 374H5, 375H5, 377H5, 403H1, 406H5, 407H5, 409H1, 413H1, 463H5, 464H5, 479H5; JGE378H5; PHY331H5
4. Social, Economic & Policy Perspectives: 0.5 credit chosen from this list: ANT357H5, 368H5; ECO373Y5; ENV250Y5, 310H5, 320H5, 345H5, 393H5, 420H5, 425H5; GGR318H5, 329H5, 333H5, 348H5, 349H5, 361H5, 365H5; MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, 136H5, 137H5

Limited Enrolment – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher.

First Year: 3.0 credits:
1. Introduction: ENV100Y5
2. Quantitative and Basic Scientific Foundation: 2.0 credits chosen from this list: BIO152H5, 153H5, CHM110H5, 120H5; GGR112H5, ERS120H5; MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, 136H5, 137H5

Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.

Second Year: 2.5 credits:
1. Environmental Management Perspectives: ENV201H5
2. Biological & Ecological Perspectives: 0.5 credit chosen from this list: BIO202H5, 203H5, 205H5, 206H5
3. Geographical Perspectives: 0.5 credit chosen from this list: GGR201H5, 214H5, 217H5, 227H5
4. Physical & Chemical Perspectives: 0.5 credit chosen from this list: CHM231H5, 242H5, JGP221H5; ERS201H5; PHY237H5
5. Analytical & Research Methods: 0.5 credit chosen from this list: CHM231H5, 242H5, JGP221H5; ERS201H5; PHY237H5

Note: This is intended to be an interdisciplinary program. At least four different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + GGR + CHM + ERS is acceptable, but a course list selected only from ENV + GGR + ERS is not; a course list selected from ENV + CHM + ERS + BIO is acceptable, but a course list selected only from ENV + CHM + BIO is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.
Major Program GSCOBBASU4 Combined
Major in Environmental Science and MScSM

**Limited Enrolment** – Enrolment in this program is limited to students who:
- Are currently enrolled in the Major Program in Environmental Science (ERMAJ1061);
- Have either completed or are currently enrolled in a min. of 15.0 total credits
- Have a min. annual GPA of 3.7 in the most recent year of study
- Have been offered conditional early admission to the MScSM Program

Meeting the minimum requirements does not guarantee admission to the program. There are a limited number of spaces available in this program; thus, the actual GPA requirement in any particular year may vary from the 3.7 value in order to achieve a proper balance between enrolments and teaching/learning resources.

**First Year:**
1. Introduction: ENV100Y5
2. Quantitative and Basic Scientific Foundation: 2.0 credits chosen from this list: BIO152H5, BIO153H5, CHM110H5, CHM120H5, GGR112H5, ERS120H5, MAT134Y5, MAT135Y5, MAT137Y5, PHY135Y5, PHY136H5, PHY137H5

**Second Year:**
1. Environmental Management Perspectives: ENV201H5
2. Biological & Ecological Perspectives: 0.5 credit chosen from this list: BIO202H5, BIO203H5, BIO205H5, BIO206H5
3. Geographical Perspectives: 0.5 credit chosen from this list: GGR201H5, GGR214H5, GGR217H5, GGR227H5
4. Physical & Chemical Perspectives: 0.5 credit chosen from this list: CHM231H5, CHM242H5; JCP221H5; ERS201H5, ERS211H5; GGR305H5, GGR307H5, GGR309H5, GGR312H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR372H5, GGR374H5, GGR377H5, GGR403H1, GGR406H5, GGR407H5, GGR409H1, GGR413H1, GGR463H5, GGR464H5, GGR479H5; JEG378H5; PHY331H5

**Third & Fourth Years:**
1. Environmental Science Core: ENV330H5
2. Field, Project-Based & Research Perspectives: 0.5 credit chosen from this list: ANT318H5, BIO313H5, BIO329H5, BIO416H5, ERS325H5; ENV299Y5, ENV331H5, ENV332H5, ENV399Y5; GGR379H5; JEG400Y5, JEG401Y5; SCI395H5, SCI396H5, SCI498H5, SCI499H5; or another program-relevant Field, Project-Based, or Research course (SCI), with permission of the Program Advisor
3. Biogeochemical Perspectives: 1.0 credit chosen from this list: BIO311H5, BIO312H5, BIO318Y5, BIO328H5, BIO330H5, BIO333H5, BIO373H5, BIO405H5, BIO406H5, BIO436H5, BIO464H5; CHM310H5, CHM311H5, CHM331H5, CHM333H5, CHM347H5, CHM361H5, CHM362H5, CHM391H5, CHM393H5; ENV495H5, ENV496H5; ERS313H5, ERS315H5, ERS321H5; GGR305H5, GGR307H5, GGR309H5, GGR312H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR372H5, GGR374H5, GGR377H5, GGR403H1, GGR406H5, GGR407H5, GGR409H1, GGR413H1, GGR463H5, GGR464H5, GGR479H5; JEG378H5; PHY331H5
4. Social, Economic & Policy Perspectives: 0.5 credit chosen from this list: ANT357H5, ANT368H5; ECO373Y5; ENV250Y5, ENV310H5, ENV320H5, ENV345H5, ENV393H5, ENV420H5, ENV245H5; GGR318H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR361H5, GGR365H5, GGR370H5, GGR418H5, GGR419H5, GGR420H5; HIS318H5, HIS319H5, JEG378H5; MGT394H5; PHL255H5, PHL273H5, PHL373H1; SCI395H5, SCI396H5, SCI498H5, SCI499H5; or another program-relevant graduate course with permission of the MScSM Director

**Fifth & Sixth Years:**
1. Core Courses: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H; ECO2908H; EES1107H, EES1124H, EES1125H; ENV1002H, ENV1704H, ENV1707H; JEG1407H, JEG1408H; or another program-relevant graduate course with permission of the MScSM Director
2. Elective Courses: 3.0 credits of either Science or Management, Economics, and Social Electives
3. Internship: SSM1110H

Notes:
1. Students must complete a min. 15.0 credits before they can enroll in this Combined Degree Program
2. Students must also complete their remaining Environmental Science Major program requirements and undergraduate degree requirements before conditions of acceptance to the MScSM Program are removed and student can begin graduate studies.
3. Students will retain 1.0 credit of graduate MScSM courses that were completed during their undergraduate. These courses do not need to be repeated to fulfill MScSM program requirements.
4. Sample Science elective courses for MScSM: JPG1407H, JPG1408H; EES1107H, EES1117H, EES1125H; ENV1002H, ENV1704H; or another

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program-relevant course with permission of the MScSM Director and Chair of the host department.

5. Sample Management, Economics, and Social elective courses for MScSM: SSM2010H, SSM2020H; ENV1707H; EES1124H; ECO2908H; MGT2918H; RSM2216H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.

Minor Program ERMIN1061 Environmental Science (Science)

4.0 credits are required, of which at least 1.0 must be at the 300 level.

Limited Enrolment – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 60% or higher.

First Year: 1.0 credit:
1. Introduction: ENV100Y5

Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.

Second Year: 2.0 credits:
1. Environmental Management Perspectives: ENV201H5

2. Biological & Ecological Perspectives: 0.5 credit chosen from this list: BIO202H5, 203H5, 205H5, 206H5

3. Geographical & Earth Science Perspectives: 1.0 credit chosen from this list: GGR201H5, 214H5, 217H5, 227H5; ERS201H5, 202H5, 203H5

Upper Years: 1.0 credit:
1. Field, Project-based & Research Perspectives: 0.5 credit chosen from this list: ANT318H5; BIO313H5, 329H5, 416H5; ERS325H5; ENV299Y5, 330H5, 399Y5; GGR379H5; JEG400Y5, SCI395H5, 396H5; or another program-relevant Field, Project-Based, or Research course, with permission of the Program Advisor

2. Biogeochemical Perspectives: 0.5 credit chosen from this list: BIO311H5, 330H5, 333H5, 373H5; CHM311H5, 333H5, 347H5, 361H5, 362H5, 391H5, 393H5; ENV495H5, 496H5; ERS313H5, 315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 312H5, 315H5, 316H5, 317H5, 338H5, 372H5, 374H5, 375H5, 377H5, 384H5, 484H5; JGE378H5; PHY331H5

This is intended to be an interdisciplinary program. At least three different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + BIO + ERS is acceptable, but a course list selected only from ENV + BIO is not; a course list selected from ENV + BIO + CHM is acceptable, but a course list selected only from ENV + ERS is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time. Students may take no more than 2.0 credits combined in ROP, individual project courses, or thesis courses at the 300/400 level for credit toward their Environment program.

List of Courses

ENV100Y5 The Environment (SCI)
This introductory environmental science course examines large-scale features of Earth, natural hazards, Earth’s climate and weather systems, energy and mineral resources, human population growth, extinction and biodiversity, environmental toxins, vanishing soils and expanding deserts, forests, urban environmental management, and food resources. Interdisciplinary interaction among Science, Social Science, and Humanities is a major theme. [72L]

ENV201H5 Environmental Management (SSc)
(Formerly GGR234H5) Environmental management builds on topics discussed in ENV100 and GGR111/112, by focusing on conceptual frameworks and specific tools that can be used to formulate environmental management goals and support decision-making. Case studies will be used throughout to highlight different approaches, focusing primarily on Canadian examples. Topics include ecosystem and adaptive management, environment impact assessments, and the role of stakeholders. [24L 12T]
Exclusion: GGR234H5
Prerequisite: GGR111H5 and GGR112H5 (formerly GGR117Y5) or ENV100Y5
JPE250Y5 Environmental Politics in Canada (SSc)  
Analyzes environmental issues in Canadian politics. Topics include: regulation and property rights, the politics of agenda-setting; sustainable development; science in politics; the impact of federalism; and global influences on domestic policy-making. Substantive issues could include climate change, biodiversity, drinking water, land use and the degradation of natural resources. [48L]  
Exclusion: POL250Y5, ENV250Y5, ENV320H1  
Prerequisite: 3.5 credits

ENV299Y5 Research Opportunity Program (SSc,SCI,EXP)  
This course provides a richly rewarding opportunity for students in their second year to work on a research project with a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

ENV310H5 The Sustainability Imperative (SSc)  
The United Nations Commission on Environment and Development popularized the term sustainable development in its 1987 report, Our Common Future. How far have we come since then, as a global community, in implementing sustainability as a model for development? In this course we will examine the history, measurement, and present-day models and applications of the concepts of sustainability and sustainable development in both the public and private spheres. [24L, 12T]  
Prerequisite: 10 credits including ENV100Y5 and ENV201H5

ENV320H5 Managing Our Waste (SSc,EXP)  
Garbage archaeologist William Rathje once said, “Garbage isn’t generic junk. It’s elements of our behavior all thrown together.” The history of human civilization is reflected in what societies have thrown away over the ages. But in recent decades both the quantity and types of waste generated by human activities have changed radically. In this course we will address the philosophical, social, and management challenges associated with waste in Canadian and international contexts, as well as examining some of the technological and scientific aspects of specific waste management problems. This course fulfills 1 field day. [24L, 12T]  
Prerequisite: 10 credits including ENV100Y5 or (GGR111H5 + GGR112H5)

ENV330H5 Experimental Design in Environmental Science (SCI,EXP)  
This hands-on course introduces students to field methods and integrative problem solving in environmental sciences. Topics will include sampling methods and protocols employed in terrestrial, aquatic and atmospheric assessment and monitoring, as well as experimental design, data analysis and presentation. Practical sessions will involve outdoor field experiences on campus and neighboring areas. [36P]  
Prerequisite: 8.0 credits, completion of a first-year foundation credit, completion of a second/third-year quantitative methods course and enrolment in an Environmental Science program.

ENV331H5 Field Course in Sustainability (SSc,SCI,EXP)  
During a 1 week stay in August, students will participate in seminars on environmental sustainability and resource management at Sir Sanford Fleming College (Lindsay, Ontario) and/or Kawartha Conservation Authority offices, and undertake natural and/or social science studies on sustainability in at least one of the Kawartha Lakes (Pigeon, Sturgeon). Preparatory meetings will be held prior to departure, and seminar/poster presentations on research outcomes will be conducted during the Fall Term.

ADMISSION: through application due March 1st of the preceding academic year, electronically. Acceptance will be based on a combination of GPA (2.7 or higher), experience, qualifications and interview performance. Please visit department website for application details. This course fulfills 7 field days towards the Geography Program Requirements.  
Prerequisite: 10.0 credits; enrolled in any of the ENV Programs / PI  
In addition to tuition fees, there is a travel cost (up to $650) associated with this course for which accepted students will be responsible to pay.

ENV332H5 Practicum in Environmental Project Management (SSc,SCI,EXP)  
This course, offered in collaboration with campus administrative offices of the University of Toronto Mississauga and various community partners, provides Environment Students with practical collaborative work experience in preparation for upper-year field courses and internships. Students will work in teams to develop skills in communication, project management, interdisciplinary teamwork, problem identification, report writing and formal presentations while working on an environmental project on campus or in the local community. This course is strongly recommended for Specialist and Major students in any of the Environment Programs. [24S, 12P]  
Exclusion: ENV232H5  
Prerequisite: 8 credits & enrolment in any of the Environment Specialist or Major Programs with a CGPA of 2.00 or higher; completion of any Research Methods course (e.g., GGR277H5).
ENV345H5 Environmental Issues in the Developing World (SSc)
The Earth is one, but the world is not. We all depend on one biosphere for sustaining our lives. Yet each community, each country, strives for survival and prosperity with little regard for its impact on others. These are the opening words from the report of the UN World Commission on Environment and Development, which first popularized the concept of sustainable development. In this course we examine 'environment' and 'development' as inseparable challenges. We consider global, regional, and local environmental problems from the perspectives of developing nations, and investigate the economic, social, and political roots of these problems. [24L, 12T]
Exclusion: GGR345H5
Prerequisite: Any 8.0 credits.

JEP351H5 Comparative Environmental Policy (SSc)
This course is an introduction to comparative environmental policy. The main focus of the course will be Canada-US-Mexico comparative policy around climate change, biodiversity, water resources, and pollution. Other countries may be examined as larger themes related to sustainable development and environmental justice will be covered in detail. [24L]
Exclusion: ENV351H5
Prerequisite: 9.0 credits, ENV250Y5
Recommended Preparation: This course is recommended for students with an interest in comparative politics and policy. Previous courses in comparative and international political science, geography and sociology will be an asset.

JEP356H5 Environmental Justice (SSc)
Environmental Justice is about the fair treatment of all people in the creation and implementation of environmental policies. It also provides a critical framework to analyze and understand inequalities of an environmental kind. These inequalities are often based around identities of race, class and gender, such that marginalized groups are made to bear the burden of environmental externalities like pollution. Why are First Nations in Canada less likely to have access to safe drinking water? Why are industrial plants often in low-income neighborhoods? After critical examinations of the theories and foundations of environmental justice, this course uses a case study approach to understanding the concepts and the ways in which it has shaped modern society. [24L, 12T]
Prerequisite: 8.5 credits

ENV393H5 Methods of Environmental Assessment (SSc,EXP)
The course focuses on the methodologies for measuring and predicting the impact of development on the bio-physical and socio-economic environments. Topics include environmental assessment, law and institutions, environmental mediation, monitoring, mitigation, evaluation, risk assessment. The types of impact assessment (IA) methods examined vary from year to year (e.g. economic IA, ecological IA). [24L, 6P]
Prerequisite: ENV100Y5
Note: Course was formerly GGR393H5.

ENV399Y5 Research Opportunity Program (SSc,SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to work on a research project with a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

ENV400Y5 Environmental Internship (SSc,SCI)
Course code has been changed to JEG400Y5 & JEG401Y5
Prerequisite: 4th year standing, PI

JEG400Y5 Geography / Environment Science Internship (SCI,EXP)
Through a part-time, unpaid work placement, students apply the natural science based environmental science/physical geography expertise gained through previous course work. Placements are made at local conservation authorities, municipalities, environmental consulting companies, corporations, provincial or federal agencies, and other organizations. Students must submit an application to the undergraduate advisor by March 1 to apply for the course. Specialists in the Environmental Science or Physical Geography Program will be given priority for admission. The student's application must include a current transcript, a current curriculum vita, and a letter of application explaining why their qualifications and interest make them suitable candidates for an internship opportunity. Applicants who meet minimum criteria will be selected for an interview. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance.
Exclusion: ENV400Y5, GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits, PI
JEG401Y5 Geography / Environment Social Science Internship (SSc,EXP)
Through a part-time, unpaid work placement, students apply the knowledge and expertise gained through previous course work in geography. Placements may be made in a range of settings. For example, placements may include municipal government, regional government, neighbourhood organizations and centres, corporations as well as with non-governmental organizations. Admission to course will be through application due by March 1. Specialists in the Environmental Management or Geography programs will be given priority for admission. The student's application must include a current transcript, a current curriculum vita, and a letter of application explaining why their qualifications and interest make them suitable candidates for an internship opportunity. Applicants who meet minimum criteria will be selected for an interview. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance. 
Exclusion: ENV400Y5, GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits, PI

ENV420H5 Geography of Food: Geographical Patterns and Environmental Impacts (SSc)
This seminar course examines the geographic patterns and environmental impacts of our food production and distribution system. Topics include the sustainability of the current system as well as alternatives to the norm. The geographic focus is Southern Ontario. Topics such as food miles, urban agriculture, and small scale production systems are also evaluated. [24S]
Exclusion: GGR419H5 offered in 2011-2013; GGR489H5F offered in 2009-2010
Prerequisite: 14 credits
Recommended Preparation: GGR287H5

ENV425H5 Managing Urban Ecosystems (SSc)
This seminar course examines the ways people interact with and manage urban ecosystems. The role of municipal policy, residents’ attitudes, neighborhood characteristics, and other factors will be examined in-depth. Throughout the course, issues associated with bridging the gaps between the social and natural sciences, unique characteristics of urban ecosystems, and the role of individual decision-makers will be considered. [24L]
Prerequisite: 14 credits; priority enrollment for ENV Management and ENV Science students

ENV430H5 Legal and Policy Approaches to Environmental Issues (SSc)
As the world grapples with increasingly complex environmental challenges, decision makers must find ways to adequately address them. There are many different instruments and tools which can be applied to environmental problems. Whether they are successful can depend on the political, policy, and legal context as well as the compatibility of the instrument chosen with the environmental problem it is directed at. This course will look at the “toolbox” of legal instruments and policy tools from both a theoretical and practical perspective. It will help students understand the advantages and disadvantages of the different options as well as how they can and are being used to deal with different environmental problems. [24L, 12T]
Prerequisite: 14 credits, GGR111H5 + GGR112H5 (formerly GGR117Y)/ENV100Y5/PI
Recommended Preparation: ENV250Y5

JEP452H5 Politics and Policy of Wildlife Conservation (SSc)
This course is an in-depth analysis of conservation policy in Canada. The course begins with an overview biodiversity crisis facing the planet and then moves to an overview of Canada's approach to managing biodiversity across the country. We will carefully examine the federal Species at Risk Act as well as the provincial and territorial wildlife legislation. The remaining of the course will be aimed at making improvements to the Canadian strategy. During the course of the semester, the students will focus on the recovery of endangered species in Canada through the development of a recovery strategy for a specific species.[24L]
Exclusion: ENV452H5
Prerequisite: ENV100Y5, ENV250H5

ENV490H5 Special Topics in Environmental Studies (SCI)
These courses highlight various topics of special interest in environmental studies. The specific focus and format of the course will vary, depending on the chosen topic. The course will not be offered every year. Please check with the Academic Counsellor, Sabrina Ferrari (905-828-5465), for further information. [24L]
Prerequisite: 4th year standing, ENV100Y5

ENV491H5 Special Topics in Environmental Studies (SSc)
These courses highlight various topics of special interest in environmental studies. The specific focus and format of the courses will vary, depending on the chosen topic. The courses will not be offered every year. Please check with the Academic Counsellor, Sabrina Ferrari (905-828-5465), for further information. [24L]
Prerequisite: 14 credits including ENV100Y5, PI.
ENV495H5 Restoration Ecology I (SCI)
Restoration ecology is an emerging cross-disciplinary field of study that concerns human activities undertaken to promote the recovery, health, integrity and sustainability of degraded ecosystems. This course introduces the fundamental concepts of ecological restoration, addressing topics such as assessing ecosystem health, resilience, resistance and stability; community structure and biodiversity; invasive species; ecosystem processes and functions; societal aspects of ecological restoration (e.g., the relationship between social, economic and environmental sustainability). Many types of ecosystems (marine, freshwater, terrestrial, tropical and temperate) will be studied, largely through case-study investigations. Occasional field exercises on campus will be scheduled during regular class meeting times. [24L, 12T]
Prerequisite: 14 credits including ENV100Y5 or BIO205H5.

ENV496H5 Restoration Ecology II (SCI,EXP)
The follow-up course to Restoration Ecology I, ENV496 will build on its theoretical foundations to focus on student involvement in a variety of restoration projects planned or underway by Credit Valley Conservation and other groups in Mississauga and the greater Credit Valley watershed. The emphasis here is on planning and implementation of restoration projects; good scientific design; understanding policies and procedures; identifying and working with stakeholders, etc. Occasional field exercises may be scheduled during regular class meeting times. [24L, 12T]
Prerequisite: ENV495H5 (Restoration Ecology I) or PI.

ENV497H5 Environmental Research Project (SSc,SCI,EXP)
This independent project course is designed to give students experience in the definition and execution of a one-term research study on an environmental topic, under the guidance of a member of the faculty. Students who wish to pursue this option with a specific faculty member or who have an idea for a research project should approach the faculty member early - before the start of the academic term - to negotiate the terms of the project. [12P]
Prerequisite: 15 credits towards an Environmental Specialist or Major program, PI

Erindale Courses
Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses
Under this heading are placed certain courses that, because of their interdisciplinary nature, are not part of the curriculum of a single academic department.

ERI203H5 Introduction to Scholarly Research (HUM,SSc)
An introduction to scholarly approaches to research including theoretical frameworks for the organization of information in print and digital resources, critical strategies for acquiring, evaluating and communicating information, and the ethical and legal obligations of using information in scholarly contexts. [24L, 12T]

ERI235H5 Russian & Soviet Cinema II: New Wave, Ideology & Dissent, the End of an Empire (HUM)
A systematic study of the Russian cinematic tradition from the political and cultural “thaw” of the late 1950s to the present. The revolution in the theory and practice of film art in the 1950s-60; 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 are subtitled in English.
Exclusion: SLA235H1

ERI260H5 Organizational Behaviour (SSc)
(Formerly WDW260H5) Introduction to the nature of organizations and the behaviour of individuals and groups within organizations, including such topics as culture and diversity, reward systems, motivation, leadership, politics, communication, decision-making, conflict, group processes and organizational change. [36L] Not recommended for students going into or in Commerce and Management programs or Digital Enterprise Management.
Exclusion: CCT324H5, MGM300H5, MGT262H5, MGT363H5, PSY332H1, WDW260H1
Prerequisite: 4.0 credits and CGPA of at least 2.0
Note: ERI260H5 is administered through the Department of Economics for the Human Resources and Industrial Relations Program.
ERI360H5 Compensation (SSc)
This course explores the theory and process of developing compensation systems which is the single largest budget component in many organizations. The course considers how the design of compensation systems affects organizations’ attractiveness to job seekers and the behaviour of current employees. The course provides students with an understanding of the principles, processes, issues and techniques involved in establishing compensation and reward programs in organizations within a framework of fairness and equity. The course focuses on the major components in developing an effective compensation and rewards program such as legislation, principles of equity and fairness, job analysis, job evaluation, compensation surveys, benefits and incentives. Current events in relation to compensation and rewards are explored. [24L]
Prerequisite: ECO244Y5, ERI260H5 or MGM300H5, MGT262H5

ERI398H5 Teaching Opportunity Program in Sciences (TOPS) (SCI,EXP)
A scholarly, active learning project in which students integrate and apply their understanding of science and pedagogy by observing, actively participating in, and reflecting on the teaching and learning process under the supervision of an experienced instructor/mentor. This course may be taken in either the Fall or Winter terms. Enrolment requires submitting an application to the department before the end of the term prior to that in which it is intended to undertake the research. Independent Studies Application Forms may be found at http://uoft.me/cpsforms. Students should plan for the course in March of the previous academic year and register as soon as their registration period begins. Students are encouraged to consult with, and obtain the consent of, prospective supervisors before applying for enrolment. Enrolment will depend on the availability of positions. [120P]
Prerequisite: This course is “by Instructor Approval”. At least 10.0 courses completed; enrolment in a life, mathematical, or physical science major or specialist program; an average of B-(CGPA 2.7) or higher.

Exceptionality in Human Learning (HBSc)

Exceptionality in Human Learning (HBSc)
Offered through the Department of Psychology

Program Director and Undergraduate Advisor
Dr. S.B. Kamenetsky
905-828-3958
stuart.kamenetsky@utoronto.ca

This program is designed to provide a broad scholarly foundation for addressing issues concerning children and adults who have disabilities and/or are gifted. Interested students might include:

1. those who at a later stage may wish to pursue more advanced work in psychology, special education, rehabilitation, social work, group home management, adult retraining, etc., or study in areas related to hearing or visual impairment, learning disabilities, developmental delay, physical disability, or related fields.
2. those wanting to know more about the psychology, sociology and biology of exceptional individuals, particularly as these become issues of public policy.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
BIO Biology (page 78)
CHM Chemistry (page 94)
ECO Economics (page 153)
ENG English (page 166)
FRE French (page 210)
HIS History (page 238)
JAL Linguistics (page 280)
LIN Linguistics (page 280)
PHL Philosophy (page 305)
PSY Psychology (page 332)
RLG History of Religions (page 251)
SOC Sociology (page 341)
STA Statistics (page 355)
Specialist Program ERSPE1883
Exceptionality in Human Learning (Science)

13.0 credits are required, including at least 4.0 300/400-level credits and 1.0 400-level credits.

**Limited Enrolment** – Enrolment is limited to students who have:
1. completed Gr.12(4U) Biology and Advanced Functions or equivalent;
2. completed 8.0 credits;
3. completed PSY201H5 (or equivalent), 210H5, 240H5 and at least 1.0 FCE in 200 series ANT/BIO/SOC courses with a minimum average of 75% for those five half courses.
4. a minimum CGPA of 2.70.

Meeting the minimum grade requirements does not guarantee admission. Further information is available on the Psychology Department web site: www.utm.utoronto.ca/psychology.

**First Year:**
PSY100Y5; (ANT101H5, 102H5)/ (BIO152H5, 153H5)/ 1.0 credit from BIO204H5, 205H5, 206H5, 207H5/ SOC100H5

**Second Year :**
2. PSY210H5, 240H5
3. 0.5 credit from the following: PSY202H5 (or equivalent), 270H5, 274H5, 280H5, 290H5

**Second and Higher Years :**
1. 3.0 credits from the following: PSY310H5, 311H5, 312H5, 313H5, 315H5, 316H5, 318H5, 319H5, 321H5, 325H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 346H5, 353H5, 374H5, 376H5, 384H5, 385H5, 391H5, 392H5, 393H5
2. PSY442Y5 and at least 0.5 credit from the following:
PSY400Y5, 403H5, 404H5, 405H5, 406H5, 410H5, 415H5, 440H5, 474H5, 495H5
NOTE: Primary Junior CTEP students are exempt from PSY442Y5 and may take PSY345H5 and any 0.5 FCE 400 level course in psychology instead.
3. 2.0 credits from one of the following lists:
(c) BIO204H5, 205H5, 206H5, 207H5, 210Y5, 215H5, 315H5, 341H5, 370Y5, 371H5, 372H5, 375H5, 380H5, 403H5, 407H5, 434H5, 443H5, 476H5, 477H5; ANT202H5, 203H5, 203Y5, 331H5, 332H5, 333H5, 334H5, 339Y5; PSL201Y1

NOTE: Students who select list b. must take 2.5 credits from this list
4. 2.5 additional credits to be selected from the following (no more than 1.0 credit from any one discipline):
   ANT Any course in 3(a) not counted previously
   SOC Any course in 3(b) not counted previously
   BIO Any course in 3(c) not counted previously
   CHM CHM242H5, 243H5, 341H5, 345H5, 347H5, 361H5, 362H5
   ENG ENG234H5, 384H5
   FGI/FRE FRE225Y5, 355H5
   HIS HIS308H5, 310H5, 326Y5, 338H5
   LIN LIN100Y5, 200H5, 256H5, 258H5, 358H5, 380H5
   JAL JAL253H5, 355H5
   RLG RLG314H5
   WGS Any course

Specialist Program GSCOBSSHLMA Combined Degree Program: Exceptionality in Human Learning (Specialist), HBSc/Child Study and Education, Master of Arts

The Combined Degree Program (CDP) in Exceptionality in Human Learning (Specialist) Honours Bachelor of Science/Master of Arts in Child Study and Education (HBSc/MA) is designed for students interested in studying human development and related areas, such as diversity and inclusion, and applying their knowledge towards professional training leading to teacher certification.

Students can combine an undergraduate program offered by the Department of Psychology at the University of Toronto Mississauga with the Master of Arts in Child Study and Education program offered through the Ontario Institute for Studies in Education.

The Combined Degree Program permits the completion of both degrees in six years and allows students to count one full graduate credit (1.0 FCE) toward both their undergraduate and graduate degrees.

**Minimum Admission Requirements**
1. Applicants must apply to and be accepted by the HBSc program at UTM and the MA-CSE program. Applicants must satisfy the admission requirements of each program. Undergraduate students apply to the master’s program in January of third year.
2. Students must be enrolled full-time in the HBSc program and be in good standing with a minimum AGPA of 3.7 in Year 3 to be admissible; students are
expected to carry a full course load of 5.0 full-course equivalents (FCEs), including 1.0 FCE at OISE in the summer term between Year 3 and Year 4.

3. Qualified students in Year 3 of the HBSc program may apply to the MA-CSE program; those accepted will receive a conditional offer to commence the MA-CSE program when the HBSc program requirements have been completed and all other conditions are met.

4. Admission into the MA-CSE program will have the following four conditions: students must (1) maintain an A- average (AGPA 3.7) or higher in Year 4 of the HBSc, (2) have an average grade of at least B+ in the graduate courses taken at OISE in the Summer term between Year 3 and Year 4, (3) demonstrate HBSc degree conferral; and (4) meet experiential learning qualifications of working with children as specified by the MA-CSE program (see program website for detailed admission package requirements).

**Program Requirements**

1. Students in the combined program must meet the full academic program requirements of both the HBSc and MA-CSE programs.

2. Students must be registered full-time, enrolling in 5.0 full-course equivalents (FCEs) each year of the undergraduate program, including 1.0 FCE from the MA-CSE program in the summer term between Year 3 and Year 4 that will count towards the HBSc degree.

3. In Year 5, students who meet the requirements to lift the conditions of admission will commence the MA-CSE program and will count the 1.0 FCE of MA-CSE program electives taken in the summer between Year 3 and Year 4 toward the MA-CSE program requirements.

Students admitted to the CDP follow the academic path to completion outlined below.

**First Year:**

**Curricular Path:** Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.

**Specific Requirements:** 5.0 FCEs toward the HBSc program and degree requirements. See Exceptionality in Human Learning Specialist program entry in this Calendar for specific program requirements.

**Second Year:**

**Curricular Path:** Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.

**Specific Requirements:** 5.0 FCEs toward the HBSc program and degree requirements. See Exceptionality in Human Learning Specialist program entry in this Calendar for specific program requirements.

**Third Year:**

**Curricular Path:** Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program. Graduate courses in accordance with the U of T regulations for the MA program.

**Specific Requirements:** 5.0 FCEs toward the HBSc program and degree requirements. See Exceptionality in Human Learning Specialist program entry in this Calendar for specific program requirements. In the Winter session, students apply to the MA program. Upon conditional acceptance, they are enrolled in the CDP.

1.0 FCE in MA elective courses in the spring/summer between Year 3 and Year 4; this will be counted towards the overall requirements of the HBSc and MA degree requirements. See the list of electives at: http://uoft.me/combinedMA

This 1.0 FCE is chosen from among master’s-level courses in the Department of Applied Psychology and Human Development (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H Child and Adolescent Development as an elective.

**Fourth Year:**

**Curricular Path:** Undergraduate courses in accordance with the U of T regulations for the Exceptionality in Human Learning (Specialist), HBSc program.

**Specific Requirements:** 4.0 FCEs toward the HBSc program and degree requirements. See Exceptionality in Human Learning Specialist program entry in this Calendar for specific program requirements. Upon degree conferral, students apply to the MA program in order to lift conditions of admission.

**Fifth Year:**

**Curricular Path:** Graduate courses in accordance with the U of T regulations for the MA program.

**Specific Requirements:** 5.0 FCEs in MA Year 1 program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements. Note that students will have previously completed the 1.0 FCE in electives in the spring/summer of Year 3 and Year 4 of the HBSc program.
Sixth Year:

Curricular Path: Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 4.0 FCEs in MA program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements.

Specialist Program GSCOBSPYMA Combined Degree Program: Psychology (Specialist), Honours Bachelor of Science/Child Study and Education, Master of Arts

The Combined Degree Program (CDP) in Psychology (Specialist) Honours Bachelor of Science/Master of Arts in Child Study and Education (HBSc/MA) is designed for students interested in studying human development and related areas, such as diversity and inclusion, and applying their knowledge towards professional training leading to teacher certification. Students can combine an undergraduate program offered by the Department of Psychology at the University of Toronto Mississauga with the Master of Arts in Child Study and Education program offered through the Ontario Institute for Studies in Education.

The Combined Degree Program permits the completion of both degrees in six years and allows students to count one full graduate credit (1.0 FCE) toward both their undergraduate and graduate degrees.

Minimum Admission Requirements

1. Applicants must apply to and be accepted by the HBSc program at UTM and the MA-CSE program. Applicants must satisfy the admission requirements of each program. Undergraduate students apply to the master's program in January of third year.

2. Students must be enrolled full-time in the HBSc program and be in good standing with a minimum AGPA of 3.7 in Year 3 to be admissible; students are expected to carry a full course load of 5.0 full-course equivalents (FCEs), including 1.0 FCE at OISE in the summer term between Year 3 and Year 4.

3. Qualified students in Year 3 of the HBSc program may apply to the MA-CSE program; those accepted will receive a conditional offer to commence the MA-CSE program when the HBSc program requirements have been completed and all other conditions are met.

4. Admission into the MA-CSE program will have the following four conditions: students must (1) maintain an A- average (AGPA 3.7) or higher in Year 4 of the HBSc, (2) have an average grade of at least B+ in the graduate courses taken at OISE in the Summer term between Year 3 and Year 4, (3) demonstrate HBSc degree conferral; and (4) meet experiential learning qualifications of working with children as specified by the MA-CSE program (see program website for detailed admission package requirements).

Program Requirements

1. Students in the combined program must meet the full academic program requirements of both the HBSc and MA-CSE programs.

2. Students must be registered full-time, enrolling in 5.0 full-course equivalents (FCEs) each year of the undergraduate program, including 1.0 FCE from the MA-CSE program in the summer term between Year 3 and Year 4 that will count towards the HBSc degree.

3. In Year 5, students who meet the requirements to lift the conditions of admission will commence the MA-CSE program and will count the 1.0 FCE of MA-CSE program electives taken in the summer between Year 3 and Year 4 toward the MA-CSE program requirements.

Students admitted to the CDP follow the academic path to completion outlined below.

First Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements. See Psychology Specialist program entry in this Calendar for specific program requirements.

Second Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements. See Psychology Specialist program entry in this Calendar for specific program requirements.

Third Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program. Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 5.0 FCEs toward the HBSc program and degree requirements. See Psychology Specialist program entry in this Calendar for specific program requirements. In the Winter session, students apply to the MA program. Upon conditional acceptance, they are enrolled in the CDP.

1.0 FCE in MA elective courses in the spring/summer between Year 3 and Year 4; this will be counted towards the overall requirements of the HBSc and MA degree.
requirements. See the list of electives at:
http://uoft.me/combinedMA

This 1.0 FCE is chosen from among master’s-level courses in the Department of Applied Psychology and Human Development (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H Child and Adolescent Development as an elective.

Fourth Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Specialist), HBSc program.

Specific Requirements: 4.0 FCEs toward the HBSc program and degree requirements. See Psychology Specialist program entry in this Calendar for specific program requirements. Upon degree conferral, students apply to the MA program in order to lift conditions of admission.

Fifth Year:

Curricular Path: Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 5.0 FCEs in MA Year 1 program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements. Note that students will have previously completed the 1.0 FCE in electives in the spring/summer of Year 3 and Year 4 of the HBSc program.

Sixth Year:

Curricular Path: Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 4.0 FCEs in MA program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements.

Major Program GSCOBMPYMA Combined Degree Program: Psychology (Major), Honours Bachelor of Science/Child Study and Education, Master of Arts

The Combined Degree Program (CDP) in Psychology (Major) Honours Bachelor of Science/Master of Arts in Child Study and Education (HBSc/MA) is designed for students interested in studying human development and related areas, such as diversity and inclusion, and applying their knowledge towards professional training leading to teacher certification. Students can combine an undergraduate
program offered by the Department of Psychology at the University of Toronto Mississauga with the Master of Arts in Child Study and Education program offered through the Ontario Institute for Studies in Education.

The Combined Degree Program permits the completion of both degrees in six years and allows students to count one full graduate credit (1.0 FCE) toward both their undergraduate and graduate degrees.

Minimum Admission Requirements

1. Applicants must apply to and be accepted by the HBSc program at UTM and the MA-CSE program. Applicants must satisfy the admission requirements of each program. Undergraduate students apply to the master’s program in January of third year.

2. Students must be enrolled full-time in the HBSc program and be in good standing with a minimum AGPA of 3.7 in Year 3 to be admissible; students are expected to carry a full course load of 5.0 full-course equivalents (FCEs), including 1.0 FCE at OISE in the summer term between Year 3 and Year 4.

3. Qualified students in Year 3 of the HBSc program may apply to the MA-CSE program; those accepted will receive a conditional offer to commence the MA-CSE program when the HBSc program requirements have been completed and all other conditions are met.

4. Admission into the MA-CSE program will have the following four conditions: students must (1) maintain an A- average (AGPA 3.7) or higher in Year 4 of the HBSc, (2) have an average grade of at least B+ in the graduate courses taken at OISE in the Summer term between Year 3 and Year 4, (3) demonstrate HBSc degree conferral; and (4) meet experiential learning qualifications of working with children as specified by the MA-CSE program (see program website for detailed admission package requirements).

Program Requirements

1. Students in the combined program must meet the full academic program requirements of both the HBSc and MA-CSE programs.

2. Students must be registered full-time, enrolling in 5.0 full-course equivalents (FCEs) each year of the undergraduate program, including 1.0 FCE from the MA-CSE program in the summer term between Year 3 and Year 4 that will count towards the HBSc degree.

3. In Year 5, students who meet the requirements to lift the conditions of admission will commence the MA-CSE program and will count the 1.0 FCE of MA-CSE program electives taken in the summer between Year 3 and Year 4 toward the MA-CSE program requirements.

Students admitted to the CDP follow the academic path to completion outlined below.

First Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements. See Psychology Major program entry in this Calendar for specific program requirements.

Second Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc program and degree requirements. See Psychology Major program entry in this Calendar for specific program requirements.

Third Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program. Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 5.0 FCEs toward the HBSc program and degree requirements. See Psychology Major program entry in this Calendar for specific program requirements. In the Winter session, students apply to the MA program. Upon conditional acceptance, they are enrolled in the CDP. 1.0 FCE in MA elective courses in the spring/summer between Year 3 and Year 4; this will be counted towards the overall requirements of the HBSc and MA degree requirements. See the list of electives at: http://uoft.me/combinedMA

This 1.0 FCE is chosen from among master’s-level courses in the Department of Applied Psychology and Human Development (APHD) and, in some cases, other departments. Elective courses that are especially recommended for Child Study and Education students are listed in the APHD program guidelines. Students without an undergraduate course in child development must take APD 1201H Child and Adolescent Development as an elective.

Fourth Year:

Curricular Path: Undergraduate courses in accordance with the U of T regulations for the Psychology (Major), HBSc program.

Specific Requirements: 4.0 FCEs toward the HBSc program and degree requirements. See Psychology Major program entry in this Calendar for specific program requirements. Upon degree conferral, students apply to the MA program in order to lift conditions of admission.
Fifth Year:

Curricular Path: Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 5.0 FCEs in MA Year 1 program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements. Note that students will have previously completed the 1.0 FCE in electives in the spring/summer of Year 3 and Year 4 of the HBSc program.

Sixth Year:

Curricular Path: Graduate courses in accordance with the U of T regulations for the MA program.

Specific Requirements: 4.0 FCEs in MA program requirements. See the Master of Child Study and Education SGS Calendar entry for full course requirements.

Important notes about Psychology programs and courses.
1. Enrolment in all programs offered by the Psychology Department is limited. Students who do NOT earn a sufficiently high grade in PSY100Y5 to be eligible for enrolment may reapply when they satisfy the second-year requirements and are encouraged to consult with the undergraduate advisor. Further information is available on the Psychology Department web site, www.utm.utoronto.ca/psychology.

2. Access to courses. PSY309H5, 319H5, 329H5, 379H5, 399H5 and all 400-level courses have limited enrolments and are normally restricted. Access to all other 300-level courses is controlled by the department. Priority is given to students enrolled in programs offered by the Psychology Department. Spaces may be allotted on the basis of CGPA.

3. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).

4. Students who wish to take Psychology courses at the St. George Campus may do so provided that they have completed the prerequisite courses and have obtained permission from the Psychology Undergraduate Advisor at the St. George Campus. If they wish to use these courses to fulfill UTM program requirements, they must also consult the Undergraduate Advisor at UTM.

IMPORTANT: Students without pre-requisites or written permission of the Undergraduate Advisor can be de-registered from courses at any time.

Financial Economics (HBSc)

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 153)
MAT Mathematics (page 298)
STA Statistics (page 356)

Specialist Program ERSPE2722 Financial Economics (Science)

13 full credits including at least 1.0 credit at the 400 level.

Limited Enrolment – Enrolment in this program is limited to students with 70% in ECO100Y1/ 100Y5, 63% in MAT134Y5/ 135Y1/ 135Y5 or 60% in MAT137Y1/ 137Y5/ 137Y1, 70% in ECO206Y1/ 206Y5, 70% in ECO208Y1/ 208Y5, 70% in ECO227Y1/ 227Y5/ STA(257H1(70%), 261H1(70%))/STA(256H5(70%), 260H5(70%)). There will be a limited number of spaces available for which students can apply after completion of at least 8 full credits (including prerequisites listed above) and a CGPA of 3.3, or with the approval of the Chair or Associate Chair of the Economics Department. Students enrolled in this program cannot simultaneously be enrolled in any other Economics specialist, joint specialist, major or minor program, or in the Commerce and Finance Program.

Note: Some required courses may be offered on one campus in any given year. Students registered at either the UTM or St. George campus may have to attend lectures on the other campus in such cases.

First Year: ECO100Y5/ 100Y1; 63% in MAT134Y5/ 135Y1/ 135Y5 or 60% in MAT137Y1/ 137Y5/ 137Y1

Higher Years:
1. ECO206Y5/ 206Y1
2. ECO208Y5/ 208Y1
3. ECO227Y5/ 227Y1/ STA(257H1,261H1)/STA(257H5/256H5,261H5/260H5)
4. ECO325H5/ 325H1; ECO326H5/ 326H1
5. ECO327Y5*/375H5/ ECO(375H1)*
6. ECO358H5/ 358H1; ECO359H5/ 359H1
7. 5.5 additional full 300+ ECO credits of which at least 1.0 credit must be chosen from ECO349H5/ 349H1,356H1,434H5,456H5,460H5,461H5/ 461H1,462H1,463H5,475H5. Not more than one full credit may be in Economic History.
Forensic Science (HBSc)

Professors Emeriti
W.R. Cummins, B.Sc., Ph.D.

Professors
M. Dryer, B.A., M.Sc., M.Sc.BMC
U.J. Krull, B.Sc., M.Sc., Ph.D., FCIC
T.L. Rogers, B.A., M.A., Ph.D.
D. Urbszat, B.Sc., LL.B., M.A., Ph.D.
A. Weir, B.Sc., M.Sc., Ph.D

Adjunct Professors
E. Liscio, P.Eng.
K. Woodall, B.Sc., Ph.D.

Part-Time Faculty - Forensic Identification Lecturer
Wade Knaap
Detective Constable (Retired)

Program Administrator, Academic Advisor & Internship Placement Officer
Teresa Cabral
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905-569-4423
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Program Director and Faculty Advisor
T.L. Rogers
tracy.rogers@utoronto.ca

Forensic Science is the study of physical evidence in a modern legal context. It is best defined as "science in service to the courts."

There are many subfields of Forensic Science including Forensic Anthropology, Forensic Biology, Forensic Chemistry, Forensic Computer Science, Forensic Psychology, etc. The single, unifying paradigm of Forensic Science is the search for truth and the meaning of evidence in both criminal investigations and through courts of law.

U of T Mississauga’s Forensic Science BSc program, the first of its kind in Canada, is designed to provide the student with an understanding of scientific analyses, theories, laboratory skills, applications, and field techniques – while allowing the student to emphasize one particular area in greater detail. This is accomplished through the requirement of a either a Forensic Science Major program – which must be pursued together with a second science major program in an approved area of study (see below for listings of approved second science majors) OR a Forensic Science Specialist program where students pursue one of the streams of specialization (see below for listings of areas of specializations).

Entry into the Forensic Science programs is limited. Students are urged to read program information in this calendar very carefully.
ALL students contemplating Forensic Science as their intended area of study MUST first complete the required introductory university level courses (see specific FSC program for min. requirements) before they can apply to be considered for admission into the program.

The selection of the second science major is limited. While other majors must be approved by the FSC Faculty Advisor, the following are approved:

- **Anthropology B.Sc.** with emphasis on forensic and biological anthropology
- **Biology** with emphasis on forensic biology and molecular biology
- **Chemistry** with emphasis on forensic chemistry
- **Computer Science** with emphasis on forensic computer science
- **Psychology** with emphasis on forensic psychology

Each of these approved second science majors has basic departmental requirements that must be fulfilled (students must check individual departmental listings for specific second science major program requirements). In addition to these basic requirements, there are provisions for a number of options.

Students are strongly advised to consult with the Forensic Science program advisor who can provide recommended courses among these options to direct student preparation for a career in their chosen field of interest. Students are also advised to consult with the individual departmental faculty student advisor for recommended guidelines for course selection within their second science major.

In addition to the Forensic Science (Double) Major program, the following Forensic Science Specialist programs are available for more directed study: Forensic Anthropology; Forensic Biology; Forensic Chemistry and Forensic Psychology.

**Notes:** Entry into all Forensic Science Programs is by special application only. Forensic Science programs direct on-line application and application procedures are available at: www.utm.utoronto.ca/forensic

- Applications open: March 1 of each year.
- Application deadline: May 1 of each year.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

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### Specialist Program ERSPE1338 Forensic Anthropology (Science)

A minimum of 15.0 credits are required.

**Limited Enrolment** – Admission into the Forensic Anthropology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, MUST submit a direct online FSC Application, upon completing the minimum program entry requirements. **Meeting the minimum requirements does not guarantee admission into the program.**

**Minimum Requirements:**

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of ANT101H5 with **75% or better** and ANT102H5 with **75% or better** (Students applying to enroll after second year must have completed **8.0 credits** and achieved at least **75% in each of ANT200H5, ANT201H5, ANT202H5, ANT203H5 and ANT205H5**).
3. A minimum Cumulative Grade Point Average of at least **3.0 The actual minimum CGPA varies from year to year but is never lower than 3.0**

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic

Forensic Science Applications Open: March 1 of each year
Forensic Science Application Deadline: May 1 of each year

**First Year:** ANT101H5, ANT102H5; BIO152H5, BIO153H5; FSC239Y5

**Second Year:** ANT200H5, ANT201H5, ANT202H5, ANT203H5, ANT205H5; FSC271H5; STA215H5

**Third Year:** ANT306H5, ANT312H5, ANT317H5, ANT334H5, ANT340H5, ANT436H5; FSC300H5, FSC302H5, FSC360H5; FSC316H5;

**Fourth Year:** ANT415H5, ANT439H5; FSC401H5, FSC481Y5; HSC403H5, HSC405H5

**Recommended:** ANT338H5, ANT358H5, ANT438H5; WRI203H5, WRI307H5; BIO360H5

**NOTES:**

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Anthropology may not complete the Forensic Anthropology Specialist Program due to the overlap of course content for courses already completed in their first specialty.

3. Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time. Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student's area of study within the Forensic Science program.

Specialist Program ERSPE1410 Forensic Biology (Science)

A minimum of 15.0 credits are required.

Limited Enrolment – Admission into the Forensic Biology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, MUST submit a direct online FSC application, upon completing the minimum program entry requirements. Meeting the minimum requirements does not guarantee admission into the program.

Minimum Requirements:
1. Completion of 4.0 credits; including 3.0 science credits
2. Completion of BIO152H5 with 65% or better and BIO153H5 with 65% or better
3. Completion of CHM110H5 with 65% or better and CHM120H5 with 65% or better
4. Completion of MAT134Y5/ MAT135Y5/ MAT137Y5
5. A minimum Cumulative Grade Point Average of at least 3.0. The actual minimum CGPA requirement varies from year to year but is never lower than 3.0

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic

Forensic Science Applications Open: March 1 of each year
Forensic Science Application Deadline: May 1 of each year

First Year: BIO152H5, BIO153H5; CHM110H5, CHM120H5; FSC239Y5; MAT134Y5/135Y5/137Y5; PHY136H5, PHY137H5

Second Year: BIO202H5, BIO206H5, BIO207H5, BIO210Y5/ FSC316H5; CHM242H5, CHM243H5; FSC271H5

Third and Fourth Years:
1. (STA215H5; BIO360H5); FSC300H5, FSC302H5, FSC315H5, FSC360H5, FSC401H5, FSC402H5, FSC481Y5
2. 1.5 additional BIO credits at the 300/400 level.

NOTES:
1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, may not complete the Forensic Biology Specialist Program due to the overlap of course content already completed in their first specialty.
3. Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
4. Once a student has been admitted into a FSC program, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student's area of study within the Forensic Science program.
Specialist Program ERSPE1009 Forensic Chemistry (Science)

A Minimum of 17.0 credits are required. This program is accredited by the Canadian Society for Chemistry.

**Limited Enrolment** – Admission into the Forensic Science-Chemistry program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, MUST submit a direct online FSC application, upon completing the minimum program entry requirements. Meeting the minimum requirements does not guarantee admission into the program.

**Minimum Requirements:**
1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM110H5 with 65% or better and CHM120H5 with 65% or better.
4. A minimum Cumulative Grade Point Average of at least 3.0. *The actual minimum CGPA requirement varies from year to year but is never lower than 3.0*

**Application** for admission into the program for ALL students can be found at: [www.utm.utoronto.ca/forensic](http://www.utm.utoronto.ca/forensic)

Forensic Science Applications Open: March 1 of each year

Forensic Science Application Deadline: May 1 of each year

**First Year:** CHM110H5, CHM120H5; BIO152H5, FSC239Y5; MAT134Y5/ MAT135Y5/ MAT137Y5; PHY136H5, PHY137H5

**Higher Years:**
1. BIO200H5, BIO206H5, BIO207H5; CHM211H5; JCP221H5, CHM231H5, CHM242H5, CHM243H5; FSC271H5
2. CHM311H5, CHM331H5/ CHM333H5, CHM341H5/ CHM345H5, CHM361H5, CHM372H5/ CHM396H5, CHM394H5; STA220H5
3. FSC300H5, FSC302H5, FSC360H5, FSC311H5, FSC402H5
4. CHM414H5, CHM416H5
5. FSC481Y5 (with chemistry focus)

**NOTES:**
1. Students are strongly advised to consult the program advisor regarding their program of study.
2. Corequisite for CHM372H5 is CHM361H5.

3. Students are strongly urged to take as many forensic sciences courses as possible from the following list: ANT205H5, ANT306H5; FSC315H5, FSC316H5, FSC350H5, FSC406H5, FSC407H5; PSY328H5, PSY344H5.

4. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.

5. Prospective students already holding a degree in Chemistry, cannot complete a Forensic Chemistry Specialist Program due to the overlap of course content for courses already completed in their first specialty.

6. Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

7. Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student’s area of study within the Forensic Science program.

Specialist Program ERSPE1505 Forensic Psychology (Science)

At least 15.0 credits are required.

**Limited Enrolment** – Admission into the Forensic Psychology Specialist Program is limited to a relatively small number of students per year and admission is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, MUST submit a direct online FSC application, upon completing the 2nd year minimum requirements. Meeting the minimum requirements does not guarantee admission into the program.

**Minimum Requirements:**
1. Completion of any Gr.12(4U) Biology and Advanced Functions or equivalent*.
2. Completion of 8.0 credits
3. Completed PSY201H5, PSY202H5 (or equivalent), and at least 1.5 FCE in 200 series PSY courses with a minimum average of 77% for those five half courses and
4. A minimum Cumulative Grade Point Average of at least 3.0. *The actual minimum CGPA requirement varies from year to year but is never lower than 3.0*

**Application** for admission into the program for ALL students can be found at: [www.utm.utoronto.ca/forensic](http://www.utm.utoronto.ca/forensic)

Forensic Science Applications Open: March 1 of each year

Forensic Science Application Deadline: May 1 of each year
Forensic Science (HBSc)

First Year: PSY100Y5, FSC239Y5, BIO152H5, BIO153H5

Higher Years:
1. PSY201H5, PSY202H5/ equivalent
2. FSC271H5
4. FSC300H5, FSC302H5, FSC316H5; PSY309H5, PSY328H5, PSY340H5/ PSY341H5, PSY344H5, PSY346H5, PSY393H5
5. One laboratory course from: PSY329H5, PSY379H5, PSY399H5
6. 1.0 credits from the following: FSC311H5, FSC315H5, FSC360H5, FSC401H5, FSC402H5, FSC406H5, FSC407H5, FSC489H5
7. 0.5 credit from PSY 400 level series courses
8. FSC481Y5

NOTES:
1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Psychology may not complete a Forensic Psychology Specialist Program due to the overlap of course content for courses already completed in their first specialty.
3. Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
4. Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student’s area of study within the Forensic Science program.

Major Program ERMAJ0205 Forensic Science (Science)

Note: This program must be taken as part of a Double Major Honours degree. 9.0 credits are required including at least 2.0 at the 300/400 level.

Limited Enrolment – Admission into the Forensic Science Major program is by special application ONLY and MUST be completed in conjunction with a second approved Major (see Notes ‘Second Major’ below). To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, MUST submit a direct online FSC Application, upon completing the minimum program entry requirements. Meeting the minimum requirements does not guarantee admission into the program.

Minimum Requirements:
1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM110H5, 120H5 with 65% or better.
4. A minimum Cumulative Grade Point Average of at least 2.7. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.
5. Enrolment in an Approved Second Major (See Second Major Notes: 1).

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic

Forensic Science Applications Open: March 1 of each year
Forensic Science Application Deadline: May 1 of each year

First Year: (CHM110H5, 120H5), FSC239Y5; MAT134Y5/ 135Y5/ 137Y5; PHY135Y5/ (PHY136H5, 137H5)
Second Year: CHM242H5, CHM243H5; FSC271H5
Third Year: FSC360H5; STA215H5/ STA220H5
Fourth Year: 2.5 credits from the following list: FSC300H5, FSC302H5, FSC311H5, FSC315H5, FSC316H5, FSC350H5, FSC401H5, FSC402H5, FSC406H5, FSC407H5, FSC489H5,

NOTES:
Second Major
1. The Forensic Science Major is part of a Double Major Honours Degree program and MUST be completed in conjunction with one of the following approved second major programs: Anthropology (Science), Biology, Chemistry, Computer Science or Psychology. (Other 2nd Majors may be possible with permission of the Forensic Science program director.)
2. Students intending to complete the Forensic Science Major with an Anthropology Second Major MUST select the ERMAJ0105 Anthropology (Science) Major. As part of the ANT (Sci) Major elective requirements (3.0 ANT science courses) students are recommended to take the following: ANT 205H5; 306H5, 334H5, 340H5, 439H5. Additional related courses include: ANT338H5, 415H5; 436H5.

3. For information on program requirements and enrolment procedures for each of the second major programs, students should consult the individual departmental faculty advisor or the departmental program descriptions listed within this calendar.

4. In each of the 2nd majors, certain courses are compulsory and where a choice of courses is available, students should consult the Forensic Science Student Advisor for the most appropriate selection.

5. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.

6. Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student’s area of study within the Forensic Science program, including the second science major. Prospective students already holding a degree in Biology, Chemistry, Computer Science, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.

7. Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor MUST be obtained for any request of change in a student’s area of study within the Forensic Science program, including the second science major.

Minors Program ERMIN0205 Forensic Science

A minor program that can be taken in combination with any specialist or major program, including from the Social Sciences and Humanities. The minor program introduces students to the core tenets of Forensic Science: evidence recovery; scientific analysis; quality assurance; evidence-based interpretation; peer review; and communication of results as they relate to the Canadian legal system. Students will be exposed to forensic techniques and approaches, helping them to understand how they can be utilized in other fields of study. This program will complement degrees in criminology, sociology, geography, political science, and any other field that intersects with the legal system. Students will learn forensic theory and at least one applied skill set through lectures and labs.

Limited Enrolment – A final grade of 75% is required in FSC239Y5.

4.0 credits are required.

First Year: FSC239Y5

Second Year: FSC271H5

Third Year: FSC360H5 and 1.0 credit from FSC300H5, FSC302H5, FSC311H5, FSC315H5; ANT306H5; PSY344H5

Fourth Year: 1.0 credit from FSC401H5, FSC402H5, FSC406H5, FSC407H5; ANT439H5; HSC403H5, HSC405H5

Some third-year and fourth-year courses listed above have additional pre-requisites. Students interested in these courses should plan their courses appropriately to ensure that the stated pre-requisites are met. Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

FSC100H5 The Real CSI (SCI)
This class introduces the science of Crime Scene Investigation and related forensic specialities. Students will learn about the latest scientific developments in the field, contrasting these to popular portrayals of CSI in the media, and addressing the impact of popular portrayals on juror expectations, knowledge and misconceptions. [36L]

General first year course open to everyone.
ANT205H5 Introduction to Forensic Anthropology (SCI)
Introduction to the field of forensic anthropology. Outlines the areas in which forensic anthropologists may contribute to a death investigation and introduces basic concepts relating to the recovery and analysis of human remains. [24L, 12P]  
Prerequisite: ANT101H5/ BIO152H5

FSC239Y5 (1) Introduction to Forensic Science (SCI)
Forensic science is the application of any scientific inquiry into criminal investigation. The results of such inquiry are ultimately for presentation in courts of law. Specialists in forensic science will lecture on a variety of topics that will include crime scene investigation, the role of the coroner, forensic pathology, forensic chemistry, forensic botany, forensic entomology, forensic anthropology, forensic dentistry, psychology and toxicology. Case studies will be reviewed, and the role of the expert witness will be examined. [48L, 24T]  
(Preference given first to Forensic Science Specialists and Majors; then Minors.)

FSC271H5 Ethics and Professionalism in Forensic Science (SCI)
This course covers three main areas of importance to the forensic scientist and the expert witness: Ethics in forensic science; the scientific theories of proof and evidence including the critical thinking and logic; analysis of how the major philosophical schools of thought impact on forensic science. [24L, 12T]  
Prerequisite: FSC239Y5  
(Preference given first to Forensic Science Specialists and Majors; then Minors.)

FSC300H5 Forensic Identification (SCI,EXP)
Focusing on the scene of the crime and evidence found there, this course is an introduction to the field of forensic identification. Topics include: crime scene protocols, management and reconstruction; image collection, storage and enhancement; recognition collection; and chain of custody and preservation of evidence. [24L, 24P]  
Prerequisite: FSC239Y5; FSC271H5  
(Preference given first to Forensic Science Specialists and Majors; then Minors.)

FSC302H5 Advanced Forensic Identification (SCI,EXP)
Continuing from FSC300H5 which critically examines identification processes, which are compared and contrasted to systematics; impression evidence and physical match theory and practice; biometrics; presentation of evidence; the expert witness; requirements of society and the court. [24L, 24P]  
Prerequisite: FSC300H5  
(Preference given first to Forensic Science Specialists and Majors; then Minors.)

FSC306H5 Forensic Anthropology Field School (SCI,EXP)
Introduction to the field of forensic anthropological field techniques and scene interpretation. A 2-week field school will be held on the U of T Mississauga campus (Monday to Friday 9 a.m. to 5 p.m., two weeks in August). Weekly 2-hour classes will be held during the fall term. In these classes, students will examine casts, maps, photos and other evidence collected in the field, for the purposes of scene reconstruction and presentation in court. [104P]  
Prerequisite: ANT205H5

FSC311H5 Forensic Chemistry (SCI,EXP)
This course focuses on the analysis of physical evidence based on the principles of analytical chemistry. Students will gain knowledge in the theory and operation of forensically relevant chemical and instrumental techniques used for the analysis of evidentiary items, including drug/alcohol analysis, gunshot residue, explosives, paint analysis, etc. Students will also develop skills relating to the interpretation, limitation, and implications of analytical results in a forensic context. [36L, 36P] (Preference given first to Forensic Science Specialists and Majors; then Minors.)  
Prerequisite: (CHM110H5, CHM120H5)/CHM140Y5; CHM211H5  
Recommended Preparation: FSC239Y5; CHM311H5

FSC315H5 Forensic Biology (SCI,EXP)
This course focuses on the analysis and interpretation of biological evidence in a forensic context. Students will gain knowledge in the theory and operation of forensically relevant biological and instrumental techniques used for the analysis of evidentiary items, including DNA, bodily fluids, hair, etc. Students will also develop skills relating to the interpretation, limitation, and implications of analytical results in a forensic context. [36L, 36P] (Preference given first to Forensic Science Specialists and Majors; then Minors.)  
Prerequisite: BIO206H5, 207H5

FSC316H5 Forensic Anatomy (SCI)
This course examines the body as forensic evidence. Human gross anatomy and histology will be examined from the perspective of forensic pathology, students will learn about the role of the body in crime scene analysis, autopsy procedures such as fingerprinting and forensic imaging of the deceased, and address anatomical anomalies useful for forensic purposes such as identification. Other topics include bodily decomposition, disease, and injuries. [12L, 24P]  
Prerequisite: FSC239Y5, FSC271H5  
Corequisite: FSC360H5  
Preference given to FSC Specialists and Majors.
**BIO338H5 Entomology (SCI)**
A survey of the Class Insecta, emphasizing the functional morphology, physiology, behaviour and evolution of this highly successful group of animals. Laboratories focus on gaining proficiency in recognizing insect orders, families and genera. Students will carry out a field study and complete an insect collection that illustrates the diversity of insects found in a specified region. [24L, 36P]
*Exclusion:* BIO334H5
*Prerequisite:* BIO152H5, BIO153H5

**PSY344H5 Forensic Psychology (SCI)**
An exploration of the role of psychology in forensic science (the application of scientific inquiry into criminal investigation). Topics, which will vary from year to year, could include the assessment of criminal responsibility, competency issues, psychiatric disorders associated with crime, criminal profiling, behavioural analysis of a crime scene, prediction of dangerousness, workplace and family violence, sexual assault/abuse/rape, recovered memories, detection of malingering and deception, deindividuation and bystander intervention, social psychology of the jury, use of psychological tests in legal cases, witness preparation/interrogation, and the psychologist as expert witness. [36L]
*Exclusion:* PSYC39H3
*Prerequisite:* PSY240H5

**FSC350H5 Special Topics in Forensic Science (SCI)**
A survey of recent developments in theory and applications of forensic science with particular attention to case studies in a particular branch of forensic science. [26L]
*Prerequisite:* FSC239Y/PI.
(Priority given to Forensic Science Specialists and Majors.)

**FSC360H5 Evidence, Law and Forensic Science in Canada (SSc)**
This course will explore the position of forensic science within the law in Canada. The focus will be on the evolution of the acceptance of forensic science in Canadian criminal law and its current position within the legal system. Topics include: Evidence law, expert evidence law, defining the expert, differing standards of legal acceptance for police sciences and others. Important historical documents and legal advancements will be surveyed. [36L]
*Prerequisite:* FSC239Y, 271H5
(Priority given first to Forensic Science Specialists and Majors; then Minors.)

**FSC401H5 Forensic Pathology (SCI)**
This is a general introduction of the scientific and medical basis of forensic pathology. The scientific aspects of death investigation will be emphasized including cause, manner, and time of death. Emphasis will be placed in developing skills to critically examine the published forensic scientific and medical literature. Also included are human rights death investigation, and custodial death. [36L]
*Prerequisite:* FSC239Y5; BIO204H5/ (BIO210H5/ BIO210Y5) /380H5
*Recommended Preparation:* FSC271H5
(Priority given first to Forensic Science Specialists and Majors; then Minors.)

**FSC402H5 Forensic Toxicology (SCI)**
This course will focus on topics in forensic toxicology. Lectures will include a review of pharmacokinetics, analytical techniques and quality assurance measures used in forensic toxicology, the effects of drugs on human performance and post-mortem toxicology of illicit drugs, pharmaceutical drugs and other poisons. The major focus of this course will be the role that a forensic toxicologist plays in criminal and death investigation. Tutorials will include case study exercises and mock court demonstrations with the possibility for field trips to court and forensic agencies in Ontario. [36L]
*Prerequisite:* FSC239Y5; (CHM110H5, CHM120H5)/CHM140Y5
*Recommended Preparation:* FSC271H5
(Priority given first to Forensic Science Specialists and Majors; then Minors)

**HSC403H5 Visualization of Forensic Demonstrative Evidence (SCI)**
This course examines the visual representation of forensic demonstrative evidence in Canadian courtrooms. A case-based approach simulates professional practice. Forensic anthropology, biology and visual communication theory are explored in new media for presentation. Visual problem solving skills are developed through collaboration. In class, presentations and practica are combined with critical analysis of visualizations. [12L, 24P]
*Prerequisite:* Completion of 10.0 credits, including one of FSC239Y5/ BIO210H5/ 210Y5/ ANT205H5/ ANT306H5

**HSC405H5 Digital Forensic Facial Reconstruction (SCI)**
This course examines the technical, anatomical, and sociological considerations involved in the three-dimensional digital forensic facial reconstruction. Human facial anatomy, traditional reconstruction techniques, and the use of 3D animation software are the core areas of study. Using this knowledge, students reconstruct the facial identity of an individual known only from cranial skeletal remains. [24S, 12P]
*Prerequisite:* 10.0 completed credits including ANT203Y5 / AN1205H5 / BIO210Y5
*Recommended Preparation:* ANT334H5
**FSC406H5 Introduction To 3D Crime Scene Mapping And Reconstruction (SCI,EXP)**

This course introduces students to both standard and innovative methods of documenting, mapping, analyzing, and visualizing/reconstructing a crime scene for investigative purposes, including: total stations; laser scanners; panoramic images; and photogrammetry. Course topics range from basic measurement theory and statistics, to legal considerations such as admissibility and preparing courtroom-ready visualizations. Students will learn to use forensic mapping software to create courtroom-ready graphics. [12L, 24P]

*Prerequisite:* FSC300H5, FSC302H5

(Priority given first to Forensic Science Specialists and Majors; then Minors.)

**FSC407H5 Forensic Identification Field School (SCI,EXP)**

A field course to complement the material covered in both FSC300H, Forensic Identification & FSC302H, Advanced Forensic Identification. The field school will be held on the U of T Mississauga Campus over a 2-week period during the summer term and during weekly two hour labs in the fall term. In these classes, students will experience practical exposure to field and laboratory methods related to evidence recognition, collection and interpretation. Emphasis will be placed on the types of evidence collected, processed, and analyzed by forensic identification specialists. General evidence and small object photography techniques will be an important component of the course. [104P]

*Prerequisite:* FSC239Y5, (FSC300H5, FSC 302H5) / P.I

(Priority given first to Forensic Science Specialists and Majors; then Minors.)

**ANT439H5 Advanced Forensic Anthropology (SCI,EXP)**

The identification of the remains of victims of homicide, mass disasters and political atrocities. Special methods are used in the recovery and identification of human skeletal remains for presentation in courts of law. [12L, 24P]

*Prerequisite:* ANT205H5

*Corequisite:* ANT306H5, 334Y5/ (334H5, 340H5)

**FSC481Y5 Internship in Forensic Science (SCI,EXP)**

As the capstone experience for the Forensic Science Specialist Programs, this course provides students with professional practice and research experience. Students are required to attend classes that address proper research design and methodology, as well as issues of professional practice in the forensic sciences including: ethics; research protocols; written and verbal communication skills; professional communication (interviews, letters, emails, reports, presentations, and publications); and expert witness testimony. Students will also be placed with a participating forensic agency to conduct research and gain an understanding of the unit’s daily operations. In addition to practice presentations, critiques, an ethics approval application, a 10-15 page research proposal, and a mock interview, students are required to formally present the results of their research at the annual Forensic Science Day symposium and submit a publication quality manuscript of their work.

*Exclusion:* FSC439Y5

*Prerequisite:* Enrolment in a Forensic Science Specialist Program; completion of the statistics course(s) requirement listed within the student’s Forensic Science Program (STA215H5, 220H5, STA221H5; BIO360H5, BIO361H5; PSY201, PSY202H5);

FSC300H5,302H5 and permission of instructor.

(Restricted to Forensic Science Specialists)

**Notes:**

1. For information on Forensic Science Internships, please see the Experiential Learning Office website: [http://www.utm.utoronto.ca/experience/](http://www.utm.utoronto.ca/experience/)

Students MUST contact Ms. Teresa Cabral in the Forensic Science Office (Room 402, Terrence Donnelly Health Sciences Complex, 905-569-4423, teresa.cabral@utoronto.ca) by the November preceding the placement.

2. Students must have one free day (Monday - Friday) to work in a placement position, and must be in the final year before graduation. Students are expected to provide their own transportation to placement work site.

3. Five week placements during the summer may be possible.

**FSC489H5 Advanced Independent Project (SSc,SCI)**

For students wishing to complete original research, a feasibility study, critical review of the literature or position paper leading towards a publishable report.

*Prerequisite:* Permission of Program Director.

*Recommended Preparation:* (Restricted to Forensic Science Specialists and Majors.)
French (HBA)

Department of Language Studies

Professors
C. Elkabas, B.A., M.A., Ph.D.
C. Evans, L.èsL., M.A., Ph.D.
R. Hong, B.A., M.A., Ph.D.
M. Lord, B.A., M.A., Ph.D.
M. Lory, L.èsL., M.èsL., Ph.D.
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The French program at U of T Mississauga offers students a wide range of courses designed to provide the basis for the study of our French heritage. For students wishing to pursue a program leading to a high level of competence in French, we offer two series of language courses:

- FSL105H5, 106H5, 205Y5, 305Y5, 405H5, 406H5 for non-specialists;
- FRE180H5, FRE181H5, FRL280Y5, 382H5, 383H5, for specialists, maximizing contact with instructors and using modern methods.

In addition, students wishing to improve their language competence in oral skills have access to a state-of-the-art audio-lingual laboratory and, for written skills, to a variety of computerized aids in the computer laboratory. Native speakers of French are not permitted to take for credit FSL105H5, 106H5, 205Y5, 305Y5, 405H5, 406H5, FRE180H5, FRE181H5. Such students, however, will be admitted to any FRE course for which FRE180H5, FRE181H5 is a prerequisite. For those wishing a full program of French Studies, our offerings satisfy the requirements in French Language and Literature, Teaching and Learning of French and Italian, and French Language and Linguistics. These offerings comprise a variety of fields: French as a language system (including Business French); critical approaches to literature; teaching and learning French (including teaching with new technology); and the study of both French and Québec Literatures.

U of T Mississauga's French graduates have moved on to advanced studies and to careers in business, teaching, translation, transportation and other fields where skills in French are a necessity.

Notes:

1. Completion of at least 3.0 courses in the Specialist program and an average of 70% in 2.0 of the 3.0 courses, may entitle a student to participate in third year in the Study Elsewhere Program in France or Nice.

2. The series FSL105H5 to FSL305Y5, which may be taken as part of a Minor program, is intended to provide instruction for students specializing in other disciplines who wish to develop a practical knowledge of French. The series emphasizes self-help beyond the limits of the individual courses.

3. Students who are not specializing or majoring in French may be admitted to French courses in Literature and Linguistics, with permission of the Department, if they demonstrate the appropriate level of competence in French. Students seeking admission to FSL205Y5 or FSL305Y5 will be required to provide a high school record as evidence of their level in French. Particularly well-qualified students may, as the result of a language proficiency test, be permitted to enrol in 200-level language courses.

4. Courses with the FSL designator cannot be counted towards a Major or Specialist program in French Studies.

The following is a guide for first-year course selection.

- **FSL105H5**: No knowledge of French (no secondary school studies).
- **FSL106H5**: Very limited knowledge of French (max. Grade 10) or as indicated by Placement Test results.
- **FSL205Y5**: Intermediate knowledge of French (max. Grade 11) or by Placement Test results.
- **FSL305Y5**/FRE180H5, FRE181H5: Grade 12 Core French (completed in Ontario). Outside of Ontario, students must complete the Online Placement Test.
- **Complete Placement Test**: Extended French (12U - Extended)
- **FRE280Y5**: Immersion French (12U - Immersion): Consult Department/as indicated by Placement Test results: French-language schooling.
Online Placement Test site is located at https://frenchpt.utm.utoronto.ca/

Courses offered every year: FSL105H5, 106H5, 205Y5, 305Y5, 405H5, 406H5; FRE180H5, 181H5, 240Y5, 272Y5, 280Y5, 382H5, 383H5; FRE225Y5

Students should also review the Degree Requirements section prior to selecting courses.

For courses in this area see:
- FRE French (page 210)
- FSL French (page 210)
- ITA Italian (page 251)
- LTL French (page 210)

Specialist Program ERSPE1092 Language Teaching and Learning: French and Italian (Arts)

14.0 credits are required. The program must include a minimum of 4.0 300/400 level credits (2.0 in French and 2.0 in Italian), 1.0 credit at the 400 level (either in French or Italian).

French

7.0 credits are required.

**Limited Enrolment** – A final grade of 63% is required in FRE180H5 and FRE181H5 (or equivalent).

**First Year:** FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempt from these courses may replace them with a higher level 1.0 credit in FRE.

**Higher Years:**
1. FRE280Y5 (or equivalent), FRE225Y5, FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5. **Note:** FRE225Y5 MUST be completed in the second year OR prior to enrolling in 300/400 level courses in Language Teaching and Learning.
2. FRE382H5, FRE383H5.
3. 1.0 credit to be chosen among the FRE courses in Teaching and Learning (FRE325H5, 345H5, 352H5, 353H5, 355H5)

Italian

7.0 credits are required. All written work will be done in Italian in all courses.

1. ITA200Y5 or ITA201Y5
2. ITA350Y5

3. ITA437Y5
4. 2.0 additional credits in Italian Language Teaching.
5. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).

Specialist Program ERSPE1295 French Studies (Arts)

10.0 credits are required, including at least 4.0 300/400 level credits in literature/linguistics, 1.0 of which must be a 400 level credit.

**Limited Enrolment** – Minimum grade of 63% required in FRE180H5 and FRE181H5 (or equivalent course).

Note: Students enrolled in the French Language and Literature specialist program prior to Summer 2012 should consult the Department regarding completion of their program.

**First Year:** FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempt from these courses may replace them with a higher level 1.0 credit in FRE.

**Second Year:** FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5, FRE280Y5

**Third/Fourth Years:**
1. FRE372H5, FRE373H5, FRE382H5, FRE383H5
2. 4.0 FRE credits to be completed within ONE area of concentration:
   (a) French Linguistics
   (b) French Literary and Cultural Studies

Major Program ERMAJ1056 Language Teaching and Learning: French (Arts)

8.0 credits are required.

**Limited Enrolment** – Minimum grade of 63% required in FRE180H5 and FRE181H5 (or equivalent course).

**First Year:** FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempted from these courses may replace them with a higher level 1.0 credit in FRE.

**Second Year:** FRE240Y5 (or equivalent), FRE225Y5, FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5.
Note: FRE225Y5 MUST be completed in the second year OR prior to enrolling in 300/400 level courses in Language Teaching and Learning.

Third & Fourth Year:

- FRE382H5, FRE383H5
- 1.0 credit to be chosen among the FRE Language Teaching and Learning courses (FRE325H5, 345H5, 352H5, 353H5, 355H5)
- 1.0 credit to be chosen among the LTL Language Teaching and Learning courses (LTL380H5, 417H5, 456H5, 486H5, 488H5)

Major Program ERMAJ1295 French Studies (Arts)

8.0 credits are required, including at least 2.0 300/400 level courses.

Limited Enrolment – 63% required in FRE180H5 and FRE181H5 or equivalent.

Note: Students enrolled in the French Language and Literature major program prior to Summer 2012 should consult the Department regarding completion of their program.

First Year: FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempted from these courses may replace them with a higher level 1.0 credit in FRE.

Second Year: FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5, FRE280Y5

Third Year:

1. FRE382H5 and FRE383H5
2. 3.0 credits to be completed in ONE area of concentration: (a) French Linguistics; (b) French Literary and Cultural Studies

Course Categories:


Minor Program ERMIN1000 Functional French (Arts)

For students seeking a level of linguistic competence with a view to using the French language in professional Francophone environments.
4.0 credits in either FSL or FRE with at least 2.0 credits at the 300/400 level. Courses offered in English are excluded (FRC and LTL). The obligatory core series courses (FSL105H5, 106H5, 205Y5, 305Y5) must be included in the student’s program, unless exemptions are approved by the Department. For any exemption received, the student must fill the gap with another suitable FSL/FRE course in order to complete the required minimum 4.0 courses. To complete the minor in Functional French program, students can choose from courses such as FSL466H5, 405H5, 406H5, or any other FRE/FSL course (excluding those offered in English-FRC and LTL) providing that the prerequisite requirements have been met.

**Minor Program ERMIN1054 Francophone Studies (Arts)**

For students wishing to develop an understanding and appreciation of the mentality and diversity that Francophone cultures express.

2.0 FSL credits plus 2.0 FRC credits including 1.0 at the 300 level.

**Minor Program ERMIN1135 French Studies (Arts)**

For students wishing to choose a combination of language, literature and/or linguistic offerings with limited access to core French courses.

4.0 FRE credits with at least 2.0 FRE language credits (FRE180Y5/ FRE180H5 & FRE181H5/ FRE280Y5/ FRE382H5/ FRE383H5). Must include 1.0 FRE credit at the 300/400 level. Courses offered in English are excluded (FRC and LTL).

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

**FSL105H5 Functional French-Novice (HUM)**

The objective of this course, which serves as a starting point in our series of FSL courses, is to introduce students to the phonetic system of the French language, to teach basic vocabulary and to develop awareness of the functions of language in different situations and contexts. [36L, 12P]

Exclusion: FSL100H1 or higher. Not open to students who have studied French in secondary school. Not open to native speakers of French.

**FSL106H5 Functional French-Advanced Beginner (HUM)**

Through the use of teaching materials adapted to their level, our students will continue to develop their linguistics abilities and to use them in specific situations. For instance, they will learn how to ask for information, how to refuse or accept an offer. On completion of this course, a linguistic system of basic but useful structures will have been assimilated. [36L, 12P]

Exclusion: Grade 11 French/FSL102H1 or higher. Not open to native speakers of French.

**FRE180H5 Introduction to French Studies I (HUM)**

A broad introduction to French studies combining a variety of exercises to improve discussion and clear expression. We will be using a selection of linguistic, artistic and cultural sources chosen among novels, plays, films, conferences, songs, comic strips, and written and audio-visual material such as interviews. [24L, 24T]

Exclusion: FRE180Y5, FSL221Y1, FSL305Y5. Not open to native speakers of French and graduates of Extended French or French immersion programs.

Prerequisite: Grade 12 Core French (FSF4U)/FSL205Y/FSL121Y1 or placement test results.

**FRE181H5 Introduction to French Studies II (HUM)**

Consolidates the development of written expression through a broad introduction to French Studies. Varied exercises are used to improve argumentation and clear expression. Course materials include linguistic, artistic and cultural sources chosen among novels, plays, films, conferences, songs, comic strips, and audio-visual materials such as interviews. [24L, 24T]

Exclusion: FSL221Y1, FSL305Y5. Not open to native speakers of French and graduates of Extended French or French immersion programs.

Prerequisite: FRE180H5 or placement test results.

**FSL205Y5 Functional French-Intermediate (HUM)**

Course will focus on nuancing acquired oral and written skills and on further developing their fluency and accuracy through the production and understanding of increasingly complex sentences and messages, refined and broadened lexical forms and expressions, and the development of discourse-oriented abilities to create meaning. Students will learn to participate in broader interpersonal interactions and to communicate emotion, opinion, value, and abstraction, while using some idiomatic expressions and a greater breadth and subtlety of vocabulary. [72L, 24P]

Exclusion: FSL121Y1, FSL205H5, 206H5 or higher.

Prerequisite: FSL106H5/ Grade 11 OAC French/Placement Test recommendation.
FRE225Y5 Teaching and Learning a Second/Foreign Language (HUM)
In this course, students will learn how language teaching methods have evolved since the 1960s. Different teaching approaches (behaviourist, audio-visual, communicative, cognitive and humanistic) will be examined with special emphasis on the teaching of the four skills (reading, writing, listening, speaking) and culture, on the roles of the teacher and the learner in the classroom. [48L, 24T]
Exclusion: LTL225Y5, LTL227H5.
Prerequisite: FRE180Y5 or FRE180H5 and FRE181H5

FRE240H5 Reading Classical French Masterworks (HUM)
This course focuses on a variety of texts from the Renaissance (16th Century) to the Enlightenment (18th Century) in order to explain the evolution of French imaginary forms. This survey offers an examination of literary movements, social meanings, and genres like poetry, novel, short story, drama and essay.
Exclusion: FRE240Y5
Prerequisite: FRE180H5, FRE181H5

FRE241H5 Reading Modern French and Québec Masterworks (HUM)
This course focuses on a variety of texts from the late Romanticism (19th Century) to Modern, and Postmodern Literature (21st Century) in order to explain the evolution of French imaginary forms over the last two centuries. This survey offers an examination of literary movements, social meanings, and genres like poetry, novel, short story, drama and the essay.
Exclusion: FRE240Y5
Prerequisite: FRE180H5, FRE181H5

FRE272Y5 The Structure of Modern French: An Introduction (HUM)
A descriptive study of contemporary French: phonetics and phonology, morphology, syntax and semantics. Theoretical discussion in general linguistics. [48L, 24T]
Prerequisite: FRE180Y5 or FRE180H5 and FRE181H5 or permission of the department.

FRE280Y5 Language Practice: Written (HUM)
Improvement of the four language skills (writing, reading, listening and speaking) for students specializing in French studies at the university. [48L, 24T]
Exclusion: FSL280Y5, FSL331Y1, FSL341Y1 or higher.
Prerequisite: FRE180H5 and FRE181H5/ FSL221Y1 or equivalent/Grade 12 Immersion or Extended French or Placement Test results.

FRE283H5 Language Practice: Oral (HUM)
Intensive practice of oral production and aural comprehension of French for students who seek to enhance their oral skills. The course provides students with the skills and vocabulary necessary to be functional in daily conversations. Focus on spontaneous speech, formal and informal interactions, as well as presentation skills.
Exclusion: Native or near native speakers.
Recommended Preparation: FRE180Y5, FRE181Y5.

FRE299Y5 Research Opportunity Program (HUM)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

FSL305Y5 Functional French-High Intermediate (HUM)
Course will focus on analysing and synthesizing information, comparing and reformulating types of discourse, developing fluency and spontaneity, accuracy and complexity in proficiently discussing or writing about current and cultural affairs and contentious topics, using different registers and tone in a broad range of situations as well as documents encountered in daily life. Formerly FSL 305H and FSL 306H. [72L, 24P]
Exclusion: FRE180H5, FRE181H5, FSL221Y1, FSL305H5, FSL306H5 or higher
Prerequisite: FSL205Y5/ FSL206H5/ Placement Test recommendation.

FRE312H5 From the Gothic and Fantastic Novels to Realism in Québec (HUM)
A study of the first wave of fiction in the 1830 with the Gothic Novel, and its evolution through fantasy, folklore and Novel of the Land which spread from 1846 to 1945. [24L]
Exclusion: FRE310Y5
Prerequisite: FRE280Y5, FRE240H5, FRE241H5 (or FRE240Y5) or permission of the department.

FRE316H5 Urban Attraction and the Québec Contemporary Novel (HUM)
A Study of the new forms of literary expression that took place in Québec after the Second World War to today. [24L]
Prerequisite: FRE280Y5, FRE240H5, FRE241H5 (or FRE240Y5) or permission of the department.
FRE320H5 French Literature of Classicism and Enlightenment (HUM)
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. [24L]
Exclusion: FRE320Y1, FRE320H1
Prerequisite: (FRE240H5, FRE241H5)/FRE240Y5

FRE325H5 Language Acquisition of French (HUM)
An introduction to the field of first language acquisition from a theoretical perspective. We will study various aspects: the acquisition of phonology, vocabulary, morphology and syntax. The following topics will be dealt with: the relationship between the development of language and the development of other cognitive aspects; bilingualism; the differences and the similarities between first and second language acquisition. [24L, 12T]
Prerequisite: LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

FRE340H5 Literary Criticism and Analysis (HUM)
Techniques of literary criticism and analysis based on a detailed study of selected novels, drama and poetry in French literature.
Prerequisite: FRE280Y5, FRE240H5, FRE241H5 or permission of the department.

FRE345H5 Teaching and Learning French Since the 1970s (HUM)
The aim of this course is to present recent research and its classroom applications in relevant contemporary domains of teaching and learning French as a second language, such as French immersion in Canada, including the implications of early, late and partial immersion; recent developments in the teaching of reading and written comprehension; the use of online resources and the pedagogical impact of Information and Communications Technologies in education. [24L]
Prerequisite: LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

FRE352H5 Teaching French Grammar (HUM)
This course examines practical and theoretical issues surrounding grammar in the language curriculum such as various approaches to the implementation of grammar in language curricula, such as in grammar-translation or task-based learning; the role and limitations of descriptive grammar, including pedagogical grammar; form focus versus meaning focus; interference and error analysis; feedback on errors. Students will be asked to critique and create teaching materials. [24L]
Prerequisite: LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

FRE353H5 Teaching French Culture (HUM)
This course examines practical and theoretical issues surrounding the integration of culture in the language curriculum such as the interface between authentic language and culture; the definition of teaching objectives; appropriate, established and emergent strategies; online resources; cross-cultural communication. Students will be asked to critique and create teaching materials. [24L]
Prerequisite: LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

FRE355H5 Psycholinguistics and Teaching and Learning French as a Second Language (HUM)
An introduction to the study of the main psychological factors that influence the acquisition and use of French as a second language. To better understand the communication needs of the language learner, we will examine the learner's style (attitude, motivations, learning patterns) in relation to cognitive processes such as perception, production and memory. Emphasis on various teaching strategies. [24L, 12T]
Prerequisite: LTL225Y5/ FRE225Y5/ FRE272Y5, FRE240H5, FRE241H5 (or FRE240Y5)/FRE280Y5

FRE356H5 Studies in 17th-century French Literature (HUM)
A close survey of selected literary texts from 17th-century France. Masterpieces of French prose, drama and poetry of the French classical age will be studied with emphasis on the social, political, and artistic background of the time. Selected texts may include plays by Molière and Racine; La Fontaine's Fables; La Rochefoucauld's Maximes; La Bruyères Caractères. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5); FRE280Y5 or equivalent.

FRE357H5 Heroism and Love in the Middle Ages (HUM)
A close reading of selected French literary texts from the 12th to the 15th century. Masterpieces of narrative prose of the French Middle Ages will be studied with emphasis on the social and political background of the time. Selected texts may include epic poems such as 'The Song of Roland' and Arthurian romances such as 'Tristan' and 'Perceval'. Most readings will be done in modern French translation, short texts will be studied in the original Old French with a discussion of the evolution of the language. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5); FRE280Y5 or equivalent.
FRE363H5 Reverie, Rejection and Romanticism in 19th Century French Literature and the Arts (HUM)
This course focuses on the French Romantic movement as part of a European renewal of cultural and esthetic forms of expression. The hero as a marginal individual, notions of escapism, forbidden love, tragic relationships, the revolt against 18th century rationalism and the codification of the Classical period are discussed in relation to works by writers such as Constant, Lamartine, Hugo and Stendhal. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE364H5 Representation of Real Life: Objectivity and Creative Activity in the Realist Novel (HUM)
Realism and Naturalism dominate the second part of the 19th century and react against romantic idealization by proposing an accurate depiction of reality and a stern representation of human experience. The techniques and styles of "modern" narrative as well as themes such as ambition, alienation, social struggle are examined in prose fiction by Balzac, Flaubert, Zola and Maupassant. [24L]
Exclusion: FRE364Y5
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE365H5 Studies in 18th-century French Literature (HUM)
A close survey of selected literary texts from 18th-century France. Masterpieces of French essay, drama and prose narratives of the French Enlightenment will be studied with emphasis on the social, philosophical, and artistic background of the time. Selected texts may include plays by Voltaire, Beaumarchais or Marivaux; essays by Diderot or Rousseau; fictional narratives by Prévost, Restif de La Bretonne or Laclos. [24L]
Exclusion: FRE373Y5
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE369H5 The French Novel Today (HUM)
Contemporary novels are numerous and varied, ranging from scandalous writings about the self to unusual experiments in story-telling, from fictions dealing with deep social issues to works that express diffidence about literature's power of influence. This course will focus on several extremely contemporary works by authors such as Houellebecq, Ernaux, Duras, or Le Clézio. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5) or permission of the department.

FRE370H5 Voices from No-Man's Land: Diaspora Writings in the 21st Century Francophone Literature (HUM)
Contemporary literature written in the French language offers a rich and fertile ground for writers of various origins, cultures and languages who are united by several common factors: exile, immigration, transculturation, identity and alterity, and relationship with French, among others. This course explores these topics while relating them to literary and cultural contexts as well as students' real life through extensive reading and analysis of ultra contemporary novels and short stories by authors such as Dany Laferrière, Ying Chen, Aki Shimazaki, Kim Thúy, Marco Micone, Abla Farhoud, Sergio Kokis, Agota Kristof, Dai Sijie, or Nancy Huston. [24L]
Prerequisite: FRE280Y5, FRE240H5, FRE241H5 (or FRE240Y5).

FRE372H5 History of the French Language I (HUM)
A study of the nature and pattern of change from Latin to Medieval French. The course will focus on the place of the French language among the languages of the world and on chronological development of French from its beginnings to the 15th century with special attention to the evolution of sounds, forms and word order. Topics will cover the emergence of Romance languages from Vulgar Latin as well as the Celtic, Germanic and Scandinavian influences on the formation of the French language. A close study of texts dating from the ninth to the 15th century up will be included. The course touches upon history, historical linguistics, socio-linguistics and French literature. [24L]
Exclusion: FRE373Y5
Prerequisite: FRE280Y5 or equivalent.

FRE373H5 History of the French Language II (HUM)
A survey of the history of the French language from the 15th century to modern times. The course will focus on the standardization of the French language, the regulation of language through legislation, the political use of the French language, the influence of other languages such as Arabic and Italian on French and the origins of regional variations in the Francophone world. A close study of texts dating from the 15th century to modern times will be included. The course touches upon History, Historical Linguistics, Socio-linguistics and French Literature. [24L]
Exclusion: FRE373Y5.
Prerequisite: FRE280Y5 or equivalent.

FRE376H5 French Phonology and Phonetics (HUM)
A study of the phonological system of modern French based on actual samples of speech taken from different regional varieties and socio-economic groups. [24L, 12T]
Prerequisite: FRE272Y5
FRE378H5 French Syntax (HUM)
A study of the distribution and relationships of the syntagmatic components of contemporary French, the sentential structure including the principle of coordination, subordination and expansion. Theoretical approaches. [24L, 12T]
Prerequisite: FRE272Y5

FRE380H5 Plurilingual Theatre: Developing Writing and Oral Skills in French (HUM)
The use of drama or theatre-based activities is a proven way to motivate and support learners in a foreign language classroom. Through observation, active participation, and reflection on the processes involved when learning French language and culture, students will use their knowledge of French, and other languages, to enhance communicative skills through drama (ranging from improvisation to full-length plays).
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

LTL380H5 Theoretical Issues in Second Language Teaching and Learning (HUM)
This course examines theoretical research on adult second language learning and the resultant implications for second language teaching. Topics include age, affect, communicative competence, and sociolinguistics. Links are drawn to pedagogical practices, including error correction, materials selection, and order and method of presentation. This course is taught in English and is open to students from other disciplines. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition to the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI380H5, LIN380H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5

FRE382H5 Advanced Language Practice: Written French (HUM)
Consolidation of writing skills already acquired by students specializing in French studies, with emphasis on advanced writing techniques. [12L, 24P]
Exclusion: FSL382H5/ FRE380H5/ FSL442H1. Open to francophones with permission of the department.
Prerequisite: FRE280Y5/ FSL280Y5 or Placement Test results.

FRE383H5 Advanced Language Practice: Oral (HUM)
This course offers a consolidation of oral production and aural comprehension that develop communication skills in various cultural contexts and authentic situations. Projects and activities are designed to enable students to acquire diverse types of oral communication skills. [24L, 12P]
Exclusion: FSL383H5, FRE381H5, FSL443H1. NOT OPEN TO NATIVE SPEAKERS.
Prerequisite: FRE280Y5/ FSL280Y5
Recommended Preparation: FRE283H5

FRE387H5 French Morphology (HUM)
A study of the morphological system of modern French, its relationship to syntax and phonology; theoretical notions derived from the analysis of specific data. Special attention will be given to the methods of analysis and classification, as well as selected morphological categories (verbs, nouns, etc.). [24L, 12T]
Prerequisite: FRE272Y5

FRE391H5 Women of the Francophone World (HUM)
An in-depth examination of the representation of women in a selection of novels and films from Francophone countries, which will include a combination of works by French, Quebecois, Guadeloupean, Algerian, and Senegalese authors and directors. The course will focus on historical and socio-cultural francophone contexts and will include a discussion of Feminism and of the impact of political systems and ideologies on the lives of women. [24L]
Exclusion: FRE392H5, FRE390H5, FRC391H5
Prerequisite: FRE280Y5

FRE393H5 French Cinéma: An Introduction (HUM)
A historical perspective on French films with a focus on the specificity of French cinéma, from the Poetic Realism of the Thirties to the New Wave of the Fifties and Sixties, the "Cinéma du look" of the Eighties and the various genres of contemporary French cinema: heritage film, film noir and comedies in particular. Recommended foundation course for FRE397H5. [24L, 12P]
Exclusion: FRE394H5, FRC393H5
Prerequisite: FRE280Y5

FRE397H5 Films of the Francophone World (HUM)
A study of a selection of films from Francophone countries, e.g. France, Québec, Burkina-Faso, Senegal. [24L, 12P]
Exclusion: FRE396H5, FRC397H5
Prerequisite: FRE280Y5.
Recommended Preparation: FRE393H5

FRE399Y5 Research Opportunity Program (HUM)
This course provides senior undergraduate students who have developed some knowledge of research methods used in the discipline of French studies to work in the research project of a U of T Mississauga professor for course credit. Enrolled students have the opportunity to become involved in original research, develop their research skills, and share in the excitement and discovery of acquiring new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter sessions are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: (FRE240H5, FRE241H5)/FRE240Y5/ FRE272Y5
FRE400H5 French Studies Internship (HUM, EXP)
Students enrolled in a French Studies program of study will have the opportunity, through work placement, to apply the knowledge and expertise gained throughout their studies in French. The work placement will take place in corporations, local media or community organizations and educational institutions (elementary, secondary schools, colleges and universities). Application deadline is February 28th. Students will be required to include a letter of interest highlighting their qualifications as suitable candidates for an internship opportunity. Applicants who meet minimum criteria (must be in 4th year of studies, number of courses completed in FRE and CGPA) will be selected for an interview. Final decisions will be based on a combination of academic qualifications, experience, and the interview. Prerequisite: FRE382H5, FRE383H5 plus an additional 1.0 credit at the 300 level in FRE.

FSL405H5 Functional French-Advanced I (HUM)
Course will focus on developing both oral and written skills in the production and understanding of complex discourse (including organization, cohesion, nuanced lexical forms and expressions) in order to participate in varied, sustained and unscripted situations. Formerly FSL385H5. [24L, 12P]
Exclusion: FSL385H5, 386H5, FRE382H5, FRE383H5, FSL331Y1, FSL321Y1
Prerequisite: FSL305Y5/ FIF4U/Placement test recommendation.

FSL406H5 Functional French-Advanced II (HUM)
Students will focus on developing both oral and written skills in the production and understanding of complex discourse (including organization, cohesion, nuanced lexical forms and expressions) in order to initiate and sustain varied and unscripted exchanges. Formerly FSL 386H5. [24L, 12P]
Exclusion: FSL385H5, 386H5, FSL331Y1, FSL321Y1
Prerequisite: FSL405H5/ FIF4U/Placement test recommendation.

FRE417H5 Comedy & Tragedy in Québec Theatre (HUM)
This advanced course explores the way plays evolved from an academic form to the exploration of modern and postmodern drama. [24L]
Exclusion: FRE311Y5
Prerequisite: FRE280Y5 or equivalent, FRE240H5, FRE241H5 (or FRE240Y5)

LTL417H5 Second Language Pedagogy (HUM)
This course offers a comprehensive survey and analysis of fundamental concepts and issues related to second, bilingual, and foreign language instruction by developing students’ knowledge of second language acquisition, approaches to language teaching, computer-assisted teaching, and pedagogical design and implementation in the language classroom. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI417H5, LIN417H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5

FRE419H5 The Art of Short and Tall Story Telling in Québec: A Study of Short Forms of Fiction and Modern Fantasy (HUM)
This course explores how short fiction has developed in Québec through opposite aesthetics (realism, folktale, fantastic and magic realism). [24L]
Prerequisite: FRE280Y5 or equivalent. FRE240H5, FRE241H5 (or FRE240Y5)

FRE445H5 Special Topics in Literature I (HUM)
A study of fiction, non-fiction or theoretical approaches in French literature. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE446H5 Special Topics in Literature II (HUM)
A study of fiction, non-fiction or theoretical approaches in French. [24L]
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

LTL456H5 Sociolinguistics and Second Language Teaching and Learning (HUM)
This course considers the impact on variant use by second language learners exerted by linguistic and extra-linguistic factors, such as the surrounding linguistic context, age, sex, style, and curricular and extra-curricular exposure. Implications are drawn for second language teaching, including deciding what registers and variants to teach and what activities to employ. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI456H5, LIN456H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5
French (HBA)  Programs

FSL466H5 French for Business Communication (HUM)
This project-based course advances practical uses of written and spoken French in business contexts. Activities and assignments are scaffolded to privilege deeper level of learning and simulate an authentic job search process in order to improve and strengthen reading comprehension, communication, writing and presentation skills that students can directly apply in the workplaces. [24L, 12T]
Exclusion: FSL366H5
Corequisite: FSL406H5/ FRE280Y5

FRE467H5 Time, Faith, and Human Condition (HUM)
French writers in the first half of the 20th century use several techniques to discuss the passage of time and the impact of memory, religious beliefs and spirituality as well as social and political activism. These are examined in selected prose fiction by Proust, Gide, Malraux and Breton. [12L, 12T]
Exclusion: FRE426Y5
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE468H5 Stress and Disorder and the Birth of the New Novel (HUM)
This course explores how in their quest to comprehend the significance of their existential angst, individuals in selected novels by Sartre, Camus, Robbe-Grillet and Duras become emotionally entangled in a journey that is riddled with questions pertaining to the meaning of life, love and death, artistic creativity, and social exclusion. [12L, 12T]
Exclusion: FRE426Y5
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5), FRE280Y5 or equivalent.

FRE474H5 Teaching and Learning Varieties of Canadian French (HUM)
(Of offered in English) This course offers students the opportunity to become familiar with the primary research methods used in sociolinguistic studies, with how sociolinguistics helps to understand the properties of Canadian French, and with the pedagogical implications arising from sociolinguistic research on Canadian French. This course will contain a research-based component. All written work is completed in French for students who wish to petition the department for credit toward a Specialist or Major in French. [24L]
Exclusion: LIN374H5, FRE374H5
Prerequisite: FRE280Y5/ FRE272Y5

FRE476H5 French Semantics (HUM)
Various approaches to the notion of meaning; its functioning at all levels of representation. [12L, 12T]
Prerequisite: FRE272Y5

FRE482H5 Creative Writing (HUM)
This course will look at the creative process and techniques of fiction, poetry and drama (rhetoric, matters of literary genres). Discussions centered on student writing will be developed during workshops. [24L]
Exclusion: FSL482H5
Prerequisite: FRE240H5, FRE241H5 (or FRE240Y5)/FRE280Y5/ FSL280Y5

LTL486H5 Teaching and Learning Cross-cultural Communication (HUM)
This course examines cross-cultural language use by second language learners from both a theoretical and pedagogical perspective. Topics addressed include the role of pragmatic transfer between native and target languages, individual differences, learning context, and instruction in the development of second language pragmatic competence. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN486H5
Prerequisite: FRE280Y5, LTL225Y5/ FRE225Y5 plus one additional course from Language Teaching and Learning Group.

LTL488H5 Principles and Strategies for Online Second Language Course Design (HUM)
This course will conduct a critical appraisal of online course materials, and formulate appropriate pedagogical strategies for their exploitation. This course is taught in English and is open to students from other disciplines. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Prerequisite: FGI225Y5/ LTL225Y5/ FRE225Y5, FRE280Y5
Recommended Preparation: LTL225Y5/ FRE225Y5, FRE280Y5

FRE489H5 The Structure of the Syllable in Romance Languages (HUM)
A comparative approach to the study of various phonological processes of contemporary Romance languages. Current issues on the representation of syllable structure and problems of syllabification in reference to phenomena such as liaison, elision, definite and indefinite article selection et cetera. [24L]
Prerequisite: FRE376H5/ LIN229H5 or equivalent.
FRE490Y5 Senior Essay (HUM)
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. For Specialists who wish to fulfill the requirements for their fourth year Literature courses. A maximum of 1.0 FCE can be taken in both Senior Essay (FRE490Y5) and Independent Study (FRE491H5, 492H5)
Prerequisite: FRE 280Y5 (or equivalent)/FRE382H5, FRE240H5, FRE241H5 (or FRE240Y5)/FRE272Y5/FRE225Y5

FRE491H5 Independent Study (HUM)
A scholarly project supervised by a Faculty member on a literary or linguistic topic of common interest, including readings, discussions and papers.
Prerequisite: FRE 280Y5 (or equivalent)/FRE382H5, FRE240H5, FRE241H5 (or FRE240Y5)/FRE272Y5/FRE225Y5

FRE492H5 Independent Study (HUM)
A scholarly project supervised by a Faculty member on a literary or linguistic topic of common interest, including readings, discussions and papers.
Prerequisite: FRE 280Y5 (or equivalent)/FRE382H5, FRE240H5, FRE241H5 (or FRE240Y5)/FRE272Y5/FRE225Y5

French and Italian (HBA)

Department of Language Studies

Undergraduate Co-ordinator - French Studies
Professor Claude Evans
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Undergraduate Co-ordinator - Italian
Professor Teresa Lobalsamo
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Undergraduate Counsellor
Rosa Ciantar
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Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
FRE French (page 210)
ITA Italian (page 261)
LTL French (page 210)

Combined Specialist Program ERSPE0815 French and Italian (Arts)

14.0 credits are required. The program must include a minimum of 4.0 300/400 level credits (2.0 in French and 2.0 in Italian) and 1.0 credit at the 400 level (either in French or in Italian).

French

7.0 credits are required.

Limited Enrolment – Final grade of 63% in FRE180H5 and FRE181H5 (or equivalent) is required.

First Year: FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempted from these courses may replace them with a higher level 1.0 credit in FRE.
Higher Years:
1. FRE240Y5 (or FRE240H5 and FRE241H5)
2. FRE280Y5, 382H5, 383H5
3. 1.0 credit from French Linguistics
4. 1.0 credit from French Literary and Cultural Studies
5. 1.0 additional credit in French linguistics or literature

Course Categories:
- **French Linguistics**: FRE372H5, FRE373H5, 376H5, 378H5, 387H5, 474H5, 476H5, 489H5

**Italian**

7.0 credits are required. Written work will be done in Italian in all courses.

1. ITA200Y5
2. ITA350Y5
3. 1.0 credit from ITA237H5, 239H5, 354Y5
4. ITA231H5/ITA232H5, ITA420Y5
5. 2.0 additional credits in ITA, excluding ITA100Y5/101H5/102H5. Courses not used in #1 above may be used. At least 1.0 credit must be in Italian literature (excluding those in item #2 above).

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- CSC Computer Science (page 133)
- ENV Environment (page 186)
- GGR Geography (page 224)
- MAT Mathematics (page 296)
- STA Statistics (page 356)
Specialist Program ERSPE2171
Geocomputational Science (Science)

The Geocomputational Science Specialist program offers a strong integration of coursework in geography and computer science. This course of study provides students with a solid foundation in geographic theory and problem-solving as well as the computer science skills valued by employers.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria: Have completed this program’s requirements for the first year with 65% or better in both GGR117Y5/ENV100Y5 and CSC148H5. Must also have a Cumulative Grade Point Average (CGPA) of 2.0 or higher for the first year. The minimum CGPA is determined annually. It is never lower than 2.0.

This program is in the process of being phased out. The Geocomputational Sciences program (ERSPE2171) is under review and will not be available for entry after August 31, 2013 (pending final decision by Governing Council). Students already in the program will be allowed to complete it.

Within an Honours degree. 14.0 credits are required.

First Year: 3.5 credits from:
CSC108H5, 148H5; MAT102H5, 135Y5/137Y5;
GGR111H5, 112H5/ENV100Y5

Second Year: 4.0 credits from:
CSC207H5, 209H5, 236H5, 263H5; MAT223H5, 224H5/232H5;
GGR278H5; STA257H5/ GGR276H5

Third Year: 4.0 credits
within total 4.0 credits, choose 3.0 credits from:
GGR321H5, 337H5, 372H5/375H5/380H5; CSC343H5,
338H5 STA331H5/ 322H5/ 348H5
and 1.0 credit from list A

Fourth Year: 2.5 credits from
GGR463H5, 464H5, 488H5, 417Y5, CSC492H5/493H5/
411H5/310H5/321H5/0.5 credit from CSC369H5/373H5/
320H5/309H5/318H5 [Notes 1, 2 and 3]

Note 1: Where there is a choice in courses, some courses have additional prerequisites not in the program.

Note 2: For students to receive credit towards this specialist degree, the projects undertaken in CSC492H5, 493H5 or GGR417Y5 must receive prior approval from the Geocomputational Science program coordinator. This is to insure that the projects have an appropriate level of Geocomputational Science content.

Note 3: It is highly recommended that students intending to pursue graduate studies take GGR417Y5/ CSC492H5/ CSC493H5.

Geographical Information Systems (HBSc)

The Department of Geography offers both BA and BSc programs in Geography, a BSc program in Geographical Information Systems (GIS), and it is closely integrated with the spectrum of Environment programs.

The general structure of the Geography programs is the foundation course (1st year), the core stream courses (2nd year) and specializations in upper years. The programs, particularly in the first two years, integrate various elements of the human-social-cultural and the biogeophysical traditions with environmental perspectives and analytical methods. After the foundation course(s), students are required to take two courses from their selected core stream and two courses from the other three core streams before they can choose their specialization.

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The Geography curriculum stresses the integrative nature of the discipline as well as the development of skills in geographical information analysis. We expect students to develop the high levels of geographical problem-solving skills required for some of the most dynamic areas of today’s job market. Field studies complement lectures by providing material for workshops, developing skills in geographical information analysis, encouraging student involvement in basic enquiry, and building cooperation.

Geography has close links with other disciplines and interdisciplinary programs. Students in other fields will find many courses within Geography that complement their interests and expertise. From Literature to Geology, Chemistry to History, Fine Art to Economics, Geography offers new ways of combining and developing knowledge about the environment in which we all live.

The following courses are counted as Science courses for distribution and program purposes: GGR112H5, 201H5, 214H5, 217H5, 227H5, 276H5, 278H5, 305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 317H5, 321H5, 335H5, 337H5, 338H5, 372H5, 374H5, 375H5, 377H5, 379H5, 384H5, 406H5, 407H5, 463H5, 479H5, 484H5, 488H5, 494H5, JEG400Y5, JBG312H5. All other GGR courses listed in this calendar are considered to be ‘Social Science,’ except GGR322H5, JGE378H5 and GGR417Y5, which can be taken either as ‘Science’ or ‘Social Science.’
Professional Advancement for Geography and Environment Students (PAGES)

The program is based on a series of workshops, career events and related activities designed to help students develop: an awareness of research, career and graduate possibilities; skills required to apply successfully for employment and graduate studies; and personal skills to improve self-confidence and potential within the workplace, professional direction and self-awareness. On successful completion of the program students receive a transcript annotation. Please contact Sabrina Ferrari (sabrina.ferrari@utoronto.ca) for details on registering for this program.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- GGR Geography (page 224)
- JEG Geography (page 224)
- JGE Geography (page 224)

Major Program ERMAJ0305 Geographical Information Systems (Science)

The GIS BSc offers an analytical perspective on geographical information. In-depth studies, beyond basic geography, include mapping, spatial analysis, digital databases with specializations in modeling, statistical analysis and remote sensing.

7.5 credits are required.

**First Year:** 1.0 credits: GGR111H5 & GGR112H5 (formerly GGR117Y5)

**Second Year:** 3.5 credits:
- 1.5 credits: GGR272H5, 276H5, 278H5
- 2.0 credits from any other 200-level GGR courses

**Third Year:** 2.5 credits
- 1.0 credits: GGR321H5 and GGR337H5
- 1.5 credits from the following: GGR311H5, 322H5, 335H5, 370H5, 372H5

**Fourth Year:** 0.5 credit from the following:
- GGR463H5, 464H5, 488H5, 494H5

Minor Program ERMIN0305 Geographical Information Systems (Science)

4.0 credits are required.

**First Year:** 1.0 credits: GGR111H5 & GGR112H5 (formerly GGR117Y)

**Second Year:** 1.5 credits:
- 1.5 credits: GGR272H5, 276H5, 278H5

**Third Year:** 1.5 credits from the following:
- GGR311H5, 321H5, 322H5, 335H5, 337H5, 370H5, 372H5
Geography (HBA, HBSc)

The Department of Geography offers both BA and BSc programs in Geography, as well as a BSc program in Geographical Information Systems (GIS), and it is closely integrated with the spectrum of Environment programs.

The general structure of the Geography programs is the foundation course (1st year), the core stream courses (2nd year) and specializations in upper years. The programs, particularly in the first two years, integrate various elements of the human-social-cultural and the biogeophysical traditions with environmental perspectives and analytical methods. After the foundation course(s), students are required to take two courses from their selected core stream and two courses from the other three core streams before they can choose their specialization. Students enrolled in major and specialist programs are required to complete a minimum number of field days over the course of their programs. Field days may be accumulated either through a field course and/or through courses with field day components as indicated in course descriptions.

Professors Emeriti
G.H.K. Gad, Dr.Phil., Ph.D.
R. Jaakson, M.Sc., Ph.D.
T.F. Mcllwraith, B.A., M.A., Ph.D.
D.S. Munro, B.Sc., M.Sc., Ph.D.

Professors
L. Besco, B.E.S., M.A., Ph.D.
L. Brown, B.Sc., M.Sc., Ph.D.
R.N. Buliung, B.A., M.A., Ph.D.
T. Conway, B.Sc., M.S., Ph.D.
P. Desrochers, B.A., M.A., Ph.D.
T. Duval, B.Sc., M.Sc., Ph.D.
M. Havelka, B.Sc., M.Sc., Ph.D.
Y. He, B.Sc., M.Sc., Ph.D.
N. Laliberte, B.A., M.S., Ph.D.
I. Lehnherr, B.Sc., Ph.D.
J. Leydon, B.A., M.A., Ph.D.
B. Murck, A.B., Ph.D.
A. Olive, B.A., M.A., Ph.D.
T. Porter, B.Sc., Ph.D.
V.B. Robinson, B.S., M.S., Ph.D.
A. Walks, B.A., M.A., Ph.D.
K. Wilson, B.A., M.A., Ph.D.

Part time Professors
H. Shear, B.Sc., Ph.D.

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Faculty Advisors
Geography (Arts)
N. Laliberte, B.A., M.S., Ph.D.

Geography (Science)
L. Brown, B.Sc., M.Sc., Ph.D.

The Geography curriculum stresses the integrative nature of the discipline as well as the development of skills in geographical information analysis. We expect students to develop the high levels of geographical problem-solving skills required for some of the most dynamic areas of today’s job market. Field studies complement lectures by providing material for workshops, developing skills in geographical information analysis, encouraging student involvement in basic enquiry, and building cooperation.

Geography has close links with other disciplines and interdisciplinary programs. Students in other fields will find many courses within Geography that complement their interests and expertise. From Literature to Geology, Chemistry to History, Fine Art to Economics, Geography offers new ways of combining and developing knowledge about the environment in which we all live.

The following courses are counted as Science courses for distribution and program purposes: GGR112H5, 201H5, 214H5, 217H5, 227H5, 276H5, 278H5, 305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 317H5, 321H5, 335H5, 337H5, 338H5, 372H5, 374H5, 375H5, 377H5, 379H5, 384H5, 406H5, 407H5, 463H5, 464H5, 479H5, 484H5, 488H5, 494H5, JEG400Y5. All other GGR courses listed in this calendar are considered to be "Social Science," except GGR322H5, JGE378H5 and GGR417Y5, which can be taken either as "Science" or "Social Science."

Professional Advancement for Geography and Environment Students (PAGES)
The program is based on a series of workshops, career events and related activities designed to help students develop: an awareness of research, career and graduate possibilities; skills required to apply successfully for employment and graduate studies; and personal skills to improve self-confidence and potential within the workplace, professional direction and self-awareness. On successful completion of the program students receive a transcript annotation. Please contact Sabrina Ferrari (sabrina.ferrari@utoronto.ca) for details on registering for this program.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.
For courses in this area see:
BIO Biology (page 78)
CHM Chemistry (page 94)
ENV Environment (page 186)
GGR Geography (page 224)
JEG Geography (page 224)
JGE Geography (page 224)
MAT Mathematics (page 298)
PHY Physics (page 313)

Specialist Program ERSPE1666 Geography (Arts)

The Geography BA program brings together many subjects of interest, ranging from community health issues, urban form and globalization to electoral politics, transportation and economic development. The program emphasizes the development of quantitative and qualitative analytical skills, including cartography, analysis of spatial data, social theory and archival work, which it supplements with field work and collaborative research opportunities. Through their training, geography BA students will become highly skilled and flexible problem solvers, preparing them for some of today's most dynamic areas of the job market. Students enrolled in the specialists Geography Arts program are required to complete a minimum of six field days over the course of their program. Field days may be accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

Limited Enrolment – Enrolment in this program is limited to students who have completed GGR111H5 and GGR112H5 (formally GGR117Y5) and a Cumulative Grade Point of 2.7 (B-) in 2nd year program courses.

Within an Honours degree, 10.0 credits and 6 Field Days are required.

First Year: 1.0 credit: GGR111H5 and GGR112H5 (formerly GGR117Y5)
Second Year: 3.5 credits:
2.0 credits from GGR202H5, 207H5, 208H5, 209H5, 210H5, 252H5, 267H5, 269H5, 287H5, 288H5
1.0 credit from GGR276H5, 277H5, 278H5
0.5 credit from GGR201H5, 214H5, 215H5, 227H5
Third Year: 4.0 credits from the following:
Fourth Year: 1.5 credits:
1.0 credit : GGR417Y5, JEG400Y5, JEG401Y5
0.5 credit from any GGR Social Science designed 400-level courses as described in the Geography Course Descriptions section of this calendar.

Field Days: 6 Days
Six days accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

Specialist Program ERSPE2070 Geography (Science)

The Geography BSc offers a broad perspective on physical geography. In-depth studies include climatology, hydrology and ecosystems, with possible specialization in biogeochemistry, glaciology, landscape ecology, natural resources and urban climate.

Students enrolled in the specialist Geography Science program are required to complete a minimum of eight field days over the course of their program. Field days may be accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

Limited Enrolment – Enrolment in this program is limited to students who have completed GGR111H5 and GGR112H5 (formally GGR117Y5) and a Cumulative Grade Point of 2.7 (B-) in 2nd year program courses.

Within an Honours degree, 12.0 credits and 8 Field Days are required.

First Year: 3.0 credits:
1.0 from GGR111H5 & GGR112H5 (formerly GGR117Y5)
2.0 foundational requirement from: MAT134Y5, MAT135Y5, MAT137Y5, MAT137Y5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, PHY136H5, PHY137H5
Second Year: 3.5 credits:
1.5 credit from GGR201H5, 214H5, 217H5, 227H5
1.0 credit: GGR276H5 & GGR278H5
0.5 credit from GGR202H5, 207H5, 208H5, 209H5, 210H5
0.5 credit from any other 200-level GGR SCi courses
Third Year: 4.0 credits:
3.0 credits from the following:
additional 1.0 credit from the list above or from the following: GGR311H5, 312H5, 321H5, 322H5, 335H5, 337H5, 372H5, 375H5, 380H5
Fourth Year: 1.5 credit :
1.0 credit from GGR417Y5, JEG400Y5, JEG401Y5
0.5 credit from any GGR Science designated 400-level courses as described in the Geography Course Descriptions section of this Calendar.
Field Days: 8 days
Eight days accumulated either through a geography field course or through geography courses with field day components as indicated in course descriptions.

Major Program ERMAJ1666 Geography (Arts)

Students enrolled in the major Geography Arts program are required to complete a minimum of six field days over the course of their program. Field days may be accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

7.0 credits and 6 Field Days are required.

First Year: 1.0 credit: GGR111H5 and GGR112H5 (formerly GGR117Y5)

Second Year: 3.0 credits as follows:
1.5 credits from GGR202H5, 207H5, 208H5, 209H5, 210H5, 252H5, 267H5, 269H5, 287H5, 288H5
1.0 credit from GGR276H5, 277H5, 278H5
0.5 credit from GGR201H5, 214H5, 217H5, 227H5

Third Year: 2.5 credits from the following:

Fourth Year: 0.5 credit from any GGR/JEG Social Science designated 400-level courses as described in the Geography Course Descriptions section of this calendar.

Field Days: 6 days
Six days accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

Major Program ERMAJ2070 Geography (Science)

Students enrolled in the specialist Geography Science program are required to complete a minimum of eight field days over the course of their program. Field days may be accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

8.0 credits and 8 Field Days are required.

First Year: 2.0 credits:
1.0 from GGR111H5 & GGR112H5 (formerly GGR117Y5)
1.0 foundational requirement from: MAT134Y5, MAT135Y5, MAT137Y5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, PHY136H5, PHY137H5

Second Year: 3.0 credits:
1.5 credit from GGR201H5, 214H5, 217H5, 227H5
0.5 credit from GGR202H5, 207H5, 208H5, 209H5, 210H5
0.5 credit: GGR276H5
0.5 credit from any other 200-level GGR SCI courses

Third Year: 2.5 credits:
2.0 credits from the following:
GGR305H5, 307H5, 309H5, 315H5, 316H5, 317H5, 338H5, 374H5, 377H5, 379H5, 384H5; JEG400Y5, JGE378H5
0.5 additional credit from the list above or from the following:
GGR311H5, 312H5, 321H5, 322H5, 335H5, 337H5, 372H5, 375H5, 380H5

Fourth Year: 0.5 credit from any GGR Science designated 400-level courses as described in the Geography Course Descriptions section of this calendar.

Field Days: 8 days:
Eight days accumulated either through a geography field course and/or through geography courses with field day components as indicated in course descriptions.

Minor Program ERMIN1666 Geography (Arts)

4.0 credits are required.

4.0 credits are required: 4.0 credits from the list of GGR Social Science courses, as described in the Geography Course Descriptions section of this calendar, including at least 1.0 credit at the 300/400 level

Minor Program ERMIN2070 Geography (Science)

4.0 credits are required.

First Year: 1.0 credit: GGR111H5 & GGR112H5 (formerly GGR117Y5)

Second Year: 1.0 credit from GGR201H5, 214H5, 217H5, 227H5
2.0 additional credits from the list of GGR Science courses as described in the Geography Course Descriptions section of this calendar, including at least 1.0 credit at the 300/400 level.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time. Students may take no more than 2.0 credits combined in ROP, individual project courses, or thesis courses at the 300/400 level for credit toward the Geography program. Students must receive permission from Faculty Program Advisor and Academic Counsellor prior to taking GGR courses on other U of T campuses toward their program requirement. No more than 1.0 non-U of T Mississauga credit is accepted in the Geography Specialist program; and no more than 0.5 non-U of T Mississauga credit in the Geography and GIS Major programs.
List of Courses

GGR111H5 Human Geography (SSc,EXP)
The course introduces human geography through an exploration of the evolution of geography to modern traditions, the measurement of geographic space and phenomena and the spatial interactions of people with the environment. Students gain an understanding of geographic principles through lectures and course material and develop fieldwork skills through practical sessions and field exercises. **This course fulfills 1 field day.** [24L, 12P]  
_Exclusion:_ GGR117Y5

GGR112H5 Physical Geography (SCI,EXP)
This physical geography course introduces earth systems processes occurring in and between the atmosphere, lithosphere, hydrosphere and the biosphere. It addresses human interaction and interference with the natural environment and compares natural and anthropogenic environmental changes. Key tools used to understand earth systems and the natural environment including hands-on empirical approaches, systems models, remote sensing, and geographical information systems are addressed in both the lectures and the practical sessions. **This course fulfills 1 field day.** [24L, 12P]  
_Exclusion:_ GGR117Y5

HHS200H5 Methodological Perspectives on the Biological and Social Determinants of Health (SSc,SCI)
It is widely recognized that human health and development is shaped by a broad set of biological and social factors (e.g., genetics, lifestyle behaviours, socioeconomic status, access to health care). The ways in which health and its determinants are defined (biomedical vs. social perspectives), operationalized, and analysed, vary across disciplines. The goal of this course is to provide students with an introduction to the main theoretical and methodological perspectives of human health that exist within various disciplines (e.g., anthropology, biology, geography, sociology, etc.). The course will cover concepts of health, wellness, disease, evidence-based approaches, research design and implementation, and knowledge translation. [24L]  
_Exclusion:_ GGR117Y5  
_Prerequisite:_ ANT101H5 / ANT102H5 / SOC100H5 / GGR111H5 / WGS101H5

GGR201H5 Introduction to Geomorphology (SCI,EXP)
This course provides an introduction to the principles and concepts of geomorphology, the study of the processes that shape the surface of the earth. The course adopts a process-oriented approach to the study of the variety of landforms found in the natural environment. Topics are mainly taken from a Canadian perspective and include energy flows through the land, weathering and erosion (fluvial, coastal, chemical, aeolian, and glacial), hillslope materials, drainage basin morphology, periglacial environments, and human modification of the landscape. [24L, 12P]  
_Exclusion:_ GGR201H1  
_Prerequisite:_ GGR111H5/ 117Y5 or ENV100Y5

GGR202H5 Geography of Canada (SSc)
Canada continues to be one of the world’s great storehouses of basic resources: fish, wood, minerals, grains, livestock, water, recreational space and more. Human impact, to the point of extinction, has varied across the country. The geography of regional change in Canada, over several centuries, is basic to this social science course. [24L, 12T]  
_Exclusion:_ GGR228Y5, GGR246H1  
_Prerequisite:_ GGR111H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR207H5 Cities, Urbanization and Development (SSc)
This course will introduce students to urban social processes, urban form and urban history. A particular emphasis will be placed on global urbanization, internal spatial and social structure of cities, as well as past and contemporary urban problems. [36L, 12T]  
_Exclusion:_ GGR124H1, combination of any of the following two:GGRA03H3, GGRB05H3, GGRC10H3  
_Prerequisite:_ GGR111H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR208H5 Population Geography (SSc)
This course examines the link between people and places from a global perspective. The course will cover topics related to population patterns and processes, geographic theories related to population and sustainability, as well as the tools used by geographers to study population size, composition and migration. [24L, 12T]  
_Exclusion:_ GGR255H5, GGR323H1, GGR320H1, GGRC02H3  
_Prerequisite:_ GGR111H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR209H5 Economic Geography (SSc)
An introduction to the interaction of the economic, social and political institutions that determine the quality of life in a particular place. Subjects covered range from economic efficiency and social equity to the location dynamics of value chains. The emphasis of the course is on Canadian examples. [24L]  
_Exclusion:_ GGR220H1, GGR221H1, GGRA02H3, GGRC27H3  
_Prerequisite:_ GGR111H5/ 117Y5/ ENV100Y5/ 4.0 credits
GGR210H5 Social Geographies (SSc)
Social geography is concerned with the ways in which social relations, identities and inequalities are produced across space. This course examines social geography in the North American context with a specific focus on identity/difference and inequalities in cities. We will explore cities as sites of both cosmopolitan inclusion and exclusion. [24L, 12T] 
Prerequisite: GGR111H5 / 117Y5 / ENV100Y5 / 4.0 credits

GGR214H5 Global Weather and Climate (SCI,EXP)
The climates of the globe are created from the kinds of weather systems which usually occur. This course surveys the weather systems of the globe and the geography which helps to transform them into regional climates. It uses just enough physics to show you how it all works and how we can make informed assessments about ideas on climatic change. [24L, 12P] 
Exclusion: GGR217Y5
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR217H5 Fundamentals of Hydrology (SCI,EXP)
Hydrology is the study of the quantity, quality, storage, and transfer of the world’s freshwater. The presence of water on and in the continents and atmosphere sustains the terrestrial biosphere, including human life. This course focuses on the central concepts of hydrology by taking a systems approach to the movement and storage of water on and in a watershed. Based on the framework of the water cycle, the course emphasizes the physical processes that control the stores and transfers of water and energy in the Earth system. This course serves as a gateway to the more advanced treatment of hydrology in upper levels, as well as providing a solid understanding of the fundamentals of the science of water for students in other streams of physical geography, environmental science, earth science, and biology. [24L, 12P] 
Exclusion: GGR217Y5
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR227H5 Ecosystems and Environmental Change (SCI,EXP)
This course introduces the rapidly advancing fields of ecosystem science through the exploration of how ecosystems respond to climate change, pollution, and intensive natural resource management. The impacts from anthropogenic stressors on ecosystem functioning are often complex, with interactions occurring among plants, microorganisms, and physical and chemical environments. Empirical and modelling approaches are explored as they allow us to understand and predict ecosystem functioning and the linkages and feedbacks with changing environments. Lecture topics and case studies focus primarily on important representative Canadian ecosystems that also play vital roles in the resource sector including forests, agricultural land, wetlands and aquatic ecosystems. [24L, 12P] 
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 4.0 credits/PI

GGR234H5 Environmental and Resource Management (SSc)
Course code has been changed to ENV201H5.

GGR252H5 Retail Geography (SSc,EXP)
The problem of retail location. The spatial structure of consumer demand and retail facilities. Techniques for site selection and trade area evaluation, location strategies, retail planning. This course fulfills 1 field day. [24L] 
Exclusion: GGR252H1

GGR267H5 India and South Asia (SSc)
A regional survey of the physical, social and economic landscape of India and neighbouring states of South Asia, with special emphasis on current developments. Roots of ancient civilization, cultural divisions and the drive for national unity, colonial and post-colonial politics, international relations. Natural resources, population pressure, economic development, social change. [24L] 
Exclusion: GGR367H5
Prerequisite: Any 4.0 credits

GGR269H5 The Changing Geographies of Latin America (SSc)
A continental survey course that covers the contemporary social, cultural, environmental and economic landscape of Latin and Central America. Some of the themes addressed include the impact of trade and globalization on Latin American economies, the role of indigenous people in Latin American culture, urban development patterns and trends and emerging crises posed by the rapidly increasing environmental challenges facing Latin American nations. [24L] 
Exclusion: GGR369H5
Prerequisite: Prerequisite: Any 4.0 credits

GGR272H5 Digital Mapping and Principles of Cartography (SSc,SCI)
This course will cover foundational concepts in mapmaking (cartography) using geographical information systems (GIS). The course will also explore map rendering in the digital and mobile worlds where the power of geography and cartography are leveraged through development of location based services used increasingly in everyday life. Topics covered will include but are not limited to: coordinate systems and map projections, measurement and classification, making maps using GIS, critical appraisal of mapped information. The course will combine lectures with practical sessions where foundational concepts will be applied using GIS and related technologies and software. [12L, 24P] 
Exclusion: GGR272H1
Prerequisite: GGR111H5, GGR112H5 / ENV100Y5
GGR276H5 Spatial Data Analysis and Mapping (SCI,EXP)
Introduction to the study of geographical phenomena using descriptive and inferential statistics. Fundamentals of geographic data and statistical problem solving using non-spatial and spatial descriptive statistics. Decision making using evidence gathered from inferential statistical analysis. Graphical summary, geographic visualization and mapping of analytical results. Application of state of the art software for statistical analysis. Provides background for future studies in geographic information systems and advanced statistical analysis. The course strikes a balance between developing an understanding of core non-spatial and spatial statistical concepts, while demonstrating technical proficiency in the application of software to the study of geographical questions. [24L, 12P]
Exclusion: GGR270H1
Prerequisite: GGR111H5 and GGR112H5 (previously GGR117Y)/ENV100Y/4.0 credits

GGR277H5 Social Research Methods (SSc,EXP)
This course introduces students to the key approaches that social scientists use to answer important questions and solve complex problems relating to the social world. It addresses the philosophies, theories and methods associated with social research. Specific methods and issues that will be covered include: archival research, surveys, interviews, focus groups, ethics, as well as qualitative and quantitative data analysis and interpretation. Throughout the course students will work through the process of designing their own independent research proposals and will gain experience with basic survey and interview data analysis and interpretation. This course fulfills 1 field day. [24L, 12P]
Exclusion: GGR270H1, GGR271H1, GGRC31H3
Prerequisite: GGR(111H5/ 112H5)/ 117Y5/ ENV100Y5/ 4.0 credits

GGR278H5 Geographical Information Systems (SCI,EXP)
Introduction to models of representation and management of geographical data for scientific analysis. Basic quantitative methods and techniques for geographic data analysis, including collection, manipulation, description and interpretation. Practical exercises using GIS and statistical software packages with examples drawn from both physical and human geography. [24L, 12P]
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 4.0 credits; GGR272H5

GGR287H5 Food and Globalization (SSc)
A broad overview of the historical development of the global food economy and a survey of recent trends and controversies. Topics discussed range from basic food staples, food markets and trade liberalization to food security, environmental sustainability and alternative agricultural systems. [24L]
Exclusion: GGR329H1, GGRC29H3
Prerequisite: GGR111H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR288H5 World Fresh Water Resources (SSc)
World geography of freshwater resources. Ethics and international principles of human water rights. Uses and abuses of accessible freshwater stocks and wastewater. Case studies of ground water, lakes and rivers (focus: Great Lakes; international watersheds), dams and diversions, water reclamation and reuse. Issues of water quality and quantity for health, and for food production. [24L]
Exclusion: cannot take GGR288H5 + GGR348H5 simultaneously GGR334H1
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 4.0 credits

GGR305H5 Biogeography (SCI)
Analysis of past and present plant and animal distributions, and of the environmental and biological constraints involved. The course emphasizes the impact of continental drift, Quaternary climatic changes and human interference on contemporary patterns. [24L]
Exclusion: GGR305H1
Prerequisite: Any 8.0 credits

GGR307H5 Environmental Soil Science (SCI,EXP)
Soils play critical roles in sustaining life. They support plants and agriculture, serve as home to a plethora of organisms, recycle organic matter and nutrients, provide materials for construction, art, and medicine, preserve paleoecological and archaeological records, regulate global climate through the exchange of greenhouse gasses, and filter contaminants in water and waste. This course introduces fundamentals of soil formation, physical, chemical and biological characteristics, and classification schemes. It explores the role of, and how humans interact with, soils in Canadian forests, wetlands, agricultural systems, and industrial and urban settings. Aspects of carbon, nutrient, and pollutant biogeochemistry in soils are explored in detail. This course fulfills 2 field days. [24L, 36P]
Prerequisite: Any 8.0 credits

GGR309H5 Wetland Ecosystems (SCI,EXP)
Wetlands are an integral part of our biosphere, playing fundamental roles in the modification of water quality, biodiversity, and the global carbon cycle. This course focuses on the classification, hydrology, biogeochemistry, and ecology of wetland systems. The latter part of the course builds on this physical foundation by introducing management issues associated with wetland preservation, restoration and creation. This course fulfills 4 field days. [24L, 36P]
Prerequisite: Any 8.0 credits
GGR311H5 Landscape Biogeography (SCI,EXP)
A geographical, multi-scale perspective on the relationships between land cover change and the distribution, movement, dispersal, abundance, and diversity of avian and mammalian species. Landscape measures such as dominance, contagion, shape, patch/edge measures, connectivity will be considered in relation to land use/land cover change and distribution of selected species. The juxtaposition of cover types will be analyzed and changes in landscapes related to selected species. Various research methods are discussed and work is done using, geographic information systems to analyze landscapes in conjunction with bird and mammal count data. [24L, 12P]
Prerequisite: GGR305H5/ BIO205H5/P.I.

GGR312H5 Landscape Ecology of Animal Populations (SCI)
A companion course to GGR311H5, further investigating the principles governing the distribution and success of animal populations in landscaptes. Topics include microhabitat selection, home range use, scale-dependent foraging theory, dispersal, genetic structure of populations, cyclic populations, metapopulation dynamics, colonization and extinction, and implications for conservation biology. [24L, 18T]
Exclusion: JBG312H5
Prerequisite: BIO205H5 and P.I.
Recommended Preparation: GGR311H5

GGR313H5 Gender and the City (SSc)
In this course students will be introduced to approaches in social geography that examine the links between gender and urban environments. Specific topics and issues to be covered include, for example, poverty, work, sex trade, human trafficking and safety. Topics will be explored across multiple scales including bodies, home, neighbourhood and community. This course fulfills 1 field day. [24L, 12T]
Exclusion: GGR327H1
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR277H5, GGR278H5
This course is crosslisted with Women's/Gender Studies

GGR315H5 Physical Hydrology (SCI,EXP)
This course centres on the advanced treatment of the physical principles involved in the occurrence and movement of water on and beneath the Earth's surface. Watershed-scale hydrologic systems are investigated, along with basic principles of fluid mechanics. Open channel hydraulics, soil water, and groundwater processes are investigated. The importance of understanding water movement in the environment by exploring the relationship of hydrology to other environmental sciences is stressed. This course fulfills 2 field days. [24L, 36P]
Prerequisite: GGR214H5/ 217H5

GGR316H5 Landforms (SCI,EXP)
Systems approach to hillslope geomorhology studies; processes of erosion and deposition; mass wasting; slope forms of humid and arid regions; process-response models; applied aspects. [24L, 12P]
Prerequisite: GGR214H5/ 217H5, 227H5

GGR317H5 The Cryosphere (SCI,EXP)
Snow and ice dominate the Canadian landscape. There is virtually no area in Canada that escapes the influence of snow and ice. We skate on frozen ponds, ski down snow covered mountains, drive through snow blizzards and watch how ice jams in rivers cause rivers to swell and floods to occur. The duration and the thickness of snow and ice increase rapidly northwards, and glaciers are found in mountainous areas and in large parts of the Arctic region. Given that snow and ice impact heavily on the Canadian way of life, this course seeks to understand the dynamics of snow and ice in a hydrological context. This course will examine snow properties, snow cover distribution, glacier hydrology, melt runoff, and ice in its many forms (lake ice, river ice, sea ice, and ground ice). This course will also examine some of the recent observed changes occurring in the cryosphere regions of Canada. This course fulfills 2 field days. [24L]
Prerequisite: GGR214H5/ 217H5

GGR318H5 Political Geography (SSc,EXP)
Political geography is concerned with the spatial expression of political entities and events. It involves analysis at a variety of scales ranging from the local to the global. The control and manipulation of territory and the imposition of political boundaries and political ideas are central to this analysis. The course provides discussion on nation building, the emergence of the state system, theories on the state, and the role of the state as provider of services and regulator of activities, and electoral geography and governance. This course fulfills 1 field day. [24L]
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR111H5 and any two of the following: GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR278H5

GGR321H5 Geographic Information Processing (SCI)
Problem solving using geographic information systems (GIS). Essential distributed computing aspects of GIS are presented. Among topics covered are the use of logic in spatial analysis, line-of-sight analysis, route selection, site selection, and landscape analysis. Hands-on assignments are emphasized. [12L, 24P]
Prerequisite: GGR278H5
Recommended Preparation: GGR311H5
GGR322H5 GIS and Population Health (SSc,SCI,EXP)
The purpose of this course will be to develop an appreciation for the conceptual and methodological intersections that exist between geographical information systems and population health. While population health can include incidence and prevalence of disease and ill-health, as well as concerns about service provision, this course will focus mainly on disease, injury, illness more broadly. The course will include both lectures, where foundational concepts will be introduced and related to practical lab sessions, where students will gain experience using GIS to map and study health information. Topics will include: spatial databases for population health, mapping health data, analyzing the spatial clustering of disease and/or injury, mapping and analyzing environmental and social risk factors. Assessment will involve completion of three laboratory assignments, a mid-term test, and a final exam. [24L, 12P]
Prerequisite: GGR278H5, GGR353H5
Corequisite: GGR353H5
Recommended Preparation: Students should be prepared to use their pre-existing introductory knowledge in geographical information systems, and statistics (at least a very basic working knowledge of descriptive statistics is necessary). Students should also be prepared to write brief reports, and to work independently on assigned tasks.

GGR325H5 Business and Industrial Geography (SSc)
This course uses economic principles and geographical analysis to help you understand the global economic map of the early 21st century. It aims to show the way in which economic activities are organized within and across countries and how this affects people and communities. Both broad patterns of economic organization and specific case studies will be discussed. Topics covered range from the impact of public policy on regional growth to a case study of the financial services industries. In short, the course attempts to answer the following question about the global economic map: “What is where, and why? and so what?”. [24L]
Exclusion: GGR326H1, GGR378H1
Prerequisite: Any 8.0 credits

GGR329H5 Environment and the Roots of Globalization (SSc)
A critical discussion of how geographical factors, such as landscape, flora and fauna, might help explain why history unfolded differently on different continents. How geography might have impacted the development of agriculture, complex technologies, writing, centralized government and how, in the process, it has shaped the current world economic map. [24L]
Exclusion: GGR489H5 in 2005-2006
Prerequisite: Any 8.0 credits

GGR333H5 Energy and Society (SSc)
A broad survey of humankind’s ability to control and manipulate energy. Forms of energy and use; energy eras and transitions; past and present economic and policy debates. Understanding of technical terms, physical principles, creation of resources and trade-offs will be emphasized as a basis for discussions about current energy options. [24L, 12T]
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR111H5/ 117Y5/ ENV100Y5

GGR335H5 GIS and Remote Sensing Integration (SCI)
The integration of GIS and remote sensing is at the center of a larger trend toward the fusion of different kinds of geospatial data and technologies. The purpose of this course is to familiarize students with the various ways in which GIS and remote sensing have been integrated and used for environmental applications at a range of spatial and temporal scales. The first one-third of the course will explore vector based GIS analysis in the context of physical environment, wildlife habitat, and human activities using ArcGIS software. The second third of the course explores remote sensing fundamentals, image interpretation, land cover mapping, change detection, and integration of raster and vector data using ERDAS IMAGINE software. The course will include lectures, where foundational concepts will be introduced and practical lab sessions, where students will gain experience on the proper use of GIS and Remote Sensing techniques. There will be guest lectures demonstrating applications of RS and GIS in natural resources management. The final third of the course will be devoted to application projects employing remote sensing and/or GIS data analysis in natural resources and environmental assessments. Assessment will involve completion of three laboratory assignments, a mid-term test, and a final project report. [24L, 24P]
Prerequisite: GGR276H5 / GGR278H5 / GGR337H5

GGR337H5 Environmental Remote Sensing (SCI)
This introductory course emphasizes mastering fundamental remote sensing concepts and utilizing remotely sensed data for monitoring land resources and environmental change. Topics include surface-energy interactions, sensor systems, image interpretation, and applications for examining soil, vegetation and water resources. Upon completion of this course, students should have the necessary knowledge and skills to pursue more advanced work in digital image processing and remote sensing applications. [24L, 12P]
Exclusion: GGR337H1
Prerequisite: 0.5 credit from (GGR201/214H5/ 217H5/ 227H5), 0.5 credit from (GGR276H5/ 278H5)
GGR338H5 Environmental Modeling (SCI)
An application of environmental models to contemporary problems of decision-making. The course demonstrates the relevance of techniques of data management (statistics, computer systems) to issues facing Canada and the global community. [24L, 12P]
Exclusion: GGR335H5
Prerequisite: Any 8.0 credits, including GGR276H5; a course in Statistics recommended.

GGR345H5 Environmental Issues in the Developing World (SSc)
course code changed to ENV345H5.
Prerequisite: Any 8.0 credits

GGR348H5 The Great Lakes - A Sustainable Natural Resource? (SSc)
This course will provide students with a history of the biophysical evolution of the Great Lakes Basin, its history of human population growth and industrial and urban development and the consequences of that development on the ecological health of the Basin. There will be a discussion of basic lake ecology, with emphasis on the unique characteristics of the Great Lakes. The course will examine the various stresses past, present and future (climate change, new chemicals) that have or could impact upon the Basin. The complex governance issues in the Basin (two countries, eight states, one province, hundreds of municipalities, First Nations) will be considered, along with the management programs put in place to deal with the effects of human activity on the ecosystem. The sustainability of the Great Lakes basin will also be discussed in the context of present and future stresses. [24L]
Exclusion: cannot take GGR288H5 + GGR348H5 simultaneously
Prerequisite: 8.0 credits including either ENV201H5 or GGR288H5

GGR349H5 Cities in Transition (SSc,EXP)
The internal geography of contemporary cities is in the midst of a series of transitions related to new settlement patterns, immigration, workplace location, transportation and communication technologies, globalization, and shifts in urban governance. This course will examine these transitions and their effects on the social and political geography of the city. Themes include gentrification, spatial mismatch, concentrated poverty, political fragmentation, and the emergence of new urban forms and of the post-modern city. [36L, 12P]
Exclusion: GGR339H1
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR207H5, GGR361H5

GGR353H5 Geography of Health and Health Care (SSc)
This course provides an introduction to the geography of health and health care, emphasizing the links between health and place, and covers six broad thematic areas including the development of health geography as a sub-discipline, data collection/analysis, medical, social, and cultural models of health/illness, health systems delivery, and inequalities. [24L, 24T]
Exclusion: GGR450H1, GGR451H1
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR111H5, GGR277H5

GGR354H5 Geographies of Youth Development (SSc)
Youth is a critical period between childhood and adulthood. Events and experiences that occur during adolescence can have lifelong and often cumulative impacts on health and development including completing (or leaving) school, joining the workforce, engaging in delinquent or risky behaviours, sexual encounters, bearing children, volunteerism and civic involvement. This course challenges students to think about youth development through a geographical lens that examines links between youth and their local social and physical environments and broader socio-economic conditions. This course features an experiential learning component where students will engage in research projects on local issues affecting youth. [24L, 12T]
Exclusion: GGR489H5S offered in 2010 winter session
Prerequisite: Any 8.0 credits

GGR361H5 City Planning and Development (SSc)
This course outlines important concepts and historical milestones involved in the planning and development of cities. It involves examination of urban sprawl, urban intensification efforts, and of the evolution of urban form and the interplay of private and public forces that shape the built-form of Canadian cities. This course fulfills 2 field days. [36L, 12P].
Exclusion: JGI346H1
Prerequisite: Any 8.0 credits
Recommended Preparation: GGR207H5, GGR349H5

GGR365H5 Trade and Globalization (SSc)
This course uses economic and geographical principles to help students understand the advent of the current period of globalization. In this context, globalization refers to international trade liberalization which results in increased contacts across borders, migration, trade, and investment. Topics covered will include the history of globalization, the environment, sweatshops, development and inequalities. By the end of the course, students should have gained a deeper understanding of current controversies surrounding international trade and globalization. [24L]
Prerequisite: Any 8.0 credits.
GGR370H5 The Geography of Transportation (SSc)
Transportation is an integral aspect of our daily lives and plays a key role in shaping the economy and the environment. Through this course, students will explore the geography of transportation. Topics will include, mobility and accessibility, transportation networks and flows, Geographic Information Systems in Transport (GIS-T), planning and policy, environmental and human health impacts, and other current issues. [24L, 12P]
Prerequisite: 8.0 credits including GGR278H5
Recommended Preparation: GGR276H5

GGR372H5 Geographical Analysis of Land Resources (SCI)
This course focuses on the nature of land resources information and its analysis. Emphasis is on use of geographic information systems to model and analyze a variety of land resources. Topics such as terrain analysis and interpolation will be covered. [24L, 12P]
Prerequisite: GGR276/GGR278 or equivalent with Permission of Instructor

GGR374H5 Water Quality and Stream Ecosystems (SCI)
Flowing water courses (streams and rivers) are unique ecosystems from lake, terrestrial, and wetland environments, and are integral in regulation of land-borne solutes to larger water bodies. This course provides a holistic treatment of the stream ecosystem, with particular emphasis on nutrient and contaminant transformation, in-stream hydraulics and morphology, the hyporheic, parafluvial, and riparian zones, as well as hillslope hydrological processes responsible for transfer of water to the stream. Variability in stream biota, community interactions, and ecosystem-level processes are also discussed. Weekly field and lab exercises provide the student with hands-on experience with the lecture material.
This course fulfills 4 field days. [24L, 36P]
Prerequisite: GGR217H5 or GGR227H5 or BIO205H5

GGR375H5 Physical Environment of the City (SCI,EXP)
The physical structure of the city results in a distinctive local climate that is linked to air and water quality, as well as to energy use. A geographical information system is used to assemble physical information from which to model the urban climatic environment, taking the example of Mississauga. Particular emphasis is placed upon the role of field measurements and satellite data as sources of geographical information. [24L, 12P]
Prerequisite: 0.5 credit from GGR214H5/ 217H5/ 227H5
0.5 credit from GGR276H5/ 278H5

GGR377H5 Global Climate Change (SCI)
The main focus of this course is upon the climatic aspects of environmental change which affect Great Lakes water levels, disappearing glaciers, sea level rise, desertification and dwindling water resources in an ever more populous world. These changes to the earth surface environment are explored in the context of themes and issues which were introduced in first year, with a view to answering an important question: whether policy action on climate change must wait for more science, or whether action is merely delayed by failure to appreciate science. [24L]
Exclusion: ENV377H5
Prerequisite: GGR112H5/ 117Y5/ ENV100Y5/ 8.0 credits

JGE378H5 Natural Hazards (SSc,SCI)
Earth is a dangerous place and risk is an inherent feature of life on this planet. Some of the events and processes that we call “hazardous,” such as earthquakes, volcanic eruptions, floods, tsunamis, cyclones, and forest fires are natural environmental processes. We define them as hazards only when they pose a threat to human interests. In this course we will examine natural hazards as well as some technological hazards – their causes, their potential impacts on people, and their management and mitigation. [24L, 12T]
Exclusion: GGR378H5, ERS317H5
Prerequisite: Any 8.0 credits
Recommended Preparation: ENV100Y5, ERS103H5, ERS120H5, GGR112H5

GGR378H5 Natural Hazards: Risks and Vulnerability (SSc,SCI)
Course Code has changed to JGE378H5

GGR379H5 Field Methods in Physical Geography (SCI,EXP)
This course is structured around one major field trip that will occur before fall-term courses begin, preparatory work, and approximately bi-weekly course meetings during the regular academic term to complete complementary work in computer and/or wet laboratories. Field projects will involve analyses and mapping of vegetation, soils, aquatic systems, hydrology, and/or geomorphology, and subsequent data analysis. Students will be required to write one major research paper and present projects to the class. Each student is required to pay the costs of his/her transportation and accommodation. Students must register on ACORN, on a first-come first-serve and non-refundable deposit basis. The deposit must be received by the Department within one week from the first day of enrollment or the student will be dropped automatically from the course. Students should contact the Department to find out more details about the specific fieldtrip plans.
This course fulfills 7 field days.
Prerequisite: 1.0 credits from: GGR201H5/ 214H5/ 217H5/
227H5 + 1.0 credits from any other GGR/ENV SCI course(s) + 2.0 credits from any science courses + PI
GGR380H5 Communicating with Maps (SSc)
This course teaches and examines the principles of cartography and provides experience in producing and reading maps. While students will learn how to map using GIS software, the emphasis is on the principles and the ability to communicate via maps. The second half of the course explores the literature on cartography and cartographic positivism, delving into myth and meaning in maps, cognitive cartographic theory, cartographic ethics and map use and misuse in the mass media. The political and social discourse in maps is analyzed through cartographic criticism, through the application of graphic logic and design principles, and through an understanding of external and internal power relations in maps. [24L, 12P]
Prerequisite: Any 8.0 credits

GGR381H5 Maps and Empire in the New World, 1500-1800 (SSc)
This course focuses on the use of maps in European expansion across the Atlantic in the early modern era. It examines connections between cartography, political power and empire across four areas: the formation of the European nation state, the tentative beginnings of European transatlantic imperial expansion, the settling of boundary disputes in the New World, and the conflicts and interactions between European and Amerindians that occurred because of and through mapmaking practices. [24L]
Exclusion: GGR489H5 offered in 2010 Fall Session
Prerequisite: 8.0 credits

GGR384H5 Climatology of Canadian Landscapes (SCI)
This course will focus on the natural surface climates of Canada. Topics covered will include Alpine and forest environments; ocean and wetland regions; and both arctic and subarctic climates. Surface energy processes will be examined, and how the behavior of energy exchange varies by climate region. This course fulfills 4 field days. [24L, 36P]
Prerequisite: GGR214H5 or GGR217H5

GGR385H5 Geographies of Indigenous Identity and Well-Being (SSc)
The geographies of indigenous identity are tied to political, social, economic, and environmental systems that shape the spaces in which we live. These geographies function at multiple scales - from international solidarity networks to nationalist claims on territory to an individual's sense of belonging. This course uses an intersectional approach that foregrounds how indigenous identity is tied to other aspects of identity such as gender, sexuality, race, and class and how identity intersects with well-being. While we will be focusing on indigenous identity within the context of Canada as a settler nation, we will also engage with how indigenous identities shape and are shaped by naturalisms in other parts of the world. [24L, 12T]
Prerequisite: GGR111H5, GGR210H5, PI

GGR389H5 Field Studies in Human Geography (SSc, EXP)
This course will provide students with a first-hand exposure to the social, urban, historical and cultural geography of a North American city. During a 5-7 day stay in a city, students will apply basic field methods, such as observation and field note taking, to gain an in-depth understanding of the landscape and build environment. Students will participate in collecting primary observational data as well as gathering information gleaned from guided tours, lectures and group discussion.

Admission to course will be through application due by end of March. The student’s application must be submitted to Sabrina Ferrari and must include a current transcript, a current curriculum vita, and a letter of application explaining why their qualifications and interest make them suitable candidates for this field course opportunity. Applicants who meet minimum criteria will be selected for an interview. Acceptance will be based on a combination of GPA, experience, qualifications and interview performance. There is a nonrefundable fee associated with this course beyond tuition, for which the accepted students are responsible.
This course fulfills 6 field days.
Exclusion: GGR382H1
Prerequisite: 8.0 credits including GGR111H5, GGR207H5, GGR210H5, GGR277H5

GGR393H5 Methods of Environmental Assessment (SSc)
Course number has changed to ENV393H5.

GGR399Y5 Research Opportunity Program (SSc, SCI, EXP)
This course provides senior undergraduate students who have developed knowledge of geography and have studied its research methods the chance to work as part of a research team, under the direction of a professor, in exchange for course credit. Students have the opportunity to be involved in original research, enhance their research skills and participate in the excitement and discovery of facilitating new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter semesters are posted on the ROP website (www.utm.utoronto.ca/rop) in mid-February and students are invited to apply at that time. This course may fulfill field day components. Please consult with your supervisor.
Prerequisite: 1.0 credit from GGR276H5, 277H5, 278H5
Recommended Preparation: Minimum of 8.0 credits
JEG400Y5 Geography / Environment Science Internship (SCI, EXP)
Through a part-time, unpaid work placement, students apply the natural science based environmental science/physical geography expertise gained through previous course work. Placements are made at local conservation authorities, municipalities, environmental consulting companies, corporations, provincial or federal agencies, and other organizations. Students must submit an application to the undergraduate advisor by March 1 to apply for the course. Specialists in the Environmental Science or Physical Geography Program will be given priority for admission. The student’s application must include a current transcript, a current curriculum vita, and a letter of application explaining why their qualifications and interest make them suitable candidates for an internship opportunity. Applicants who meet minimum criteria will be selected for an interview. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance.
Exclusion: ENV400Y5, GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits, PI

JEG401Y5 Geography / Environment Social Science Internship (SSc, EXP)
Through a part-time, unpaid work placement, students apply the knowledge and expertise gained through previous course work in geography. Placements may be made in a range of settings. For example, placements may include municipal government, regional government, neighbourhood organizations and centres, corporations as well as with non-governmental organizations. Admission to course will be through application due by March 1. Specialists in the Environmental Management or Geography programs will be given priority for admission. The student’s application must include a current transcript, a current curriculum vita, and a letter of application explaining why their qualifications and interest make them suitable candidates for an internship opportunity. Applicants who meet minimum criteria will be selected for an interview. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance.
Exclusion: ENV400Y5, GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits, PI

GGR406H5 Biogeochemistry (SCI)
Biogeochemistry explores the intersection of biological, chemical, and geological processes that shape the environment. In an era of unprecedented human-induced environmental and climate change, research in this field is advancing rapidly. This seminar course explores the processes underlying biogeochemical cycles of major elements such as carbon and nutrients, and examines how humans alter these cycles. Topics covered include biogeochemical processes in atmospheric, aquatic and terrestrial compartments, emerging techniques (e.g., stable-isotopes) used in biogeochemistry, and how disruptions to these processes are at the root of many environmental issues such as eutrophication, climate change, ocean acidification and toxic metal contamination.
Prerequisite: 4th year standing in GGR, ENV, or P.I.

GGR407H5 Ecohydrology (SCI, EXP)
Ecohydrology explores the feedbacks between biological, hydrological and biogeochemical processes that help shape ecosystem form and function. These feedbacks are central to the regulation of the global climate and water resources. With pronounced and rapid human modification to the landscape and climate system this field of study is increasingly relevant to formulate mitigation strategies. This seminar and research course explores the feedback processes most crucial to climate change and water resources. Topics include ecosystem control on the water balance, the role of peatlands in ameliorating climate change, hydrologic controls on species diversity, and the role of the watershed in mitigating human pollutants. Students are expected to conduct independent and collaborative study. This course fulfills 4 field days. [24S, 36P]
Prerequisite: GGR315H5 or a combination of GGR217H5 plus one of GGR305H5/307H5/309H5/374/BIO311H5/BIO330H5

GGR410Y5 Human Geography Internship (SSc)
course number has changed to JEG400Y5 + JEG401Y5

GGR417Y5 Honours Thesis (SSc, SCI, EXP)
This course is designed to give students experience in the design and execution of an independent senior thesis under the supervision of a faculty member. In order to register in the course, students must complete and submit an application form to the Department of Geography by March 31 of the preceding year. This course may fulfill field day components. Please consult with your supervisor.
Prerequisite: Completion of 3rd-year requirements for the Specialist program in GGR Arts and Science.
GGR418H5 Geopolitics (SSc)
The course focus is classical and contemporary geopolitical theories. We examine different and competing ideas and consider how and if geographic logic of the international (or global) political order has changed. Discussion will initially focus on the historical progression of geopolitical reasoning and then will proceed to discuss imperial rivalries, concepts of hegemony and world order and the geopolitics of the Cold War and the post-Cold War eras. The final section of the course will consider theoretical struggles surrounding the geopolitics in the early 21st century and the challenges posed by critical geopolitics, social movements, environmental changes and feminist theory. Throughout, the primary concern is how the effects of scale, space and power in global politics is understood and experienced. [24L]
Exclusion: GGR439H1
Prerequisite: Completion of 3rd year requirements for GGR Specialist or Major Arts programs.

GGR419H5 Geography of Food: Spatial Organization and Policy Controversies (SSc,EXP)
This seminar course examines the spatial organization and some of the main policy controversies surrounding our food production and distribution system. Topics covered include traditional agriculture and the rise of agri-business, food safety and security, food miles and urban agriculture, the environmental impacts of different production systems and agricultural trade liberalization. Cases discussed range from global issues to Southern Ontario. This course fulfills one field day. [24S]
Prerequisite: Completion of 3rd-year requirements for any Specialist or Major program in ENV or GGR or PI.
Recommended Preparation: GGR287H5

GGR420H5 Geography of Finance and Financial Crisis (SSc)
The global financial crisis brought to mainstream attention the important role played by finance, and new and strange terms such as subprime, derivatives, ABCP, libor, CDS, CDOs. The aftermath of crisis also witnessed mortgage foreclosures and evictions, factory closures, bailouts of large banks and hedge funds, and the implosion of public finances in a number of European nations. This course seeks to understand the spatial organization of financial flows, intermediaries, and instruments, and how these may be related to the apparently disparate phenomenon cited above. It explores how this geography of finance might be related to the production of financial crisis, and how the global geography of international finance relates to the public finances of nations and municipalities, pension and hedge funds, and individual investors. This course begins by exploring the workings of international finance, and examining the history of financial crisis, including both the current crisis and the great depression. We consider the different theories of financial crisis emanating from disparate political-economic-geographical perspectives, as well as the divergent policy implications that flow from such theories. The course then explores on the literature regarding the localized effects of the geography of finance, from the geography of sub-prime lending and foreclosures, to unemployment in selected European cities, the geography of new start-ups in developing nations, and the geography of credit card debt, bankruptcies and defaults. Exclusion: none
Prerequisite: Completion of third-year requirements for any Specialist or MAJOR program in ENV or GGR, PI
Recommended Preparation: GGR207H5, GGR209H5, GGR325H5, GGR329H5, GGR349H5, GGR365H5

GGR426H5 The Geographies of Human Rights (SSc)
This course examines the promises, problems and paradoxes of human rights. We will study the local, national and global aspects of human rights enforcement and violation. By examining specific case studies, we shall examine how so-called ‘universal’ human rights are articulated and practiced differently in different places. Throughout this course, we shall explore human rights as means of empowerment as well as oppression. [24L]
Prerequisite: Completion of third-year requirements for any Specialist or Major program in ENV or GGR or PI
Recommended Preparation: GGR202H5, GGR208H5, GGR313H5

GGR463H5 Geographic Information Analysis and Processing (SCI,EXP)
Emphasis will be on both the analysis and processing of geographic information using open source software. Topics from geographic information science will be presented. Extensive hands-on experience with spatially explicit simulation models, fuzzy techniques, statistical analysis, and programming tools. [12L/24P]
Prerequisite: GGR321H5
GGR464H5 Advanced Remote Sensing (SCI, EXP)
This course builds on the fundamental remote sensing concepts, techniques, and applications introduced in GGR 337, and aims to provide an advanced study of digital image processing and remote sensing applications. Topics include image pre-processing and calibration, spectral data transformation, image enhancement, pattern recognition, artificial intelligence, hyperspectral image analysis, and change detection. Students will apply these advanced remote sensing techniques in practical lab exercises and a term project. [12L, 24P]
Prerequisite: GGR337 or PI

GGR479H5 Special Topics in Physical Geography (SCI, EXP)
An advanced seminar dealing with topics in physical geography, to be selected according to staff and student interests. [24P]
Prerequisite: P.I.

GGR484H5 Arctic Environments (SCI)
High latitude environments are becoming the focus of increasing scientific attention because of their role in global environmental change. The implications of changes occurring to the sea ice and snowcover are far reaching and can have impacts on physical, biological and human systems both within and beyond the region. This course will provide a comprehensive examination of climates of high latitudes. Topics that will be covered include the Arctic energy budget and atmospheric circulation, the hydrologic cycle in the Arctic, the ocean-sea ice-climate interactions and feedbacks, modeling the Arctic climate system as well as an evaluation of recent climate variability and trends. [24L]
Prerequisite: 8.0 credits including GGR214H5/PI

GGR488H5 Geostatistics (SCI)
Prerequisite: 0.5 credit STA course at 200+ level; 1.0 credit 300+ level courses in GGR

GGR489H5 Special Topics in Human Geography (SSc)
An advanced seminar dealing with topics in human geography, to be selected according to staff and student interests. [24P]
Prerequisite: Completion of third-year requirements for any Specialist or Major program in ENV or GGR, PI

GGR493H5 Special Topics in Environmental Management (SSc)
An exploration of theories, research techniques and policy options relevant to the understanding and solution of environmental issues such as sustainable development, risk management and environmental assessment. [24L]
Prerequisite: 5.0 courses from the Environmental Management Major

GGR494H5 Special Topics in GIS (SCI)
(Formerly GGR394H5) Studies of selected topics in Geographic Information Systems not covered in regular courses.
Prerequisite: P.I.

GGR497H5 Human Geography Independent Research Project (SSc, EXP)
This independent project course is designed to give students experience in the definition and execution of a one-term research study on a human geography topic, under the guidance of a member of the faculty. Students who wish to pursue this option with a specific faculty member or who have an idea for a research project should approach the faculty member early - before the start of the academic term - to negotiate the terms of the project.
Prerequisite: P.I., Completion of 3rd-year requirements towards a Geography Major or Specialist program

GGR498H5 Physical Geography Independent Research Project (SCI, EXP)
This independent project course is designed to give students experience in the definition and execution of a one-term research study on a physical geography topic, under the guidance of a member of the faculty. Students who wish to pursue this option with a specific faculty member or who have an idea for a research project should approach the faculty member early - before the start of the academic term - to negotiate the terms of the project.
Prerequisite: P.I., Completion of 3rd-year requirements towards a Geography Major or Specialist program.
Geology (HBSc)

Chair

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This program offers a traditional education in Geology, with emphasis on the field and laboratory study of the Earth, and is recommended for students wishing to pursue careers in the resource industries or graduate studies in Geology.

Students should also review the Degree Requirements section prior to selecting courses.

For courses in this area see:
BIO Biology (page 78)
CHM Chemistry (page 94)
ENV Environment (page 186)
ERI Chemistry (page 94)
ERS Earth Science (page 146)
GGR Geography (page 224)
JCB Chemistry (page 94)
JCP Chemistry (page 94)
MAT Mathematics (page 298)
PHY Physics (page 313)
STA Statistics (page 356)

Specialist Program ERSPE0509 Geology (Science)

14.0 credits are required.

Limited Enrolment – Enrolment in this program is based on completion of 4.0 credits including ENV100Y5 / (ERS103H5, 120H5) (minimum grade of 60%).

First Year:  CHM140Y5/ (110H5,120H5); ENV100Y5/ (ERS103H5, 120H5); MAT134Y5/ 135Y5/ 137Y5;
                  PHY135Y5/ (136H5,137H5)

Second Year:  ERS201H5, 202H5, 203H5; 0.5 credit from GGR217H5/ 214H5/ BIO356H5/ ESS261H1(G); 1.0 credit from CHM211H5/ 231H5/ ESS211H1(G)/ JCP221H5; 1.0 credit from MAT212H5/ 223H5, STA220H5/ 221H5

Third Year:  ERS313H5, 325H5; 1.5 credits from ERS315H5/ 321H5/ ESS322H1(G) / 311H1(G)

Fourth Year:  1. ESS420H1(G)
2. 3.0 credits from 400 level courses in ERS or ESS(G) OR (JCB487Y5/ ERI398H5)

NOTE: MAT212H5 has the following requirements:
Prerequisite: MAT233H5 or Corequisite MAT232H5;
Corequisite: MAT223H5/ 240H5

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
Health Sciences Communication

The Health Sciences Communication (Science) program (ERMAJ1095 Major) is no longer offered as of 2010-11. Students already in this program may continue to follow it.

History (HBA)

Professors Emeriti
- S. Aster, B.A., M.A., Ph.D., FRHisS.
- R.E. Johnson, B.A., Ph.D.
- L.S. MacDowell, B.A., M.Sc., Ph.D.
- D.P. Morton, M.A., Ph.D.
- A.C. Murray, B.A., Ph.D.
- D.L. Raby, B.A., Ph.D.

Professors
- E. Brown, B.A., M.A., M.Phil., Ph.D.
- K. Coleman, B.A., M.A., Ph.D.
- M. Cowan, B.A., B.Ed., M.A., Ph.D.
- B. Gettler, B.S., M.A., Ph.D.
- J. Hanssen, D. Phil.
- M. Kasturi, B.A., M.A., M. Phil., Ph.D.
- H.K. Kwee, B.A., M.A., Ph.D.
- T. Lam, B.Sc., M.A., Ph.D.
- J. MacArthur, Hons. B.A., M.Phil., Ph.D.
- J. Noel, B.A., M.A., Ph.D.
- M. Tavakoli-Targhi, M.A., Ph.D.
- R. Wittmann, B.A., M.A., Ph.D.

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The U of T Mississauga History program is designed to give its students a wide-ranging perspective on Canada and the world through reflection on the past, both recent and distant. The department provides a diverse and global curriculum, with faculty offering a range of specialized expertise on Africa, the Americas, Asia and Europe. The curriculum is also characterized by sets of thematic emphases that include imperialism, colonialism and nationalism, culture and society, religion, the environment, source criticism, labour, gender, ethnicity, war and politics.

History is an ancient discipline, but its modern practitioners are often by necessity interdisciplinary and are frequently positioned at the crossroads of the humanities and social sciences. U of T Mississauga’s historians actively participate in a variety of interdisciplinary programs, including Canadian Studies, Diaspora and Transnational Studies, European Studies, Industrial Relations, Medieval...
Programs

History (HBA)

Studies, Near and Middle Eastern Civilizations, and the Study of Women and Gender.

A concentration in history can provide students with the critical-thinking and communication skills required to excel in a number of professions. The student of history is in a position to pursue a diversity of career paths from academic research and teaching to media, law, journalism and government service.

A fuller description of the History program is available online at www.utm.utoronto.ca/historicalstudies/. This website provides detailed information on course outlines, timetabling and program requirements. It also contains faculty profiles with research interests and publications.

100 and 200 entry-level courses provide intensive introductions to the history of areas and periods; these are typically conducted as a combination of lecture and tutorial; 300- and 400-level courses focus on more specialized or thematic topics. 400-level courses are offered as seminars, allowing students opportunities for collaborative discussion, independent research, and oral presentations.

The department encourages students to take advantage of the various study abroad opportunities available at UTM.

For more information, refer to the Department of Historical Studies website at http://www.utm.utoronto.ca/historicalstudies/

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

HIS History (page 238)

Specialist Program ERSPE0652 History (Arts)

10.0 HIS credits are required meeting the following requirements:

Limited Enrolment – Limited Enrolment – Students applying to enroll at the end of first year (4.0 credits) must have a CGPA of at least 2.00 and a mark of at least 70% in each of 2.0 HIS credits. Students applying to enroll after second year (8.0 credits) must have a CGPA of at least 2.30 and a mark of at least 70% in each of 2.0 HIS credits.

First Year: 0.5 credit in HIS101H5. It is recommended that this course be taken in the first year.

Higher Years: At least 0.5 200+ level credit in each of three of the following topical areas of study:
1. Ancient History and Culture
2. Medieval History
3. History of Religion
4. Gender History
5. Ideas, Culture, and Society

3.0 300-level credits

1.0 400-level credits, 0.5 must be an HIS course

2.5 additional HIS credits at any level

Specialists are permitted to substitute non-HIS courses for up to 2.0 HIS credits. All Classical Civilization and History of Religions courses in the Department of Historical Studies are suitable substitutions. Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

For a current list of courses falling under the various geographical and topical areas of study, see the Departmental Handbook.

Major Program ERMAJ0652 History (Arts)

7.0 HIS credits are required meeting the following requirements:

First Year: 0.5 credit in HIS101H5. It is recommended that this course be taken in the first year.

Higher Years: At least 0.5 200+ level credit in three of the four following geographical areas of study:
1. Africa, Latin America, & the Caribbean
2. Asia and the Middle East
3. Canada & U.S.A.
4. Europe

0.5 200+ level credit in three of the five following topical areas of study:
1. Ancient History and Culture
2. Medieval History
3. History of Religion
4. Gender History
5. Ideas, Culture, and Society

3.0 300 level credits

0.5 400 level HIS credit

Majors are permitted to substitute non-HIS courses for up to 1.0 HIS credits. All Classical Civilization and History of Religions courses in the Department of Historical Studies are suitable substitutions. Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

For a current list of the courses falling under the various geographical and topical areas of study, see the Departmental Handbook.
Minor Program ERMIN0652 History (Arts)

4.0 HIS credits are required meeting the following requirements:

First year: 0.5 credit in HIS101H5. It is recommended that this course be taken in the first year.

Higher years: At least 0.5 200/300 level credit in each of two of the following geographical areas of study:
1. Africa, Latin America, & the Caribbean
2. Asia and the Middle East
3. Canada & U.S.A.
4. Europe

1.0 credit at the 300 level

For a current list of the courses falling under the various geographical and topical areas of study, see the Departmental Handbook.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

HIS101H5 Introduction to Historical Studies (HUM)
This writing-intensive course introduces Historical Studies through a variety of exercises that will allow students to read models of good writing and to practise the integration of successful strategies into their own work. After a basic overview of the disciplines of Classics, Diaspora and Transnational Studies History, History of Religions and Women and Gender Studies, students will try different tools and approaches for developing the skills useful at every stage of the creative process from pre-writing and preliminary research through to editing and undergraduate publication. Each year will focus on a particular historical event that will appear as a recurring theme in readings and assignments. [24L, 10T]

HIS201H5 Introduction to Middle Eastern History (HUM)
An introduction to the history of Islamic culture from its beginnings to modern times. [24L, 10T]
Exclusion: HIS201Y1, NMC201Y1

HIS203H5 The Making of the Atlantic World (1000-1800) (HUM)
An introduction to African, European, and American peoples around and across the Atlantic Ocean between 1000 and 1800. Themes include ideologies and practices of exploration, conquest, and colonization; perceptions and misunderstandings; forced and voluntary migration; effects of disease; resistance and revolt; and the "Atlantic World" as a field of study. [24L, 10T]

HIS204H5 History Of The Ottoman Empire, 1299-1923 (HUM)
This course provides an overview of the history of the Ottoman Empire, the longest lasting Muslim superpower and a major player in world history, from its inception in 1299 until its dissolution after World War I. Among current members of the United Nations, close to 40 member states were, for periods ranging from 50 to 600 years, integral parts of the Ottoman state. Present-day conflicts in political hot spots, such as the Middle East, Bosnia, Kosovo, Cyprus and the Caucasus can only be understood through exploring their origin in the Ottoman past. At the same time in many cases the Ottoman Empire was an example of tolerance and accommodation of various ethnic and religious groups. [24L, 10T]

HIS210H5 Introduction to Digital Humanities (HUM)
What is Digital Humanities? We explore the field's debates, platforms, tools, projects, and critical perspectives, as well as its current core practices: digital exhibits, digital mapping, text analysis, information visualization, and network analysis. We discuss the relationship between technology and knowledge production in historical and critical perspective. [24L]

HIS211H5 Screening History (HUM)
This course explores the relationship of media – film, television and new visual technologies – to history: as historical representations, as sources of history, and as history itself. The course examines the impact of popular representations of history on screen and the controversies that emerge over these constructions of the past. [24L]

HIS212H5 The History of Capitalism (HUM)
This course historicizes capitalism and all of the subcategories that derive from this mode of production: labour, management, the commodity chain, marketing, advertising, finance, exchange value, and the multinational corporation, to name but a few. Students will be introduced to classic texts as well as to more recent work that uses historical methods to study the social, cultural, environmental, gendered, and ethical aspects of economic life under capitalism. The course takes a global perspective, and the focus will range from examining the historical development of capitalism in Canada, the United States, Latin America, Asia, Africa, and Europe.[24L]

HIS213H5 A History of the Present (HUM)
This course takes as its starting point current world events of global significance. We focus on 3-4 flashpoints/crises/events shaping contemporary global politics and culture, and move back in time to understand how current events have been shaped by longer histories of power, inequality, conflict and contestation.[24L]
HIS221H5 Themes in Medieval History (HUM)
This course is a brief survey of European history from the late Roman Empire to the fifteenth century emphasizing select themes that created the shape of medieval civilization and influenced developments in subsequent centuries. [24L]
Exclusion: May not be taken with or after HIS220Y5.

HIS222H5 Eastern Europe Since 1815 (HUM)
The course will provide a historical overview of the lands, peoples and states of Eastern Europe roughly encompassing the band of countries stretching from today's Poland to the Balkans from 1815 to the present. In addition to providing insight into the major historical events and developments, it will also raise and debate some of the following larger questions: does the name Eastern Europe mean more than a geographic concept, how were its experiences different or similar to those of the rest of Europe or other parts of the world, how did the histories of the various states and communities within the region resemble or differ, and how was the region significant for European and world history. [24L, 10T]

HIS230H5 Introduction to European History 1300-1815 (HUM)
European history from the late Middle Ages to the end of the Napoleonic Wars, emphasizing the major political, cultural, economic and social changes that created early modern Europe. [24L, 10T]

HIS236H5 Introduction to British History (HUM)
An introduction to some of the major themes of British history and civilization from the late seventeenth century. This includes - the emergence of industrial society, evangelical humanitarianism, parliamentary democracy, foreign and imperial issues such as the "Eastern Question", Victorianism, the "Irish Question", trade unionism, and war and society. [24L, 10T]
Exclusion: HIS236Y5/ HIS239H1

HIS241H5 Introduction to 19th-Century European History (HUM)
An introduction to the principal themes of western European history from the French Revolution to the 1890's. [24L, 10T]
Exclusion: EUR200Y5, FGI200Y5, HIS241H1

HIS242H5 Introduction to Contemporary European History (HUM)
The evolution of European politics, culture, and society from 1890: the origins and consequences of the two world wars, the Bolshevik Revolution and Stalinism, Fascism and Nazism, the post-1945 reconstruction and division of Europe. This course is essentially a continuation of HIS241H5. [24L, 10T]
Exclusion: EUR200Y5, FGI200Y5, HIS242H1

HIS250H5 Introduction to Russian History (HUM)
An introductory survey that examines the political, social, and cultural developments that shaped the Russian empire from the settlement of Kiev in the 9th century to the collapse of the Romanov dynasty in 1917. [24L, 10T]
Exclusion: HIS250Y1
Recommended Preparation: HIS101H5

HIS261H5 Introduction to Canadian History (HUM)
A survey of the political, social, and economic history of Canada, topically treated from the beginning to the present. This course is intended for students from disciplines outside of History looking for a broad-ranging approach to Canadian history. [24L]
Exclusion: HIS263Y1; May not be taken with or after HIS263Y5.

HIS263Y5 The History of Canada (HUM)
The department's most comprehensive survey of Canadian history, this course is designed to enhance the knowledge and skills of history students, those preparing to teach and others who want to benefit from a full lecture course and weekly tutorials. The first half of the course examines the French colony along the St. Lawrence River and its conquest by Great Britain. How did French culture survive? Political topics include Rebellions and Confederation. The course also explores the many peoples who arrived on our shores: stone-age hunters, French soldiers and brides, white and black Loyalists, and famine Irish; as well as later waves heading to eastern cities and western prairies. Twentieth century topics include modern social movements; the nation at war; popular culture; consumer society; and issues of Canadian identity. Lectures, debates and weekly tutorials help students master historical methods. [48L, 24T]
Exclusion: HIS262Y5/ HIS262H5/ HIS263H5
Recommended Preparation: HIS101H5

HIS271H5 US History, Colonial Era to 1877 (HUM)
A survey of the main developments and themes of U.S. history from the colonial period to the end of Reconstruction. [24L, 10T]
Exclusion: HIS271Y1, HIS272Y5
Recommended Preparation: HIS101H5

HIS272H5 US History, 1877-present (HUM)
How did the US move from the Civil War to a world power? What have been the tensions between national ideals of "liberty for all" and US market expansion? Topics covered include: Jim Crow South; immigration and urbanization; Populism and the Progressivism; consumerism; many wars; post-45 social movements; Reaganism and after. [24L, 10T]
Exclusion: HIS272Y5, HIS271Y1
Recommended Preparation: HIS101H5, HIS271H5
**HIS282H5 Introduction to South Asian History (HUM)**
A critical introduction to the main themes and questions defining South Asian history from its beginnings to the present. Emphasis will be placed particularly on the period after the 1750s, which saw the emergence of British imperialism, anti-colonial struggles, and the formation of new nation states after 1947. [24L, 10T]
*Exclusion:* HIS282Y1, HIS285Y1, HISB57H3
*Recommended Preparation:* HIS101H5

**HIS284H5 Introduction to East Asian History (HUM)**
A survey of East Asian civilization and history from antiquity to modernity. It particularly explores the interrelations of Chinese, Japanese, and Korean cultural and political development. [24L, 10T]
*Exclusion:* EAS204Y1, HIS107Y1
*Recommended Preparation:* HIS101H5/ HIS102Y5

**HIS285H5 Politics of Asia Pacific War Memories (HUM)**
This course examines how Japan, China, Taiwan, Korea and the US try to remember the Asian Pacific War. It will particularly focus the bitterly contested representations of war atrocities such as the Nanjing Massacre, the comfort women system, and the bombings of Hiroshima and Nagasaki. [24L]
*Exclusion:* HIS381H5

**HIS290H5 Introduction to Latin American History (HUM)**
An introduction to the history of Latin America from pre-conquest indigenous empires to the end of the 20th century. Lectures, films, readings, and tutorials explore a set of themes in historical context: nationalism, authoritarianism, religion, racism, patriarchy, and Latin America’s multiple interactions with the outside world. [24L, 10T]
*Exclusion:* HIS291H1, HIS292H1
*Recommended Preparation:* HIS101H5/ HIS102Y5

**HIS295H5 Introduction to African History (HUM)**
A survey of African civilization and history from antiquity to modernity. The course also examines the transformation of Africa from colonial domination to postcolonial states, social movements, and ideologies. [24L, 10T]
*Exclusion:* HIS295Y1
*Recommended Preparation:* HIS101H5

**HIS299Y5 Research Opportunity Program (HUM)**
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
*Prerequisite:* Completion of at least 4.0 and not more than 9.0 credits.

**HIS300H5 Islam and Muslims in the Balkans (HUM)**
This course explores in some detail the specifics of Islamic civilization in the Balkans and the formation and fate of Muslim communities in the region from the Ottoman conquest until the present day. The Balkans, at one time an integral part of the longest living Islamic Empire, the Ottoman state, are nowadays the home of more than 6.5 million Muslims of various ethnic backgrounds. In spite of the growing body of scholarly literature on the subject and the significance of the region, the Balkans still remain marginalized or neglected in the context of both European history and the study of Muslim societies, while local Muslim communities have drawn popular attention primarily in connection to recent conflicts, such as the violent break-up of Yugoslavia. The course seeks to correct this imbalance and bring deeper and more nuanced understanding of how Islam and Muslims contributed to shaping Balkan society, demography, culture and politics, and their relationship to Europe and the larger Muslim world. [24L]
*Recommended Preparation:* HIS101H5

**HIS306H5 The Cold War (HUM)**
This course will review the alliance systems and conflicts that dominated international relations in the period 1945-1991. It will examine specific incidents such as the Berlin Blockade and Airlift of 1948-49, the Hungarian uprising of 1956, the Cuban Missile Crisis, the Vietnam War, and the Prague Spring, as well as the broader strategies and tactics that followed by the two superpowers and their allies. Particular attention will be given to the documentary evidence that has been declassified in the past two decades, and the light it sheds on earlier developments. [24L]
*Recommended Preparation:* HIS101H5, HIS242H5, HIS250H5

**HIS307H5 The Russian Revolutions of 1917 (HUM)**
The fall of the Romanovs and the coming to power of the Bolsheviks have been controversial. This course examines interpretations of the 1917 events using original sources from 1917 in English. [24L]
*Prerequisite:* A course in modern European history.
*Recommended Preparation:* HIS101H5
HIS308H5 The History of Women Pre-1800 (HUM)
A selection of topics relating to the history of women in European society from ancient to early modern times. [24L] 
**Exclusion:** HIS308Y5, HIS245Y1 
**Recommended Preparation:** HIS101H5, A course in European history.

HIS309H5 Anglo-Saxon England (HUM)
Political, institutional and social history of England from the fifth to the eleventh centuries. [24L] 
**Recommended Preparation:** HIS101H5, HIS221H5/ HIS327Y5 or another course in medieval history.

HIS310H5 The History of Women Since 1800 (HUM)
A selection of topics relating to the history of women in modern European society. [24L] 
**Exclusion:** HIS308Y5, HIS245Y1 
**Recommended Preparation:** HIS101H5

HIS311H5 Introduction to Canadian International Relations (HUM)
Canadian international affairs in a broader context. Anglo-American, 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. [24L] 
**Exclusion:** HIS311Y1, HISC46H3 
**Recommended Preparation:** HIS101H5

HIS312H5 Canadian Communities 1600-2000 (HUM)
This course examines selected community interactions with the Canadian environment, society and polity. Lectures, novels and historical readings illuminate some or all of the following groups: First Nations, immigrant brides of New France, Underground Railway migrants, British orphans on Canadian farms, World War I Expeditionary Forces, Italian and Punjabi immigrants. [24L] 
**Exclusion:** HIS312H1, HISC45H3 
**Prerequisite:** HIS261H5, HIS263H5/ HIS263Y5

HIS313H5 Canadian Working-Class History to 1919 (HUM)
This course focuses on the transition in Canada from a pre-industrial society to an industrial society, and the changing nature of work. It examines the impact of technological changes on jobs, themes of gender and ethnicity in the workforce, the emergence of the labour movement and workers’ political action, working class family and community life, early standards legislation, workers and war, and the meaning of the Winnipeg General Strike 1919. [24L] 
**Exclusion:** HIS313Y5, HIS313Y1 
**Corequisite:** 1.0 credit from the following list: ECO244Y5; HIS262Y5, HIS263H5, HIS263Y5, SOC227H5

HIS314H5 20th Century Canadian Working-Class History (HUM)
This course focuses on the changing place and definition of workers in modern Canadian society. It surveys the hard years of the Great Depression, workers’ contributions to the Second World War, the rise and consolidation of the labour movement, and changing patterns of political action by workers. It examines the creation of a modern industrial relations system, legislative measures affecting workers on the job and during strikes and collective bargaining, the emergence of public sector employees and their negotiations, changing gender roles in the workforce, work experiences of immigrant workers, and Canadian workers’ changing position in the global economy. [24L] 
**Exclusion:** HIS313Y5, HIS313Y1 
**Corequisite:** 1.0 credit from the following list: ECO244Y5; HIS263Y5, SOC227H5 
**Recommended Preparation:** HIS101H5, HIS313H5

HIS318H5 Canadian Environmental History: Contact to Conservation (HUM)
This course focuses on the interaction of people and the environment. Themes include environmental change as a result of: European exploration and settlement; the transfer of animals, plants and diseases; the impact of contact and the "Columbian exchange" on indigenous peoples; the fur trade; the lumber industry; the destruction of the bison, the reserves system, and immigrant settlers in the West; the emergence of the conservation movement in Canada. [24L] 
**Exclusion:** HIS318Y5, HIS318Y1 
**Prerequisite:** 8.0 credits 
**Recommended Preparation:** HIS101H5, HIS261H5/ HIS263Y5

HIS319H5 Canadian Environmental History: Conservation to the Modern Environmental Movement (HUM)
This course focuses on the interaction of people and the environment in the 20th Century. Themes include the environmental impact of industrialization, urbanization, and the revolution in transportation, and of resource development in the mining, oil, and gas industries; the destruction and preservation of wildlife; parks and the wilderness idea; the modern environmental movement; the contested world of modern agriculture and the food industry; the collapse of the fisheries; Canadian public policy, environmental law, and Canada’s international role concerning the environment. [24L] 
**Exclusion:** HIS318Y5, HIS318Y1 
**Prerequisite:** 8.0 credits 
**Recommended Preparation:** HIS101H5, HIS261H5/ HIS263Y5/ HIS318H5
HIS321H5 Medieval and Early Modern Scotland (HUM)
This course examines the political, social, cultural, and religious history of Scotland during the medieval and early modern periods. Topics include the Anglo-Norman impact, the Wars of Independence, Stewart monarchy, the growth of towns and trade, Highlands and Lowlands, the medieval Church, the Protestant Reformation, and Union with England. [24L]
Exclusion: HIS413H5
Prerequisite: 0.5 HIS credit
Recommended Preparation: HIS101H5, HIS220Y5/
HIS221H5/ HIS230H5

HIS325H5 Modern African History (HUM)
Looking at the last one hundred years of modern African history, this course will examine the consolidation of colonial societies; transformations in gender, sexuality and identity politics; the roots of ethnic patriotism, racial ideologies and African nationalisms; the role of violence in colonial and postcolonial governance; and the contemporary in historical perspective. [24L]
Recommended Preparation: HIS101H5

HIS326Y5 History of Women in Canada, 1600-2000 (HUM)
This course samples the experience of women in various regions of Canada from pre-contact times through the First World War. Was Iroquoian society a matriarchy? Were women in New France more "liberated" than their 19th century granddaughters? Other topics include domestic servants, fur trade women, suffrage campaigns, Nellie McClung, World War II and Women's Liberation. [24L, 24T]
Recommended Preparation: HIS101H5
Note: This is a 1.0 credit course that is offered over one session (half year) only.

HIS327Y5 From Antiquity to the Middle Ages: Europe 300-800 (HUM)
Lecture course on the transition from ancient to medieval civilization. Emphasizes the character of the source material and its role in shaping the interpretations of modern historiography. [48L]
Exclusion: HIS424Y1
Recommended Preparation: HIS101H5

HIS330H5 Politics and Political Change in Latin America (HUM)
Examines major movements and cultures in Latin American politics from independence to present day. Topics include: nineteenth-century militarism; revolutionary socialism in Cuba and Nicaragua; military dictatorships in Argentina, Brazil and Chile; and recent grassroots and transnational political movements. Emphasizes the integral roles of gender, race and the United States in the region's political processes. [24L]
Recommended Preparation: HIS101H5, HIS290H5

HIS338H5 The Holocaust in Nazi Germany and Occupied Europe (HUM)
This course provides an expansive survey of the Nazi extermination of European Jews, including the ideological underpinnings of the genocide; the policies leading up to the "Final Solution" in Germany and the rest of Europe, a broad overview of the varied reactions and policies of many countries throughout Europe, the role of the Vatican and the response of the Jews themselves as well as the international community; the motivation of the perpetrators; and the complexities of survival in the ghettos and concentration camps. [24L, 10T]
Exclusion: HIS61H1, HIS338H1
Recommended Preparation: HIS101H5, A course in modern European history.

HIS339H5 Postwar Germany, 1945-present (HUM)
This course will explore the history of Germany beginning in 1945. We will examine the evolution of Germany from a dictatorship to a divided state by looking at Allied Policies in the 1940s, the economic wonder of the 1950s, and the tensions between East and West Germany until the fall of the Berlin wall in 1989. This course will look at both East and West Germany's very different confrontations with the Nazi past, the student movement of the 1960s, domestic terrorism in the 1970s, the breakdown of communism in the 1980s, and the growing pains of reunification that exist to the present day. All of these developments will be seen through legal, political, cultural, and media trends. [24L]
Recommended Preparation: HIS101H5, HIS242H5/
HIS338H5

HIS340H5 The Reformation in Europe (HUM)
The focus of this course will be the religious movements of sixteenth century that are described collectively as the Reformation: Lutheranism, Calvinism, the Radical Reformation and the Counter-Reformation. [24L]
Exclusion: RLG346H5, HIS309H1
Recommended Preparation: HIS101H5

HIS351H5 Twentieth-Century Russia (HUM)
The Social, economic, and political development of Twentieth-Century Russia: the Russian Revolution, Stalinism, the Cold War. [24L]
Exclusion: HIS351Y1
Recommended Preparation: HIS101H5, HIS250H5

HIS357H5 The Renaissance (HUM)
A cultural history of the 15th and 16th centuries set against the socio-economic background. The course will concentrate upon the development of the Renaissance in Italy and will deal with its manifestations in Northern Europe. [24L]
Exclusion: HIS357Y5
Recommended Preparation: HIS101H5
HIS358H5 Canada Since World War Two (HUM)
This course examines Canadian developments in the post-war period. It explores the tremendous economic expansion in that period. It surveys trends in immigration and urban development. The course also examines social movements and social change, as well as the growth of nationalism in Canada and Quebec. [24L]  
Exclusion: HIS41H3  
Recommended Preparation: HIS101H5, HIS263Y5

HIS364H5 International Labour Migration (HUM)
This course examines and compares the history of international labour migration from the trans-Atlantic African slavery, indentured Asian labour to the manual labour migration in the present day. [24L]  
Recommended Preparation: HIS101H5

HIS366H5 Diasporic Histories & Cultures (HUM)
This course explores a number of significant historic diasporas - and sites of diaspora - from Constantinople to Al-Andalus to Shanghai, to the United States and the United Kingdom, and to Tel Aviv and the West Bank, through historical record, fiction, memoir and film. [24L]  
Recommended Preparation: HIS101H5, HIS261H5, HIS263Y5

HIS367H5 Diasporic Canada (HUM)
This course explores the history of Canada as a recipient of diasporic communities, arriving from many parts of the world and bringing a great variety of cultures and experiences. [24L]  
Exclusion: HIS266H5  
Recommended Preparation: HIS101H5

HIS368H5 Canada in the First World War (HUM)
The First World War offers a focus for examining every aspect of Canadian Society in an age recognizable and different from our own. Lectures will address the basis for Canada's involvement in the conflict, the Canadian military response and the problems and achievements of the CEF overseas and the impact of the war on Canada itself. [24L]  
Prerequisite: HIS261H5/ HIS263Y5/ POL100Y5  
Recommended Preparation: HIS101H5, A Canadian or European history course.

HIS369H5 Great Lakes Aboriginal History (HUM)
Algonkian and Iroquoian history from the eve of European contact to the present in the Great lakes region of today's Canada and the United States. Algonkian and Iroquoian societies in the 16th century, change over time, material culture, and inter-cultural relations among natives and between natives and Euroamericans. [24L]  
Exclusion: HIS366H1  
Recommended Preparation: HIS101H5

HIS370H5 The American Revolution (HUM)
A comprehensive examination of the causes, conduct, and consequences of thirteen British colonies' withdrawal from their empire. Topics will include English political theory and practice, the unification of the colonies into a new "Continental" government, the military course of the fighting, great-power interventions by Continental Europe, and the Revolution's place in history compared with the contemporaneous French and Haitian revolts. Readings include classic and recent historical writing as well as selected primary sources. [24L]  
Recommended Preparation: HIS101H5, HIS271H5/ HIS272Y5

HIS371H5 The Americas: Interaction and Inequality (HUM)
An introduction to the history of Americas (the present-day territories of the Caribbean, Canada, Latin America and the United States) from pre-conquest indigenous societies to the end of the 20th century. This course will explore the Americas as a zone of connection and interaction between people of distinct environments, cultures and experiences. It surveys the historical continuities and transformations within the region and its linkages to increasingly globalized networks of culture, communication and commerce. [24L]  
Exclusion: HIS91Y1, HISC70H3  
Recommended Preparation: HIS101H5

HIS372H5 The United States in the 20th Century (HUM)
Major developments in the economic, social, political, and cultural life of the United States during the past century as it grew from a burgeoning industrial nation to the leading Superpower. [24L]  
Exclusion: HIS372H1, HISD36H3  
Recommended Preparation: HIS101H5

HIS373H5 From the Gilded Age to the Jazz Age: The Emergence of Modern America, 1877-1929 (HUM)
Examines the major social, political and cultural developments of American society from the end of reconstruction to the stock market crash of 1929. Topics include the rise of mass culture; the growth of the corporation; labour politics; the rise of Jim Crow; the Populist revolt; Progressive Era reforms; WWI; women's suffrage; the Harlem Renaissance; and the "roaring" 1920s. [24L]  
Prerequisite: A course in American history.  
Recommended Preparation: HIS101H5, HIS271H5/ HIS272Y5
HIS374H5 Gender and Sexuality in the US, 1945-present (HUM)
This class historicizes the intersectional analysis of gendered and sexed bodies after 1945. We explore topics such as normative gender expectations; reproductive freedom; masculinities; second-wave feminism; race, class and poverty; conservative backlash; media and gender/sexuality; LGBTQ social movements; trans histories. In terms of methods, I look forward to introducing students to experiments in digital history. [24L]
Recommended Preparation: HIS101H5/ HIS272Y5/ WGS101H5 or any course in U.S. History

HIS378H5 East Asian Cities (HUM)
An examination of the historical transformation of East Asian cities from the imperial to modern times. The course focuses especially on how cities have been planned, depicted, experienced. [24L]
Recommended Preparation: HIS101H5, HIS284H5

HIS382H5 Nationalism in Modern South Asia (HUM)
This course foregrounds and examines the relationship between nationalism and popular movements 'from below', against the backdrop of variables such as class, community, gender and religion. In this regard, it relates the broader themes and question under review to the social history of varied groups such as peasants, the working class, tribes, lower castes and women in the era of colonialism, the national-liberation movement and the postcolonial nation-state. [24L]
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5

HIS384H5 International Relations in the Middle East - Regional Perspectives on the 20th Century (HUM)
The discovery of oil, the establishment of the state of Israel and subsequent wars for Palestine, Pan-Arabism and Political Islam were the over-riding factors in the regional balance of power. This course examines international relations as they were shaped by state- and non-state actors in 20th Century Egypt, Saudi Arabia, Israel/Palestine, Iraq, Iran, Lebanon and Syria. [24L]
Exclusion: HIS307H1

HIS385H5 Orientalism and Occidentalism (HUM)
This course reflects on Edward W. Said's seminal Study Orientalism. The first part focuses on the debates around academic representations of the Orient before and after Said's intervention: his critics, alternative perspectives and methodological elaborations. The second part dissects the ways in which Orientalism inhabits political forms of belonging such as romantic nationalism or Islamic fundamentalism, as well as colonial constructions of liberalism, race, gender and sexuality. The third part examines the ramifications of Orientalist knowledge production in the media and in visual culture. The course also raises questions of strategic reversals of Orientalism, and to what extent Occidentalism can be considered the non-Western equivalent to Western constructions of Otherness. [24L]
Prerequisite: HIS201H5
Recommended Preparation: HIS101H5

HIS386H5 Gender and History in Modern South Asia (HUM)
This course seeks to understand the manifold ways in which gender has shaped South Asian history, with a particular emphasis on the period from the colonial era to contemporary times. The themes will include the relationship between gender, kinship, society and politics on the one hand and race, imperialism, nationalism, popular movements and religion on the other. [24L]
Exclusion: HIS282Y5, HIS481H5
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5

HIS387H5 Popular Culture in East Asia (HUM)
This course uses historical texts, fictions, visual media, and ethnography to explore the history of twentieth-century China and Japan. [24L]
Recommended Preparation: HIS101H5/ HIS284H5

HIS388H5 Histories of Modern Hinduism in South Asia (HUM)
This course examines the social, cultural and political history of Hinduism since 1800. Themes include Hindu socio-reform and political movements, public and popular engagements with Hinduism, and the role of religious institutions, sites, beliefs and rituals in crafting contestatory Hindu ‘publics’ and ideologies. It emphasizes the nexus between gender, class, caste, region and the language of religion in shaping national and transnational political and cultural identities. [24L]
Prerequisite: HIS282H5/ RLG205H5
Recommended Preparation: HIS101H5, RLG308H5

University of Toronto Mississauga
HIS389H5 Localities, Regions and Nations in South Asia (HUM)
This course foregrounds and examines the role of localities and regions in forging social, cultural and political identities and cartographies in South Asian history before and after colonial rule. The course examines the shifting relationship between localities, regions and empires from 1200-1800, and thereafter in the era of colonialism, nationalism and post colonial nation-states. The course is especially interested in how social groups from the margins shaped, or alternatively contested political and spatial articulations of region, locality and nations. [24L]
Exclusion: HIS382H5
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5

HIS390H5 Revolutions and Nations in Latin America (HUM)
Examines social revolutions in Guatemala, Bolivia, Cuba and Nicaragua. It emphasizes the historical linkages between these revolutions and national identity, and stresses the roles of gender, race and the United States in revolutionary processes. This course considers as well the counterrevolutionary politics of the 1970s and 1980s in Central America and the Southern cone. [24L]
Recommended Preparation: HIS101H5, A course in Latin-American history or politics.

HIS391H5 Mexico from Aztec to Zapatista (HUM)
This course examines the origins and evolution of Mexican society, from its prehispanic empires to the Mexican Revolution (1910-1940). Drawing on primary sources, literature, films and secondary texts, the course will track a set of historical themes, including ethnic identity, Catholicism, economic development and migration. [24L]
Prerequisite: HIS290H5
Recommended Preparation: HIS101H5

HIS392H5 Topics in Global History (HUM)
An examination of global historical issues. Content in any given year depends on instructor. See Department of Historical Studies web site at www.utm.utoronto.ca/historicalstudies for details. [24L]
Recommended Preparation: HIS101H5

HIS393H5 Slavery and the American South (HUM)
An examination of the role of slavery in the development of the American South from the early colonial period through the Civil War. Among the topics to be dealt with are: 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. [24L]
Exclusion: HIS384Y1
Prerequisite: HIS271H5/ HIS272Y5
Recommended Preparation: HIS101H5

HIS394H5 Race and Empire in Colonial South Asia (HUM)
This course investigates the language of power and race underwriting the colonial state structure in South Asia in the 19th and 20th centuries. It examines the ways colonial ethnographic, geograhical, scientific, medical and legal discourses emerged as fundamental cultural, political and ideological tools in the creation and maintenance of the British Empire. [24L]
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5

HIS395H5 Topics in History (HUM)
An in-depth examination of historical issues. Content in any given year depends on instructor. See Department of Historical Studies web site at www.utm.utoronto.ca/historicalstudies for details. [24L]
Recommended Preparation: HIS101H5

HIS396H5 Modernity and Islam (HUM)
The aim of this course is to engage students in the ongoing historiographical debates on modernity and Islam. Students will critically explore recent public discussions concerning "Islamic Fundamentalism," "Islamic Feminism," and "What Went Wrong" in the Islamic world. [24L]
Prerequisite: HIS101H5, HIS201H5
Recommended Preparation: HIS282H5

HIS397H5 Iran’s Islamic Revolution (HUM)
This course explores the making of the Iranian Revolution of 1978-79 and the subsequent establishment of the Islamic Republic. Framed in a comparative perspective, it explains the cultural and political peculiarities that shaped the Islamist outcome of the Revolution. It examines the staging of the hostage crisis, the Iran-Iraq War, and the secularization of private lives. [24L]
Prerequisite: HIS201H5
Recommended Preparation: HIS101H5

HIS399Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.
HIS402H5 Topics in the History of French Canada (HUM)
The development of the French-Canadian community under leaders such as Papineau, Laurier, Duplessis and Trudeau. The course traces Quebec's economic development, and the birth and evolution of its nationalism. Novels and films provide insight into this enduring culture, both in its home province and elsewhere in North America. [24S]
Prerequisite: HIS101H5, HIS261H5/ HIS263Y5

HIS403H5 Empire and Colonization in the French Atlantic (HUM)
This course examines French imperial expansion into the Atlantic world during the 17th and 18th centuries. It focuses on two regional centres of colonial settlement: New France (including the upper country of the interior of North America) and the Caribbean. [24S]
Prerequisite: HIS101H5

HIS407H5 Imperial Germany 1871-1918 (HUM)
This course will explore Germany's history beginning with its unification and trace the events that led to the First World War and the end of the Imperial era. We will examine the Imperial period through various different focal points including unification and the legacy of Bismarck and Kaiser Wilhelm II, the Sonderweg debate, gender, nationalism, German Jews and the birth of modern antisemitism, German's brief colonial era, the path to war and the revolution of 1918. By reading historical texts, articles, and novels, and by addressing numerous historiographical debates, we will attempt to understand Germany's foundational period in the context of this country's troubled history. [24S]
Exclusion: HIS407Y1
Prerequisite: HIS101H5
Recommended Preparation: A course in modern European history.

HIS409H5 The Life Cycle in Medieval and Early Modern Europe (HUM)
This course examines the daily lives of medieval and early modern Europeans as they moved through birth, infancy, childhood, adolescence, marriage, adulthood, old age and death. Special attention is given to the ways in which gender, social status and local custom shaped thoughts and experiences throughout the life cycle. [24S]
Prerequisite: HIS101H5, 0.5 credit medieval or early modern Europe.

HIS416H5 Canada and the Second World War (HUM)
This course is primarily a social and cultural history of the Canadian experience during the Second World War. Themes include: women in the war plants, internment camps, war brides and war orphans, war and memory, displaced persons, the Holocaust, the atom bomb, and displaced persons in 1945. [24S]
Prerequisite: HIS101H5, HIS261H5/ HIS263Y5

HIS420H5 Topics in Medieval History (HUM)
Critical evaluation of selected legal, literary and narrative sources. Thematic content will vary from year to year, but there will be an emphasis on social history. [24S]
Prerequisite: HIS101H5

HIS425H5 Global Intellectual History: Asia and Africa in the 20th Century (HUM)
This seminar explores 20th-century political culture and the circulation of ideas and thinkers. With a particular focus on Africa and Asia, we examine the politics of race, religion, class, and gender in their transnational historical contexts. Students are exposed to key analytical concepts, including hegemony, traveling theory, decolonization and Orientalism. [24S]
Prerequisite: HIS101H5

HIS431H5 Modern China (HUM)
A critical examination of the historiography of modern China. It is simultaneously a study of modern Chinese history and historiography in general. [24S]
Prerequisite: HIS101H5, HIS284H5

HIS435H5 The Viking Age (HUM)
A seminar on the history of Europe from the eighth to the eleventh centuries with emphasis upon the Scandinavians and their relations with western European civilization. Readings will be in both primary and secondary sources. [24S]
Prerequisite: HIS101H5

HIS438H5 Remembering Atrocity: The Holocaust and Historical Memory in Europe and North America (HUM)
This course will examine how Europe and North America confronts the Holocaust through the law, literature, left wing agitation, film, memorials and museums, and political debates. Among the focal points: the Nuremberg and postwar West German trials of Nazis, the fascination with Anne Frank, anti-fascist terror in 1970s Germany, The Berlin Memorial and the US Holocaust Museum, and films such as The Pianist and Schindler's List. [24S]
Prerequisite: HIS101H5, HIS242H5/ HIS338H5/ HIS339H5

HIS440H5 Photography and American Culture (HUM)
Examines the history of photography in the United States, in relationship to society and culture. The course will follow three threads: the history of the medium, from 19th century daguerreotypes through 20th century fine art and documentary photography; the relationship between photography and American history, especially urbanization, the rise of commercial culture, and identity formation; and finally the history of the theory of photography, i.e., how photography has been understood as a medium. [24S]
Prerequisite: HIS101H5
Recommended Preparation: 1.0 credit in American history or 1.0 credit in modern art history.
Programs

History (HBA)

HIS448H5 Memory, History and South Asia’s Contested Pasts (HUM)
This course focuses on the relationship between memory and the "traditions" of historical writing and remembering in the sub continent from 1200 to the present. It also focuses on the role of politics in mediating the region's multiple, often contesting histories in our period of study. [24S]
Prerequisite: HIS101H5, HIS282H5
Recommended Preparation: HIS382H5/ HIS386H5/ HIS394H5

HIS452H5 The Great Depression in Canada (HUM)
This course explores the social, economic and political crisis in the 1930s. It examines social welfare policies, cultural developments, themes of regionalism and federalism and political change. [24S]
Prerequisite: HIS101H5, A university-level course in modern Canadian history.

HIS454H5 Race, Gender and Nation in Modern Latin America (HUM)
This seminar examines the interconnected histories of race, gender and nation in Latin America. It studies the significance of race/racism and gender/patriarchy in the construction of national societies in Latin America during the nineteenth and twentieth centuries. Subtopics include: slavery and Indian servitude; acculturation and eugenics; immigration and urbanization; machismo and marianismo; and current Indian and women's movements. [24S]
Exclusion: HIS441H1
Prerequisite: HIS101H5, HIS290H5

HIS461H5 History of Upper Canada (HUM)
This course surveys Ontario before Confederation. Topics include aboriginal and immigrant settlements, gender roles and the rise of schooling. Also of interest are political topics: Loyalism, the Family compact, the 1837 Rebellion and Upper Canada's key role in shaping Confederation. Each student explores one key historical figure in depth through biographies and primary sources of a key Upper Canadian figure. [24S]
Prerequisite: HIS101H5, HIS261H5/ HIS263Y5

HIS475H5 The French Revolution (HUM)
A topical survey of the French Revolution dealing with the uprising in France and its repercussions elsewhere by examining such subjects as its causes, its effect on nations, classes and gender, and its relation to nationalism, socialism and democracy. [24S]
Prerequisite: HIS101H5
Recommended Preparation: A course in European history.

HIS479H5 Cold War America (HUM)
An examination of significant political, economic, social and intellectual developments, including Cold War Foreign policies, economic and social reforms, McCarthyism, the Civil Rights movement, women's liberation, the "counter-culture,"and the Indochina Wars. [24S]
Exclusion: HIS479Y5
Prerequisite: HIS101H5

HIS483H5 Colonialism in East Asia (HUM)
This course examines the ideologies and practices of colonialisms, both internal and external, in modern East Asia. [24S]
Prerequisite: HIS101H5
Recommended Preparation: HIS284H5

HIS484H5 Religion and Popular Culture in Modern South Asia (HUM)
The course examines the role played by religion in shaping the public sphere, popular culture and everyday practice in Modern South Asia. It also studies key themes on the subject. [24S]
Prerequisite: HIS101H5, HIS282H5
Recommended Preparation: HIS382H5/ HIS386H5/ HIS394H5

HIS486H5 Political Thought in the Reformation (HUM)
The political thought of the Protestant reformers and pamphleteers of the 16th century is examined, with emphasis on the issues of Church-state relations and religious toleration. [24S]
Exclusion: HIS486Y5
Prerequisite: HIS101H5, A course in medieval or early modern European history.

HIS487H5 Canadian Social History (HUM)
The evolution of Canada from an agrarian to an industrial society. Themes include migration and ethnicity, urbanization and industrialization, violence and social order, social stratification, education and family. [24S]
Prerequisite: HIS101H5
Recommended Preparation: HIS263Y5

HIS490H5 Religion and Society in Latin America (HUM)
An interdisciplinary seminar that examines religion and its historical role in shaping culture, society, and politics in Latin America. It considers both the formal institutional practice of religion as well as informal and popular religiosities. A framing theme of the course is the complex relationship between Church and State - and more broadly, between religion and politics - in the region. [24S]
Prerequisite: HIS101H5
Recommended Preparation: HIS290H5

2016-2017 Calendar
HIS492H5 Entrepreneurial Diasporas (HUM)
This course examines and compares the history of entrepreneurial diasporas operating in the Afro-Asian regions during the nineteenth and early twentieth centuries. [24L]
Prerequisite: HIS101H5

HIS493H5 Advanced Topics in Global History (HUM)
Prerequisite: HIS101H5

HIS494H5 Advanced Topics in the History of the Americas (HUM)
Prerequisite: HIS101H5

HIS495H5 Advanced Topics in European History (HUM)
Prerequisite: HIS101H5

HIS497Y5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for students in History Specialist, Joint Specialist or Major programs. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of 2 reading courses, amounting to 1.0 credit, is permitted.

HIS499Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.

HIS498Y5 Internship in History (HUM, EXP)
Through a part-time, unpaid work placement, a limited number of advanced history students may enrol for field experience relating to expertise they have gained in the program. Placements are made at local libraries, historic sites and foundations, media outlets, public and private institutions. Five previous history courses and a cumulative GPA of 3.0 are required. For application to admission contact the Department of Historical Studies before June 1.
Prerequisite: HIS101H5, 5.0 HIS credits and a CGPA of 3.0.
History and Political Science (HBA)

Full listing of Political Science (Page 319) courses

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
HIS History (page 238)

Combined Specialist Program ERSPE1045
History and Political Science (Arts)

Political Science

7.0 credits in POL are required, including at least 1.0 at the 300 level and 1.0 at the 400 level.

1. POL 200Y, POL 214Y 2. 1.0 credit from two of the following three fields: Comparative Politics, International Relations, Public Policy and Administration 3. 3.0 Additional POL credits.

History

7.0 credits are required.

**First Year:** HIS101H5; an additional HIS credit at the 200 level may be taken.

**Higher Years:** Additional HIS courses to a total of at least 7.0 credits from at least two geographical divisions of study. These must include at least 3.0 credits at the 300/400 level; 2.0 HIS credits must correspond in region or theme to 2.0 of the POL credits chosen.

Notes:

1. Specialists must take a 100 level HIS credit to complete the program.

2. Specialists may substitute non-HIS courses taught elsewhere at U of T Mississauga for up to 1.0 of the HIS credits.

3. The Department of Historical Studies Handbook identifies substitutions, courses satisfying division requirements. It is available online at: www.utm.utoronto.ca/historicalstudies

Limited Enrolment – Enrolment in the Specialist Program in History and Political Science is limited.

1. Students enrolling at the end of first year (4.0 credits) must obtain a mark of at least 70% in 1.0 POL credit and a mark of at least 70% in 1.0 HIS credit and have a Cumulative Grade Point Average of 2.00.

2. Students enrolling at the end of second year (8.0 credits) must obtain a mark of at least 70% in each of 2.0 POL credits and a mark of at least 70% in each of 2.0 HIS credits and have a Cumulative Grade Point Average of 2.30.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
History of Religions (HBA)

Professors Emeriti
N.F. McMullin, B.A., S.T.B., M.Th., Ph.D.
L.E. Schmidt, B.A., M.A., Ph.D.

Professors
K.S. Derry, B.A., M.A., Ph.D.
C. Emmrich, M.A., DPhil.
A.A. Irani, B.A., M.S.W., M.A., Ph.D.
S.K. Metso, B.A., M.Th., Th.D.
E. Raffaelli, B.A., M.A., Ph.D.
A. Rao, B.A., M.A., Ph.D.
K. Ruffle, B.A., M.A., Ph.D.
J.B. Scott, B.A., M.A., Ph.D.
K. Smith, B.A., M.A., Ph.D.
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The History of Religions explores the importance of religion in the historical processes that make up world history. It situates religion in its historical and socio-political contexts as part of the interplay of forces that constitute the story of humankind, and acknowledges the role of religion in shaping and being shaped by that story. Its approach often involves (but is not limited to) the study of particular religious traditions, the comparative study of religion, and the study of the religious dimension of human experience and of common historical phenomena. Its subject includes all religions throughout the world, from ancient times to the present day. The History of Religions is therefore an excellent preparation for living and working in a cosmopolitan and multi-confessional world. As an academic subject, it is intrinsically rewarding and can lead to graduate work in a variety of disciplines in the humanities and social sciences. It also provides the reading, writing, and analytical skills demanded by a wide range of careers in ministry, government, business, library and museum science, law, teaching, journalism, and community services, such as counselling and social services.

The department encourages students to take advantage of the various study abroad opportunities available at UTM.

For more information, refer to the Department of Historical Studies website at http://www.utm.utoronto.ca/historicalstudies/

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
RLG History of Religions (page 251)

Specialist Program ERSPE0151 History of Religions (Arts)

10.0 RLG credits are required.

First Year: 0.5 credits in RLG101H5. It is recommended that this course be taken in the first year.

Higher Years:

- 2.0 200-level credits
- 0.5 credits in RLG312H5 Method and Theory in the History of Religions
- 3.5 300-level credits (1.5 in Primary Concentration; 1.0 in Secondary Concentration; 1.0 Comparative)
- 1.0 400-level credits
- 2.5 additional RLG credits at any level

Specialists are permitted to substitute non-RLG courses for up to 2.0 RLG credits. A list of courses suitable as substitutions is available in the Department of Historical Studies handbook. Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

In the major and specialist programs, language courses offered by the Department of Language Studies at U of T Mississauga and on the St. George campus relevant for a student’s coursework in the History of Religions may be substituted for 300-level RLG credits. In this substitution, a language course of 1.0 credits at the 200+ level corresponds an RLG course of 0.5 credits at the 300 level in a relevant concentration. Students are invited to contact the departmental office for further information.

Primary concentration: Specialists in the History of Religions must select a primary concentration in one of the following areas: Buddhism, Christianity, Greco-Roman Religions, Islam, Judaism, South Asian Religions, or Zoroastrianism.

Secondary concentration: To cultivate a broader understanding of the history of religions, specialists are to choose a secondary concentration.

Major Program ERMAJ0151 History of Religions (Arts)

7.0 RLG credits are required.

First Year: 0.5 credit in RLG101H5. It is recommended that this course be taken in the first year.
**Higher Years:**

- 1.5 200-level credits
- 0.5 credit in RLG312H5 *Method and Theory in the History of Religions*
- 3.0 300-level credits (1.5 in Primary Concentration; 1.0 in Secondary Concentration; 0.5 Comparative)
- 1.0 400-level credit
- 0.5 additional RLG credit at any level

Majors are permitted to substitute non-RLG course for up to 2.0 RLG credits. A list of courses suitable as substitutions is available in the Department of Historical Studies handbook. Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

In the major and specialist programs, language courses offered by the Department of Language Studies at U of T Mississauga and on the St. George campus relevant for a student's coursework in the History of Religions may be substituted for 300-level RLG credits. In this substitution, a language course of 1.0 credits at the 200+ level corresponds an RLG course of 0.5 credits at the 300-level in a relevant concentration. Students are invited to contact the departmental office for further information.

Primary concentration: Majors in the History of Religions must select a primary concentration in one of the following areas: Buddhism, Christianity, Greco-Roman Religions, Islam, Judaism, South Asian Religions or Zoroastrianism.

Secondary concentration: To cultivate a broader understanding of the history of religions, majors are to choose a secondary concentration.

**Minor Program ERMIN0151 History of Religions (Arts)**

4.0 RLG credits are required.

**First Year:** 0.5 credits in RLG101H5. It is recommended that this course be taken in the first year.

**Higher Years:**

- 1.5 200-level credits
- 1.0 300/400-level credits
- 1.0 additional RLG credits at any level

Minors are permitted to substitute non-RLG courses for up to 1.0 RLG credits. A list of courses suitable as substitutions is available in the Department of Historical Studies handbook. Other substitutions will be considered on a case-by-case basis after the submission of the relevant syllabus.

**List of Courses**

**RLG101H5 Introduction to the Study of Religion (HUM)**
Theses about the variety and nature of religious experience, personal and collective. How religious life is expressed in such forms as myth, narrative and ritual, systems of belief and value, morality and social institutions. [36L]
*Exclusion: RLG101Y1*

**RLG201H5 Introduction to Religion in the Literary, Visual, and Performing Arts (HUM)**
An examination of the interplay between religion and aesthetics, as expressed through the literary, visual, and performing arts. Structured thematically rather than by religious tradition, this course covers topics such as the creative word, visual representation of the divine through icons and iconography, sacred space and religious architecture, religion and the book arts, religious music, dance, and drama, visual narrativization, and religious ritual as performance. [24L,10T]

**RLG202H5 Introduction to Judaism (HUM)**
This course studies Jewish religious thought and activity in both ancient and modern times through selected biblical, rabbinic, medieval, and modern Jewish writings. It explores the roots of Jewish religion, the variety of Jewish traditions, and how these traditions worldwide have been transformed throughout history in response to major political and religious crises. [24L,10T]
*Exclusion: RLG202Y1*
*Recommended Preparation: HIS101H5*

**RLG203H5 Introduction to Christianity (HUM)**
An introduction to the diverse history of Christianity, from its origins as a Jewish sect to its contemporary importance as a major global religion, with a focus on how Christianity has both shaped and been shaped by various social, geographical, and cultural environments over the past two millennia. [24L,10T]
*Exclusion: RLG203Y1*
*Recommended Preparation: HIS101H5*

**RLG204H5 Introduction to Islam and Muslim Civilizations (HUM)**
A thematic introduction to the diversity and rich traditions of Islam and Muslim Civilizations that explores many geographical areas, historical periods, schools of affiliation and interpretation, and cultural milieus. [24L,10T]
*Exclusion: RLG204Y1*
*Recommended Preparation: HIS101H5*

**RLG205H5 Introduction to South Asian Religions (HUM)**
A historical and thematic introduction to South Asian religious traditions as embedded in the socio-cultural structures of India. [24L,10T]
*Exclusion: RLG205Y1*
RLG206H5 Introduction to Buddhism (HUM)
The teachings of the Buddha and the development, spread, and diversification of the Buddhist tradition from southern to northeastern Asia. [24L, 10T]
Exclusion: RLG206Y1
Recommended Preparation: RLG101H5

RLG207H5 Introduction to Sikhism (HUM)
An introduction to the historical and religious context in which the Sikh religion emerged and developed, its principal doctrines, practices and institutions and its evolution from its origins to the present, both in South Asia and the diaspora. [24L, 10T]
Recommended Preparation: RLG101H5

RLG208H5 Introduction to Zoroastrianism (HUM)
A survey of the historical development of Zoroastrianism and its canonical texts, doctrines, rituals, and observances from the time of Zoroaster to the present. It also explores the emergence of Zoroastrian diasporic communities in India, Europe, and North America. [24L, 10T]
Recommended Preparation: HIS101H5

RLG209H5 Introduction to Indigenous Traditions (HUM)
An introduction to the vast array of global Indigenous religions, with a focus on North American traditions. Various religious practices will be examined in both historic and contemporary contexts, including consideration of Indigenous responses to colonialism. [24L, 10T]

RLG211H5 Introduction to Religion, Media, and Popular Culture (HUM)
How does religion shape popular culture? How does popular culture shape religion? This course traces a history of these questions from the early modern period through the twenty-first century by looking at fairs and folk culture; mass broadcast media like radio, film, and television; and the rise of digital culture. Topics covered vary by semester, but could include religious comic books, televangelism, mass-mediated religious violence, online pilgrimage, digital occultism, etc.[24L]

RLG299Y5 Research Opportunity Program (HUM)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

RLG304H5 Islamic Spiritual Traditions (HUM)
An investigation of the spiritual traditions in Islam, covering the development of Sufism and other esoteric schools of Islamic thought. The historical evolution of devotional traditions, philosophical schools and scriptural hermeneutics are explored. [24L]
Recommended Preparation: RLG204H5 or permission of the instructor.

RLG305H5 Islamic Aesthetic Traditions (HUM)
This course explores aesthetic traditions in the Muslim world, including art, architecture, music and literature. Case studies may range from the majestic Taj Mahal to the sonorous voice of Umm Kulthum, from the enthralling worlds of the 1001 Arabian Nights to the lilting lyricism of poets like Hafiz and Rumi. [24L]
Recommended Preparation: RLG204H5 or permission of the instructor.

RLG306H5 Shi’i Islam (HUM)
An exploration of the history, thought and institutions of the Shi’i interpretation of Islam. The early Shi’i milieu, Zaidi, Ismaili and Twelver Shi’ism and the development of the Shi’i school of thought from early to modern times will be studied in this course. [24L]
Recommended Preparation: RLG204H5 or permission of the instructor.

RLG307H5 Indian Scholasticism (HUM)
A general introduction to Indian scholasticism through the organizing rubric of the human ends (purusarthas): pleasure, power, moral order, and liberation. Intellectual traditions covered may include the science of desire, aesthetics, the science of power, analysis of the socio-moral order, hermeneutics, and metaphysics. [24L]
Recommended Preparation: RLG205H5 or permission of instructor.

RLG308H5 Religion in Medieval Indian History (HUM)
A survey of Vaisnava, Saiva, Jaina, and Islamic traditions in the Vijayanagara Empire of late-medieval South India, this course explores the use of historical data in the study of religion. [24L]
Recommended Preparation: RLG205H5 or permission of instructor.

RLG310H5 The Ramayana (HUM)
A study of the Ramayana of Valmiki in translation. Themes include aesthetic, ethical, and socio-political issues in the text, as well as commentary and the rise of Rama worship. [24L]
Recommended Preparation: RLG205H5 or permission of instructor.
RLG312H5 Method and Theory in the History of Religions (HUM)
A team-taught course which examines the historical emergence of the discipline of religious studies, representative works of the nineteenth- and twentieth-centuries, and the application of theoretical and methodological approaches to one or more religious tradition. (Required of specialists and majors) [24L]
Exclusion: RLG200H1
Prerequisite: RLG101H5, 1.0 RLG credits

RLG313H5 The Literature of Ancient Israel (HUM)
The Hebrew Bible (i.e. the Old Testament) is not a single book, but an anthology selected from a larger body of ancient Jewish literature reflecting different authors, historical circumstances, literary genres, and religious agendas. This course familiarizes the student with critical study of the Hebrew Bible and related literature of ancient Jewish communities (Apocrypha, Pseudepigrapha, Dead Sea Scrolls). Among the topics to be examined are the basic forms of ancient Hebrew literature, the issues of textual development, the process of canonization, and the ancient Near Eastern cultural environment from which this literature emerged. [24L]

RLG314H5 Religion and Gender (HUM)
This course focuses on the interaction of gender and religion from a comparative and multidisciplinary perspective; topics include creation myths, authority and leadership, sainthood, expressions of the divine, and gendered ritual.
Prerequisite: RLG101H5

RLG315H5 Biblical Wisdom and Poetry (HUM)
Ancient Jewish sages understood wisdom as a "skill in living." Wisdom for them was an approach to life, a way of looking at the world, and a quest for meaning and purpose in the relationships with God and fellow human beings. Some of history's most enduring collections of ancient wisdom are included in the Hebrew Bible (i.e., Old Testament) books of Job, Proverbs and Ecclesiastes. Wisdom perspectives are also found in the Song of Songs and many of the Psalms. Sometimes joyful and exultant, at other times cynical and fatalistic, the ancient sages wrestled with the ups and downs of life, and grappled with them rationally from the perspective of experience and community wisdom. This course investigates the genre of wisdom literature - its style, language, and historical and theological backgrounds - and explores the pluriformity of the biblical heritage. [24L]

RLG320H5 Topics in Ancient Greek and Roman Religions (HUM)
A detailed study of selected topics of religion in the ancient Greek and Roman world. Topics may have an historical, historiographical or systematic focus and vary from year to year. [24L]

RLG321H5 Rituals in Ancient Greek and Roman Religions (HUM)
An examination of the role of ritual in the ancient Greek and Roman world. Individual topics vary from year to year and may focus on ancient rituals such as divination, magic, prayer, sacrifice, temple cult practices, etc. Attention will be paid to their performative structure, function and meaning in ancient society. Please note that this course may be taken only once for credit. [24L]

RLG323H5 Jesus of Nazareth (HUM)
Analytic and comparative study of the earliest accounts of the life of Jesus of Nazareth in the canonical and non-canonical Gospels with a supplementary focus on historical reconstructions of Jesus using broader textual, cultural, and archaeological data.[24L]
Exclusion: RLG323H1
Prerequisite: RLG203H5

RLG324H5 Paul and Earliest Christianity (HUM)
An exploration of the literary form and theological content of Paul's letters in the New Testament, including analyses of the importance of Paul in the rise, spread, and development of what would become earliest Christianity. [24L]
Exclusion: RLG324H1
Prerequisite: RLG203H5

RLG325H5 Visions and Revelations (HUM)
Apocalyptic literature, concerned with the expectation of imminent, radical and transforming intervention of the divine into human history, flourished between 200 BCE and 200 CE. This course provides an introduction to the study of the origin, form and function of ancient Jewish and related apocalyptic literature understood in its cultural and literary contexts. [24L]
Prerequisite: RLG202H5/ RLG203H5

RLG326H5 Early Christianity and Rabbinic Judaism (HUM)
This course examines how Rabbinic Judaism and Christianity interacted in late antiquity. It explores the processes by which each community (in competition with the other and shaped by a wider social context) formed an identity for itself by establishing an "orthodox" set of beliefs, rituals, moral guidelines, and spiritual ideals. [24L]
Prerequisite: RLG202H5/ 203H5
Recommended Preparation: RLG202H5/ 203H5

RLG330H5 Topics in Judaism (HUM)
A detailed study of selected aspects of Judaism. [24L]
Prerequisite: RLG101H5/ RLG100Y5/ RLG100Y1/ RLG202H5/ RLG202Y1
Recommended Preparation: HIS101H5
RLG332H5 Reel Religion (HUM)
The role of film as a mediator of thought and experience concerning religious worldviews. The ways in which movies relate to humanity’s quest to understand itself and its place in the universe are considered in this regard, along with the challenge which modernity presents to this task. Of central concern is the capacity of film to address religious issues through visual symbolic forms. [24L, 12T]
Exclusion: RLG232H1

RLG333H5 Biblical Themes in Modern Literature (HUM)
This course examines the role and representation of Christian traditions, teachings, and themes in various (non-Biblical) literary works. Topics may include: sin and salvation; myth and parable; selfhood and identity; missionizing and conversion; evil and “othering”; love and forgiveness; guilt and sacrifice; and suffering and transcendence. [24L]

RLG339H5 Ideologies of Tamil Religion (HUM)
This is a survey of the structures of Tamil religious thought in its textual and ethnographic traditions beginning from classical Cankam literature to present-day Goddess and politician cults, seeking to examine if there is a religious aesthetic which can be classified as intrinsically Tamil. [24L]

RLG340H5 Topics in Christianity (HUM)
A detailed study of selected aspects of Christianity. [24L]
Prerequisite: RLG101H5/ 100Y5/ 100Y1/ 203H5/ 203Y1
Recommended Preparation: HIS101H5

RLG343H5 Major Themes in Biblical Literature (HUM)
Major religious themes running through biblical literature. Old and New Testament concepts of creation, election, covenant, salvation, divine law, prophecy, wisdom, justification, etc. [24L]
Exclusion: RLG243H5/ RLG243Y5/ RLG243Y1

RLG346H5 Early Modern Christianity (HUM)
A study of the ways in which Protestant and Catholic Christians contributed to and reacted against the complex intellectual, political, and social changes in Europe from the sixteenth to the eighteenth century. [24L]
Exclusion: HIS340H5
Prerequisite: RLG203H5

RLG347H5 Zoroastrian Religious Writings (HUM)
The course studies passages of Zoroastrian texts, principally from pre-Islamic times, in English translation. These passages are studied from the doctrinal point of view, and placed in the context of the history of Zoroastrianism. In addition, their points of contact with the texts of other religious literatures are analyzed. [24L]
Exclusion: RLG381H5
Recommended Preparation: RLG208H5

RLG348H5 Zoroastrian Customs and Ceremonies (HUM)
The course analyzes the religious practices and the daily practices having a religious background, performed by the Zoroastrians in modern times. Their historical development is analyzed, considering, for the medieval and modern times, the influence of the environment of the countries where Zoroastrians lived, and where they represented a minority. Also highlighted is the significance of these practices in relationship to the Zoroastrian doctrinal system. [24L]
Recommended Preparation: RLG208H5

RLG349H5 Medieval Christianity (HUM)
Spanning a millennium from the fall of Rome to the Protestant Reformation, this course explores the many ways in which the western branch of Christianity, based in Rome, shaped the religion, society, culture, and politics of emerging Europe. [24L]
Prerequisite: RLG203H5

RLG350H5 Topics in Islam (HUM)
A detailed study of selected aspects of Islam. [24L]
Prerequisite: RLG101H5/ RLG100Y5/ RLG100Y1/ RLG204H5/ RLG204Y1
Recommended Preparation: HIS101H5

RLG351H5 Major Themes in the Study of the Quran (HUM)
An introduction to the Quran, the scripture of Islam. Surveys of the history of the text and the development of traditions of Quranic interpretation and commentary, including tafsir and ta’wil, from early to modern times. [24L]

RLG352H5 Jews and Muslims: The Medieval Encounter (HUM)
This course examines the encounter between Jews and Muslims during the Middle Ages, when a large majority of the Jewish people subsisted under Muslim rule: an overview of the religious, political, communal, material and intellectual settings of the Judaeo-Muslim experience. [24L]
Exclusion: RLG250H5
Prerequisite: HIS101H5/ RLG101H5/ RLG202H5/ RLG202Y5/ RLG204H5

RLG356H5 Persia and Beyond: Christianity in Asia to 1300 (HUM)
This course will examine the origins of Syriac-speaking Christianity on the eastern fringes of the Roman world, and chart its spread into Persia, Central Asia, China, and India. In contrast to the situation in Byzantium and in the Latin West, Christians in Asia lived (with few exceptions) as religious minorities under Zoroastrian, Muslim, Confucian, or Hindu rulers. We shall consider how these Christians adapted to regional cultures, engaged the political structures of the day, and developed their own unique theological and spiritual traditions. [24L]
RLG357H5 Contemporary Global Christianity (HUM)
An exploration of the changing face of Christianity in the twentieth and twenty-first centuries focusing on such topics as: Christianity in the Global South; new religious movements within Christianity; and intra- / inter-religious debates and conflicts in contemporary Christianity. [24L]
Prerequisite: RLG203H5

RLG358H5 Christianity in Late Antiquity: From Persecuted Sect to Imperial Religion (HUM)
Beginning at the end of the Apostolic Age and continuing up to the seventh-century confrontation with early Islam, this course examines the evolution of Christianity from a persecuted sect to the predominant religion of the Roman and Byzantine Empires, with a particular focus on the Eastern Mediterranean and Mesopotamian contexts.[24L]
Prerequisite: RLG203H5
Recommended Preparation: RLG323H5/ RLG324H5/ RLG326H5

RLG359H5 The Orthodox Church of the Byzantine Empire (HUM)
By the end of the fourth century, Constantinople was becoming the centre of a distinct branch of the Christian Church. This course will explore the formation and development of this "Eastern Orthodox" Christianity, including its theology, religious practices, social and cultural impact, and relationship to political power. [24L]

RLG360H5 Topics in South Asian Religions (HUM)
A detailed study of selected aspects of South Asian Religions. [24L]
Prerequisite: RLG101H5/ RLG100Y5/ RLG100Y1/ RLG205H5/ RLG205Y1
Recommended Preparation: HIS101H5

RLG361H5 Encounters Between Indo-Islamic and Hindu Cultures (HUM)
This course explores historical encounters between Indo-Islamic and Hindu cultures in pre-colonial South Asia, including narratives of conquest and resistance, iconoclasm and the reuse of images, patterns of courtly dress, translations of Sanskrit sources into Persian, indigenous Islamic practices, and Sufi and bhakti poetry. [24L]
Prerequisite: RLG204H5/ RLG205H5

RLG370H5 Topics in Buddhism (HUM)
A detailed study of selected aspects of Buddhism. [24L]
Prerequisite: RLG101H5/ RLG100Y5/ RLG100Y1/ RLG206H5/ RLG206Y1
Recommended Preparation: HIS101H5

RLG371H5 Buddhist Thought (HUM)
The course deals with the historical development of doctrines and controversies pertaining to the most important schools of Buddhist thought up to the end of the first millennium CE. It discusses the relationship of reason, belief and practice while giving a closer look at Buddhist positions on specific philosophical questions. [24L]
Exclusion: RLG371H1
Prerequisite: One RLG credit.
Recommended Preparation: RLG206H5/ RLG206Y5

RLG373H5 Buddhist Practices and Institutions (HUM)
The course will help understand the historical importance of alms giving and devotion in Buddhism and will look at different traditions of meditation. It will also introduce to the literature of monastic discipline and confront it with both archeological remains of Buddhist institutions and their political and economic role today. [24L]
Exclusion: RLG273H5, RLG273Y5
Prerequisite: One RLG credit.
Recommended Preparation: RLG206H5, RLG206Y5

RLG374H5 Buddhist Literatures (HUM)
The course looks at popular Buddhist educational storytelling, courtly dramas, Buddhist poetry or the life-histories of the buddhas, bodhisattvas and Buddhist holy men and women. It reflects on how popular motifs, aesthetic styles and literary media have helped transport Buddhist doctrines across various times, regions and languages. [24L]
Prerequisite: One RLG credit.
Recommended Preparation: RLG206H5/ RLG206Y5

RLG375H5 Topics in Comparative Religions (HUM)
An in-depth study of the main teachings, practices and institutions of the major, and several of the minor, religious traditions: namely, Buddhism, Christianity, Confucianism, Hinduism, Islam, Jainism, Judaism, Shinto, Sikhism, Taoism and Zoroastrianism. [24L]
Exclusion: RLG280H5/ RLG280Y5
Prerequisite: 1.0 credits from RLG202H5/ RLG203H5/ RLG204H5/ RLG205H5/ RLG206H5/ RLG208H5

RLG380H5 Special Topics (HUM)
A comprehensive study of special topics in the history of religions. [24L]
RLG399Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 24) for more details.

Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.

RLG401H5 Advanced Topics in Religion and the Literary, Visual, and Performing Arts (HUM)
A critical exploration of selected topics concerning the relationship between religion and aesthetics, as expressed through the literary, visual, and performing arts. The focus in any given year may be on a particular tradition, or on broader, comparative understandings of "religion." Similarly, the course may concern one specific art form or a variety of forms, including architecture, dance, film, literature, music, visual art, etc. [24S]

Prerequisite: RLG101H5

RLG411H5 Advanced Topics in Religion, Media, and Culture (HUM)
A critical exploration of selected topics concerning the relationships among religion, media and culture. The focus in any given year may be on a particular religious tradition or on a broader thematic question. Assigned readings typically include a combination of visual and written cultural texts, as well as works of cultural and social theory. Content in any given year depends on instructor. See Department of Historical Studies website at www.utm.utoronto.ca/historicalstudies for details. [24S]

Prerequisite: 0.5 RLG credit

RLG430H5 Advanced Topics in Judaism (HUM)
A critical exploration of selected topics in the history of Judaism. [24S]

Prerequisite: RLG202H5/RLG330H5

RLG435H5 The Dead Sea Scrolls (HUM)
This course provides a survey of the Dead Sea Scrolls, a brief history of the period in which the Scrolls were written, and a presentation of the various ways in which scholars have interpreted them. The course also includes in-depth study of selected texts and themes illuminating the formation of the Hebrew Bible, ancient Judaism, and the historical and theological background of the New Testament and early Christianity. [24S]

Prerequisite: RLG202H5/RLG203H5

RLG440H5 Advanced Topics in Christianity (HUM)
A critical exploration of selected topics in the history of Christianity. [24S]

Prerequisite: RLG203H5/RLG340H5

RLG445H5 Making Martyrs: From Socrates to the Suicide Bomber (HUM)
Comparative study of martyrdom and the idea of the martyr beginning with Greco-Roman philosophical concepts of 'noble death' and continuing through Judaism, Christianity, and Islam in ancient, medieval, and contemporary contexts. [24L]

Prerequisite: 0.5 200 level RLG credit

RLG449H5 Islamic Sexualities (HUM)
This course focuses on the diverse attitudes and expressions of sexuality in Islam. Taking a broad approach, this course examines issues of sexuality, including homosexuality, female sexuality, birth control, divorce, marriage, transgender identity and performance, and feminist sexual ethics. [24S]

Prerequisite: ANT335H5/RLG204H5/RLG314H5/WGS301H5/WGS450H5

RLG450H5 Advanced Topics in Islam (HUM)
A critical exploration of selected topics in the history of Islam. [24S]

Prerequisite: RLG204H5/RLG350H5

RLG451Y5 Islamic Literatures (HUM)
This course is an in depth exploration of the literary traditions of the Islamic world. The course examines the influence of religion in the writings of Muslim authors, as well as the role of symbols, philosophy, mystical practice, ideologies, rituals and history in the creation of literary pieces. Works will be studied in their original language. The focus language and the primary theme of the course will change every year. [48S]

Recommended Preparation: RLG204H5/PI.

RLG452H5 Anthropology of Islam (HUM)
This course focuses on the everyday lived experience of Muslims in different parts of the world. We will read ethnographic studies and analyze films, which highlight important issues in everyday Muslim life: gender, modernity and piety, the role of ritual in everyday practice. This course has an ethnographic field project. [24S]

Recommended Preparation: RLG306H5/WGS301H5

RLG460H5 Advanced Topics in South Asian Religions (HUM)
A critical exploration of selected topics in the history of South Asian religions. [24S]

Prerequisite: RLG205H5/RLG360H5
RLG461H5 Religion and Aesthetics in South Asia (HUM)
South Asian religious traditions are suffused with aesthetic elements and processes – Hindu temple worship, for example, abounds in music, song, dance, and iconography. In this course we examine the close relationship between religion and aesthetics in South Asia through study of poetics, courtly poetry, visual culture, music, and performance traditions. [24L]
Prerequisite: RLG205H5/ 0.5 300 level RLG credit

RLG462H5 Sex and Gender in South Asian Religions (HUM)
This course examines ideas, roles, and regulation of sexuality and gender in South Asian religious traditions, paying attention to sexual abstinence and promiscuity as forms of piety, and we will examine performances of the gendered body that transcend and/or problematize the binary construction of masculine and feminine. [24L]
Prerequisite: RLG101H5/ RLG205H5

RLG470H5 Advanced Topics in Buddhism (HUM)
A critical exploration of selected topics in the history of Buddhism. [24S]
Prerequisite: RLG206H5/ RLG370H5

RLG497Y5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for students in Specialist or Major programs. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of 1.0 credit in a reading course is permitted.

RLG499H5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for students in Religion Specialist or Major programs. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of 2 reading courses, amounting to 1.0 credit, is permitted.

RLG499Y5 Research Opportunity Program (HUM)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 24) for more details.
Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.

Human Resources and Industrial Relations (HBA)

The Human Resources and Industrial Relations (ERMAJ1882) program is no longer accepting new students. Students already in the program will be allowed to complete it.

Student Advisor, Economics
R. Mack
Room KN3252, Innovation Complex
905-828-5404
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International Affairs (HBA)

Faculty Advisor
Professor G. Anderson (Economics)
anderson@chass.utoronto.ca

Student Advisor
R. Mack
905-828-5404
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Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 153)
ENV Environment (page 186)
FRE French (page 210)
FSL French (page 210)
GER Language Studies (page 275)
GGR Geography (page 224)
HIS History (page 238)
ITA Italian (page 261)
MAT Mathematics (page 298)
POL Political Science (page 319)

Specialist Program ERSPE1384 International Affairs (Arts)

This program provides background and training in the combination of analytical and linguistic skills demanded of individuals who wish to work in the context of an increasingly globalized economy. A combination of courses are offered that allow the student to acquire full interactive capability in a chosen language, while simultaneously studying institutional and theoretical issues pertaining to political, commercial and economic relationships between nations. Within an honours degree, 15.0 credits are required, at least 1.0 of which must be at the 400 level.

Limited Enrolment – Enrolment in this program is limited to students who have 63% in ECO100Y5; one introductory language course and a CGPA of 2.50.

11.0 credits are required from the following list: ECO100Y5; MAT133Y5/134Y5/135Y5; ECO200Y5/204Y5/206Y5, 202Y5/208Y5/209Y5,220Y5/227Y5,364H5,365H5; POL208Y5; 4.0 language credits in the same discipline.

3.0 from: ENV345H5,GGR325H5,365H5;HIS311Y5/HIS311H5; POL302Y5,327Y5/375H5,340Y5,343Y5,475H5

1.0 from: ECO400Y5/412Y/433H5/435H5/436H5/439Y5/456H5/460H5/461H5/463H5; a 400-level language course. The following 400-level St. George courses will also fulfill this requirement: ECO419H1, 459H1; POL454Y1 or a 400-level course from a cognate discipline approved by the faculty advisor.

Language components available at U of T Mississauga:

French: FSL(205H5,206H5)/ 205Y5, FSL(305H5,306H5)/305Y5, 385H5/405H5, 386H5/406H5 or 366H5, FRE383H5

German: GER100Y5, 200Y5, 300Y5, 330H5, 370H5 (300/400 level German courses not always available at UTM.)

Italian: ITA100Y5, 200Y5, 231H5, 232H5, 313Y5, 315Y5, 350Y5, 437H5, 436Y5, 420Y5

Note: Other languages can be considered with the approval of the Department.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
Italian (HBA)

Department of Language Studies

Professors
S. Bancheri, B.A., M.A., Ph.D
M. Lettieri, B.A., M.A., Ph.D.
T. Lobalsamo, B.A., M.A., Ph.D.

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A. Mollica (Brock University)

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The Italian program at U of T Mississauga is designed to provide a comprehensive study of the many facets of Italy, a country whose culture continues to be a significant force in the shaping of Western civilization. Literature and cinema courses are organized around major figures, movements or genres, as well as Italian life and civilization. Language is studied from all points of view – practical, stylistic, philological and historical – at all levels of instruction.

In Canada, the strong presence of large Italian communities provides a social, intellectual and practical incentive for the study of Italian.

Students are free to design for themselves the program of study best suited to their interests and needs, and they can choose from available courses at U of T Mississauga and at the St. George campus. There are conditions, however, which must be satisfied:

1. for specialization in Italian alone or in Language Teaching and Learning;
2. for a major in Italian alone or Italian and French;
3. for a major in Language Teaching and Learning in Italian alone or Italian and French;
4. for a minor in Italian alone or in Cinema Studies;
5. for a specialist in International Affairs, which requires a language component.

Knowledge of another language and culture is regarded favourably by other disciplines (i.e. Art History, Art and Art History) and is frequently required for graduate-level studies.

Graduates in Italian are in demand and will continue to be. U of T Mississauga’s Italian graduates have moved on to advanced studies and to careers in business, journalism, teaching, translation, transportation, foreign affairs, government, social services, trade, law, and other fields where skills in Italian are a necessity.

In case of uncertainty with regard to the program of study, course content, graduate studies requirements, or any related matter, students are strongly advised to consult the Program Advisor for Italian at U of T Mississauga.

Courses offered every year: ITA100Y5, 200Y5, 350Y5

Study in Florence Program
The Study in Florence program is an intensive language and cultural experience that allows students to study in Florence, Italy while simultaneously obtaining up to 3.0 University of Toronto Mississauga credits. Classes are taught in tandem by faculty from the Department of Language Studies, U of T Mississauga, and the Accademia Fiorentina di Lingua e Cultura Italiana. This unique opportunity also includes:

- an experiential learning component which further enhances cultural competency and adds context to one's studies
- a communication agreement, wherein students commit to speaking exclusively in Italian for the duration of the program

For further information regarding the program and how to apply, please see www.utm.utoronto.ca/study-florence.
Students should also review the Degree Requirements section prior to selecting courses.

For courses in this area see:
- FRE French (page 210)
- ITA Italian (page 261)
- LTL French (page 210)

Specialist Program ERSPE1092 Language Teaching and Learning: French and Italian (Arts)

14.0 credits are required. The program must include a minimum of 4.0 300/400 level credits (2.0 in French and 2.0 in Italian), 1.0 credit at the 400 level (either in French or Italian).

French
7.0 credits are required.

Limited Enrolment – A final grade of 63% is required in FRE180H5 and FRE181H5 (or equivalent).

First Year: FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempt from these courses may replace them with a higher level 1.0 credit in FRE.

Higher Years:
- FRE280Y5 (or equivalent), FRE225Y5, FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5. Note: FRE225Y5 MUST be completed in the second year OR prior to enrolling in 300/400 level courses in Language Teaching and Learning.
- FRE382H5, FRE383H5.
- 1.0 credit to be chosen among the FRE courses in Teaching and Learning (FRE325H5, 345H5, 352H5, 353H5, 355H5)

Italian
7.0 credits are required. All written work will be done in Italian in all courses.

1. ITA200Y5 or ITA201Y5
2. ITA350Y5
3. ITA437Y5
4. 2.0 additional credits in Italian Language Teaching.
5. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).

Specialist Program ERSPE2524 Italian (Arts)

10.0 credits are required including at least 3.0 300/400 level full courses and 1.0 400 level credit. Written work will be done in Italian in all courses.

1. ITA100Y5. Students exempted from this course may replace it with a higher level 1.0 credit in ITA.
2. ITA200Y5 or ITA201Y5
3. ITA350Y5
4. ITA420Y5
5. ITA437Y5
6. 2.0 credits in Italian Cinema.
7. 1.0 credit in Italian Culture and Communication and/or Italian Language Teaching (excluding those listed above).
8. 2.0 additional credits in Italian Literature (excluding those listed above).

Limited Enrolment – Completion of 4.0 credits and ITA100Y5 is required.

Major Program ERMAJ1249 Language Teaching and Learning: Italian (Arts)

8.0 credits are required including at least 2.0 credits at the 300/400 level. Written work will be done in Italian in all courses.

1. ITA100Y5/ 101Y5. Students exempted from this course may replace it with a higher level 1.0 credit in ITA.
2. ITA200Y5/ ITA201Y5
3. ITA350Y5
4. ITA437Y5
5. 1.5 additional credits in Italian Language Teaching.
6. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).
7. 0.5 credit from LTL380H5, LTL417H5, LTL456H5, LTL488H5

Major Program ERMAJ2524 Italian (Arts)

8.0 credits are required including at least 2.0 300/400 level credits. Written work will be done in Italian in all courses.

1. ITA100Y5/ 101Y5. Students exempted from this course may replace it with a higher level 1.0 credit in ITA.
2. ITA200Y5/ ITA201Y5
3. ITA350Y5
4. ITA420Y5
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Italian (HBA)

5. ITA437Y5
6. 1.0 additional credits in Italian Cinema.
7. 1.0 additional credits in Italian Culture and Communication and/or Italian Language Teaching (excluding those listed above).
8. 1.0 additional credits Italian Literature (excluding those listed above).

Minor Program ERMIN2524 Italian (Arts)

4.0 ITA credits are required including at least 1.0 300/400 level credit. Written work will be done in Italian in all courses.

   1. ITA100Y5 or ITA101Y5
   2. ITA200Y5 or ITA201Y5
   3. 2.0 additional credits in any of the Italian course categories.

COURSE CATEGORIES All written work will be done in Italian for students enrolled in any Italian Minor, Major or Specialist Program.

Italian Cinema: ITA242H5; ITA243H5; ITA246H5; ITA247H5; ITA307H5; ITA309H5; ITA311H5; ITA342H5; ITA343H5
Italian Culture and Communication: ITA235H5; ITA237H5; ITA238H5; ITA255Y5; ITA354Y5; ITA371Y5; ITA400Y5; ITA437Y5
Italian Language Teaching: ITA227H5; ITA375Y5; ITA376H5
Italian Literature: ITA221H5; ITA222H5; ITA231H5; ITA232H5; ITA255Y5; ITA307H5; ITA315Y5; ITA370Y5; ITA390Y5; ITA397Y5; ITA413Y5; ITA420Y5; ITA436Y5

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

ITA100Y5 Italian for Beginners (HUM)
An introduction to the Italian language for students of non-Italian linguistic background. Essentials of grammar, oral practice, language laboratory, translation. [48L, 24T, 24P]
Exclusion: Previous schooling in Italian, ITA100Y1, 101H5/102HT or permission of department.

ITA101Y5 Intermediate Italian I (HUM)
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/4th year level). Introduction to linguistic analysis of literary prose. [72L, 24P]
Exclusion: OAC Italian/ITA100Y5/101H5/102H5 or higher/ITA101Y1 or higher.

ITA200Y5 Continuing Italian (HUM)
This course consists of a thorough review of grammatical structures and is designed to improve the students' self-expressiveness in Italian. Selections from contemporary authors and passages dealing with present-day issues are used as a basis for discussion in Italian. For students whose background in Italian is solely academic. [48L, 24P]
Prerequisite: ITA102H/100Y5 or Grade 12 Italian

ITA201Y5 Continuing Italian (Offered in Florence) (HUM)
This course consists of a thorough review of grammatical structures and is designed to improve the students' self-expressiveness in Italian. Selections from contemporary authors and passages dealing with present-day issues are used as a basis for discussion in Italian. For students whose background in Italian is solely academic. [48L, 24P]
Exclusion: ITA200Y5/251Y1 or higher.
Prerequisite: ITA100Y5/ITA101Y5 or permission of the department.

ITA219Y5 The Philosophy of Love and Sex (HUM)
(Offered in English) The course will be an exploration of literary representations of love and sex in Medieval and Renaissance Italy. Primary texts include Dante Alighieri's Divina commedia (Divine Comedy), Francesco Petrarca's Canzoniere, and Giovanni Boccaccio's Decameron. Studies will also dovetail into a discussion of works by Baldassare Castiglione and Pietro Aretino. [48L]
Prerequisite: ITA100Y5 (Prerequisite only applicable to students enrolled in an Italian Minor, Major, or Specialist program.)

ITA221H5 Forms of Modern Italian Literature Part I (HUM)
(Offered in Italian) An introduction to twentieth-century Italian literature through a study of representative novelle, shorter works of fiction, plays and poetry. Exclusion: ITA221Y5, ITA220Y5.
Prerequisite: ITA100Y5/ITA101Y5/ OAC Grade 12 Italian or equivalent.

ITA222H5 Forms of Modern Italian Literature Part II (HUM)
(Offered in Italian). A continuation of the study of twentieth-century Italian literature through representative works of fiction, plays and poetry. Selections will include writings by Moravia, Calvino, and others. Exclusion: ITA222Y5/ITA221Y
Prerequisite: ITA100Y5/ITA101Y5/ OAC Grade 12 Italian or equivalent.
ITALIAN (HBA)

LTL227H5 Learning Styles and Strategies in Second Language Acquisition (HUM)
(Offered in English) This course examines how languages are learned and students are introduced to theories of second language acquisition. [24L]
Exclusion: LTL225Y5, FRE225Y5

ITA231H5 Italian Literature Through the Ages I (HUM)
(Offered in English/Italian) A survey of the shorter forms of Italian literature from the Middle Ages to the Renaissance. Emphasis will be given to poems and “novelle”, but theoretical pieces and short plays of recognized literary significance will also be examined. [24L]
Exclusion: ITA229Y5, 230Y5
Corequisite: ITA200Y5

ITA232H5 Italian Literature Through the Ages II (HUM)
(Offered in English/Italian) A survey of the shorter forms of Italian literature from the Baroque period to present times. Emphasis will be given to poems and “novelle”, but theoretical pieces and short plays of recognized literary significance will also be examined. [24L]
Exclusion: ITA229Y5, 230Y5
Corequisite: ITA200Y5

ITA235H5 Cucina Italiana: Italian History and Culture Through Food (HUM)
(Offered in English) This course describes the history of food in Italy, throughout the centuries. The course will also analyze the formation of different regional traditions. The historical, cultural and linguistic culinary traditions will be illustrated by a series of pertinent literature on the topic. Special attention will be dedicated to the relationship that existed between the various cultures who controlled the country (pre Resurgence) and the traditions and recipes left in their wake (post Unification). In addition, the course will examine the effects that Italian immigration had in North America, especially on the Canadian and American culinary experience. Students will also have the opportunity to investigate and explore their own regional (Italian or otherwise) culinary history. [24L]
Exclusion: ITA234H5

ITA237H5 Topics in Italian Civilization I (HUM)
(Offered in English) The course will cover the period between 1815 to 1960 and discuss through a selection of short stories, novels, sociological and historical documents, articles from newspapers, magazines as well as the Internet various aspects of modern Italian civilization such as fascism, the Resistance, the constitution and political ideologies, the relation between State and the Church, the question of the North vs. the South, the land reform. Please note that this course will be taught in Italian when offered in Florence, Italy. [24L]
Exclusion: ITA234Y5, ITA235Y5, ITA239H5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5, ITA237H5 or permission of the department.

ITA238H5 Topics in Italian Civilization II (HUM)
(Offered in English) The course will cover the period between 1960 to present days through a selection of short stories, novels, sociological and historical documents, articles from newspapers, magazines as well as the Internet various aspects of modern Italian civilization such as industrialization, the mafia, language and mass-media, immigration and emigration, the generation of ’68, terrorism, women’s liberation and family issue in general. Please note that this course will be taught in Italian when offered in Florence, Italy. [24L]
Exclusion: ITA234Y5, ITA235Y5, ITA239H5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5, ITA237H5 or permission of the department.

ITA242H5 Classics of Italian Cinema of the Sixties and Seventies Part I (HUM)
(Offered in English) This course explores varying aspects of Italian cinema during the 60s and 70s. Topics, genres, etc. covered will include the Break with Neorealism and Commedia all’italiana (Comedy, Italian Style). Films analyzed are by those directors who crossed over genres throughout their careers. Students will gain the necessary framework of the events surrounding the make and release of the film (i.e., what is happening in Italy during those years) so as to better contextualize and understand the images before them. [24L, 24T]
Exclusion: ITA241H5, ITA242Y5, ITA243Y5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5.

ITA243H5 Classics of Italian Cinema of the Sixties and Seventies Part II (HUM)
(Offered in English) This course explores varying aspects of Italian cinema during the 60s and 70s. Topics, genres, etc. covered will include Spaghetti Westerns, Gangster films, Horror, and Holocaust Cinema. Films analyzed are by those directors who crossed over genres throughout their artistic careers. Students will gain the necessary framework of the events surrounding the make and release of the film (i.e., what is happening in Italy during those years) so as to better contextualize and understand the images before them. [24L, 24T]
Exclusion: ITA244H5, ITA242Y5, ITA243Y5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5.
ITA246H5 Contemporary Italian Cinema Part I (HUM)
(Offered in English) This course is a study of Italian cinema from the late 1970s to the present. Various works from several directors (Nanni Moretti, Giuseppe Tornatore, Bernardo Bertolucci, and others) will be analyzed. Films and analyses will centre on themes, genres, etc. such as Odes and Homages to Italian Cinema, Religion, Psychoanalysis, and Introspection, and Crime and Mafia. [24L, 24T]
Exclusion: ITA245H5, ITA246Y5, ITA247Y5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5.

ITA247H5 Contemporary Italian Cinema Part II (HUM)
(Offered in English) This course is a study of Italian cinema from the late 1970s to the present. Various works from several directors (Gabriele Salvatores, Gianni Amelio, Francesco Rosa, Roberto Benigni, and others) will be analyzed. Films and analyses will centre on themes, genres, etc. such as The Crisis of Cinema, Italians in the Holocaust, The Second World War, and The Cinema of Crisis: Commedia all’italiana Revisited through Identity and Immigration. [24L, 24T]
Exclusion: ITA248H5, ITA246Y5, ITA247Y5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5.

ITA255Y5 The Italian Canadian Experience (HUM)
(Offered in English) An historically defined portrait of Italian immigrants and their descendents through a study of significant writings by and about them in literature and theatre. Readings to include: Nino Ricci, Lives of the Saints; F. Paci, Black Madonna; Curaggia. Writing by Women of Italian Descent, ed. N.A. Ciatu et al.; M. Micone, Two Plays; The Anthology of Italian Canadian Writing, ed. J. Pivato; If one were to write a history... Selected Writings by R.F. Harney, ed. P. Anctil and B. Ramirez. [24L, 24T]
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA100Y5.

ITA299Y5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

ITA307H5 Modern Italian Literature and Cinema (HUM)
(Offered in English) A study of various novels, short stories and plays and of their adaptation into film. Among the authors to be studied are Verga, Moravia, Bassani and De Filippo and among the film directors Visconti, Scola, Bertolucci and De Sica. [24L] Note: Extra hours will be scheduled for viewing of films.
Exclusion: ITA306H5
Prerequisite: ITA200Y5/ 201Y5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program. Recommended Preparation: Minimum 0.5 credits in any ITA literature and/or cinema course.

ITA309H5 Mafia Movies: Unraveling the Mob in Italian and North American Cinema (HUM)
(Offered in English) Through a selection of contemporary Italian and American films, such as The Godfather, Gomorra, I cento passi, and others, this course explores the representation of the Mafia, and the myths surrounding it, in relation (and in contrast to) to its historical, political, social, and cultural realities in Italy, Canada, and United States. The course will also analyze the ways in which Italian Mafia films de glamorize the mafioso image while American popular cinema perpetuates its mystique. [24L, 24T]
Exclusion: ITA310H5
Prerequisite: ITA100Y5. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program. Recommended Preparation: Minimum 0.5 credits in any ITA cinema course.

ITA311H5 Laughter Is the Best Medicine: Italian Cinematic Comedies and Comedians, Then and Now (HUM)
(Offered in English) This course presents students with an overview of Commedia all’italiana (Comedy, Italian Style), an integral part of the fabric of Italian cinema, from its origins to its manifestations today. Students will learn about the importance and influence of the genre, which is deeply rooted in the history, politics, society, and culture of the Italian peninsula. Films and analyses will also centre on the Italian star system (such as Totò, Troisi, Benigni, and Zalone) and their works. [24L, 24T]
Exclusion: ITA312H5
Prerequisite: ITA200Y5/ 201Y5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program. Recommended Preparation: Minimum 0.5 credits in any ITA cinema course.
ITAL315Y5 Italian Theatre and Performance (HUM,EXP)
(Offered in English) A study of Italian dramas (comedy, tragedy, opera) from the Nineteenth and Twentieth Centuries with a consideration of staging and acting techniques mainly through the production of a specific play or operatic piece. [24L, 48P, 24T].
Exclude: ITA314Y5
Prerequisite: ITA200Y5/201Y5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program.
Recommended Preparation: A good knowledge of Italian.

ITAL342H5 Post War Italian Cinema I: Mastering Neorealism (HUM)
(Offered in English) An analysis of the neorealist period in Italian cinema, and its relation to the political and social climate of post-war Italy. Screenings will include selections from the major exponents of Italian neorealism: Visconti, Rossellini, and De Sica. Attention will also be given to Italian Holocaust cinema, cinematic adaptations, and Italian neorealist literature, in general.
Exclude: ITA342Y5, ITA343Y5, ITA341H5.
Prerequisite: ITA200Y5/201Y5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program.
Recommended Preparation: Minimum 0.5 credit in any ITA cinema course.

ITAL343H5 Post War Italian Cinema II: Moving Beyond Neorealism (HUM)
(Offered in English) An examination of the evolution of Italian cinematic neorealism and its revisitations in the early films of Antonioni, Comencini, Fellini, Pasolini, and others. Attention will also be paid to Italian Holocaust cinema, Italian comedies, and cinematic adaptations.
Exclude: ITA342Y5, ITA343Y5, ITA344H5
Prerequisite: ITA200Y5/201Y5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program.
Recommended Preparation: Minimum 0.5 credit in any ITA cinema course.

ITAL350Y5 Language Practice (HUM)
Intermediate - advanced level language course designed to give the student oral and written proficiency. Selected readings on questions of topical interest, discussions, compositions. [48L, 24P]
Prerequisite: ITA200Y5

ITAL354Y5 Creative Writing (HUM)
(Offered in English/Italian) A course designed to promote self-expression in Italian by involving students in writing shorter pieces in fiction and non-fiction and teaching the structure of the language in relation to the writing activity. Genres to be practised: the personal sketch, fable, apologue, short story, brief documentaries, and short plays. There will be an option of transforming the creative pieces into a screenplay which will be turned into a short film. Selected writings will be collected and published in a booklet. [24L, 52P, 24S]
Prerequisite: ITA 200Y PI.

ITAL370Y5 Power and Success in the Renaissance (HUM)
(Offered in English/Italian) Concepts of Power and strategies for success in Machiavelli's Principe and Castiglione's Libro del Cortegiano. Politics, art and the pen as instruments of distinction in Lorenzo de' Medici, Michelangelo, and Pietro Aretino. [48L]
Exclude: ITA370H5
Prerequisite: ITA200Y5

ITAL371Y5 Digital Italian: Writing, Editing, and Translation (HUM)
(Offered in English/Italian) This course is designed to enhance students' Italian language skills through digital writing, editing, and translating. Projects include media production (subtitles, dubbing, etc.), digital analysis of primary texts, and comparisons between human-generated and computer-generated translations. Students will collaborate with industry leaders in the fields of film, publishing and editing, and reference collection. [48L, 24P]
Prerequisite: ITA200Y5/PI.

ITAL375Y5 Second Language Teaching Methodology (HUM)
(Offered in English) This course connects Second Language Acquisition theory and research to teaching practice. Students will gain hands-on experience in the development and evaluation of Italian second language teaching materials for the communicative classroom environment. Special emphasis will be placed on the teaching of the four skills (speaking, reading, listening, and writing) and grammar instruction. Students enrolled in the Italian Major (ERMAJ 2524) or Specialist (ERSPE 2524) can only use this course as an elective towards program requirements. [24L, 24T]
Exclude: ITA374H5
Prerequisite: ITA100Y5
Recommended Preparation: LTL227H5
ITAL390Y5 Modern Humanity in Crisis (HUM)
Masterpieces of modern Italian fiction analyzed against the background of modern-day Italy. Works to be read include novels by Svevo, Vittorini, Silone, Moravia, Pavese. [48L]
Prerequisite: ITA200Y5
Exclusion: ITA312Y5, ITA397Y5, ITA413Y5
Recommended Preparation: ITA200Y5 for Italian Specialists, Majors and Minors.

ITAL397Y5 The Individual and Society in 19th Century Italian Literature (HUM)
(Offered in English/Italian) Examination of personal and social themes in the poetry of the Romantics, especially Leopardi, and in the novels of Manzoni, Verga and others. [48L]
Exclusion: ITA395Y5, 398Y5
Prerequisite: ITA200Y5

ITAL399Y5 Research Opportunity Program (HUM)
This course provides senior undergraduate students who have developed some knowledge of research methods used in the discipline of Italian studies to work in the research project of a U of T Mississauga professor for course credit. Enrolled students have the opportunity to become involved in original research, develop their research skills, and share in the excitement and discovery of acquiring new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter sessions are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: ITA200Y5, ITA231H5 and 232H5.

ITAL400Y5 Italian Studies Internship (HUM,EXP)
Students enrolled in an Italian Studies program of study will have the opportunity, through work placement, to apply the knowledge and expertise gained throughout their studies in Italian. The work placement will take place in corporations, local media or community organizations. Application deadline is February 28th. Students will be required to include a letter of interest highlighting their qualifications as suitable candidates for an internship opportunity. Applicants who meet minimum criteria (must be in 3rd or 4th year of studies, number of courses completed in ITA and CGPA) will be selected for an interview. Final decisions will be based on a combination of academic qualifications, experience, and the interview.
Prerequisite: ITA100Y5, ITA200Y5, 1.0 credit from ITA350Y5 / ITA371Y

ITAL413Y5 Italian Theatre: Text and Performance (HUM,EXP)
(Offered in English/Italian) A study of representative plays (comic, tragic, religious, melodrama) from the Middle Ages to Alfieri, with a consideration of staging and acting techniques mainly through the production of a specific play. [24L, 48P, 24T].
Exclusion: ITA312Y5, ITA397Y5
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA350Y5 or permission of the department.

ITAL420Y5 Dante’s Divina Commedia (HUM)
An introduction to the work and thought of Dante, with special emphasis on the Inferno and Purgatorio. [48L]
Prerequisite: ITA200Y5

ITAL436Y5 The 18th Century in Italy (HUM)
(Offered in English/Italian) An investigation of the intellectual trends and literary forms in Italy from the pre- enlightenment to Romanticism. Readings from the works of Vico, Muratori, Gravina, Metastasio, Rolli, Parini, Verri, Beccaria, Goldoni, Alfieri and others. [48L]
Prerequisite: ITA200Y5

ITAL437Y5 History of the Italian Language (HUM)
The linguistic transition from Latin to Italian, the "Questione della lingua," developments in the 18th and 19th centuries, contemporary trends. Reading and linguistic analysis of representative texts. [48L]
Prerequisite: ITA200Y5
Recommended Preparation: Knowledge of Medieval/Renaissance and modern Italian literary culture.
ITA490Y5 Independent Italian Theatre Studies I (HUM)
A scholarly project, supervised by a member of the Italian department, on an aspect or figure of Italian theatre of the nineteenth or twentieth centuries. Performing in a play is also a requirement. [24L, 48P, 24T]
Exclusion: ITA495Y5 in the same year
Prerequisite: ITA315Y5; Written permission of the undergraduate co-ordinator in Italian.

ITA491H5 Independent Studies in Italian (HUM)
A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent; Written permission of the undergraduate co-ordinator in Italian.

ITA491Y5 Independent Studies in Italian (HUM)
A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent; Written permission of the undergraduate co-ordinator in Italian.

ITA492H5 Independent Studies in Italian (HUM)
A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent; Written permission of the undergraduate co-ordinator in Italian.

ITA493H5 Special Topics in Italian Language Teaching and Learning: The Language Classroom (HUM)
An individual study in which students integrate and apply their understanding of Italian Studies and Language Teaching & Learning by observing, actively participating in, and reflecting on the teaching and learning process in an Italian language course, under the supervision of an experienced instructor/mentor. Together with the mentor, the student will develop and implement strategies, based on current pedagogical findings, for the successful execution of lesson plans and grammatical and communicative activities in a foreign language classroom.
Prerequisite: ITA350Y5

ITA494H5 Special Topics in Italian Language Teaching and Learning: Theatre, Drama, and Culture (HUM)
An individual study in which students integrate and apply their understanding of Italian Studies and Language Teaching & Learning by observing, actively participating in, and reflecting on the teaching and learning process in an Italian theatre course, under the supervision of an experienced instructor/mentor. Together with the mentor, students will develop and implement strategies, based on current pedagogical findings, for the successful execution of language-centered drama activities (ranging from improvisation to full-length plays) in the classroom.
Prerequisite: ITA350Y5

ITA495Y5 Independent Italian Theatre Studies II (HUM)
A scholarly project, supervised by a member of the Italian department, on an aspect or figure of Italian theatre from its origins to Goldoni. Performing in a play is also a requirement.
Exclusion: ITA490Y5 in the same year
Prerequisite: ITA315Y5; Written permission of the undergraduate co-ordinator in Italian.
With the endeavor of enhancing the undergraduate academic experience of U of T Mississauga students, the Department of Language Studies offers a variety of undergraduate level language courses that can be taken as electives. These language courses offer the opportunity to expand students’ professional skills, and to better prepare them for graduate study as well as a competitive global market.

Students can request a notation on their academic record of language proficiency. The Language Citation at the University of Toronto Mississauga 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. For further information see Experiential Learning Programs (Page 34) or visit the Department of Language Studies website at www.utm.utoronto.ca/language-studies/language-courses/language-citation.

All students who are enrolling in an ARA, CHI and HIN course for the first time are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

Assessment Deadlines

- Summer Session - March 14
- Fall/Winter Session - Continuing Students - April 30
- Fall/Winter Session - New Students - June 27

Students without pre- and co-requisites or written permission of the instructor, or those who misrepresent their knowledge of a language, can be de-registered from courses at any time.

List of Courses

**CHI100Y5 Introductory Chinese (HUM)**
Intended for students with none or very minimal background in Mandarin or any Chinese dialects. This course provides a comprehensive introduction to Modern Standard Chinese (Mandarin) as a second language, and focuses on integrated skills in listening, speaking, reading, writing and translation. [72L, 24P]

**NOTE:** All students who are enrolling in a CHI language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

**GER100Y5 Introductory German I (HUM)**
An intensive language course for students with no previous knowledge of German. Practice in comprehension, reading, writing and speaking. This is a language course. [72L, 24P]
Exclusion: Grade 12(U) German (LWG4U/LWA4U), or equivalent/ GER101H5

**LAT100Y5 Introductory Latin (HUM)**
An intensive introduction to Latin for students who have no knowledge of the language. This course will aid in the preparation for the reading of Latin literature. [72L, 24P]
Exclusion: LAT150H5, LAT151H5, LAT100Y1, LAT101H1, LAT102H1. Students who have studied Latin previously must obtain permission from the Department of Language Studies before enrolling.

**SPA100Y5 Spanish for Beginners (HUM)**
Introduction to the Spanish language for beginning students; overview of basic grammatical structures, development of vocabulary and oral and written expression. [48L, 24T, 24P]
Exclusion: SPA100Y1/ Grade 12 Spanish or equivalent knowledge of Spanish, LGGA30H3, LGGA31H3.
CHI101H5 Introductory Chinese for Students with Prior Background (HUM)
This course is designed for students who have some prior knowledge of Chinese. Potential students for this course are able to speak and understand elementary Mandarin or any Chinese dialects but with minimal literacy skills (reading and writing), or are able to read and write with either traditional or simplified character at beginner level. This course focuses on phonetics and literacy of Modern Standard Chinese (Mandarin) and addresses integrated skills of listening, speaking, reading, writing, and translation. [24L, 24T]
Exclusion: CHI100Y5, CHI101Y5, EAS100Y1, EAS101Y1, LGG60H3, LGG61H3
NOTE: All students who are enrolling in a CHI language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

CHI200Y5 Intermediate Chinese (HUM)
As a continuation of Introductory Chinese (CHI100Y5), this course focuses on developing students' language comprehension, expanding their vocabulary and grammar, and improving their skills in listening, speaking, reading, writing and translation in Modern Standard Chinese (Mandarin) at intermediate level. [72L, 24P]
Exclusion: EAS200Y1, LGGB60H3, LGG61H3.
Prerequisite: CHI100Y5 or appropriated language level as indicated by the language assessment questionnaire.
NOTE: All students who are enrolling in a CHI language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

GER101H5 Introductory German I: Continuation (HUM)
An intensive language course for students who have studied German, but who have not quite attained Grade 12 level. Practice in comprehension, speaking, reading, and writing. This course is the spring term of GER100Y5. This is a language course. [36L]
Exclusion: Grade 12(U) German (LWG4U/LWA4U), or equivalent /GER100Y5

GER150H5 German Cultural Studies I (HUM)
How did Germany come to be a political and economic powerhouse in the European Union? Does cultural and intellectual life in contemporary Germany reflect both eastern and western traditions? How can we define this “Germany” today, as it becomes increasingly multicultural? These and other broad questions are examined in their cultural, social and intellectual history from the Middle Ages to the present. This course is taught in English and is open to all students. [24L]

GER200Y5 Introductory German II (HUM)
Continuation of work done in GER100Y5/101H5. Expansion of grammar and vocabulary, practice in comprehension, translation, composition, and conversation. This is a language course. [96L]
Exclusion: GER200H1/201H1, 202Y5
Prerequisite: Grade 12(U) German, (LWG4U/LWA4U) or equivalent/GER100Y5/101H5
This course is not open to fluent speakers of German.

LAT200Y5 Intermediate Latin (HUM)
Continuation of LAT100Y5. Reading of selections of Latin prose works with systematic language study. [48L, 24T]
Exclusion: LAT201H1, LAT202H1
Prerequisite: LAT100Y5. Students who have completed Grade 12 Latin must obtain permission from the department before enrolling.

GER204H5 German Literature in Translation (HUM)
A survey of selected themes and topics in German literature from the eighteenth century to the present. Students should check with the department and/or instructor regarding the course focus in the term it is being offered. [24L]
**GER205H5 German Literature I (HUM)**
(Formally GER275H5: Introduction to German Literature)
An introduction to the study of German literature and literary concepts. Texts are in the original German. Required for Majors. This is a literature course. [36L]
Exclusion: GER204Y5, 204H1, 275H5
Prerequisite: Grade 12(U) German (LWG4U/LWA4U), or equivalent/ GER100Y5/101H5

**PRS210H5 Introductory Persian I (HUM)**
This course is for students who have minimal or no prior knowledge of Persian. The course provides students with basic information about the Persian language with the special focus on literacy skills, i.e. reading and writing. Students start by learning how to write and pronounce the alphabet and how to connect letters to form new words. Then, they learn basic vocabulary in Persian in order to express basic ideas orally and in writing. By the end of the course, students should be able to conduct basic conversations in Persian.
Exclusion: PRS210Y5, NML260Y1.

**ARA211H5 Introductory Arabic for Students with Prior Background (HUM)**
This course is for students who have basic background information in Arabic of any dialects because of family background but have not studied the grammar or literary Arabic, nor read and write enough to take the course Arabic at intermediate level, ARA311H. To study this course, students should be able to write and speak simple sentences to express basic information in formal Arabic. By the end of this course, students should be able to use formal Arabic at an intermediate low level. Everyday language in the Egyptian and Levantine accents will be provided occasionally as supplementary materials for students’ information only. However, students’ skills will be assessed using formal Arabic only, which is the focus of this course. [36L, 12P]
Exclusion: ARA211Y5
Prerequisite: As indicated in Department’s language assessment. All students are required to complete an language assessment.

**PRS211H5 Introductory Persian II (HUM)**
This course is for students who passed PRS210H or demonstrate commensurate Persian skills. As a continuation of introductory Persian I, this course continues to develop students’ language comprehension, expand their vocabulary and grammar, and improve their skills in listening, speaking, reading, writing, and translation at an intermediate low level.
Exclusion: PRS210Y5, NML260Y1.
Prerequisite: PRS210H5.

**HIN212Y5 Introduction to Hindi/Urdu (HUM)**
Intensive introduction to phonology, grammar, syntax of the modern Hindi and Urdu language; emphasis on basic writing and reading. [72L, 24P]
Exclusion: NEW212Y1 or higher/SAS 202Y1 or higher/LGGA70H3, LGGA71H3/Native users.
NOTE: All students who are enrolling in a HIN language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit [www.utm.utoronto.ca/language-studies/elective-languages](http://www.utm.utoronto.ca/language-studies/elective-languages) for further details.

**ARA212Y5 Introductory Arabic (HUM)**
This course is for students who have no background knowledge in formal Arabic. The course provides students with basic information about the Arabic language paying particular attention to literacy skills, i.e. reading and writing in formal Arabic. Students start by learning how to write and pronounce the alphabet and how to connect letters to form new words. Then, they learn basic vocabulary in formal Arabic in order to express basic ideas orally and in writing. By the end of the course, students should be able to write simple sentences to express basic information, and they should be able to conduct basic conversations in formal Arabic only, which is the focus of this course. [72L, 24P]
Exclusion: ARA210H5, ARA211H5, ARA211Y5, LGGA40H3, LGGA41H3, NMC210Y1/NML210Y1 or higher, native speakers.
NOTE: All students who are enrolling in an ARA language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit [www.utm.utoronto.ca/language-studies/elective-languages](http://www.utm.utoronto.ca/language-studies/elective-languages) for further details.

**SPA220Y5 Intermediate Spanish (HUM)**
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. [48L, 24P]
Exclusion: SPA220Y1, SPA319Y1 or higher
Prerequisite: Grade 12 U Spanish/SPA100Y1/SPA100Y5

**LTL227H5 Learning Styles and Strategies in Second Language Acquisition (HUM)**
(Offered in English) This course examines how languages are learned and students are introduced to theories of second language acquisition. [24L]
Exclusion: LTL225Y5, FRE225Y5
SPA259H5 Introduction to Hispanic Culture (HUM)
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. [24L]
Exclusion: SPA323Y1, SPA323
Prerequisite: SPA100Y5
Corequisite: SPA220Y5

SPA275H5 Latin American Cinema (HUM)
A survey of Latin American cinema, analyzed within historical, social, political, and cultural contexts. Aesthetic and social forms and questions of identity will also be studied. Throughout the course, the cinema of various Spanish speaking nations, regions, and historical periods will be highlighted. The course is taught in English. Students who take this course for Spanish Language Citation must complete written course work in Spanish. Exclusion: SPA375H1
Recommended Preparation: SPA100Y5, SPA220Y5 or SPA259H5.

SAN291Y5 Introductory Sanskrit (HUM)
This introductory course looks at mastering the reading and writing of the Devanagari script and studying the grammar of the classical Sanskrit language. There will be close analytical reading of simple Sanskrit texts, which are used to reinforce the grammatical study done in the first half of this course. The aim is to bring students to the point where they are comfortably able, with the help of a dictionary, to read simple, narrative Sanskrit. Texts in Sanskrit. [72L, 24P]
Exclusion: SAN390H5, SAN391H5, RLG260Y1

GER299Y5 Research Opportunity Program (HUM)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

GER300Y5 Intermediate German I (HUM)
(Formerly GER301H5) German at the intermediate level: extension of vocabulary, specific problems of grammar, practice in translation, essay-writing, reading and conversation. Students taking this course and intending to major in German must take the equivalent of a full literature course (GER325H5/329H5/335H5/355H5) as well. The Department reserves the right to place students in the appropriate course in the series GER200Y5, 300Y5, 400Y5. This is a language course. [72L]
Exclusion: GER300H5, 301H5
Prerequisite: GER200Y5/201H1/202Y5

CHI301Y5 Advanced Chinese (HUM)
This advanced level language course is designed for students who can read newspaper in either traditional or simplified characters. The emphasis is on reading and analyzing contemporary publications in Chinese culture, literature, and cinema. Students will improve their rhetoric, reading, and writing skills through diverse reading and writing practice. [72L, 24P]
Exclusion: EAS300Y1, EAS290Y1, LGGC60H3, LGGC61H3.
Prerequisite: CHI200Y5/CHI201Y5/EAS201Y1 or appropriated language level as indicated by the language assessment questionnaire
NOTE: All students who are enrolling in a CHI language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

GER303H5 German Current Events Through Print and Online News Media (HUM)
The study of important political, social, and cultural issues in contemporary Germany on the basis of print and online sources is studied. Topics are typically selected by the instructor with the input of students. The course provides further refinement of writing style, reading strategies, vocabulary, and conversation skills. [36L]
Prerequisite: GER300Y5
Corequisite: GER300Y5 with permission of department

GER305H5 German Literature II (HUM)
(Formerly GER304H5: Modern German Literature) Building on the work of GER205H5, this course explores texts from the 18th to the 20th century. This course is required for Majors. [24L]
Exclusion: GER304H5
Prerequisite: GER100Y5, 205H5/275H5
CHI310H5 Business Chinese (HUM)
This advanced level course introduces practical uses of spoken and written Mandarin Chinese in business contexts. Students will improve their reading comprehension, strengthen their writing ability and advance their communication and presentation skills through a variety of class activities and projects in this course. Interviews maybe required for students who wish to enroll in this course.
Prerequisite: CHI201Y5 OR equivalent as indicated in the language assessment questionnaire.
Corequisite: CHI301Y5

PRS310Y5 Intermediate Persian (HUM)
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. [72L, 24P]
Exclusion: PRS310H5, PRS311H5, NMC360Y1. Native speakers.
Prerequisite: PRS210H5, PRS211H5/ PRS210Y5

CHI311H5 Classical Chinese (HUM)
An introduction to Classical Chinese language with emphasis on grammatical analysis, reading literary texts and translation/contextualization into modern Chinese and English. This course examines pre-Qin Chinese classics, such the Analects of Confucius, the Mencius, the Dao De Jing, the Art of War, and some other philosophical maxims, literary quotations, idioms, poems, and prose.
Prerequisite: CHI301Y OR adequate reading knowledge of Chinese as determined by department assessment questionnaire.

ARA311H5 Intermediate Arabic for Students with Prior Background (HUM)
This course is for students who have basic background information in formal Arabic. To study this course, students should be able to write and speak simple sentences to express basic information in formal Arabic. The course builds on the skills that students have learned in ARA212. By the end of this course, students should be able to use formal Arabic at an intermediate low level using ACTFL guidelines. Everyday language in the Egyptian and Levantine accents will be provided occasionally as supplementary materials for students’ information only. However, students’ skills will be assessed using formal Arabic only, which is the focus of this course.
Exclusion: HIN312Y5
Prerequisite: ARA212Y5

HIN311H5 Readings in Hindi (HUM)
This course is designed for students who have a fair knowledge of Hindi. In this course children’s stories from Indian classical writings Panchtantra, Jataka and other folk stories will be discussed.
Prerequisite: HIN212Y5

ARA312Y5 Intermediate Arabic (HUM)
This course is for students who have basic background information in formal Arabic. To study this course, students should be able to write and speak simple sentences to express basic information in formal Arabic. The course builds on the skills that students have learned in ARA212Y5. By the end of this course, students should be able to use formal Arabic at an intermediate low level using ACTFL guidelines. Everyday language in the Egyptian and Levantine accents will be provided occasionally as supplementary materials for students’ information only. However, students’ skills will be assessed using formal Arabic only, which is the focus of this course. [72L, 24P]
Exclusion: Native users/NMC310Y1/ NML310Y1/ LGGC42H3, LGGC43H3, ARA211H5, ARA311H5
Prerequisite: ARA212Y5

NOTE: All students who are enrolling in an ARA language course for the first time (do not have the prerequisite) are required to complete a language assessment questionnaire. Students who have not completed an assessment cannot be approved for course enrolment. Please visit www.utm.utoronto.ca/language-studies/elective-languages for further details.

HIN312H5 Intermediate Hindi/Urdu I (HUM)
This course focuses on further development of grammatical structures from Introduction to Hindi/Urdu and continues to next level of acquisition of grammar and communicative skills. Students will be introduced to the vocabulary of intermediate level to advance. Their speaking and writing skills will be developed by dictation exercises, writing short compositions, reviews etc. It also includes Hindi/Urdu readings that introduce literature. Readings from newspaper/magazines and other internet resources will be frequently taken.
Exclusion: HIN312Y5
Prerequisite: HIN212Y5 or as indicated by results from language assessment questionnaire.
HIN313H5 Intermediate Hindi/Urdu II (HUM)
This course is continuation of Intermediate Hindi/Urdu I. The course focuses on usage of advanced; grammatical structures of Hindi/Urdu and will take the students to the next level of acquisition of grammar and communicative skills. Reading of print media texts in both Devanagari and Nastaliq scripts will be a common feature of the course. Writing skills will be enhanced with regular exercises such as compositions, essays, reviews. The course will also have a brief introduction of Hindi/Urdu literature and readings of simple prose texts from Hindi/Urdu literature will be regular feature of the course.
Exclusion: HIN312Y5
Prerequisite: HIN212Y5 or as indicated by language assessment questionnaire.

SPA320Y5 Advanced Spanish (HUM)
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. [48L, 24T]
Exclusion: SPA320Y1, SPA319Y1
Prerequisite: SPA220Y5

GER320H5 Topics in German Literature (HUM)
Topic, genre, period, and author studies. This course may be repeated for credit with different content. [24L]
Prerequisite: GER205H5, 305H5

SPA323H5 Business Spanish (HUM)
Practical uses of spoken and written Spanish for business contexts. This course builds on grammar and vocabulary knowledge already acquired at the intermediate level. [24L]
Exclusion: SPA323Y1, SPA323H1
Prerequisite: SPA220Y5

GER325H5 19th Century German Literature (HUM)
Introduction to the themes and social and cultural concerns of 19th Century German Literature. [24L]
Prerequisite: GER205H5/305H5/275H5, 304H5

GER330H5 Topics in German Cultural Studies (HUM)
This course covers various topics in the culture of German-speaking countries. Such topics may include Berlin, Weimar culture, unification and the politics of memory in postwar Germany. This course may be repeated for credit with new content. [24L]
Prerequisite: GER204H5, GER205H5
Recommended Preparation: GER150H5

GER335H5 German Literature: 1945 to the Present (HUM)
Prose and poetry since World War II, from the Stunde Null through the Restoration, the division of Germany, the political 60's and beyond, the questions of the place of the individual in our world today; works by such writers as Böll, Celan, Dürrenmatt, Frisch, Grass, Handke, Bobrowski, and Wolf. [24L]
Prerequisite: GER205H5, 305H5

GER351H5 German Cinema I (HUM)
Replaced by GER353H5 2005-06.

GER353H5 German National Cinemas (HUM)
An introductory survey of the history of German cinemas from the silent period to the present. Counts toward the Minor in Cinema Studies. Knowledge of German is not required. [24L, 24P - includes screening of films]
Exclusion: GER351H5, 352H5

GER354H5 Topics in German Cinema Studies (HUM)
This course will cover various topics that may include genre studies, a period focus (Weimar, New German Cinema, Nazi Cinema, GDR Cinema), directors (Fritz Lang, Wim Wenders), or themes (transnational cinema, cinema and the city, film and history, film and literature, etc.). This course may be repeated for credit with different content. It counts toward the Minor in Cinema Studies. Knowledge of German is not required. [24L, 24P - includes screening of films]
Exclusion: GER351H5,352H5
Recommended Preparation: GER353H5

GER355H5 The Theatre of Bertolt Brecht (HUM)
This course will study selected plays by Brecht and investigate his dramatic theories and stage techniques. All readings will be in German. [24L]
Exclusion: GER355Y5
Prerequisite: GER205H5, 305H5/275H5, 304H5

GER370H5 Business German I (HUM)
An introduction to the use of German in the business context. Emphasis on oral and written communication. [36L]
Prerequisite: GER200Y5/202Y5/200H1/201H1/permission of the department

GER371H5 Business German II (HUM)
Intensive development of the communicative skills needed in the context of a German business environment. [36L]
Prerequisite: GER370H5 or permission of the department
ITA376H5 Recreational Linguistics: Brain Game, Brain Teasers (HUM)
Recreational linguistics embraces all types of word games: acrostics, mesostichs, search-a-word, crossword puzzles, acronyms, riddles, intruders, rebus, etc. To these will be added the use of proverbs, idiomatic expressions and the use of humour. Examples of ludolinguistica will be used to teach and expand basic vocabulary. Students will be encouraged to create their own activities to emphasize the language skills and will prepare activities which promote communication in and outside the classroom scene. Open to all students. **Students enrolled in the Italian Major (ERMAJ 2524) or Specialist (ERSPE 2524) can only use this course as an elective towards program requirements.** [24L]
*Prerequisite:* ITA100Y5
*Recommended Preparation:* ITA200Y5 for Italian Specialists, Majors and Minors.

SAN392Y5 Intermediate Sanskrit (HUM)
Continuation of Introductory Sanskrit with grammar review and readings at the intermediate level. This course consists of a thorough review of grammatical structures in Sanskrit with reading of simple Sanskrit narrative texts. [72L, 24P]
*Exclusion:* SAN390H5, SAN391H5/ SAN291Y5, RLG369H1

CHI408H5 Reading Confucianism in Modern Chinese (HUM)
This advanced level course covers the readings on Confucianism in modern Chinese language. The course examines Confucian doctrines and the development of Confucianism from ancient time to the contemporary era. Critical reading and essay writing skills will be stressed.
*Exclusion:* CHI309Y5
*Prerequisite:* CHI301Y OR adequate reading knowledge of Chinese as determined by department assessment questionnaire.

HIN411H5 Hindi Culture and Media (HUM)
The course is designed for students who have completed intermediate Hindi and have a good knowledge of Urdu. The course enhances all four language skills through a focus on culture delivered via various forms of the media. The teaching material for the course will largely include segments from Hindi films, soap operas, Music TV, cine magazines or related items from newspapers in Hindi.
*Prerequisite:* HIN312Y5

ARRA412Y5 Advanced Arabic (HUM)
This course is for students who have passed ARA311H/ARA312Y or those who demonstrate commensurate Arabic skills. By the end of this course, students enable to reach a high level of proficiency in formal Arabic. Everyday language in the Egyptian and Levantine accents will be provided occasionally as supplementary materials for students’ information only. However, students’ skills will be assessed using formal Arabic only, which is the focus of this course. [72L, 24T]
*Exclusion:* NML410Y1
*Prerequisite:* ARA312Y5/ ARA311H5. Students who have not completed ARA312Y5/ 311H5, must obtain permission from the department before enrolling.

HIN412Y5 Advanced Hindi (HUM)
This course is designed for students who already have a good knowledge of Hindi; it offers them an opportunity to effectively use the knowledge attained in previous years to read and understand advanced texts in sociocultural and literary studies, and engage in discussing issues pertaining to modern Indian society. [72L, 24P]
*Prerequisite:* HIN312Y5

GER450H5 Advanced Seminar in German Literature (HUM)
Topic, genre, period, and author studies. This course may be repeated for credit with different content. [24S]
*Prerequisite:* GER204H5, 205H5, and 0.5 of 300/400 level literature or culture course

GER475H5 Advanced Seminar in German Cultural Studies (HUM)
This course is an in-depth study of different topics in the cultures of German-speaking countries. It may be repeated for credit with different content. [24S]
*Prerequisite:* GER205H5, 305H5, and 0.5 of 300/400 level literature or culture course.
GER490H5 Independent Study (HUM)
An independent research paper or scholarly project supervised by a member of staff on a literary or cultural topic. Students must submit a written proposal that includes a provisional project or paper title, plan of study and preliminary bibliography. Open only to students in their fourth year of study.
Prerequisite: Written permission of the instructor and of the Department to be obtained by May 1st for the Fall Session; by November 1st for the Winter Session.

Language Teaching and Learning: French and Italian (HBA)

Department of Language Studies

Professors
- C. Elkabas, B.A., M.A., Ph.D.
- M. Lory, L.èsL., M.èsL., Ph.D.
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The Language Teaching and Learning programs offered by the Department of Language Studies at UTM are specially designed to provide a comprehensive study of how languages are taught and learned, whether in a second or foreign language context. The programs develop expertise in the areas of pedagogy and skills development, psycholinguistics and language acquisition, bilingualism and multilingualism, sociolinguistics and cross-cultural communication, and teaching and learning through theatre, drama, and culture. Certain courses focus on the teaching and learning of particular languages, while others are not language specific.

The programs in Language Teaching and Learning provide a solid foundation for students who intend to continue their studies at the graduate level in education, apply to teacher education programs/teachers colleges, complete a TESOL certificate or other related certificate, or for those students who intend to enter the workforce or continue their academic studies in fields that involve employee-training and other forms of workplace education.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- FRE French (page 210)
- ITA Italian (page 261)

Specialist Program ERSPE1092 Language Teaching and Learning: French and Italian (Arts)

14.0 credits are required. The program must include a minimum of 4.0 300/400 level credits (2.0 in French and 2.0 in Italian), 1.0 credit at the 400 level (either in French or Italian).
French

7.0 credits are required.

**Limited Enrolment** – A final grade of 63% is required in FRE180H5 and FRE181H5 (or equivalent).

**First Year:** FRE180H5 and FRE181H5 (minimum grade of 63% is required) or equivalent. Students exempt from these courses may replace them with a higher level 1.0 credit in FRE.

**Higher Years:**
1. FRE280Y5 (or equivalent), FRE225Y5, FRE240Y5 (or FRE240H5 and FRE241H5), FRE272Y5. **Note:** FRE225Y5 MUST be completed in the second year OR prior to enrolling in 300/400 level courses in Language Teaching and Learning.
2. FRE382H5, FRE383H5.
3. 1.0 credit to be chosen among the FRE courses in Teaching and Learning (FRE325H5, 345H5, 352H5, 353H5, 355H5)

Italian

7.0 credits are required. All written work will be done in Italian in all courses.

1. ITA200Y5 or ITA201Y5
2. ITA350Y5
3. ITA437Y5
4. 2.0 additional credits in Italian Language Teaching.
5. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).

**List of Courses**

**FRE225Y5 Teaching and Learning a Second/Foreign Language (HUM)**
In this course, students will learn how language teaching methods have evolved since the 1960s. Different teaching approaches (behaviourist, audio-visual, communicative, cognitive and humanistic) will be examined with special emphasis on the teaching of the four skills (reading, writing, listening, speaking) and culture, on the roles of the teacher and the learner in the classroom. [48L, 24T]

**Exclusion:** LTL225Y5, LTL227H5.

**Prerequisite:** FRE180Y5 or FRE180H5 and FRE181H5

**LTL227H5 Learning Styles and Strategies in Second Language Acquisition (HUM)**
(Offered in English) This course examines how languages are learned and students are introduced to theories of second language acquisition. [24L]

**Exclusion:** LTL225Y5, FRE225Y5

**FRE325H5 Language Acquisition of French (HUM)**
An introduction to the field of first language acquisition from a theoretical perspective. We will study various aspects: the acquisition of phonology, vocabulary, morphology and syntax. The following topics will be dealt with: the relationship between the development of language and the development of other cognitive aspects; bilingualism; the differences and the similarities between first and second language acquisition. [24L, 12T]

**Prerequisite:** LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

**FRE345H5 Teaching and Learning French Since the 1970s (HUM)**
The aim of this course is to present recent research and its classroom applications in relevant contemporary domains of teaching and learning French as a second language, such as French immersion in Canada, including the implications of early, late and partial immersion; recent developments in the teaching of reading and written comprehension; the use of online resources and the pedagogical impact of Information and Communications Technologies in education. [24L]

**Prerequisite:** LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

**FRE352H5 Teaching French Grammar (HUM)**
This course examines practical and theoretical issues surrounding grammar in the language curriculum such as various approaches to the implementation of grammar in language curricula, such as in grammar-translation or task-based learning; the role and limitations of descriptive grammar, including pedagogical grammar; form focus versus meaning focus; interference and error analysis; feedback on errors. Students will be asked to critique and create teaching materials. [24L]

**Prerequisite:** LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5

**FRE353H5 Teaching French Culture (HUM)**
This course examines practical and theoretical issues surrounding the integration of culture in the language curriculum such as the interface between authentic language and culture; the definition of teaching objectives; appropriate, established and emergent strategies; online resources; cross-cultural communication. Students will be asked to critique and create teaching materials. [24L]

**Prerequisite:** LTL225Y5/ FRE225Y5/ FRE272Y5, (FRE240H5, FRE241H5)/FRE240Y5/ FRE280Y5
FRE355H5 Psycholinguistics and Teaching and Learning French as a Second Language (HUM)
An introduction to the study of the main psychological factors that influence the acquisition and use of French as a second language. To better understand the communication needs of the language learner, we will examine the learner's style (attitude, motivations, learning patterns) in relation to cognitive processes such as perception, production and memory. Emphasis on various teaching strategies. [24L, 12T]
Prerequisite: LTL225Y5/ FRE225Y5, FRE240H5, FRE241H5 (or FRE240Y5)/FRE280Y5

ITA375Y5 Second Language Teaching Methodology (HUM)
(Offered in English) This course connects Second Language Acquisition theory and research to teaching practice. Students will gain hands-on experience in the development and evaluation of Italian second language teaching materials for the communicative classroom environment. Special emphasis will be placed on the teaching of the four skills (speaking, reading, listening, and writing) and grammar instruction. Students enrolled in the Italian Major (ERMAJ 2524) or Specialist (ERSPE 2524) can only use this course as an elective towards program requirements. [24L, 24T]
Exclusion: ITA374H5
Prerequisite: ITA100Y5
Recommended Preparation: LTL227H5

ITA376H5 Recreational Linguistics: Brain Game, Brain Teasers (HUM)
Recreational linguistics embraces all types of word games: acrostics, mesostichs, search-a-word, crossword puzzles, acronyms, riddles, intruders, rebus, etc. To these will be added the use of proverbs, idiomatic expressions and the use of humour. Examples of ludolinguistica will be used to teach and expand basic vocabulary. Students will be encouraged to create their own activities to emphasize the language skills and will prepare activities which promote communication in and outside the classroom scene. Open to all students. Students enrolled in the Italian Major (ERMAJ 2524) or Specialist (ERSPE 2524) can only use this course as an elective towards program requirements. [24L]
Prerequisite: ITA100Y5
Recommended Preparation: ITA200Y5 for Italian Specialists, Majors and Minors.

LTL380H5 Theoretical Issues In Second Language Teaching and Learning (HUM)
This course examines theoretical research on adult second language learning and the resultant implications for second language teaching. Topics include age, affect, communicative competence, and sociolinguistics. Links are drawn to pedagogical practices, including error correction, materials selection, and order and method of presentation. This course is taught in English and is open to students from other disciplines. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition to the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI380H5, LIN380H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5

LTL417H5 Second Language Pedagogy (HUM)
This course offers a comprehensive survey and analysis of fundamental concepts and issues related to second, bilingual, and foreign language instruction by developing students' knowledge of second language acquisition, approaches to language teaching, computer-assisted teaching, and pedagogical design and implementation in the language classroom. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI417H5, LIN417H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5

ITA437Y5 History of the Italian Language (HUM)
The linguistic transition from Latin to Italian, the "Questione della lingua," developments in the 18th and 19th centuries, contemporary trends. Reading and linguistic analysis of representative texts. [48L]
Prerequisite: ITA200Y5
Recommended Preparation: Knowledge of Medieval/Renaissance and modern Italian literary culture.

LTL456H5 Sociolinguistics and Second Language Teaching and Learning (HUM)
This course considers the impact on variant use by second language learners exerted by linguistic and extra-linguistic factors, such as the surrounding linguistic context, age, sex, style, and curricular and extra-curricular exposure. Implications are drawn for second language teaching, including deciding what registers and variants to teach and what activities to employ. Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FGI456H5, LIN456H5
Prerequisite: LTL225Y5/ FRE225Y5, FRE280Y5
**LTL486H5 Teaching and Learning Cross-cultural Communication (HUM)**

This course examines cross-cultural language use by second language learners from both a theoretical and pedagogical perspective. Topics addressed include the role of pragmatic transfer between native and target languages, individual differences, learning context, and instruction in the development of second language pragmatic competence. **Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian).** [24L]

**Exclusion:** LIN486H5  
**Prerequisite:** FRE280Y5, LTL225Y5/ FRE225Y5 plus one additional course from Language Teaching and Learning Group.

**LTL488H5 Principles and Strategies for Online Second Language Course Design (HUM)**

This course will conduct a critical appraisal of online course materials, and formulate appropriate pedagogical strategies for their exploitation. This course is taught in English and is open to students from other disciplines. **Students enrolled in this course who submit all written work in the language they are studying (French/Italian) may petition the department for credit towards a Specialist (French or Italian) or Major (French/Italian).** [24L]  
**Prerequisite:** FGI225Y5/ LTL225Y5/ FRE225Y5, FRE280Y5  
**Recommended Preparation:** LTL225Y5/ FRE225Y5, FRE280Y5

**ITA493H5 Special Topics in Italian Language Teaching and Learning: The Language Classroom (HUM)**

An individual study in which students integrate and apply their understanding of Italian Studies and Language Teaching & Learning by observing, actively participating in, and reflecting on the teaching and learning process in an Italian language course, under the supervision of an experienced instructor/mentor. Together with the mentor, the student will develop and implement strategies, based on current pedagogical findings, for the successful execution of lesson plans and grammatical and communicative activities in a foreign language classroom.  
**Prerequisite:** ITA350Y5

**ITA494H5 Special Topics in Italian Language Teaching and Learning: Theatre, Drama, and Culture (HUM)**

An individual study in which students integrate and apply their understanding of Italian Studies and Language Teaching & Learning by observing, actively participating in, and reflecting on the teaching and learning process in an Italian theatre course, under the supervision of an experienced instructor/mentor. Together with the mentor, students will develop and implement strategies, based on current pedagogical findings, for the successful execution of language-centered drama activities (ranging from improvisation to full-length plays) in the classroom.  
**Prerequisite:** ITA350Y5

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**Latin American and Caribbean Studies (HBA)**

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This program offers an exploration of Latin America and the Caribbean and their diasporas, drawing on a range of disciplinary approaches. Through diverse course offerings, students can study Latin American and Caribbean history, languages, politics, societies, cultures, religions and geographies. The program is geared toward building an engagement with the region(s) as well as with their communities in Canada and the United States. Students may take courses offered by a number of departments that focus on Latin America and the Caribbean. As a complement to the student’s other chosen programs, the Minor in Latin American and Caribbean Studies can prepare students for careers in a competitive global context in which the greater part of the Western Hemisphere plays an increasingly important role.

**Students should also review the Degree Requirements (Page 29) section prior to selecting courses.**

**For courses in this area see:**  
ANT Anthropology (page 40)  
DTS Diaspora and Transnational Studies (page 144)  
ENG English (page 166)  
FAH Fine Art History (FAH) (page 51)  
FRE French (page 210)  
FSL French (page 210)  
HIS History (page 238)  
LIN Linguistics (page 280)  
POL Political Science (page 319)  
SOC Sociology (page 341)  
SPA Language Studies (page 275)  
VCC Visual Culture and Communication (page 371)  
WGS Women and Gender Studies (page 375)

**Minor Program ERMIN0562 Latin American and Caribbean Studies (Arts)**

4.0 total credits, including 1.0 at the 300/400 level. While study of a relevant language is encouraged, the minor program does not have a language requirement.
First Year: 0.5 credit in HIS290H5. It is recommended that this course be taken in the first year.

Higher years: Courses that can be counted toward this program are drawn from a range of offerings in the Humanities and Social Sciences at UTM. In order to complete the program, students will be required to take a total of 3.5 credits in at least two distinct disciplines selected from the list below:

- Art History (FAH): FAH356H5
- Geography (GGR): GGR369H5
- History (HIS): HIS290H5, HIS330H5, HIS390H5, HIS391H5, HIS454H5, HIS490H5,
- Language Studies (FRE, FSL, SPA): FRE280Y5, FSL205Y5, SPA100Y5, SPA220Y5, SPA275H5, SPA285H5, SPA320Y5, SPA323H5
- Linguistics (LIN): LIN366H5, LIN466H5
- Political Science (POL): POL438Y5
- Sociology (SOC): SOC253H5

In consultation with the Academic Counsellor of the Department for Historical Studies and depending on the focus of the course, the following courses may qualify on a year-to-year basis:

- Anthropology (ANT): ANT310H5, ANT320H5
- Diaspora and Transnational Studies (DTS): DTS201H5
- English (ENG): ENG370H5, ENG435H5, ENG436H5
- History (HIS): HIS494H5
- Language Studies (FRE, FSL, SPA): FRE391H5
- Political Science (POL): POL112H5, POL113H5, POL114H5, POL200Y5, POL218Y5, POL320Y5, POL487H5
- Visual Studies (VCC): VCC306H5, VCC406H5
- Women and Gender Studies (WGS): WGS200Y5, WGS368H5, WGS369Y5, WGS350H5, WGS370H5, WGS450H5

Linguistics (HBA)

Department of Language Studies

Professors
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M. Pirvulescu, B.A., M.A., Ph.D.
K. Rehner, B.A., B.Ed, TEIL, M.Ed, Ph.D.
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Linguistics is the scientific study of language. Its aim is to develop an understanding of how languages work and how languages use disparate means for the same effects.

An account of the unity and the variety of human language involves many different approaches, including grammatical theory and its application to data, language divergence and convergence in space and time, the sociocultural stratification of linguistic systems, normal and pathological language behaviour, and language learning.

Undergraduate linguistics is an essential component of a liberal education because any academic discipline that considers human nature – anthropology, communication, literature, language studies, neuroscience, philosophy, psychology, teaching and learning, among others – must have something to say about the nature of language, how it works, and how it is used.

Linguistics is equally essential in artificial intelligence research and related areas in the computing sciences such
as speech recognition, natural language processing and computer mediated language learning. Linguistics also provides the foundation for further research and graduate studies in discipline-related areas. It also provides a valuable background for people interested in pursuing a career education (teaching language, teacher education, or educational research), rehabilitative medicine such as audiology or speech therapy, or in areas such as language protection, documentation, and preservation, lexicography (writing, editing, or compiling dictionaries), law, publishing, advertising, and careers in the public service.

**Students cannot be enrolled in the Linguistics Studies Major and Linguistics Studies Minor programs simultaneously.**

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

**For courses in this area see:**
- ANT Anthropology (page 40)
- FRE French (page 210)
- ITA Italian (page 251)
- JAL Linguistics (page 280)
- LIN Linguistics (page 280)
- LTL French (page 210)
- PHL Philosophy (page 305)
- PSY Psychology (page 332)

**Major Program ERMAJ1850 Linguistic Studies (Arts)**

8.0 credits are required including LIN101H5 & LIN102H5/ LIN100Y5

*No more than 1.5 credits can be double counted towards two programs of study in Linguistics.*

**First Year:** LIN101H5, LIN102H5 (or LIN100Y5)

**Upper Years:**
2. Language requirement: 1.0 credit in a language course. This credit should involve the same language and must be taken either concurrently with LIN101H5 and LIN102H5 (or LIN100Y5) or after their completion. The language must be one other than the student’s first language; English language courses are excluded.
3. Upper Year requirements: 1.5 credits from the following (choose one course from three of the following categories):
   - (a) Language acquisition: LIN356H5/ LIN358H5
   - (c) Language contact and change: LIN360H5/ LIN366H5/ LIN376H5/ LIN460H5/ LIN476H5
   - (d) Linguistic theory: LIN331H5/ LIN322H5/ LIN406H5

4. The remaining 2.0 credits to be chosen from those courses not yet taken from the list above, or from the following list: ALL 300/400 level LIN courses, FRE474H5, FRE489H5, ITA437Y5, JAL353H5, JAL355H5, LTL488H5, PSY315H5, PSY374H5, PSY376H5, PHL350H5, PHL451H5, ANT382H5, ANT358H5.

Students must have a minimum of 0.5 credits at the 400 level. No more than 1.0 credits outside of LIN offerings (i.e. FRE, ITA) can be used towards program requirements.

**Minor Program ERMIN0506 Linguistic Studies (Arts)**

4.0 credits are required.

*No more than 1.5 credits can be double counted towards two programs of study in Linguistics.*

**First Year:** LIN101H5 and LIN102H5/ LIN100Y5

**Upper Years:** The remaining courses to be chosen from the following list:

1. Minimum 1.0 credit from the following list: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN247H5, LIN256H5/ JAL253H5, LIN258H5.
2. Minimum 1.0 credit from the following list: 1.0 credit from any 300 and 400 level LIN or JAL courses.
3. 1.0 credit from any remaining courses listed in (1) or (2) or from the following list: FRE474H5, FRE489H5, ITA437Y5.

*Note:* Some of the courses listed above have prerequisites which would not count towards this program.

**Minor Program ERMIN1200 English Language Linguistics (Arts)**

4.5 credits are required.

*No more than 1.5 credits can be double counted towards two programs of study in Linguistics.*

**Foundation:** LIN101H5 and LIN102H5 (or LIN100Y5), LIN204H5, LIN205H5

**Upper Years:**
1. 1.5 credits: LIN203H5, LIN228H5, LIN256H5/ JAL253H5/ LIN258H5.
2. 1.0 credit at the 300 or 400 level to be selected from the following list: LIN310H5, LIN311H5, LIN335H5, JAL353H5, JAL355H5, LIN410H5, LIN486H5.
Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

**LIN101H5 Introduction to General Linguistics: The Sounds of Language (HUM)**
Lectures on fundamental principles of phonetics, phonology, and morpho-phonology with illustrations from English and a broad spectrum of other languages. Practice in elementary analytic techniques and applications from acquisition, historical linguistics, psycholinguistics, and sociolinguistics.
**REQUIRED COURSE FOR ANY PROGRAM IN LINGUISTICS. [24L, 12T]**
*Exclusion: LIN100Y5, LIN100Y1, LINA01H3, LINA02H3.*
*Prerequisite: This course has no prerequisites. It can be taken independently, before, or after LIN102H5.*

**LIN102H5 Introduction to General Linguistics: Words, Sentences, their Structure and Meaning (HUM)**
Lectures on fundamental principles of morpho-syntax, syntax, and semantics with illustrations from English and a broad spectrum of other languages. Practice in elementary analytic techniques and applications from acquisition, historical linguistics, psycholinguistics, and sociolinguistics.
**REQUIRED COURSE FOR ANY PROGRAM IN LINGUISTICS. [24L, 12T]**
*Exclusion: LIN100Y5, LIN100Y1, LINA01H3, LINA02H3.*
*Prerequisite: This course has no prerequisite. It can be taken independently, before, or after LIN101H5.*

**LIN200H5 Introduction to Language (HUM)**
A general-interest course on language. The structure of language; the social and psychological aspects of language; how language changes over time, with special reference to the history of English. Also origin of language, writing systems, and language acquisition. [24L, 12T]
*Exclusion: LIN100Y5, LIN101H5, LIN102H5, LIN100Y1, LINA01H3, LINA02H3, LIN200H1.*
*This course will not count towards any Linguistics program of study. It will only count as an elective.*

**LIN203H5 English Words through Space and Time (HUM)**
An analysis of English words, the history of their development and the variation in their use across the English-speaking world. Topics include the history and structure of words, the relation between sound and spelling, dialect variation and the development of dictionaries. **This course does not count towards the Linguistic Studies minor or major program. [24L, 12T]**
*Exclusion: LGGB18H3, LIN203H1.*
*Recommended Preparation: LIN101H5, LIN102H5 (or LIN100Y5).*

**LIN204H5 English Grammar I (HUM)**
Students will learn about fundamental grammatical concepts, focusing on the major grammatical categories in English and how they interact at the phrase level. They will be introduced to the main constituents of English sentences and learn about the basic relationship between tense, aspect, and modality. Students will learn to apply this knowledge as a tool to think analytically about English, evaluating various registers and styles, and gaining an awareness of their own style of speaking and writing.
Depending on the instructor, this course may be delivered fully or partially online. Students are required to take the final exam at the UTM campus. Arrangements will be made for proctored exam writing for students who are registered at Ontario university locations outside of the GTA. **This course does not count towards the Linguistic Studies minor or major program.**
*Prerequisite: LIN204H1*

**LIN205H5 English Grammar II (HUM)**
This course examines complex methods of sentence construction that will enable a critical analysis of English sentence structure, word and sentence meanings, and language function in communicative contexts. This course is particularly suitable for students who wish to improve their academic writing skills or who wish to teach English.
**This course does not count towards the Linguistic Studies minor or major program. [24L, 12T]**
*Prerequisite: LIN204H5*

**LIN228H5 Phonetics (HUM)**
Investigation of the sounds most commonly used in languages from an articulatory and acoustic point of view, with practice in their recognition and production. [24L, 12T]
*Exclusion: LIN228H1, LINB09H3*
*Recommended Preparation: LIN101H5 (or LIN100Y5)*

**LIN229H5 Sound Patterns in Language (HUM)**
This course explores the nature and organization of phonological systems (i.e. the sound structure of languages) with practical work in analysis. [24L, 12T]
*Exclusion: LIN229H1, LINB04H3.*
*Prerequisite: LIN101H5/ LIN228H5 (or LIN100Y5).*

**LIN231H5 Morphological Patterns in Languages (HUM)**
This course explores the nature and organization of morphological systems (word formation rules, organization of paradigms, etc.) with practical work in analysis. [24L, 12T]
*Exclusion: LIN231H1.*
*Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5).*
LIN232H5 Syntactic Patterns in Language (HUM)
This course explores the nature and organization of syntactic systems; their relation to semantic systems and the linguistic organization of discourse; practical work in analysis. [24L, 12T]
Exclusion: LIN232H1.
Prerequisite: LIN102H5 (or LIN100Y5).

LIN247H5 Semantics and Pragmatics (HUM)
This course provides an introduction to the study of meaning in natural language and its relation to syntactic structure and discourse context. Topics include assertion, presupposition, implicature, thematic roles, predication, quantification, scope and the representation of discourse structure. [24L, 12T]
Exclusion: LIN347H5, LIN241H1.
Prerequisite: LIN102H5 (or LIN100Y5).

JAL253H5 Language and Society (SSc)
The study of the relationship between language and society with the goal of understanding social structure through language; major themes are multilingual societies, including pidgin and creoles, and social interaction through speech. (Given by the Departments of Anthropology and Linguistics) [24L, 12T]
Exclusion: ANT253H1, JAL253H1
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), or ANT206H5.

LIN256H5 Sociolinguistics (SSc)
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. [24L, 12T]
Exclusion: LIN203H3 and LIN251H1.
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), or ANT206H5.

LIN258H5 Introduction to Psycholinguistics and Language Acquisition (HUM)
This course is a general introduction to psycholinguistics and language acquisition. It covers topics such as the neurobiological basis of language, the mental lexicon, memory, speech production/perception, sentence comprehension, and first/second language acquisition and bilingualism. The course includes a tutorial introducing students to the methods and tools used for quantitative research in psycholinguistics and language acquisition. [24L, 12T]
Exclusion: PSY374H5, PLIC55H3, JLP374H1
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5).

LIN299Y5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply by early March. See Experiential Learning Programs (Page 34) for more details.

LIN310H5 Contrastive Linguistics (HUM)
An introductory survey of the theory and practice of contrastive analysis. How are languages compared with respect to their phonological, morphological, syntactic and semantic structure? How are lexicons compared? Focusing on contrastive procedures, students will examine a number of case studies and then apply this knowledge to produce their own analysis. Some consideration will be given to the usefulness of contrastive analysis to foreign language teaching. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5) and 1.0 credit in LIN at the 200-level.

LIN311H5 Linguistics and Poetics (HUM)
Developments in linguistic theory sprouted diverse approaches to linguistic analysis of literature, from early formalism and structuralism to cognitive linguistics and functional linguistics. Survey of major trends and issues in linguistic poetics includes essential readings, such as works of R. Jakobson, M.A.K. Halliday, R. Barthes, and practice in linguistic analysis of literary texts. [24L, 12T]
Exclusion: LIN211H5
Prerequisite: LIN101H5, LIN102H5, and LIN228H5/ LIN229H5

LIN322H5 Phonological Theory (HUM)
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.) [24L, 12T]
Prerequisite: LIN229H

LIN328H5 Acoustic Phonetics (HUM)
This course provides an introduction to the scientific study of speech production, speech perception, and hearing. Course work emphasizes the practical application of this knowledge to case studies in speech language pathology and clinical audiology. [24L, 12T]
Exclusion: LIN323H1
Prerequisite: LIN228H5 and LIN229H5.
LIN331H5 Syntactic Theory (HUM)
An introduction to the foundations and formal framework of current generative grammar, concentrating on Chomsky’s Minimalist theory. (Students who want to pursue graduate studies in linguistics are strongly advised to include this course in their program.) [24L, 12T]
Prerequisite: LIN232H

LIN335H5 Phonetics and Phonology in English (HUM)
The aim of the course is to provide an in-depth description of the phonetic and phonological system of English with special emphasis on prosodic aspects (word and sentence stress, rhythm and intonation). The course also discusses dialect differences in sound structure, and issues in the acquisition of the English phonological system. [24L, 12T]
Prerequisite: LIN228H5 or LIN229H5

JAL353H5 Discourse Analysis/Conversation Structures (SSc)
The aims of this course are to introduce students to the close and detailed observation of ordinary conversational interaction, and to some of the main ways in which such interaction is orderly and organized. The course is not a survey of different approaches to the study of interaction or to socio-linguistics. Rather, it employs one sort of empirical material – naturalistic audio and video tape recordings and transcriptions of ordinary interaction – and one way of dealing with such material to introduce students to the practice of close observation of conversation and to some of its results. The focus is on students developing the capacity to discern orderliness and method in the details of everyday interaction, and beginning the path to competent and productive independent research in this area. [24L, 12T]
Exclusion: CCT307H5, JAL353H1
Prerequisite: ANT 206Y5/ LIN 256H5/ JAL 253H5

JAL355H5 Language and Gender (SSc)
Ways in which women and men differ in their use of language and in their behaviour in conversational interaction: ways in which language reflects cultural beliefs about women and men. [24L, 12T]
Exclusion: JAL355H1

LIN356H5 The Acquisition of Grammar in Different Contexts (HUM)
This course examines language acquisition by different populations: first language acquisition by normal, deaf and impaired children; first language re-acquisition by aphasic patients; second language acquisition by children and adults. The question that we will ask is the following: what are the similarities and differences across acquisition contexts? Comparative theoretical approaches will be examined in order to gain an insight into the following topics: evidence for innate linguistic endowment, the stages in the development of grammar, the role of input. An important component will be the analysis of both spontaneous corpora and experimental work. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), plus 0.5 credit at the 200-level (not including LIN204, LIN205, LIN203, LIN200), or 0.5 credit equivalent at the 300-level in PSY.
Recommended Preparation: LIN258H5

LIN358H5 Bilingualism and Multiple Language Acquisition (HUM)
This course examines simultaneous and successive second (and multiple) language acquisition by children. We will look at such topics as the bilingual brain, the nature of the input, age constraints on language acquisition, language separation and cross-linguistic influences, schooling in a second language, and various methods used in the study of bilingualism in individuals. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), plus 0.5 credit at the 200-level (not including LIN204, LIN205, LIN203, LIN200), or 0.5 credit equivalent at the 300-level in PSY.
Recommended Preparation: LIN258H5

LIN360H5 Historical Linguistics (HUM)
This course will provide a historical perspective on the study of languages with a focus on processes of phonetic, morphological, syntactic and semantic evolution, on methods of historical reconstruction, such as the comparative method and internal reconstruction, and on major sound laws. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5) and LIN229H5.
Recommended Preparation: LIN231H5/ LIN232H5
LIN366H5 Contact Languages: Pidgins, Creoles and Mixed Languages (HUM)
This course examines languages recently created by means of contact between languages of different socio-economic status. Analysis of these new languages is of particular interest to linguistic theory since it offers insight on the construction of linguistic systems, language evolution and on how language is acquired in such a context. Emphasis is given to the description and analysis of French-based pidgins and Creoles spoken in the Caribbean and Indian Ocean region. [24L, 12T]
Prerequisite: 1.0 credit of any of the following: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN247H5, LIN256H5/ JAL253H5, LIN258H5.

LIN376H5 Introduction to Romance Linguistics (HUM)
This course explores the linguistic features and characteristics of major Romance languages such as French, Italian, Spanish and Romanian. Attention will be given to the phonological, morphological and syntactic components of the languages to be studied, with emphasis on both similarities and differences. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5) and LIN229.
Recommended Preparation: LIN231/LIN232

LIN380H5 Theoretical Issues in Second Language Teaching and Learning (HUM)
This course examines theoretical research on adult second language learning and the resultant implications for second language teaching. Topics include learning styles and strategies, age, affect, communicative competence, and sociolinguistics. Links are drawn to teaching practices, including error correction, materials selection, and order and method of presentation. [24L]
Exclusion: FGI380H5/ LTL380H5
Prerequisite: 1.0 credit of any of the following: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN247H5, LIN256H5/ JAL253H5, LIN258H5.

LIN399Y5 Research Opportunity Program (HUM)
This course provides senior undergraduate students who have developed some knowledge of research methods used in the discipline of Linguistics to work in the research project of a U of T Mississauga professor for course credit. Enrolled students have the opportunity to become involved in original research, develop their research skills, and share in the excitement and discovery of acquiring new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter sessions are posted on the ROP website in mid-February; students are invited to apply at that time. See Experiential Learning Programs (Page 24) for more details.
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), and 1.0 credit from any of the following: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN247H5, JAL253H5, LIN256H5, LIN258H5.

LIN406H5 Language Diversity and Language Universals (HUM)
This course examines cross-linguistics typological features found in the languages of the world. Special attention is given to describing phonological, morphological or syntactic patterns found cross-linguistically. The goal of the course is to draw on the range of variation in order to uncover language universals. [24L]
Prerequisite: LIN232H5
Recommended Preparation: LIN231H5

LIN410H5 Critical Reading and Writing in English Linguistics (HUM)
The goal of the course is to develop skill in academic writing through the analysis of representative articles concerning classic and current issues in English linguistics. Careful reading and discussion will lead students to construct concise summaries of the texts and to critically evaluate them using cohesive, logical arguments. [24L, 12T]
Prerequisite: LIN101H5, LIN102H5, LIN205H5, plus 0.5 credit at the 200-level in LIN.
Recommended Preparation: LIN205H5

LIN417H5 Second Language Pedagogy (HUM)
This course offers a comprehensive survey and analysis of fundamental concepts and issues related to second, bilingual, and foreign language instruction by developing students’ knowledge of second language acquisition, approaches to language teaching, computer-assisted teaching, and pedagogical design and implementation in the language classroom. [24L]
Exclusion: FGI417H5/ LTL417H5
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), plus 0.5 credit in LIN at the 300-level

LIN456H5 Sociolinguistics and Second Language Teaching and Learning (HUM)
This course considers the impact on variant use by second language learners exerted by linguistic and extra-linguistic factors, such as the surrounding linguistic context, age, sex, style, and curricular and extra-curricular exposure. Implications are drawn for second language teaching, including deciding what registers and variants to teach and what activities to employ. [24L]
Exclusion: FGI456H5/ LTL456H5
Prerequisite: LIN256H5/ JAL253H5

LIN460H5 Special Topics in Language Change (HUM)
This course examines current issues of theoretical and/or empirical relevance in linguistics with special reference to phenomena involving language change. Depending on the instructor, the focus of the course may be more oriented towards phonology, morpho-syntax, semantics, or the lexicon.
Prerequisite: LIN231H5/ LIN232H5/ LIN247H5, and LIN256H5/ JAL253H5/ LIN258H5
Recommended Preparation: LIN360H5/ LIN376H5/ LIN366H5
LIN466H5 Topics in Creole Linguistics (HUM)
An advanced seminar on current issues of theoretical relevance in linguistics with special reference to Creole languages, in particular their emergence and their linguistic properties compared to those of the contributing languages. Depending on the instructor, the course may emphasize on French-based, English-based or Portuguese-based Creoles. [24L]
Prerequisite: LIN229H5, LIN231H5/ 232H5/ 366H5

LIN468H5 Research Methods in Linguistics (HUM)
Introduction to the main methods, tools and techniques used in the analysis, interpretation and presentation of linguistic data. Topics may include research in the areas of general linguistics, language acquisition, psycholinguistics, sociolinguistics and dialectology. This course involves a practical component where students will apply skills learned in order to carry out their own study. Note that a background in statistics is NOT required for this course. [36L]
Prerequisite: LIN101H5, LIN102H5 (or LIN100Y5), plus 0.5 credit in LIN at the 300-level

LIN474H5 Teaching and Learning Varieties of Canadian French (HUM)
This course offers students the opportunity to become familiar with the primary research methods used in sociolinguistic studies, with how sociolinguistics helps to understand the properties of Canadian French, and with the pedagogical implications arising from sociolinguistic research on Canadian French. This course will contain a research-based component. [24L]
Exclusion: FRE374H5, LIN374H5, FRE474H5
Prerequisite: LIN256H5/ JAL253H5 and reading ability in French.

LIN476H5 Topics in Romance Linguistics (HUM)
An advanced seminar on current issues of theoretical relevance in Linguistics with special reference to Romance languages such as French, Italian, Spanish and Romanian. Depending on the instructor, focus of the course may be more oriented towards morpho-phonology or morpho-syntax. [24L, 12T]
Prerequisite: LIN376H5 or permission of the instructor.

LIN477H5 Topics in Natural Language Processing (HUM)
A brief introduction to Linguistics and Computing followed by applications to computational understanding of text and language. This course is cross-disciplinary, tools and project based; it teams Linguistics and Computer Science students in projects exploring novel applications of Natural Language Processing. Example topics include text summarization, classification and sentiment analysis using tools such as Python and the NLTK with applications to understanding the web and social media. Topics and applications will vary by instructor. Prerequisite: For LIN program students: LIN232H5/ LIN247H5/ LIN347H5/ JAL353H5 plus 1.0 additional credit at the 300 level. For CS program students: CSC207H5, STA256H5 and/or permission from the instructor.

LIN481H5 Introduction to Analysis and Argumentation (HUM)
Practice in analyzing and constructing hypotheses and developing sound linguistic argumentation. Emphasis is on the structure of arguments based on critical evaluation of representative articles rather than on the analysis of a particular language. [24L]
Exclusion: LIN481H1
Prerequisite: LIN 229H5, LIN 232H5, LIN231H5/ LIN247H5/ LIN256H5/ LIN258, plus 0.5 credit in a 300-level LIN course.

LIN486H5 Teaching and Learning Cross-cultural Communication (HUM)
This course examines cross-cultural language use by second language learners from both a theoretical and pedagogical perspective. Topics addressed include the role of pragmatic transfer between native and target languages, individual differences, learning context, and instruction in the development of second language pragmatic competence. [24L]
Exclusion: LTL486H5
Prerequisite: LIN256H5/ JAL253H5/ LIN258H5

LIN495Y5 Individual Project (HUM)
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: One half course at the 300 level in LIN.

LIN496H5 Individual Project (HUM)
A research or reading project undertaken by the student under the supervision of a staff member. Prerequisite: One half course at the 300 level in LIN.

LIN498H5 Individual Project (HUM)
A research or reading project undertaken by the student under the supervision of a staff member. Prerequisite: One half course at the 300 level in LIN.
Logic (HBA)

Major Program ERMAJ1736 Logic (Arts)

This program is no longer offered. Students currently enrolled in the program will be allowed to continue.

Management (HBA, BBA)

Professors

- V. Aivazian, B.S., M.A., Ph.D.
- P. Akey, B.Com., M.Res.
- F. Chen, B.A., M.A., Ph.D.
- L. Derksen, B.Sc., M.Sc., M.Res.
- L. Florence, M.B.A., M.Sc., Ph.D.
- A. Galasso, B.A., M.A., Ph.D.
- H.P. Gunz, B.Sc., D.Phil, Ph.D., Dp.B.A.
- J. Hirsh, H.B.Sc., M.A., Ph.D.
- T. Hossain, B.A., B.S., Ph.D.
- S. Kang, B.Sc., M.A., Ph.D.
- L. Kramer, B.B.A., Ph.D
- N. Lacetera, B.S., Ph.D.
- P. Landry, B.S., M.A., Ph.D.
- Y. Li, B.Sc., M.B.A., Ph.D.
- M. Osborne, B.A., Ph.D.
- A. Park, M.Phil., Dipl.Wirt.Math, Ph.D.
- C. Seguin, M.B.A., C.G.A.
- S.M. Toh, B.B.S., Ph.D.
- M.M. Tombak, B.A.Sc., M.B.A., A.M., Ph.D.
- G. Trippen, M.Sc., Ph.D.
- G. Virag, B.A., M.A., Ph.D.
- D. Vyas, B.E., M.Sc., Ph.D.
- M. Ye, B.A., M.A., Ph.D.

Chair
Professor M.M. Tombak

Associate Chair
Professor S.M. Toh

Administrator and Assistant
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905-828-3814

Assistant Director, Operations
Heather Hines
Room 2272, Kaneff Centre
905-569-4972

Careers Officer
Natasha Walli
Room 207, Kaneff Centre
905-569-4917

Director, Undergraduate Programs
Professor L. Florence
There are three undergraduate program streams in Management at the University of Toronto at Mississauga: the Commerce Programs, the BBA Program and the Management Major Program.

1. **Commerce Programs [BCom and HBA/HBSc (Major)]**
   The Commerce programs combine economics and the various sub-disciplines of business and management enabling students to develop analytical skills and gain knowledge of institutions. This background is useful for solving problems and making decisions in business and government environments. Commerce students have the opportunity to participate in an international exchange program during third year.
   Several Specialist programs are offered within Commerce: Accounting, Finance, Marketing. The Specialist Program in Accounting allows students to complete the prerequisite studies for professional accounting qualifications (e.g. CPA) within the BCom. Commerce graduates frequently become professional accountants, economists, actuaries, financial analysts, marketing analysts, managers of firms and government, or proprietors of small businesses. Some commerce students choose to do post-graduate studies; law schools and MBA programs have been favoured by recent graduates.

2. **The Management Programs (BBA)**
   The Management programs prepares students to become effective members of organizations. Drawing on a balanced offering of rigorous intellectual frameworks from the social sciences, it covers the nature and working of organizations, and managerial functions. The programs provide students with a good understanding of the major aspects of management and helps them to acquire an integrated set of management skills. The Human Resource Management and Industrial Relations (HRMIR) Specialist provides students with a good grounding in the management disciplines and a specialized education in HRMIR. It will allow students to complete the prerequisites for the CHRP designation.

3. **The Management Major Program (HBA/HBSc)**
   The Management Major program leads to either an Honours BA or an Honours BSc degree, depending on your second discipline. For example, Chemistry and Management will prepare you for a career in the chemical industry; English and Management for publishing, Psychology and Management or Sociology and Management for a wide range of careers in business or commerce, etc.

**Professional Skills Development Program (PSDP)**
The Professional Skills Development Program (PSDP) has been created exclusively for Commerce and BBA/Management students as a way to encourage skill development beginning in the second year through to final year.

The information and skills gained through participation in this program will help students to:

- Strengthen technical and soft skills necessary for workplace success.
- Increase awareness of marketability on the job market and confidence in abilities
- Effectively make the transition from school to the workplace
- Manage their career by navigating through the working world more effectively

By participating in the program, students will be officially recognized and rewarded for their co-curricular activities through a transcript notation. Students will need to earn a minimum of at least 46 PSDP skill points over the course of their academic program. Upon completion of this requirement, students can submit an application to the PSDP Advisory Committee for transcript notation consideration. For more information and program details, please visit the Commerce or Management Blackboard organization or www.utm.utoronto.ca/management

Enrolment in Commerce and Management programs, and all 200+ level Management courses, is restricted.

"MGD" Management Courses are available to students in the Digital Enterprise Management (CCIT) program and, if space is available, to Commerce and Management program students.

"MGM" Management Courses at the 200+ level are available only to students in the Management programs.

"MGT" Management Courses at the 200, 300, and 400 levels are available only to students in the Commerce programs.

MGT252H5, 260H5, 262H5, 353H5, 363H5, 371H5, 374H5, 452H5, 453H5, 455H5, 461H5, 480H5, 491H5, 493H5 are open to Management students.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.
For courses in this area see:
- ANT Anthropology (page 40)
- ECO Economics (page 153)
- ERI Erindale Courses (page 190)
- GGR Geography (page 224)
- HIS History (page 238)
- MGD Communication, Culture, Information and Technology (page 115)
- MGM Management (page 288)
- MGT Management (page 288)
- SOC Sociology (page 341)
- STA Statistics (page 356)
- WGS Women and Gender Studies (page 375)

Specialist Program ERSPE1882 Human Resource Management and Industrial Relations

Within a BBA degree, 14 credits are required.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria:

1. Prerequisite Courses: MGM101H5 (63%), MGM102H5 (63%); ECO100Y5 (63%) in a minimum of 4.0 credits.
2. Cumulative Grade Point Average (CGPA):
   Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.
3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Note: Transfer Credits Students applying to Management with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T. The CGPA is based on courses taken for credit.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

Application for admission to the program for September is made during the Subject POSt request periods in March/April. Contact Management Department for dates.

First Year: (2.0 credits) MGM101H5, 102H5; ECO100Y5
Upper Years:
- Core courses (1.5 credits): MGT262H5, MGM301H5, 400H5

- Statistics (0.5 credits): STA218H5
- Electives (select 1.5 credits): ANT350H5; ECO261H5; HIS313H5, 314H5; SOC227H5, 236H5, 263H5, 361H5; GGR252H5

Specialist Program ERSPE2431 Management

Within the BBA degree, 12 credits are required.

Limited Enrolment – Enrolment in this program is limited to students who meet the following criteria:

1. Prerequisite Courses:
   MGM101H5 (63%), MGM102H5 (63%);
   ECO100Y5 (63%) in a minimum of 4.0 credits.
2. Cumulative Grade Point Average (CGPA)
   Each year the Management Department sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.
3. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Note: Transfer Credits Students applying to Management with transfer credits must meet these requirements:

1. The CGPA must meet the cut off in a minimum of 4.0 credits taken at U of T. The CGPA is based on courses taken for credit.
2. The combined CGPA of all courses taken at another institution plus U of T courses must meet the minimum cut off for the year in which you are applying.

Application for admission to the program for September is made during the Subject POSt request periods in March/April. Contact Management Department for dates.

First year: (2.0 credits) MGM101H5, 102H5; ECO100Y5
Upper Years:
- Core courses (1.5 credits): MGT262H5, MGM301H5, 400H5
- Statistics (0.5 credits): STA218H5
- Electives (select 1.5 credits): MGT260H5, 452H5, 453H5, 454H5, 455H, 461H5, 480H5, 491H5, 493H5, 494H5; MGD421H5, 422H5, 423H5, GGR252H5

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Major Program ERMAJ2431 Management

Note: This program must be taken as part of an Honours degree.

8.0 or 8.5 credits are required to be taken with another Major, which can be in any area EXCEPT Commerce, Digital Enterprise Management, Economics or Human Resource Management and Industrial Relations.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

IMI400H5 Innovation and Entrepreneurship (SSc)
Students in this course will analyze business cases, read academic studies, and interact with guest lecturers to gain familiarity with the major challenges that entrepreneurs encounter in successfully bringing innovations to market. Topics to be addressed include market and industry analysis, managing value chains, competing and positioning in the marketplace, negotiating for and obtaining financial resources, defining a business model, writing a business plan, and growth and exit strategies. In addition to more "traditional" lectures, there will be a number of guest lectures, especially in the second half of the course, provided from practitioners in different areas of interest, including current entrepreneurs, technologists, early-stage investors, and IP lawyers. [24L, 12T]
The course is open to 2nd-, 3rd- and 4th-year students in all programs and does not require any prerequisites.
Exclusion: MGT494H5

MGM101H5 Introduction to Management Functions (SSc)
This course shows how the principal management disciplines provide analytical tools for understanding organizations and their management, how the disciplines inter-relate and how they underpin the activities of organizations. [24L]
Exclusion: MGTA02Y3, MGTA01H3, MGTA03H3, RSM100Y1

MGM102H5 Management in a Changing Environment (SSc)
This course introduces the environment in which managers operate, and to the managerial role. It explores the Canadian business system, the economic, technological and social trends that are bringing about change in the system, and the basic principles of managing in this environment. Not open to students enrolled in the 3rd or 4th year of the Commerce Major or Specialist program. [24L, 6T]
Exclusion: MGTA02Y3, MGTA04Y3, MGTA04H3, RSM100Y1
Prerequisite: MGM101H5(63%)

MGM221H5 Accounting Fundamentals I (SSc)
The objective of this course is to expose students to the fundamentals of accounting and financial reporting from a user perspective. Students will learn to prepare, read and understand financial statements as well as to analyze them for information content. [24L]
Exclusion: MGTA02H5, MGTA01H1, MGAB01H3, RSM219H1
Prerequisite: MGM(101H5, 102H5)

First year: (2.0 credits) MGM101H5, 102H5; ECO100Y5

Upper Years:

- Core courses (1.5 credits): MGT262H5, MGM301H5, 400H5
- Management Disciplines (3.0 credits): MGM221H5/ MGT120H5, MGM222H5, 230H5, 390H5; MGT252H5, 371H5
- Statistics (0.5 credits): STA218H5
- Electives (select 1.0 credits): MGM320H5, 332H5; MGT260H5, 353H5, 363H5, 452H5, 453H5, 455H5, 461H5, 480H5, 491H5, 493H5, 494H5; MGD421H5, 422H5, 423H5

The program requirements in effect at the time students are admitted to the program must be met in order to fulfill the degree requirements.
MGM222H5 Accounting Fundamentals II (SSc)
Management accounting reports aid the decision-making process by providing management with pertinent financial, as well as nonfinancial, information, such as product service costing information, information to assist in planning and controlling operations, and special reports and analyses to support management’s decisions. This course will provide you with the tools to understand and use management accounting information for decision making, planning and control. [24L, 12T]
Exclusion: MGM223H5, RSM222H1, MGAB03H3
Prerequisite: MGM(101H5, 102H5), MGM221H5/ MGT120H5

MGM230H5 Finance (SSc)
This course analyzes the financial decision-making processes of individuals and firms. It emphasizes the institutional aspects of finance, focusing on the characteristics of financial instruments and institutions in capital markets. [24L, 12T]
Exclusion: CCT321H5; MGT338H5, RSM332H1, MGFB10H3
Prerequisite: MGM(101H5, 102H5)

MGM301H5 Analysis for Decision and Control (SSc) (Formerly MGM200H5). Students will be introduced to a variety of techniques for analyzing data for the purposes of decision and control. Topics covered include mathematical modelling, decision analysis and operations management. [24L, 12T]
Exclusion: MGM200H5, MGOC10H3
Prerequisite: MGM(101H5, 102H5)
Corequisite: STA218H5

MGM320H5 Financial Reporting (SSc)
This course will provide an understanding of financial reports, and their use for investment and management decisions. Cases will be used to enhance problem-solving skills and will integrate ideas from finance, management and financial accounting and other areas of study. The course focuses on the interpretation and use of financial statement data for the purpose of assessing the financial performance of a business operation, not on the technical details of accounting rules. [24L, 12T]
Exclusion: MGT224H5, 322H5, RSM221H1, MGAC01H3.
Prerequisite: MGT120H5/ MGM221H5, 222H5

MGM332H5 Managerial Finance (SSc)
This course deals with financial valuation models, capital budgeting decision-rules, the problem of investment under uncertainty, optimal financial structure of the firm; the characteristics of debt, equity and other financial instruments such as options are also analyzed. [24L, 12T]
Exclusion: MGT338H5, 339H5, RSM333H1, MGFC10H3
Prerequisite: MGM230H5

MGM364H5 Labour Relations (SSc)
The role, structure, and performance of industrial relations within the framework of Canada’s socio-economic-political system. Growth and history of the Canadian Labour movement: its philosophy and structure. Management’s strategies and tactics in collective bargaining; public policy in the field of industrial relations; strikes in so-called emergency situations: the role of unions and collective bargaining in inflation. [24L]
Exclusion: ECO244Y5
Prerequisite: MGT260H5

MGM365H5 HR Planning (SSc)
During Human Resource Planning, organizations identify changes in human resources required to meet their future goals. In this course, students will learn about the steps involved in HR Planning including labour market forecasting, goal setting and strategic planning, and program implementation and evaluation. [24L]
Exclusion: IRE346H1
Prerequisite: MGT260H5

MGM390H5 Business Law (SSc) (Formerly MGM290H5). This course provides an overview of the public institutions, laws and regulations that affect the structure and management of Canadian organizations. [24L]
Exclusion: MGM290H5, MGT393H5, 394H5, RSM225H1, MGSC32H3.
Prerequisite: MGM(101H5, 102H5)

MGM400H5 Strategic Management in a Competitive Environment (SSc)
A series of advanced seminars and projects, designed to integrate the themes of the program and to draw connections with current issues of importance in private- and public-sector organizations. [24L, 12T]
Exclusion: MGT400H5, MGT492H5
Prerequisite: MGT262H5/ MGM300H5

MGM464H5 Recruitment and Selection (SSc)
An organization’s success depends on its ability to recruit and select top talent. This course is designed to provide students with a deep understanding of the methods and application of various recruitment and selection techniques within organizations. Students will learn to recognize and create effective, resource-efficient recruitment programs, and how to identify the most qualified individuals from a pool of applicants. [24L]
Prerequisite: MGT260H5
MGM465H5 Occupational Health & Safety (SSc)
As individuals spend more and more time at work, it becomes increasingly important for organizations to protect their employees from harm and to support their physical, psychological, emotional, and social welfare. Students in this course will gain the knowledge and skills necessary to design and foster healthy and safe working environments. [24L]
Exclusion: IRE378H1
Prerequisite: MGM260H5

MGM466H5 Training & Development (SSc)
The goal of training and development is to grow the potential of employees within an organization. This course is designed to provide students with an understanding of how to improve job-related competencies through training and how to prepare employees for future job responsibilities through development. Topics covered include needs assessment, design, implementation, and evaluation of training and development programs. [24L]
Prerequisite: MGM260H5

MGT120H5 Financial Accounting I (SSc)
Introduction to the theory and concepts of financial accounting. Students learn how to construct and interpret financial statements. Topics include an introductory understanding of accounting and the context within which accounting occurs. [24L, 20T]
Exclusion: MGM221H5, MGT201H1, MGAB01H3, RSM219H1
Prerequisite: MGM210H5

MGT220H5 Financial Accounting II (SSc)
Expands the analysis of financial accounting beyond MGT120H5. Cases are used to develop critical thinking and communication skills. Topics include accounting's conceptual framework, analysis of business and financial statements, accounting for assets, and valuation of bonds. [24L, 24T]
Exclusion: RSM220H1, MGAB02H3
Prerequisite: At least a "C" in MGT120H5

MGT223H5 Management Accounting I (SSc)
Covers conceptual and analytical foundations of cost accounting and uses of accounting by management. Cost concepts for product costing and decision making provide an understanding of the uses of accounting information by management. Costing and control concepts are analyzed to equip students with tools for establishing costing systems and to make decisions. [24L, 24T]
Exclusion: RSM222H1, MGAB03H3
Prerequisite: At least a "C" in MGT120H5

MGT224H5 Financial Accounting Theory & Policy I (SSc)
Expands the analysis of financial accounting beyond MGT220H5. Technical topics include accounting for leases, capital assets, revenue recognition, intangibles and contingencies. Emphasis on implication for valuation and analysis. [24L, 5T]
Exclusion: RSM221H1, MGAC01H3
Prerequisite: MGT220H5

MGT238H5 Financial Markets (SSc)
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 helpful preparation for students thinking of taking the Canadian Securities Course. [24L]
Exclusion: ACT349H1, ECO358H5, ECO359H5, RSM230H1
Prerequisite: A grade of 63% in MGT120H5

MGT252H5 Principles of Marketing (SSc)
An introduction to the basic concepts of market definition, consumer behaviour, and the principal marketing functions: product line development, pricing, distribution, promotion, salesforce management, advertising, research, and planning. [24L]
Exclusion: CCT322H5; MGT252H5, RSM250H1, MGIA01H3

MGT260H5 Human Resource Management (SSc)
(Formerly MGT460H5) Human resource management is studied from the perspective of the manager/practitioner. The course focuses on current theory and practices in the major functions of human resource management. Class exercises and projects are used to provide students with some practical HR experience. [24L]
Exclusion: MGIB12H3; MGT460H5

MGT262H5 Individual and Group Behaviour in Organizations (SSc,EXP)
Theoretical ideas and practical applications concerning individual and group behaviour in organizations. We explore relevant problems confronting management: motivation, influence, communication, supervision, decision-making, and work force diversity. [24L]
Exclusion: CCT324H5; ER1260H5; MGM300H5; MGIB02H3; PSY332H1; RSM260H1; WDW260H1
MGT299Y5 Research Opportunity Program (SSc,EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.  
Exclusion: MGT299Y5

MGT321H5 Auditing (SSc)
A study of the concepts and theory underlying audit practice. Students are introduced to the CICA Handbook recommendations and guidelines for assurance. Practical examples are used to help students develop skills in exercising professional judgment. [24L]  
Exclusion: RSM323H1  
Prerequisite: MGT224H5

MGT322H5 Financial Accounting Theory and Policy II (SSc)
Examines several current measurement and disclosure issues in financial reporting, within a "quality of earnings" framework. Topics include: financial instruments, measuring and reporting pensions, financial reporting of corporate income taxes, corporate reporting via the Internet, etc. The emphasis is on developing judgment. [24L, 12T]  
Exclusion: RSM320H1, MGAC02H3  
Prerequisite: MGT224H5

MGT323H5 Managerial Accounting II (SSc)
Introduction to the different contexts in which costs need to be determined for goods sold internally, externally, domestically, and internationally. Other topics include appropriate cost structures for centralized, decentralized, and matrix forms of organizations and costs for long-term capital projects. Cases are used to promote understanding of the theories. [24L]  
Exclusion: RSM322H1, MGAC03H3  
Prerequisite: MGT223H5; ECO220Y5/ 227Y5/ STA(256H5, 258H5)/(STA256H5, 260H5)

MGT330H5 Investments (SSc)
Security analysis and portfolio management. Emphasis is placed on an analysis of bonds and common stocks. [24L]  
Exclusion: RSM330H1, MGFD10H3  
Prerequisite: MGT338H5

MGT336H5 Security Analysis (SSc)
This course aims to introduce students to the fundamental concepts of security analysis. Through a combination of lectures, assignments, presentations, and experiential activities it will provide students with an overview of different theories and concepts that apply to security analysis and engage them in the process of conducting equity research and producing high quality reports and research notes. [24L, 12T]  
Prerequisite: MGT338H5

MGT338H5 Business Finance I (SSc)
This course analyzes the financial investment decision-making process of individuals and firms. It provides an introduction to present-value techniques, capital budgeting decision-rules, the problem of investment under uncertainty, and portfolio theory. [24L, 5T]  
Exclusion: CCT321H5, ECO358H5, 358H1, RSM332H1, MGFB10H3  
Corequisite: ECO200Y5/ 204Y5/ 206Y5, ECO220Y5/ 227Y5/ STA(256H5, 258H5)/STA(256H5, 260H5). Students must complete the first half of these courses before they can take MGT338H5.

MGT339H5 Business Finance II (SSc)
This course extends material learned in MGT 338H, which is a prerequisite. Topics include the concept of efficiency of financial markets, the optimal financing decisions of firms, and the characteristics of debt, equity and other financial instruments such as options. [24L, 5T]  
Exclusion: CCT321H5; ECO359H5; RSM333H1, MGFC10H3  
Prerequisite: ECO200Y5/ 204Y5/ 206Y5, ECO220Y5/ 227Y5/ STA(256H5, 258H5)/STA(256H5, 260H5); MGT338H5

MGT353H5 Introduction to Marketing Management (SSc)
An applications-oriented course intended to develop the analytic skills required of marketing managers. The course is designed to improve skills in analyzing marketing situations, identifying market opportunities, developing marketing strategies, making concise recommendations, and defending these recommendations. [24L]  
Exclusion: RSM251H1  
Prerequisite: MGT252H5/ MGM252H5  
Recommended Preparation: ECO220Y5/ 227Y5/ STA(256H5, 260H5)
Management (HBA, BBA)

Programs

MGT354H5 Consumer Behaviour (SSc)
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. [24L]
Exclusion: RSM353H1
Prerequisite: MGT252H5

MGT355H5 Pricing (SSc)
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. (24L)
Exclusion: RSM455H1
Prerequisite: MGT252H5

MGT363H5 Organization Design (SSc)
The course covers the relationship between design and effectiveness; the impact and determinants (environment, technology, competitiveness, size, life-cycle, communication needs) of an organization’s form as well as the difficulties of re-framing organizations. [24L]
Exclusion: WDW260H1

MGT371H5 Introduction to Business Information Systems (SSc)
This course provides an introduction to information systems and technology. It covers key management decisions about information systems and their role in strategy, profitable growth, and modern work environments. The focus is on management practice in the face of technological change. Unlike programming courses, the focus is on knowledge to help students contribute to information systems decisions in the organizations that they join. [24L, 12T]
Exclusion: CCT225H5; MGM371H5, MGAC70H3, RSM270H1

MGT374H5 Operations Management (SSc)
Operations management is concerned with the facilities and their operation to deliver the goods and services of the organization. The course develops this theme and gives a theoretical framework for managing operations. Some of the major themes include aggregate planning, materials management, and inventory control. This course introduces students to modern quantitative and computing tools necessary for in-depth operational analysis and planning. [24L]
Exclusion: MGOC20H3, RSM270H1
Prerequisite: ECO220Y5/ 227Y5/ STA(256H5, 260H5)/STA218H5

MGT393H5 Legal Environment of Business I (SSc)
An introduction for commerce 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. [24L]
Exclusion: MGM290H5, MGSC30H3, RSM225H1

MGT394H5 Legal Environment of Business II (SSc)
This course builds on the legal principles developed in Legal I and canvasses other areas of law that impact a business entity. The course deals with 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. (24L)
Exclusion: MGSC32H3, RSM325H1
Prerequisite: MGT393H5

MGT399Y5 Research Opportunity Program (SSc,EXP)
This course provides senior undergraduate students who have developed some knowledge of a discipline and its research methods an opportunity to work in the research project of a professor in return for course credit. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for participating faculty members for the following summer and fall/winter sessions are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Exclusion: MGT299Y5, MGM299Y5
Prerequisite: A minimum of 10.0 credits

MGT401H5 Supervised Reading Course on an Approved Subject (SSc,EXP)
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Commerce and the supervising faculty member before enrolling.
Prerequisite: Cumulative GPA of at least 2.70

MGT402H5 Supervised Reading Course on an Approved Subject (SSc,EXP)
Open when a faculty member is willing and able to supervise. Students must obtain the approval of the Director of Commerce and the supervising faculty member before enrolling.
Prerequisite: Cumulative GPA of at least 2.70

MGT411H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT412H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]
MGT414H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT415H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT416H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT417H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT420H5 Critical Thinking, Analysis and Decision Making (SSc)
(Formerly MGT419H5) This is a capstone case course stressing the pervasive competencies and critical thinking skills required from business school graduates, future professional accountants and advisors. This course provides students with an opportunity to integrate the technical and practical knowledge obtained in the prerequisite and other University courses and to apply this knowledge to case type situations. Because of the integrative nature and content of the course, the course will be directed towards students who have completed most of their required courses and who are seeking an accounting designation. [36L]
Exclusion: RSM426H1
Prerequisite: MGT321H5, 322H5, 323H5, 339H5, 423H5.
Open only to 4th year Commerce students.
Corequisite: Highly Recommended: MGT421h5, 422h5, 426h5, 429h5

MGT421H5 Advanced Auditing Topics (SSc)
The course focuses on the reasoning and evidence theory underlying audit decision making. Coverage includes professional judgement, statistical auditing, assurance engagements, and public sector auditing. [24L]
Exclusion: RSM426H1
Prerequisite: MGT321H5

MGT422H5 Information Systems and Technology, and IT Assurance (SSc)
Initially the course introduces core concepts in developing, implementing and using information systems in an organization, as well as the business issues that arise from the use of technology. The course then focuses on how information systems impact the audit process and the techniques that auditors must utilize in assessing IT/IS controls and systems. [24L]
Exclusion: RSM427H1
Prerequisite: MGT321H5

MGT423H5 Canadian Income Taxation I (SSc)
This is the first of two courses in federal income tax law. It is designed to give the student 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. The GST/HST implications, where relevant, will also be discussed. The two course sequence (MGT423H5 and MGT429H5) have been designed to provide participants with coverage of the tax content required by the professional accounting bodies. [24L, 20T]
Exclusion: MGAC50H3, RSM324H1
Prerequisite: MGT322H5/323H5/339H5

MGT426H5 Advanced Accounting (SSc)
The emphasis in this course is on accounting issues and practices relating to long-term investments, consolidations, foreign transactions and foreign investments. International accounting issues are also introduced. Assigned material includes cases to ensure that the user impact of accounting choices is appreciated. [24L, 12T]
Exclusion: RSM321H1
Prerequisite: MGT322H5

MGT428H5 Management Control (SSc)
Management control includes all 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. The case method is used to provide an understanding of the issues and environment of management control. [24L]
Exclusion: MGAD40H3, RSM422H1
Prerequisite: MGT323H5

MGT429H5 Canadian Income Taxation II (SSc)
This is the second of two courses in federal income tax law. It is designed to give the student an understanding of more complex issues of Canadian Income Tax law and tax planning. This is achieved through a combination of lectures and the application of the law to practical problems and case settings. Topics include computation of corporate taxes, integration, corporate reorganizations, surplus distributions, partnerships and trusts. [24L, 20T]
Exclusion: MGAC60H3, RSM424H1
Prerequisite: MGT423H5

MGT430H5 Behavioural Finance (SSc)
This interdisciplinary course considers the ways in which human psychology influences financial decision making. Topics may include prospect theory, overconfidence, mental accounting, emotions, and neurofinance. [24L]
Exclusion: MGFD40H3
Prerequisite: MGT338H5, 339H5
MGT431H5 Advanced Topics in Corporate Finance (SSc)
Application and development of the ideas in MGT338H5, 339H5 to corporate finance problems such as initial public offerings and project evaluation. [24L]
Exclusion: RSM433H1
Prerequisite: MGT338H5, 339H5

MGT433H5 Financial Management (SSc)
This course focuses on the application of modern financial techniques to operating and investing decisions. It analyzes working capital management and capital budgeting decisions within the context of the firm's business strategy. [24L]
Prerequisite: MGT338H5, 339H5

MGT434H5 Mergers and Acquisitions (SSc)
This course deals with issues related to mergers and acquisitions. The main focus is to develop a solid understanding of the valuation of potential acquisition targets from a bidders perspective. Other themes to be explored include M and A and corporate strategy, motivations for M and A, corporate restructuring and divestitures, financing M and A activity, and M and A 'waves' over the past 50 years. [24L]
Exclusion: MGFD60H3, RSM433H1
Prerequisite: MGT338H5, 339H5

MGT435H5 Financial Market Trading (SSc)
This LKC FLC-lab-based course will provide a hands-on introduction to the functioning of security markets and the trading of financial instruments. Students will learn how the market prices financial securities, how to use finance theory to develop trading strategies, and how to identify and manage risks of trading strategies. Cases will cover various securities, such as fixed income securities, equities, futures and options. Students will further learn how to deal with various kinds of risks, such as liquidity risk, market risk, downside risk, crash risk, and credit risk. [24L]
Exclusion: MGFD60H3, RSM434H1
Prerequisite: MGT330H5, 338H5, 339H5

MGT436H5 Investment Fund Management (SSc)
This course will create experiential learning opportunities that expose students to various roles and titles in the capital markets and help them understand the functioning of a capital markets/portfolio/asset management firm. By working in different roles that would typically be found at an asset management firm - e.g. analysts, risk manager, portfolio manager - they will gain practical skills and knowledge about finance that are directly transferrable to entry level positions in finance. [24L, 12T]
Prerequisite: MGT330H5, 336H5, 339H5, and by special application only.

MGT437H5 Strategy and Governance (SSc)
This course covers concepts in strategic management and focuses on the role of corporate governance in formulating, implementing and monitoring a firm's strategic objectives. Although the course will cover economic foundations of strategy, market, industry and competitive analysis, the main focus will be on the internal operations of an organization. Corporate governance will be examined in the broad sense of the term and will include an overview of country-level legal environment, regulatory agencies, stock market, and the firm's board of directors. The objective of the course is to enhance students' understanding of the operating tensions facing firms and the means of addressing such tensions through country-level and firm-level corporate governance systems. [24L]
Prerequisite: MGT322H5, 338H5

MGT438H5 Futures and Options Markets (SSc)
Analysis of derivative instruments such as futures contracts, put and call options and swaps. Emphasis is placed on the valuation of these instruments as a foundation for valuing complex securities. [24L, 12T]
Exclusion: MGFC30H3, RSM435H1
Prerequisite: 63% in MGT338H5, 339H5

MGT439H5 International Finance (SSc)
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. [24L]
Exclusion: ECO365H5, MGFC50H3, RSM437H1
Prerequisite: MGT338H5, 339H5

MGT452H5 Advanced Marketing Management (SSc)
The emphasis in this course is on marketing decision making in a dynamic environment. Building on the concepts and skills developed in MGT353H5, the course focuses on the major decisions facing marketing managers in the attempt to harmonize the resources of the organization with the opportunities in the market. [24L, 12T]
Prerequisite: MGT353H5

MGT453H5 Marketing Research (SSc)
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. [24L]
Exclusion: MGMC01H3
Prerequisite: MGT353H5; ECO220Y5/ 227Y5/ STA(256H5, 260H5)/STA218H5
MGT454H5 Special Topics in Marketing (SSc)
This course focuses on a specific theoretical or functional area of marketing. The area of concentration depends on the instructor. Examples of areas that may be covered include current issues in consumer behaviour, advertising, industrial marketing, or retailing. [24L]
Prerequisite: MGT353H5

MGT455H5 Marketing Consulting: Models for Analysis (SSc)
This course reviews the science side of marketing by studying multiple models used by companies and consulting firms in the different steps of the marketing process. The marketing consulting approach provides a deeper understanding of the process that supports marketing management decisions. This is of benefit not only for students following a marketing consulting path, but also for students joining marketing departments of Canadian firms. To enhance the learning experience the course will be strongly based on software applications that offer hands on exposure to real life corporate applications. [24L]
Exclusion: MGD01H3
Prerequisite: MGT252H5/ MGM252H5, ECO220Y5/ STA221H5/ 218H5

MGT456H5 Marketing Ethics (SSc)
There is a growing public awareness of (and interest in) the ethics of marketing. Therefore, it is increasingly important for marketing practitioners to be attuned to the many ethical challenges that they will inevitably confront. This class explores these issues from a managerial perspective by reviewing relevant conceptual frameworks for ethics-based decision-making and extending them to real world examples faced by marketers. In particular, we will explore ethical issues in pricing, product development, promotions, market segmentation, targeting, and market research, with an emphasis on how technological advancements have brought new considerations to the forefront of marketing ethics. [24L]
Prerequisite: MGT353H5

MGT457H5 Business to Business Marketing (SSc)
Business to business (B2B) marketing dwarfs business to consumer (B2C) marketing in terms of total transaction value. In this course we will focus on how B2B marketing is different from B2C marketing and how demand in the business market is derived from demand in the consumer market. We will also discuss customer and supplier relationships, supply chain development, and the impact of globalization on B2B marketing. [24L]
Prerequisite: MGT353H5

MGT458H5 Big Data and Marketing Analysis (SSc)
Recent advances in computer technology have led to an explosion in the amount of data available for companies to use for market research. In order to be effective as a marketing manager today, it is necessary to understand how to apply cutting edge statistical models to large databases, such as scanner data, loyalty program data, or internet marketing data, and to be able to obtain managerial insights from model results. This course will introduce students to marketing analytics driven by big data, using applications from real world business problems. [24L]
Exclusion: RSM456H1
Prerequisite: MGT353H5

MGT461H5 Negotiation (SSc)
We negotiate every day - with potential employers, coworkers, roommates, landlords, parents, bosses, merchants, service providers, and even our friends and romantic partners. Negotiation is the art and science of securing agreements between two or more interdependent parties. It is a craft that must hold cooperation and competition in creative tension. It can be very difficult to do well. Even the most experienced negotiators often fall prey to common biases and errors in judgment. This course is highly experiential - students will practice, reflect, analyze, and practice again - and draws its insights from research in the cognitive, behavioral and social sciences. [24L]
Exclusion: MGHC52H3, RSM461H1
Prerequisite: Open to third and fourth year Commerce and Management students.

MGT463H5 Organizational Behaviour in a Global Context (SSc)
A multinational perspective has become critical to an organization's success. This course explores some of the challenges of managing across and working with cultures. It will also consider ways in which management theories and behaviors may be adapted to ensure their application is carefully considered when applying Western management theories in an international setting. The course weaves together conceptual and practical considerations to create a balanced and exciting learning experience. [24L]
Prerequisite: MGT262H5/ MGM300H5

MGT467H5 Labour and Employment Law (SSc)
This course examines the various laws which govern the relationship between organizations, employees, unions, and the government. Topics covered include industrial relations, workplace health and safety regulations, and employment standards (minimum wage, working hours, holidays, severance, etc.). [24L]
Prerequisite: MGT260H5
Mathematics (HBSc)

MGT480H5 Internship (SSc,EXP)
(Formerly MGT413H5) Students will be provided with an opportunity to apply, in a practical business setting, the management knowledge they have gained through previous course work. This is accomplished through part-time unpaid work placements, or "internships." The internship will provide students with a valuable opportunity to make personal contacts in the public or private sector. The course is also intended to help students acquire practical skills that will serve them well in the workplace. An application is required.

Prerequisite: 1.0 credits in MGT at the 300/400 level, 3.0 CGPA, 14.0 credits.

MGT491H5 Introduction to International Business (SSc)
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. [24L]

Exclusion: RSM490H1

Prerequisite: 1.0 credit in MGT/MGM at the 300/400 level

MGT492H5 Introduction to Strategic Management (SSc)
Focuses on industry analysis and different models of the firm. The key questions addressed are: "why do some firms succeed where others fail?" and "what strategy should a firm employ to reach its goals?" [24L]

Exclusion: MGSC01H3, RSM392H1

Prerequisite: 1.0 credit in MGT/MGM at 300/400 level

MGT493H5 Small Business Management (SSc)

Exclusion: RSM493H1

Prerequisite: 1.0 credit in MGT/MGM at 300/400 level

MGT494H5 Entrepreneurial Strategy (SSc)
This course introduces students to the challenges an entrepreneur faces when starting a business: assessing his/her goals and ability, attracting financial and human resources, competing in the marketplace, and dealing with laws and regulations. Readings and discussion material will include actual business cases as well as academic articles and book chapters. The class is of relevance to students interested in starting new businesses, working in consulting or finance, and pursuing research and graduate studies. [24L]

Prerequisite: Open to 3rd and 4th year Commerce and Management students.

Mathematics teaches one to think analytically and creatively. It is a foundation for advanced careers in a knowledge-based economy. The past century has been a remarkable one for discovery in mathematics. Problems in computer science, physics, biology, and economics have opened new fields of mathematical inquiry, and discoveries at the most abstract level, for example in number theory, have led to breakthroughs in applied areas.

The Mathematical Sciences Specialist Program at U of T Mississauga provides students with a solid foundation in the fundamental theoretical aspects of the mathematical sciences along with a broad range of techniques for applying this theory. The Major and Minor Programs in Mathematical Sciences consist largely of MAT courses, and may be combined with programs in other subjects.
First-year Courses Most first-year students at U of T Mississauga take a course in calculus (MAT133Y5, MAT134Y5, MAT135Y5, or MAT137Y5).

MAT133Y5 serves students in Commerce, Economics or Management who do not wish to take courses in Mathematics or Statistics beyond the 100 level. It cannot be used as a prerequisite for any other MAT course, except for students who have also completed MAT233H5. MAT133Y5 counts as a Social Science course for distribution purposes. (Students in the above subjects who wish to do a Major in Statistics or Mathematics should take MAT134Y5, MAT135Y5 or MAT137Y5 instead.)

MAT134Y5 and MAT135Y5 are comparable in terms of mathematical content and difficulty, but differ in the nature of applications. MAT134Y5 is specifically designed for students in the Life Sciences, and is often taken at the same time as BIO152H5. MAT135Y5 gives a sense of the wide-ranging applications of calculus to the physical, biological and social sciences.

MAT137Y5 is for students who know when they enter university that they wish to study Mathematics or Computer Science (including Bioinformatics). Students in Statistics or Physics or Economics who are mathematically inclined will also enjoy this course.

MAT102H5 is a special course for beginning Mathematical Sciences students. It is intended to bridge the gap between high school mathematics, where mathematical proofs and logical arguments are often omitted, and university level mathematics, where proofs are critical to full understanding of the material.

A wide variety of upper level courses is available to students who have the proper prerequisites. Students should feel free to consult the department regarding course selection.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- BIO  Biology (page 78)
- CSC  Computer Science (page 133)
- MAT  Mathematics (page 298)
- STA  Statistics (page 356)

Specialist Program ERSPE2511 Mathematical Sciences (Science)

13.5 credits are required.

Limited Enrolment – Enrolment in the Specialist program is limited to students who meet the following criteria: (1) A minimum of 4.0 credits, including 60% in MAT102H5 and 60% in MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT233H5. (2) A minimum cumulative grade point average (CGPA), to be determined annually.

First Year:  CSC108H5, 148H5; MAT102H5, 137Y5, 240H5
Second Year:  CSC207H5/ 209H5/ 236H5; MAT202H5, 247H5, 232H5, 236H5, 244H5; STA256H5, 258H5/ 260H5
Third Year:  MAT301H5, 378H5
Third & Fourth Years:
1. MAT311H5, 334H5, 392H5, 302H5/ 315H5, 402H5
2. 1.0 additional credit, chosen from MAT302H5, 309H5, 315H5, 332H5, 344H5.
3. 0.5 additional credits in MAT at the 400 level (405 is recommended).
4. 1.5 additional credits at the 300+ level in CSC/MAT/STA

Note:
1. Recommended CSC courses: CSC236H5, CSC310H5.
2. Students enrolled in this program may participate in the PEY program. For more information visit www.pey.utoronto.ca

Major Program ERMAJ2511 Mathematical Sciences (Science)

7.5 credits are required.

Limited Enrolment – Enrolment in the Major program is limited to students who meet the following criteria: (1) A minimum of 4.0 credits, including 60% in MAT102H5 and 60% in MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT233H5. (2) A minimum cumulative grade point average (CGPA), to be determined annually.

First Year:  MAT102H5, 134Y5/ 135Y5/ 137Y5
Second Year:  MAT202H5,232H5/ 233H5, 244H5, two courses from (MAT223H5,224H5,240H5,247H5)
Higher Years:
2. STA256H5/ 0.5 MAT credit at the 300+ level

Notes:
1. MAT137Y5 is highly recommended.
2. Students enrolled in this program may participate in the PEY program. For more information visit www.pey.utoronto.ca
Minor Program ERMN2511 Mathematical Sciences (Science)

4.0 credits in MAT are required, including 1.0 MAT credit at the 300+ level.

**First Year:** MAT102H5, 134Y5/135Y5/137Y5

**Second Year:** MAT223H5/240H5, 212H5/224H5/232H5/240H5/247H5

**Higher Years:** 0.5 MAT credit at the 200+ level and 1.0 MAT credit at the 300+ level

**Notes:**
1. MAT223H5 may be taken in the first year.
2. Students who have the required prerequisites may take CSC236H5 and CSC310H5 and have them counted under "Higher Years".
3. Students may replace the combination (MAT134Y5/135Y5/137Y5 and MAT232H5) with the combination (MAT133Y5 and MAT233H5).

Students without pre- and co-requisites or departmental approval can be de-registered from courses at any time.

**List of Courses**

**MAT100H5 Prep. for University Calculus (SCI)**
This course is for students who wish to improve their skills in order to get ready for first year calculus at UTM. Topics include fractions, exponentials, logarithms, algebraic expressions, long division of polynomials, completing the square, solving equations and inequalities, functions and their graphs, inverse functions, trigonometric functions and word problems.

This course is restricted to first year students only, who have not taken and are not currently enrolled in a first year calculus course.

**MAT102H5 Introduction to Mathematical Proofs (SCI)**
Understanding, using and developing precise expressions of mathematical ideas, including definitions and theorems. Set theory, logical statements and proofs, induction, topics chosen from combinatorics, elementary number theory, Euclidean geometry. [36L, 12T]

**MAT133Y5 Calculus and Linear Algebra for Commerce (SSc)**
Mathematics of finance, matrices and linear equations. Review of differential calculus; applications. Integration and fundamental theorem; applications. Introduction to partial differentiation; applications. NOTE: This course cannot be used as the calculus prerequisite for any 200-level MAT or STA course, except in combination with MAT233H5. [72L, 24T]

**MAT134Y5 Calculus for Life Sciences (SCI)**

**MAT135Y5 Calculus (SCI)**

**MAT136Y5 Calculus and Linear Algebra for Commerce (SSc)**
Mathematics of finance, matrices and linear equations. Review of differential calculus; applications. Integration and fundamental theorem; applications. Introduction to partial differentiation; applications. NOTE: This course cannot be used as the calculus prerequisite for any 200-level MAT or STA course, except in combination with MAT233H5. [72L, 24T]

**MAT137Y5 Calculus for Life Sciences (SCI)**
MAT137Y5 Calculus (SCI)
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 theorem, the integral, the fundamental theorem, elementary transcendental functions, Taylor’s theorem, sequences and series, power series. [72L, 48T]
Exclusion: MAT133Y5, 134Y5, 135Y5, 133Y1, 135Y1, 135H1, 136H1, 137Y1, 157Y1, MATA30H3, MATA31H3, MATA32H3, MATA33H3, MATA35H3, MATA36H3, MATA37H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U), Minimum 70% in Grade 12 Calculus and Vectors (MCV4U).

MAT223H5 Linear Algebra I (SCI)
Systems of linear equations, matrix algebra, determinants. Vector geometry in $\mathbb{R}^2$ and $\mathbb{R}^3$. Complex numbers. $\mathbb{R}^n$: subspaces, linear independence, bases, dimension, column spaces, null spaces, rank and dimension formula. Orthogonality, orthonormal sets, Gram-Schmidt orthogonalization process, least square approximation. Linear transformations from $\mathbb{R}^m$ to $\mathbb{R}^n$. The determinant, classical adjoint, Cramer’s rule. Eigenvalues, eigenvectors, eigenspaces, diagonalization. Function spaces and applications to a system of linear differential equations. The real and complex number fields. [36L, 12T]
Exclusion: MAT223H1, 188H1, MATA23H3
Prerequisite: Grade 12 Advanced Functions (MHF4U), (Grade 12 Calculus and Vectors (MCV4U)/MAT102H5).

MAT240H5 Linear Algebra II (SCI)
Exclusion: MAT240H5, 224H1, MATA24H3
Prerequisite: MAT102H5, 223H5.
MAT236H5 Vector Calculus (SCI)  
_Exclusion:_ MAT368H5, 235Y1, 237Y1, 257Y1, MATB42H3  
_Prerequisite:_ MAT102H5, 223H5/240H5, 232H5/233H5  
**Priority is given to students enrolled in the Mathematics Specialist or Major programs.**

MAT240H5 Algebra I (SCI)  
A theoretical approach to Linear Algebra and its foundations, aimed at students with a serious interest in Mathematics. Topics to be covered: Vector spaces over arbitrary fields (including C and finite fields), linear equations and matrices, bases and linear independence, linear transformations, determinants, eigenvalues and eigenvectors, similarity, change of basis, diagonalization, the characteristic and minimal polynomials, the Cayley-Hamilton theorem. [36L, 24T]  
_Exclusion:_ MAT224H5, 224H1, 240H1  
_Prerequisite:_ 60% in MAT102H5  
_Corequisite:_ MAT134Y5/135Y5/137Y5/233H5  

MAT244H5 Differential Equations I (SCI)  
(Formerly MAT242H5) Ordinary differential equations of the first and second order, existence and uniqueness; solutions by series and integrals; linear systems of first order; linearization of non-linear systems. Applications in life and physical sciences. Power series solutions, boundary value problems, Fourier series solutions, numerical methods. [36L, 12T]  
_Exclusion:_ MAT212H5, 242H5, 244H1, MATB44H3  
_Prerequisite:_ MAT233H5 or Corequisite MAT232H5.  
_Corequisite:_ MAT223H5/ MAT240H5  
**Priority is given to students enrolled in the Mathematics Specialist or Major programs.**

MAT247H5 Algebra II (SCI)  
_Exclusion:_ MAT247H1  
_Prerequisite:_ MAT240H5, 240H1  

MAT299Y5 Research Opportunity Program (SCI)  
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.  
_Prerequisite:_ Departmental permission.  

MAT301H5 Groups and Symmetries (SCI)  
_Exclusion:_ MAT301H1, MATC01H3  
_Prerequisite:_ MAT102H5, 202H5/224H5/240H5  
**Priority is given to students enrolled in the Mathematics Specialist or Major programs or in the Information Security Specialist program.**

MAT302H5 Introduction to Algebraic Cryptography (SCI)  
(Cross list with CSC322H5) The course will take students on a journey through the methods of algebra and number theory in cryptography, from Euclid to Zero Knowledge Proofs. Topics include: block ciphers and the Advanced Encryption Standard (AES); algebraic and number-theoretic techniques and algorithms in cryptography, including methods for primality testing and factoring large numbers; encryption and digital signature systems based on RSA, factoring, elliptic curves and integer lattices; and zero-knowledge proofs. [36L, 12T]  
_Exclusion:_ CSC322H5, MATC16H3  
_Prerequisite:_ MAT224H5/ 240H5, 301H5  
**Priority is given to students enrolled in the Mathematics Specialist or Major programs or in the Information Security Specialist program.**

MAT309H5 Introduction to Mathematical Logic (SCI)  
The nature of axioms, proofs and consistency. Introduction to the theory of recursive functions. Gödel's incompleteness theorems and related results. This course emphasizes rigour. [36L, 12T]  
_Exclusion:_ CSC438H1, 309H1, MATC09H3  
_Prerequisite:_ MAT102H5, 134Y5/135Y5/137Y5, 224H5/240H5  
**Priority is given to students enrolled in the Mathematics and Computer Science Specialist or Major programs.**
MAT311H5 Partial Differential Equations (SCI)
Partial differential equations of applied mathematics, mathematical models of physical phenomena, basic methodology. [36L, 12T]
Exclusion: APM346H1, 351Y1, MATC46H3
Prerequisite: MAT102H5, 232H5/233H5, 212H5/242H5/244H5
Corequisite: MAT236H5/368H5
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT315H5 Introduction to Number Theory (SCI)
Elementary topics in number theory such as: prime numbers; arithmetic with residues; Gaussian integers, quadratic reciprocity law, representation of numbers as sums of squares. (This course emphasizes rigour). [36L, 12T]
Exclusion: MAT315H1, MATC15H3
Prerequisite: MAT102H5, 134Y5/135Y5/137Y5/(MAT133Y5, 233H5), 224H5/240H5, 301H5
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT332H5 Introduction to Nonlinear Dynamics and Chaos (SCI)
Stability in nonlinear systems of differential equations, bifurcation theory, chaos, strange attractors, iteration of nonlinear mappings and fractals. This course will be geared towards students with interest in sciences. [36L, 12T]
Exclusion: MAT335H1, MATC35H3
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT334H5 Complex Variables (SCI)
Theory of functions of one complex variable: analytic and meromorphic functions; Cauchy’s theorem, residue calculus. Topics from: conformal mappings, analytic continuation, harmonic functions. [36L, 12T]
Exclusion: MAT334H1, MATC34H3
Prerequisite: MAT102H5, 232H5/233H5
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT344H5 Introduction to Combinatorics (SCI)
Basic counting principles, generating functions, permutations with restrictions. Fundamentals of graph theory with algorithms; applications (including network flows). [36L, 12T]
Exclusion: MAT344H1, MATC44H3
Prerequisite: MAT102H5, 223H5/240H5
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT378H5 Introduction to Real Analysis (SCI)
Exclusion: MAT337H1, 357H1, MATB43H3, MATC37H3
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT382H5 Mathematics for Teachers (SCI)
The course discusses the Mathematics curriculum (K-12) from the following aspects: the strands of the curriculum and their place in the world of Mathematics, the nature of the proofs, applications of Mathematics, and the connection of Mathematics to other subjects.
Restricted to students in the CSC/MAT/STA major and specialist programs. [36L, 12T]
Exclusion: MAT329Y1, MATC82H3
Prerequisite: Minimum 60% in MAT134Y5/135Y5/137Y5/(MAT133Y5, 233H5), minimum 60% in MAT102H5, MAT223H5/240H5, and at least one additional MAT half-course at the 200+ level.

MAT388H5 Topics in Mathematics (SCI, EXP)
Introduction to a topic of current interest in mathematics. Content will vary from year to year.
Prerequisite: Departmental permission; Minimum 2.5 CGPA.
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT392H5 Ideas of Mathematics (SCI)
This is a one-term course to give students extensive practice in the writing of mathematics. The format will be to study excellent expositions of important ideas of mathematics and then to assign short writing assignments based on them. [36L, 12T]
Exclusion: MATC90H3
Prerequisite: Completion of the first- and second-year requirements for the Major and Specialists Programs in Mathematical Sciences.
Limited enrolment. The course is open only to students in the MAT major/specialist programs, with priority to students in the specialist program and to CTEP students.

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Mathematics (HBSc) Programs

**MAT401H5 Polynomial Equations and Fields (SCI)**
*Exclusion:* MAT347Y1, 401H1, MATD01H3
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT402H5 Classical Geometries (SCI)**
Euclidean and non-Euclidean plane and space geometries. Real and complex projective space. Models of the hyperbolic plane. Connections with the geometry of surfaces. [36L, 12T]
*Exclusion:* MAT402H1, MATD02H3
*Prerequisite:* MAT102H5, 232H5/233H5, 224H5/240H5
*Corequisite:* MAT301H5
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT405H5 Introduction to Topology (SCI)**
*Exclusion:* MAT327H1, MATC27H3
*Prerequisite:* MAT102H5, 224H5/240H5, 232H5/233H5
and at least one MAT half-course at the 300+ level with a mark of at least 65%.
*Recommended Preparation:* MAT378H5
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT406H5 Mathematical Introduction to Game Theory (SCI)**
Combinatorial games: Nim and other impartial games; Sprague-Grundy value; existence of a winning strategy in partisan games. Two-player (matrix) games: zero-sum games and Von-Neuman's minimax theorem; general sum-matrix games, prisoner's dilemma, Nash equilibrium, cooperative games, asymmetric information. Multi-player games: coalitions and the Shapley value. Possible additional topics: repeated (stochastic) games; auctions; voting schemes and Arrow's paradox. Mathematical tools that may be introduced include hyperplane separation of convex sets and Brouwer's fixed point theorem. Numerous examples will be analyzed in depth, to offer insight to the mathematical theory and its relation with real life situations. [36L, 12T]
*Exclusion:* ECO316H1
*Prerequisite:* MAT102H5, 223H5/240H5; STA256H5
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT478H5 Topics in Mathematics (SCI, EXP)**
Introduction to a topic of current interest in mathematics. Content will vary from year to year. [36S]
*Prerequisite:* Departmental permission; Minimum 2.5 CGPA.
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT488H5 Topics in Mathematics (SCI, EXP)**
Introduction to a topic of current interest in mathematics. Content will vary from year to year. [36S]
*Prerequisite:* Departmental permission; Minimum 2.5 CGPA.
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*

**MAT492H5 Senior Thesis (SCI, EXP)**
An exposition on a topic in mathematics written under the supervision of a faculty member. Open to students in Mathematical Sciences Specialist program.
*Prerequisite:* MAT392H5; 2.0 additional credits in MAT at the 300 level and minimum CGPA 2.5.
*Only open to students in the MAT major/specialist programs.*

**MAT498H5 Topics in Mathematics (SCI, EXP)**
Introduction to a topic of current interest in mathematics. Content will vary from year to year. [36S]
*Prerequisite:* Departmental permission; Minimum 2.5 CGPA.
*Priority is given to students enrolled in the Mathematics Specialist or Major programs.*
Molecular Biology (HBSc)

This program is offered through the Biology Department.

Paleontology (HBSc)

This program is offered through the Biology Department.

Philosophy (HBA)

Professors Emeriti

J.V. Canfield, A.M., Ph.D.
A. Gombay, B.A., M.A., B.Phil.

Professors

J. Allen, B.A., Ph.D.
J. Brunning, B.A., M.A., Ph.D.
N. Charlow, B.A., M.A., Ph.D.
P. Clark, B.A., Ph.D.
B.D. Katz, B.A., M.A., Ph.D.
M. Matthen, B.Sc., M.A., Ph.D.
A. Mullin, B.A., M.A., Ph.D.
J. Nagel, B.A., M.A., Ph.D.
D. Raffman, B.A., Ph.D.
G. Rattan, B.Sc., M.Phil., Ph.D.
M. Rozemond, B.A., Ph.D.
A. Sepielli, B.A., M.A., Ph.D., J.D.
S. Tenenbaum, B.A., M.A., Ph.D.
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Philosophy has a distinctive place in a university education. In philosophy class we ask, and try to answer, some of the deepest questions confronting us as human beings. For example: What is knowledge? What is justice? Who am I? What am I? Am I a physical thing, or something more? What makes me me? What sort of thing is an artwork? What makes an artwork good or bad? Where is the line between art and propaganda?

In order to address these questions, we learn certain reflective ways of thinking, arguing, and writing. We employ concepts and strategies of reasoning and explanation that have themselves been critically assessed within philosophy.

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for their clarity, soundness and cogency. Our philosophical reflections are also guided by critical engagement with the views of great thinkers like Plato, Aristotle, Descartes, Hume, Kant, Hegel, Nietzsche, Quine, Kripke, and many others. Specialists, Majors and Minors can look forward to substantial interaction with these authors.

Philosophy class is not only for Specialists, Majors and Minors, however. It can have a much broader impact, in at least two ways. First, the different branches of philosophy span a broad range of subjects that intersect with topics studied in history, the arts, the social sciences, biology, physics, and mathematics, among others. Second, the intellectual skills and virtues acquired in philosophy class are extremely beneficial to our thinking generally, no matter what subject or issue we are thinking about. Philosophy cultivates general intellectual virtues of critical thinking, clarity of thought, writing and communication, and creativity in approaching difficult problems. As a result, the study of philosophy provides excellent preparation for graduate study in the intersecting fields mentioned above, and also for a variety of non-academic careers. Philosophy students go on to successful careers in law, medicine, journalism, government, technology, and business. Clear thinking and expression, and creative problem-solving, are essential to success in all of these fields.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

- CCT Communication, Culture, Information and Technology (page 115)
- PHL Philosophy (page 305)

Specialist Program ERSPE0231 Philosophy (Arts)

Students must complete 10.0 credits in Philosophy. At least 4.0 credits must be at the 300 level or higher, including at least 1.0 credit at the 400 level.

Limited Enrolment – Enrolment in the Specialist Program in Philosophy is limited to students who have completed 4.0 credits including 2.0 PHL credits with a grade of 73% or higher.

The program must include:

1. at least 3.5 credits in the History of Philosophy: PHL202H5, 210Y5 and 2.0 additional credits from PHL220H5, 300H5, 307H5, 313H5, 314H5, 315H5, 324H5, 325H5, 327H5, 400H5, 416H5, 420H5;
2. at least 1.0 credit in Logic and Philosophy of Language: PHL245H5 and 0.5 additional credit from PHL246H5, 340H5, 345H5, 346H5, 347H5, 348H5, 350H5, 451H5, CCT315H5
3. at least 1.5 credits in Metaphysics and Epistemology: from PHL332H5, 333H5, 341H5, 342H5, 355H5, 358H5, 360H5, 430H5, CCT314H5, 415H5
4. at least 1.5 credits in Ethics and Political Philosophy: PHL277Y5 or PHL265H5 and PHL275H5 and 0.5 additional credit from PHL365H5, 370H5, 375H5, 475H5.

It is strongly recommended that students begin their study of Philosophy with PHL105Y5 and that students planning to enrol in the Specialist Program in Philosophy complete PHL202H5, 210Y5, 245H5, and 277Y5 or PHL265H5 and PHL275H5 by the end of their second year. It is recommended that all students discuss their course selection requirements with the Undergraduate Advisor.

Major Program ERMAJ0231 Philosophy (Arts)

Students must complete a program of 7.0 credits in Philosophy, at least 3.0 of which must be at the 300/400 level. The program must include:

1. at least 2.5 credits in the History of Philosophy: PHL202H5, 210Y5 and 1.0 additional credit from PHL220H5, 300H5, 307H5, 313H5, 314H5, 315H5, 324H5, 325H5, 327H5, 400H5, 416H5, 420H5;
2. at least 0.5 credits in Logic: PHL245H5;
3. at least 1.0 credits in Metaphysics and Epistemology: from PHL240H5, 258H5, 332H5, 333H5, 340H5, 341H5, 342H5, 350H5, 355H5, 358H5, 360H5, 430H5, CCT314H5, 415H5;
4. at least 1.0 credits in Ethics and Political Philosophy: PHL277Y5 or PHL275H5 and one of PHL265H5 or PHL274H5

It is strongly recommended: that students begin their study of Philosophy with PHL105Y5; and that students planning to enrol in the Major Program in Philosophy complete at least 2.0 credits of PHL202H5, 210Y5, 245H5 and 277Y5 or (265H5 and 275H5) by the end of their second year.

Minor Program ERMIN0231 Philosophy (Arts)

4.0 credits in PHL or CCT314H5, 315H5, 415H5 are required, including at least 1.0 at the 300/400 level.

Minor Program ERMIN1618 Ethics, Law and Society

This program provides students with a deeper understanding of ethical theories and their application in various social contexts; for example, it examines particular ethical issues concerning health care, the environment, legal systems, and political institutions. Students are
required to take courses in philosophy and social sciences. Courses should be selected in consultation with the Faculty Advisor.

4.0 credits are required including at least 1.0 at the 300/400 level.

1. 1.0 credit from the following: PHL105Y5, PHL145H5, PHL210Y5, PHL235H5, PHL240H5, PHL241H5, PHL244H5, PHL255H5, PHL258H5, PHL285H5
2. 0.5 credit from PHL265H5, PHL271H5, PHL275H5
3. 1.0 credit from PHL267H5, PHL273H5, PHL274H5, PHL277Y5, PHL283H5, PHL284H5, PHL365H5, PHL370H5, PHL375H5, PHL475H5, or from courses listed in #2 above.
4. 1.0 credit from ANT, ECO, POL, or SOC
5. 0.5 credit from ANT, ECO, POL, SOC, or from courses listed in #2 or #3 above.

Notes: Students who take PHL277Y5 will count as having taken PHL265H5 and PHL275H5

NOTE: The Undergraduate Advisor will be glad to offer advice and assistance. To arrange for advising, contact Dianne Robertson at dianne.robertson@utoronto.ca or 905-828-5201.

Notes:

- All 200-level courses, with the exception of PHL245H5 and PHL247H5, have the prerequisite that the student has completed at least 4.0 credits at the university. This prerequisite is waived for students who are taking (or have taken) a 100-level course in Philosophy. There are no other prerequisites for any 200-level courses.

- All 300-level courses, with the exception of PHL344H5, 347H5, have a prerequisite of 1.5 credits in Philosophy. It is strongly recommended that students prepare for 300-level courses by taking two of the following: PHL100Y1/101H1/105Y5, 200Y1/202H5, 210Y5, 245H5, 277Y5. Some 300-level courses have specific prerequisites or recommended preparation, as described in the course descriptions. Students who do not meet the prerequisite for a particular course but believe that they have adequate preparation should consult the Undergraduate Advisor concerning entry to the course.

- The prerequisite for 400-level courses, except PHL451H5, is 4.5 credits in Philosophy.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

When choosing your courses, keep in mind that not all courses listed are offered every year. Some courses required to complete a program might be offered only every other year. For courses offered during the current year, consult the Philosophy website.

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**List of Courses**

**PHL105Y5 Introduction to Philosophy (HUM)**
An introduction to philosophy, covering such topics as conceptions of human nature and the good life, the foundation of morality, the relation of the individual to the state, arguments for the existence of God, debates about the meaning and possibility of free will, the theory of knowledge and the nature of reality. [48L, 24T]
*Exclusion: PHL100Y5, 101Y5*

**PHL145H5 Critical Reasoning (HUM)**
The course covers the area of informal logic—the logic of ordinary language. Topics include: criteria for the critical assessment of arguments as strong or merely persuasive; different types of argument and techniques of refutation; their use and abuse. [36L]
*Exclusion: PHL247H5, TRN200Y1*
*Prerequisite: None*

**PHL202H5 Ancient Philosophy (HUM)**
Some core texts of ancient philosophy, concentrating on the work of Plato and Aristotle. Topics include the good life, the soul, knowledge, virtue and the nature of reality. [36L]
*Exclusion: PHL200Y5, PHLB31H3*
*Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.*
*Recommended Preparation: PHL100Y5/101Y5/105Y5*

**PHL210Y5 17th and 18th Century Philosophy (HUM)**
Classic texts by European philosophers (e.g., Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant). Their attitudes toward science and religion, and their theories about the nature of the world and of human knowledge, culminating in the "Copernican Revolution" of Kant. [72L]
*Exclusion: PHLB35H3*
*Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.*
*Recommended Preparation: PHL100Y5/101Y5/105Y5*

**PHL220H5 Existentialism (HUM)**
Human perception and knowledge of reality; freedom and the meaning of human life; sexuality and the body. Authors include Heidegger, Buber, Marcel, Camus, Sartre, de Beauvoir, Merleau-Ponty. [36L]
*Exclusion: PHLB30H3*
*Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.*

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**2016-2017 Calendar 305**

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**Philosophy (HBA)**

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PHL235H5 Philosophy of Religion (HUM)
A philosophical analysis of some basic theological 
questions; the nature of religious belief and experience, the 
relationship between religion and morality, or religion and science, the role of religion in a pluralistic society. [36L]  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL240H5 Minds and Machines (HUM)
Can machines think and feel? Are human beings simply very complicated organic machines? These questions are discussed in the light of recent work on the simulation of intelligence and purposive behaviour. [36L]  
Exclusion: PHL342H5, PHLB81H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL241H5 Freedom and Determinism (HUM)
This course will examine the question of whether determinism is true, and to which extent and whether, determinism is compatible with the possibility that our will is free as well as the relation between freedom and responsibility. In particular, we will look at the plausibility of views such as compatibilism, hard determinism and libertarianism. [36L]  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL242H5 Science Fiction and Philosophy (HUM)
Science fiction is a rich resource for philosophical thinking. Are we in a matrix? Are there alternative realities? Is teleportation, or telepathy, or telekinesis, or time travel, possible? In addition, philosophical thought experiments often include elements of science fiction, like twin-earths, zombies, swamp people, inverted spectra, brain-splitting, eternal recurrences, and evil demons. This course considers these topics – both some philosophy of science fiction and some science fiction in philosophy. [36L]  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL243H5 Philosophy of Human Sexuality (HUM)
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; theories of psycho-sexual development; sexual morality; "natural," "normal," and "perverse" sex; sexual liberation; love and sexuality. [36L]  
Exclusion: PHLB12H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL244H5 Human Nature (HUM)
Theories of human nature, e.g., psychoanalysis, 
behaviourism, sociobiology. Current issues, e.g., egoism and altruism, instincts, I.Q., rationality, sanity and mental illness. [36L]  
Exclusion: PHLB91H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL245H5 Modern Symbolic Logic (HUM)
The elements of axiomatic probability theory, and its main interpretations (frequency, logical, subjective). Reasoning with probabilities in decision making and science. [36L]  
Exclusion: PHLB50H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL246H5 Probability and Inductive Logic (HUM)
The application of symbolic techniques to the assessment of arguments. Propositional calculus and quantification theory. Logical concepts; techniques of natural deduction. [36L]  
Exclusion: PHLB50H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL247H5 Human Nature (HUM)
The nature of science and its development. Topics may include: the contrast between science and religion, between science and pseudo-science; the nature of scientific reasoning; scientific reality; science and objectivity; scientific revolutions; and the interaction between science, society, and values. [36L]  
Exclusion: PHLB52H5  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL248H5 Puzzles and Paradoxes (HUM)
Philosophy often begins with a puzzle or paradox. Zeno once convincingly argued that motion was impossible, but people continue to move. The "liar's paradox" seems to show that everything is both true and false, but that cannot be right. In this course, we will examine these and related issues. [36L]  
Exclusion: PHLB55H3  
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL255H5 Philosophy of Science (HUM)
Recommended Preparation: PHL100Y5/ 105Y5/ 245H5...
PHL265H5 Social and Political Philosophy (HUM)
A survey of the major political theorists/theories of the Western philosophical tradition. Questions to be addressed include: Why obey the law? What is justice? What is the best form of government? [36L]
Exclusion: PHL277Y5, PHLB16H3, PHLB17H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL267H5 Feminism (HUM)
Main types of feminist theory: liberal, Marxist, Existential and "Radical." A number of ethical, political and psychological issues are considered. [36L]
Exclusion: PHL277Y5, PHLB13H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL271H5 Ethics and the Law (HUM)
Moral issues in the law, such as civil liberties and police powers, censorship, civil disobedience, the death penalty, inequality, paternalism and the constitutional protection of human rights. Case studies from Canadian law. [36L]
Exclusion: PHLB11H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL272H5 Philosophy of Education (HUM)
The nature, aims, and content of education; learning theory; education and indoctrination; the teaching of morals and the morality of teaching; the role and justification of educational institutions, their relation to society and to individual goals; authority and freedom in the school. [36L]
Exclusion: PHLB13H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL273H5 Environmental Ethics (HUM)
Environmental ethics is a relatively new development in philosophical thinking which focuses on the ethical and value questions arising from our relation to nature. Focal question of the area asks: Is the non-human world of ethical significance only insofar as it is connected with human well-being, or is ethically significant in itself? This course investigates and evaluates anthropocentrism, ecofeminism and radical biocentric theories of the deep ecologists. [36L]
Exclusion: PHLB02H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL274H5 Ethics and Society (HUM)
The course explores ethical problems posed by social issues such as inequality, poverty, war, corporate responsibility, the treatment of animals, and social media, against the background of major ethical and political theories. [36L]
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL275H5 Ethics and Moral Philosophy (HUM)
A survey of the major moral theorists/theories of the Western philosophical tradition. Questions to be addressed include: Why be moral? What makes certain actions right or wrong? Can we know what is morally right or wrong? [36L]
Exclusion: PHL277Y5, PHLA11H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 or 4.0 credits.

PHL277Y5 Moral, Social and Political Philosophy Through Its History (HUM)
Classics in moral, social and political philosophy from Plato to the present. Likely readings include Plato on justice in the state and in the individual, Aristotle's ethics, Hume's moral psychology, Hobbes on the social contract, Kant on the fundamental principle of morality, Mill's utilitarianism, Locke on rights, Marx on Capitalism, Nietzsche on the origins of modern morality, and Rawls and Nozick on distributive justice. [72L]
Exclusion: PHL265H, PHL275
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H (may be taken as a corequisite) or 4.0 credits
Recommended Preparation: PHL100Y5/101Y5/105Y5

PHL282H5 Ethics: Death and Dying (HUM)
(Formerly PHL382H5) An intermediate-level study of moral and legal problems, including the philosophical significance of death, the high-tech prolongation of life, definition and determination of death, suicide, active and passive euthanasia, the withholding of treatment, palliative care and the control of pain, living wills; recent judicial decisions. [36L]
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H (may be taken as a corequisite) or 4.0 credits.

PHL283H5 Bioethics (HUM)
Moral implications of recent developments in medicine and the life sciences; related legal and social issues. Euthanasia, health care priorities, abortion, fertility control, against the background of some major ethical theories. [36L]
Exclusion: PHL281Y1
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.
PHL284H5 Philosophy of Food (HUM)
What obligations do we have in light of the effects of our food choices? Do we have any obligations to non-human animals; are we obliged to spare them painful lives and deaths? Are we obligated to spare their lives altogether? What about our obligations to our fellow humans, and to the environment that future humans will live in? Are we obligated to choose foods that minimize harm to the environment and to other communities? We will explore these questions at both the individual and the social-policy levels. For example, should we as a society have laws that ban certain foods, or certain treatments of animals? Or do such laws trample the freedom of individual choice? Whatever laws we do have, are we as individuals obliged to take responsibility for what we eat? Or are the effects of our choices just an insignificant drop in the bucket, since they make no real difference given what everyone else is doing? [36L]

PHL285H5 Philosophy of Art (HUM)
A study of some of the most important philosophical questions about art. For example, what exactly is a work of art? Can any object whatsoever be, or become, an artwork? Who or what determines whether something is art? Does each person decide for themselves, or does a certain community (the "art world") decide? Can one interpretation or evaluation of a work be better, or more justified, than another? If so, how do we tell which one is better? Exclusion: PHLB03H3
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL290H5 Psychoanalysis (HUM)
An introduction to dream psychology, the psychology of errors, instinct theory, mechanisms of defence, the structure of personality. Philosophical topics include: freedom and determinism, consciousness, the nature of conscience, the status of psychoanalysis. [36L]
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL295H5 Philosophy of Business (HUM)
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 of the other way around? Do political ideas and institutions such as democracy have a role within business? [36L]
Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL299Y5 Research Opportunity Program (HUM)
This course provides a rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details. Prerequisite: PHL105Y5 (may be taken as a corequisite) or PHL145H5 (may be taken as a corequisite) or PHL174H5 (may be taken as a corequisite) or 4.0 credits.

PHL300H5 Topics in Ancient Philosophy (HUM)
A study of some topic or thinker in the ancient period. [36S] Prerequisite: 1.5 credits in PHL Recommended Preparation: PHL200Y5/ 210Y5

PHL307H5 Topics in Mediaeval Philosophy (HUM)
A study of some of the principal figures and intellectual problems in the period from the first century to the sixteenth. Figures such as Philo, Augustine, Abelard, Avicenna, Maimonides, Aquinas, Duns Scotus, Ockham and Suarez will be studied on topics in metaphysics, epistemology, ethics and philosophy of nature. [36S] Prerequisite: 1.5 credits in PHL Recommended Preparation: PHL200Y5/ 210Y5

PHL313H5 Topics in 17th and 18th Century Philosophy (HUM)
A study of a topic or thinker in the 17th or 18th century. [36S] Exclusion: PHL309H5, PHL310H1, PHL311H1 Prerequisite: 1.5 credits in PHL Recommended Preparation: PHL200Y5/ 210Y5

PHL314H5 Kant (HUM)
A systematic study of The Critique of Pure Reason. [36S] Exclusion: PHL312H5, PHL3C7H3 Prerequisite: PHL210Y5; 1.5 additional credits in PHL Recommended Preparation: PHL245H5/ 309H5

PHL315H5 Topics in Nineteenth Century Philosophy (HUM)
A study of some topic or thinker in the 19th century. [36S] Exclusion: PHL317H5 Prerequisite: 1.5 credits in PHL Recommended Preparation: PHL210Y5/ 309H5/ 312H5
PHL324H5 The Continental Tradition (HUM)
A study of recent traditions of continental philosophy such as phenomenology, existentialism, hermeneutics, critical theory, structuralism and post-structuralism. Figures such as Husserl, Heidegger, Sartre, the Frankfurt school, Lacan, Foucault, Deleuze and Derrida. [36S]
Exclusion: PHL320H1, 321H1
Prerequisite: 1.5 credits in PHL

PHL325H5 Early Analytic Philosophy (HUM)
An examination of some of the classic texts of early analytic philosophy, concentrating on the work of Frege, Russell and Wittgenstein. Central topics to be covered include: the development of logic and its relation to arithmetic; the nature of language and meaning; truth and objectivity; the distinction between sense and reference; logical analysis; the relation between language and thought; and the bounds of intelligibility. [36S]
Exclusion: PHLC43H3
Prerequisite: PHL245H5; 1.5 additional credits in PHL
Recommended Preparation: PHL210Y5

PHL327H5 Later Analytic Philosophy (HUM)
An examination of the later analytic tradition from logical positivism to Kripke. The course will cover some of the following topics: meaning and verifiability; the relation between science and philosophy; ordinary language and philosophy; the nature and status of the analytic-synthetic distinction; meaning and theories of meaning; theories of truth; the nature of necessity; and reference and identity. [36S]
Prerequisite: PHL 245H5; 1.5 additional credits in PHL
Recommended Preparation: PHL325H5

PHL332H5 Issues in Metaphysics (HUM)
Typical problems: ontological categories; ontological commitment; the objectivity of space and time; causality and determinism; mind and body. [36S]
Exclusion: PHL330Y1, PHLC60H3
Prerequisite: 1.5 credits in PHL

PHL333H5 Issues in Epistemology (HUM)
Typical problems: knowledge and belief, perception, the analytic-synthetic distinction, theories of truth, necessity and the a priori. [36S]
Exclusion: PHL330Y1
Prerequisite: 1.5 credits in PHL

PHL340H5 Issues in Philosophy of Mind (HUM)
Typical problems: the brain-mind identity theory; intentionality and the mental; personal identity; the nature of human action. [36S]
Prerequisite: 1.5 credits in PHL

PHL341H5 Practical Reason and Human Action (HUM)
(Formerly: Freedom, Responsibility, and Human Action)
The course will cover various topics in action theory and the nature of practical reason, such as the nature of intentional action and intentional explanations, the relation between morality and practical reason, the distinction between theoretical and practical reasoning, and the relation between motivation and evaluation. [36L]
Prerequisite: 1.5 credits in PHL

PHL345H5 Intermediate Logic (HUM)
A sequel to PHL245H5, developing skills in quantificational logic and treating of definite descriptions. The system developed will be used to study a selection of the following topics: philosophical uses of logic, formal systems, set theory, non-classical logics and metalogic. [36L]
Exclusion: PHLC51H3
Prerequisite: PHL245H5 and 1.0 credit in PHL/MAT/CSC

PHL346H5 Philosophy of Logic and Mathematics (HUM)
Platonism versus nominalism, the relation between logic and mathematics, implications of Godel's and Church's theorems, counterfactuals, necessity and possibility, extensional and intensional contexts, intuitionism. [36S]
Exclusion: PHLC55H3
Prerequisite: PHL245H5 and 1.0 credit in PHL/MAT/CSC

PHL347H5 Many-Valued and Modal Logics (HUM)
Many-valued and modal propositional logics and their interrelations; logical matrices and possible-world semantics; problems of interpretation and philosophical applications. [36L]
Prerequisite: PHL245H5 and 1.0 credit in PHL/MAT/CSC
Recommended Preparation: PHL345H5

PHL348H5 Metalogic (HUM)
Soundness and completeness of propositional and quantificational logic, undecidability of quantificational logic, and other metalogical topics. [36L]
Exclusion: PHL344H5, MAT309H5, CSC438H1
Prerequisite: PHL345H5 and 1.0 credit in PHL/MAT/CSC; 1.5 additional credits in PHL

PHL350H5 Philosophy of Language (HUM)
Topics may include: Different approaches to the study of language; the analysis of central theoretical notions in the descriptions of language; the relation between thought and language; the relation between philosophy of language and metaphysics. [36S]
Exclusion: PHLC60H3
Prerequisite: PHL245H5; 1.5 additional credits in PHL
PHL355H5 Issues in Philosophy of Science (HUM)
Central problems and contemporary issues. Topics may include: scientific inference and method; explanation; under-determination; the pessimistic induction; constructive empiricism; entity realism; structural realism; laws of nature. [36S]
Exclusion: PHL356H1
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL245H5/252H5

PHL357H5 Philosophy of Biology (HUM)
Conceptual issues in modern biology. Topics may include natural selection, biological kinds, the role of evolution in explaining human attributes such as rationality, cooperation, and communication, reductionism in molecular biology, and functional explanation in biology. [36L]
Prerequisite: PHL355H5

PHL358H5 Philosophy of Cognitive Science (HUM)
An examination of philosophical issues that arise in cognitive science, such as: the nature of consciousness, alternative models of computation in theories of cognition, the nature and function of perception and the emotions, the evolution of mind and language, and the relation among various fields of cognitive science such as psychology, linguistics, and neuroscience. [36S]
Prerequisite: PHL340H5/345H5/350H5; 1.5 additional credits in PHL

PHL365H5 Issues in Political Philosophy (HUM)
A study of some of the best recent work by political philosophers on topics such as justice, rights, welfare and political authority. [36S]
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL265H5 or PHL277Y5

PHL367H5 Issues in Philosophy and Feminism (HUM)
This course will examine selected philosophical topics in feminism, such as multiculturalism and women’s rights, feminist epistemologies, ethics of care, the intersection between sexism and other forms of oppression, pornography. [36L]
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL267H5/274H5/277Y5

PHL370H5 Issues in Philosophy of Law (HUM)
Major issues in philosophy of law, e.g., responsibility and punishment, the obligation to obey the law, legal positivism, law and morality. [36L]
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL271H5/277Y5

PHL375H5 Issues in Moral Philosophy (HUM)
A study of some of the best recent work by moral philosophers on topics such as the objectivity of values, rights and duties, utilitarianism and the nature of moral judgments. [36S]
Exclusion: PHLC05H3, PHLC06H3
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL275H5 or PHL277Y5

PHL400H5 Seminar in Ancient and Medieval Philosophy (HUM)
Advanced discussion of principal figures and themes in ancient or medieval philosophy. [36S]
Prerequisite: 4.5 PHL credits

PHL416H5 Seminar in 17th and 18th Century Philosophy (HUM)
Advanced discussion of principal figures and themes in 17th or 18th century philosophy. [36S]
Prerequisite: 4.5 PHL credits

PHL420H5 Seminar in 19th and 20th Century Philosophy (HUM)
Advanced discussion of principal figures and themes in 19th and 20th century philosophy. [36S]
Prerequisite: 4.5 PHL credits

PHL430H5 Seminar in Metaphysics and Epistemology (HUM)
Advanced topics in metaphysics or epistemology. [36S]
Prerequisite: 4.5 PHL credits

PHL440H5 Seminar in the Philosophy of Mind (HUM)
Advanced topics in Philosophy of Mind. [36S]
Exclusion: None
Prerequisite: 4.5 PHL credits

PHL451H5 Seminar in Philosophy of Language and Logic (HUM)
Advanced topics in philosophy of language, logic, or philosophy of logic. [36S]
Prerequisite: PHL245H5; 4.5 PHL credits

PHL475H5 Seminar in Moral and Political Philosophy (HUM)
Advanced topics in moral, social, or political philosophy. [36S]
Prerequisite: 4.5 PHL credits
PHL489Y5 The Socrates Project (HUM)
The Socrates Project (PHL489Y) is a full-year course with two components. First, you will serve as a TA for a section of PHL105Y. You will attend two 1-hour PHL105Y lectures each week, and teach one tutorial of 20-25 students, meeting with them for 1 hour each week. You will grade their papers, hold office hours, and meet with the relevant professor as needed. You will be paid for 100 hours of work each semester, for a total of 200 hours, at the current hourly wage for CUPE Unit 1.

The second component of the course is a seminar component that meets once per week for 3 hours. Roughly 75% of the seminar will be devoted to more in-depth study of the topics taken up in the PHL105Y. You will write a seminar paper on one of these topics under the supervision of a UTM Philosophy faculty member working in the relevant area. You will also give an oral presentation on your topic to the seminar members. The remaining 25% of the seminar will focus on the methods and challenges of teaching philosophy, benchmark grading, and grading issues generally.

Admittance to the Socrates Project is by application only. Instructions and the application form are available on the web at: www.philosophy.utoronto.ca/people/academic-employment/cupe-3902-unit-1

PHL495H5 Special Seminar: Philosophical Problems (HUM)
A seminar for advanced students in Specialist and Major Programs in Philosophy. Topic to vary from year to year. [36S]
Prerequisite: 4.5 PHL credits

PHL496H5 Individual Studies (HUM)
Contact Undergraduate Advisor. Individual study courses are aimed at highly motivated students. They are not intended to duplicate course offerings already available. A student seeking to do an independent course must secure a faculty supervisor. Regular meetings between student and supervisor are required, and the workload should be the same as a fourth-year philosophy seminar.
Prerequisite: Permission of Instructor

PHL497H5 Individual Studies (HUM)
Contact Undergraduate Advisor. Individual study courses are aimed at highly motivated students. They are not intended to duplicate course offerings already available. A student seeking to do an independent course must secure a faculty supervisor. Regular meetings between student and supervisor are required, and the workload should be the same as a fourth-year philosophy seminar.
Prerequisite: Permission of Instructor

PHL498H5 Individual Studies (HUM)
Contact Undergraduate Advisor. Individual study courses are aimed at highly motivated students. They are not intended to duplicate course offerings already available. A student seeking to do an independent course must secure a faculty supervisor. Regular meetings between student and supervisor are required, and the workload should be the same as a fourth-year philosophy seminar.
Prerequisite: Permission of Instructor

PHL499H5 Individual Studies (HUM)
Contact Undergraduate Advisor. Individual study courses are aimed at highly motivated students. They are not intended to duplicate course offerings already available. A student seeking to do an independent course must secure a faculty supervisor. Regular meetings between student and supervisor are required, and the workload should be the same as a fourth-year philosophy seminar.
Prerequisite: Permission of Instructor
Philosophy of Science (HBA)

Consult Department of Philosophy

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
PHL Philosophy (page 305)

Minor Program ERMIN1370 Philosophy of Science (Arts)

4.0 credits are required including at least 1.0 at the 300/400 level.

First Year: PHL105Y5

First or Second Year: 1.5, normally at the 100- or 200-level, from AST, BIO, ERS, CHM, PSY, PHY.
NOTE: Courses intended as science courses for students in the Humanities and Social Sciences cannot be counted towards this requirement.

Third or Fourth Year: At least two of the following courses: PHL255H5, 350H5, 355H5, 357H5, 358H5 (including at least one of PHL255H5, 355H5)

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

NOTE: Not all courses are offered each year. Please consult with the department.

Physics (HBSc)

Professors Emeriti
R.F. Code, B.Sc., A.M., Ph.D.
D.J. Dunlop, B.A.Sc., M.A., Ph.D., F.R.S.C.
R.M. Farquhar, B.A., M.A., Ph.D., F.R.S.C.

Professors
V. Barzda, Dipl. Biophys., Ph.D.
W. Ghobriel, B.Sc., M.Sc., Ph.D.
C. Gradinaru, B.Sc., M.Sc., Ph.D.
J.N. Milstein, B.Sc., M.Sc., Ph.D.
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The domain of physics ranges from its origins in natural philosophy to the investigations of complex biological systems. Combining the power of mathematics with the art of precision experiments, Physics discovers the mechanisms that interconnect many different aspects of nature. An increasing number of activities in modern science and technology have arisen from a fundamental basis in physics. Physicists are interested in all systems that can be studied by experimental measurements, and described by mathematical models. Physicists at U of T Mississauga interact closely with astronomers, biologists, chemists, geologists and other scientists to study complex problems in these disciplines.

Students of physics develop flexible skills in experimentation, problem-solving, analytical thinking, and modeling. We offer a Specialist Program in Biomedical Physics that combines fundamental courses in physics, mathematics, chemistry, and biology together with specialized courses in biological physics. This new program has been introduced in response to the growing demand for specialists with physics background in the areas of biology and medicine. We also offer Physics Major and Minor programs. A Major or Minor in physics, in combination with another major, can strongly enhance studies in the other discipline. Besides mathematics and the other natural sciences, a major in another quantitative discipline such as computer science, management/finance, or economics is ideally suited to be combined with a Physics Major or Minor.
A physics background with its emphasis on quantitative problem solving enhances future employment opportunities in scientific research and teaching, biomedical professions, biotech and environmental organizations, industrial research and development, electronics and engineering companies, informatics and computer-related enterprises, or financial institutions.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- BIO Biology (page 78)
- CHM Chemistry (page 94)
- JCB Chemistry (page 94)
- JCP Chemistry (page 94)
- MAT Mathematics (page 298)
- PHY Physics (page 313)
- STA Statistics (page 356)

Specialist Program ERSPE1944 Biomedical Physics Specialist (Science)

Within an Honours Degree, 13.5 credits are required.

**Limited Enrolment** — Enrolment in this program is based on completion of 4.0 credits including PHY135Y/(136H5, 137H5) (minimum grade of 70%).

**Year 1:**
- BIO152H5; CHM140Y5/ (110H5,120H5); MAT134Y5/ 135Y5/ 137Y5; PHY135Y5/ (136H5, 137H5);
- **Year 2:**
- PHY241H5, 242H5, 245H5, 255H5; JCP221H5/ CHM221H5; MAT232H5, 212H5/ 244H5/ STA256H5;
- **Year 3:**
- PHY324H5, 325H5, 332H5, 333H5, 347H5; JCP321H5, 322H5;
- **Year 4:**
- PHY433H5, 451H5, (JCP463H5, PHY473H5)/PHY489Y5/ JCB487Y5; JCP421H5

PHY333H5 and JCP421H5 alternate with PHY332H5 and PHY451H5, respectively, in consecutive years. Check individual course listing for the details in a given calendar year. Check all prerequisites and corequisites when registering for 2nd year courses.

Major Program ERMAJ1944 Physics (Science)

8.0 credits are required including at least 4.0 at the 300/400 level.

**Limited Enrolment** — Enrolment in this program is based on completion of 4.0 credits including PHY135Y/(136H5, 137H5) (minimum grade of 60%).

**Year 1:**
- PHY135Y5/ (136H5, 137H5); MAT134Y5/ 135Y5/ 137Y5
- **Year 2:**
- PHY241H5, 242H5, 245H5, JCP221H5/ CHM221H5
- **Years 3 & 4:**
- PHY324H5, 325H5, 332H5, 347H5, 451H5; JCP321H5, 421H5
- 1.0 additional 300/400 level PHY/JCP credits.

PHY333H5 and JCP421H5 alternate with PHY332H5 and PHY451H5, respectively, in consecutive years. Check individual course listing for the details in a given calendar year.

Minor Program ERMIN1944 Physics (Science)

4.0 credits are required including at least 1.5 at the 300/400 level. Please note that a number of these courses have MAT prerequisites or corequisites.

**Limited Enrolment** — Enrolment in this program is based on completion of 4.0 credits including PHY135Y/(136H5, 137H5) (minimum grade of 60%).

**Year 1:**
- PHY135Y5/ (136H5, 137H5)
- **Year 2:**
- PHY241H5, 242H5, 245H5
- **Years 3 & 4:**
- JCP321H5, 1.0 credits from: PHY325H5, 332H5, 333H5, 347H5, 433H5, 451H5, JCP322H5, 421H5

PHY333H5 and JCP421H5 alternate with PHY332H5 and PHY451H5, respectively, in consecutive years. Check individual course listing for the details in a given calendar year.

List of Courses

**PHY100H5 What’s Physics Got to Do With It? (SCI)**

Stephen Hawking once said: “We are just an advanced breed of monkeys on a minor planet of a very average star. But we can understand the Universe. That makes us something very special.” The magic of Physics, with its ambitious goals of pushing the boundaries of knowledge, from finding the “God particle” to predicting the fate of the Universe, will be the focus of this course. The course is intended for those who are not trained in Physics and Mathematics but who nevertheless want to gain insight into this interesting and important field in a non-intimidating way. We will discover important concepts and theories through applications to everyday phenomena, including new energy sources, laser surgery, flat-screen TVs, wireless communications, GPS, etc. More advanced, but nevertheless fascinating and popular topics, will also be covered: time travel, relativity, ultracold atoms, quantum entanglement, black holes and the Higgs boson. No previous background in Physics is expected; high school algebra is recommended. [24L]

**Exclusion:** Any PHY or JCP course, taken previously or concurrently; PHY100H1; PMU199Y1
PHY136H5 Introductory Physics I (SCI)
An introductory course focusing on conceptual understanding and problem solving skills of subjects such as: Vector Kinematics; Forces and Newton’s Laws of Motion; Dynamics of Uniform Circular Motion; Work and Energy; Impulse and Momentum; Rotational Kinematics; Rotational Dynamics; Simple Harmonic Motion and Elasticity; Waves and Sound; Interference Phenomena. Video demonstrations for the experiments in this course may be found at this YouTube channel: https://www.youtube.com/channel/UCuPRkdMB9JxElfzWK0llaw

Exclusion: PHY131H1; PHYA10H4, 11H3
Prerequisite: 1. Grade 12 Physics (SPH4U)/P.I.; Grade 12 Advanced Functions (MHF4U)/Grade 12 Calculus and Vectors (MCV4U) or, 2. PHY100H5 (minimum grade of 70%)
Recommended Preparation: Grade 12 Calculus & Vectors (MCV4U) highly recommended
Students without Grade 12 Physics (SPH4U) can be granted P.I. based on their performance in Grade 11 Physics (SPH3U) or in the other mathematical and physical sciences. Students who already passed successfully the university level course PHY100H5 (minimum grade of 70%) are also acceptable in PHY135H5.

PHY137H5 Introductory Physics II (SCI)
An introductory course focusing on conceptual understanding and problem solving skills of subjects such as: Electric Forces and Fields; Gauss’ Law; Electric Potential Energy and the Electric Potential; Electric Circuits; Kirchhoff’s Rules; RC circuits; Magnetic Forces and Magnetic Fields; Ampère’s Law; Electromagnetic Induction; Faraday’s Law; Lenz’s Law; The Special Theory of Relativity. [36L, 15P, 12T]
Exclusion: PHY132H1; PHYA21H3, 22H3
Prerequisite: PHY136H5 or P.I.

JCP221H5 Thermodynamics and Kinetics (SCI)
[Replaces CHM221H5] An introduction to equilibrium thermodynamics with application to real and non-ideal systems: covering the concepts of work and heat, the laws of thermodynamics, internal energy, enthalpy and entropy, the chemical potential, states of matter, phase rules and phase diagrams, and chemical equilibria. Kinetics topics include rate laws, both differential and integrated, rate constants, activated complex theory, and temperature effects. [36L, 15P, 14T]
Exclusion: CHM220H1, 221H1, 225Y1; CHM221H5; CHMB20H3
Prerequisite: MAT134Y5/ 135Y5/ 137Y5; CHM140Y5(minimum grade of 60%)/(110H5,120H5; minimum grade of 60% in CHM120H5)/PHY135Y5/ (136H5,137H5) (minimum 60%)
Recommended Preparation: MAT212H5/ 223H5/ 232H5/ 242H5. These courses are also prerequisites for JCP321H5

PHY241H5 Electromagnetism (SCI)
Topics in electricity and magnetism, beginning with vector analysis and culminating in Maxwell’s equations. Electric fields and Gauss’ law, conductors, capacitors and dielectrics. Magnetic fields, magnetic materials and devices, induction and Faraday’s law. Maxwell’s equations and electromagnetic waves are introduced. [24L, 16P, 8T]
Exclusion: PHY250H1
Prerequisite: PHY135Y5/ (136H5,137H5); MAT134Y5/ 135Y5/ 137Y5

PHY242H5 Thermal Physics and Fluid Mechanics (SCI)
An introduction to the basic concepts and modern analysis of thermal-fluid sciences. Topics include: Mechanisms of Heat Transfer; Heat Conduction; Forced and Natural Heat Convection; Radiation Heat Transfer; Fluid Statics; Fluid Kinematics; Fluid Dynamics; Bernoulli and Energy Equations; Internal Flow; Transport Processes and Diffusion; and Biomedical Applications of Thermal Physics and Fluid Mechanics. [24L, 16P, 8T]
Prerequisite: PHY135Y5/ (136H5, 137H5); MAT134Y5/ 135Y5/ 137Y5

PHY245H5 Vibrations and Waves (SCI)
The analysis of vibrating systems and wave motion, introducing mathematical techniques such as complex numbers, eigenvalue problems, and Fourier series. Topics include: simple and coupled oscillators; dispersion relations and boundary conditions; travelling waves; propagation of electromagnetic waves in materials; reflection and transmission of waves at interfaces. [24L, 16P, 8T]
Exclusion: PHY254H1
Prerequisite: PHY135Y5/ (136H5, 137H5), MAT134Y5/ 135Y5/ 137Y5

PHY255H5 Introduction to Biomedical Physics (SCI)
The course focuses on applying principles from introductory Physics to biomedical phenomena. The goal is to illustrate the application of physical principles in life sciences and how this enhances one’s understanding of biology. Topics may vary but they will include: the elasticity of muscles, the flow of blood, the electrical signal propagation in nerve cells, the optical properties of the eye, and the sound generation in vocal cords. In addition, the physical basis of medical techniques such as ultrasound imaging, endoscopy, electrocardiography, magnetic resonance imaging, laser surgery, and radiation therapy will be treated quantitatively. [24L, 12T]
Exclusion: PHY231H1
Prerequisite: PHY135Y5/ (136H5, 137H5) or PI
**PHY299Y5 Research Opportunity Program (SCI,EXP)**

This course provides a rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

**JCP321H5 Introduction to Quantum Mechanics (SCI)**

A first course covering basic concepts of quantum chemistry and physics. Topics include: de Broglie waves and wave-particle duality, the postulates of quantum mechanics, the Schrödinger equation, the square potential well and potential barriers, the harmonic oscillator, the rigid rotor, atoms, molecules and solids. [36L]

*Exclusion:* CHM326Y1, PHY256H1, 356H1; PHYB56H3, C56H3

*Prerequisite:* PHY135Y5/(136H5,137H5) (minimum 60%); JCP221H5/ CHM221H5/ PHY245H5; MAT212H5/ 223H5/ 232H5

**JCP322H5 Introduction to Statistical Mechanics (SCI)**

Statistical methods for bridging the quantum behaviour of atoms and molecules to their macroscopic properties in solid, liquid and gaseous states. The course introduces partition functions, canonical ensembles, and their application to thermodynamic properties such as entropy, heat capacity, equilibrium constants, reaction rates, and Bose-Einstein/Fermi-Dirac distribution functions. [36L]

*Exclusion:* CHM328H1; CHMC20H3

*Prerequisite:* JCP321H5

**PHY324H5 Advanced Physics Laboratory (SCI,EXP)**

Selected physics experiments and modeling that illustrate important principles of physics. Topics include: fiber optics and laser physics, optical interferometers, atomic spectroscopy, microwave optics, absorption of gamma rays, nuclear coincidence counting, gamma ray spectroscopy, X-ray quantum physics, nuclear magnetic resonance, field emission of electrons. [72P]

*Prerequisite:* PHY241H5/ 242H5/ 245H5/JCP221H5

**PHY325H5 Mathematical and Computational Physics (SCI)**

The theory and applications of mathematical methods for the physical sciences. The topics include: vector calculus, linear algebra applied to coordinate transformations, probability distributions, systems of linear ordinary differential equations and boundary value problems, Fourier analysis and orthogonal functions, Laplace's, Bessel's and the Heat equations in various coordinate systems, and use of Legendre polynomials and Spherical Bessel functions. Computational methods and standard software tools will be used to solve the complex physics problems. [24L, 12P, 6T]

*Corequisite:* PHY241H5, 242H5, 245H5

**PHY332H5 Molecular Biophysics (SCI)**

A physicist's perspective on the building blocks of the living world, such as nucleic acids, proteins and lipids. The course will cover topics such as symmetry, structural complexity of the biological macromolecules, molecular interactions in the cellular environment and the impact for the biological function. Basic concepts from mechanics and thermodynamics will be applied specifically to proteins and DNA in order to understand structural transitions, stabilizing interactions, reaction dynamics and equilibrium. A rigorous treatment of a wide range of biophysical techniques commonly use in life science, such as optical spectroscopy, light scattering, mass spectrometry and single-molecule methods, will be accompanied by recent examples from the molecular biophysics research. [24L, 12T]

*Exclusion:* PHY331H1

*Prerequisite:* PHY242H5, 255H5; JCP221H5

**PHY333H5 Physics of the Cell (SCI)**

A biophysical description of the structural properties and biological processes of the cell. The course will focus on: membrane biophysics, osmosis and transport through membranes, cell division, differentiation and growth, cell motility and muscular movement, cellular communication, cellular signal transduction and control, nerve impulses, action potential, synaptic signal transmission, free energy transduction in biological systems and bioenergetics of the cell, photosynthesis and respiration, photobiophysics, photoreception, and bioluminescence. [24L, 12T]

*Exclusion:* PHY431H5

*Prerequisite:* PHY242H5, 255H5, JCP221H5

**PHY347H5 Optics (SCI,EXP)**

A comprehensive introduction to the physics of light. Topics may vary but will include: electromagnetic waves and propagation of light, basic coherence concepts and the interference of light, Fraunhofer and Fresnel diffraction, matrix methods in paraxial optics, Fresnel equations, polarization and birefringence. Technical applications will include lasers, optical fibers and optical detectors and displays. [24L, 16P, 8T]

*Exclusion:* PHY247H5; PHY385H1

*Prerequisite:* PHY241H5, 245H5, 325H5
PHY399Y5 Research Opportunity Program (SCI,EXP)
This course provides third-year undergraduate students (after completion of at least 8 to 10 credits) who have developed some knowledge of Physics and its research methods, an opportunity to work in the research project of a professor in return for course credit. Students enrolled have the opportunity to become involved in original research, enhance their research skills and share in the excitement of acquiring new knowledge and in the discovery process of science. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: P.I.

JCP410H5 Modelling of Biochemical Systems (SCI)
An introduction to mathematical modelling of complex biological systems. The primary focus will be on biochemical kinetic models and the nonlinear dynamics that arise from them. An introduction to and survey of techniques in mathematics (especially nonlinear dynamics and stochastic processes) will be presented, along with an overview of numerical methods for computational simulation, including an introduction to molecular modelling. [24L]
Recommended Preparation: MAT212H5/ 242H5

JCP421H5 Quantum Mechanics (SCI)
The course offers an in-depth examination of the fundamental principles of quantum theory and a guide to its applications. Topics may vary but will include: time-independent Schrodinger equation, quantum dynamics in Heisenberg and Schrodinger pictures, time-independent perturbation theory, WKB approximation, variational method, spin, addition of angular momentum, time-dependent perturbation theory, scattering. [36L]
Exclusion: PHYC563H3
Prerequisite: JCP321H5, PHY325H5

JCP422H5 NMR Spectroscopy (SCI)
Fundamentals of NMR spectroscopy including classical and quantum descriptions, NMR parameters and relaxation times, product operators, multi-dimensional NMR, and solid-state techniques. [24L]
Prerequisite: JCP221H5/ CHM221H5/ PHY241H5,245H5; MAT212H5/ 221H5/ 258Y5
Recommended Preparation: JCP321H5

PHY433H5 Medical Physics (SCI)
An introduction to key physical principles applied to medical diagnostics, imaging and radiation therapy. Topics include: electrophysiology, electrocardiogram and encephalogram; biomagnetism, magnetocardiogram and magnetoencephalogram; atomic and nuclear physics, ionizing radiation, radioactivity, nuclear medicine; theory of image formation and analysis, X- and gamma-ray imaging, positron emission tomography; lasers, optical light-matter interactions, optical imaging and therapy; physics of ultrasound, Doppler scanning and imaging with ultrasound; principles of nuclear magnetic resonance, contrast in magnetic resonance imaging. [24L, 12T]
Prerequisite: PHY332H5/ 333H5

PHY451H5 Classical Electrodynamics (SCI)
An overview of electromagnetism leading to the study of radiation. A review of electrostatics, magnetostatics, and Maxwell's equations is followed by a discussion of propagating, non-propagating and guided waves; interactions with dielectric boundaries; multipole radiation fields, and simple models of optical dispersion. [24L, 12T]
Exclusion: PHY350H1; PHYC50H3
Prerequisite: PHY241H5, 325H5

JCP463H5 Techniques in Structural Biology (SCI)
Biochemical and biophysical approaches to studies of protein interactions, structures, and dynamics. Theory and practice of specific experimental approaches will provide a fundamental understanding on information potential and technique limitations. Specific applications from the current literature will be discussed. Student evaluations will include oral presentations describing studies using the techniques. [24L, 12T]
Prerequisite: CHM361H5/ (PHY332H5/ 333H5)
Recommended Preparation: CHM362H5, JCP221H5

PHY473H5 Supervised Readings (SCI,EXP)
A program of individual study chosen by the student with the advice of, and carried out under the direction of, a Physics professor. This course requires the student to submit a completed application to the CPS Undergraduate Assistant. Registration in the course is required. The application form can be downloaded from http://uoft.me/cpsforms.
Prerequisite: Permission of the course co-ordinator.
**Political Science (HBA)**

**Professors Emeriti**
- P. Silcox, B.A., Dipl. of Soc. Admin., M.A., Ph.D.
- P. Solomon, B.A., M.A., Ph.D.
- G. White, B.A., M.A., Ph.D.

**Professors**
- T. Bejan, B.A., M.A., M.Phil., Ph.D.
- S.F. Bernstein, B.A., M.A., Ph.D.
- A. Braun, B.A., M.A., Ph.D.
- L.A. Fuji, B.A., M.A., Ph.D.
- S. Hughes, B.Sc., M.Sc., Ph.D.
- M. Lippincott, B.A., M.A., Ph.D.
- P.J. Loewen, B.A., Ph.D.
- S. Mukherjee, B.A., M.A., Ph.D.
- A. Olive, B.A., M.A., Ph.D.
- E. Schatz, B.A., M.A., Ph.D.
- E. Tolley, B.A., M.A., Ph.D.
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When one asks after the subject matter of Botany or Geography or Economics, one may hope for a reasonably straightforward and uncontroversial answer. But to ask after the subject matter of Political Science immediately plunges one into controversies no less deep and intractable than those that grip political life itself. What is politics? Answers range all the way from, at one extreme, Plato's "the art whose business it is to care for souls," to, at the other extreme, Harold Laswell's "who gets what, when, how." For this reason, the study of politics makes uncommon demands on one's critical faculties; in fact, it is the leading goal of political science to cultivate just this capacity for critical reflection. To be sure, the student of politics can expect to be asked to master a great mass of plain facts, with a view to explaining what makes bureaucracies work; how great powers rise and fall; what constitutes the difference between an effective public policy and a misguided one; how one designs an unbiased opinion poll; what factors shape international decision-making; and so on. Indeed, important disciplines within Political Science...
address questions like these. But not even the greatest
exertion of fact-mongering can relieve the student of the
need to ponder the more far-reaching questions: Who ought
to rule? What is legitimacy? Are liberty and equality
compatible? How does one adjudicate between competing
ideas about democracy? What are the abiding needs of
human beings as such? Are we by nature political animals?
In short, one cannot study the doings of citizens, public
servants, and governments in abstraction from the
attempts, from Plato onwards, to define the very nature of
politics itself.

Perhaps it might be said that political science caters to
every taste, from those preoccupied solely by the question
of how one can rise to be premier of Ontario, to those
whose chief longing is to glimpse the true nature of justice.
Put less vulgarly, this suggests that the study of politics
encompasses the entire range of human concerns in their
full diversity. Aristotle went so far as to claim that political
science is the "ruling science" insofar as it inquires not
merely into this or that aspect of human affairs, but looks to
the comprehensive order within which all human activities
and practices are governed. It seems fair to say that the
subsequent development of Political Science as an
intellectual discipline has not left behind this ancient claim,
but confirmed it ever anew.

Political Science graduates do not typically go on to become
professional politicians. More frequently, they proceed to
careers in law, journalism, the civil service and
government-business relations.

Students are urged to consult the U of T Mississauga
Political Science Handbook and the Political Science
Undergraduate Studies (available in the Political Science.office, Suite 3125, William G. Davis Bldg., and on the
departmental website), both of which are published in the
spring, for detailed information on course offerings.

Students contemplating taking either 300- or 400-level
courses in Political Science at the St. George Campus are
advised to consult the website www.chass.utoronto.ca/polsci/ for instructions.

Notes:

- 200-level POL courses require standing in either 1.0
  POL credit or in at least 4.0 credits.

- 400-Level Topics Courses. The number of courses
  and the actual content of the courses will vary from
  year to year. For details on specific courses to be
  offered, along with their individual prerequisites,
  consult the U of T Mississauga Political Science
  Handbook. Only minimum prerequisites are listed
  here.

Students should also review the Degree Requirements
(Please see:

For courses in this area see:
JPE Environment (page 186)
POL Political Science (page 319)

Specialist Program ERSPE2015 Political Science (Arts)

10.0 POL credits are required including 4.0 credits at the
300/400 level, of which 2.0 credits must be at the 400 level.

Limited Enrolment – Students enrolling at the end
of first year (4.0 credits) must obtain a CGPA of at
least 2.00 and a mark of at least 70% in 1.0 POL
credit. Students applying to enrol after second year
(8.0 credits) must obtain a CGPA of at least 2.30 and
a mark of at least 70% in each of 2.0 POL credits.

1. POL200Y5, 208Y5, 214Y5, 218Y5, 242Y5, 320Y5

2. 1.0 credit in the field of Public Policy and Public
   Administration: POL250Y5, 316Y5, 317Y5, 336Y5,
   346Y5, 353Y5, 355Y5, 368Y5, 369Y5; ENV 250Y5, 3551Y5,
   359Y5, 452H; JPE 250Y5; JEP 356H5, 351H5, 452H

3. 3.0 additional POL courses

Major Program ERMAJ2015 Political Science
(Arts)

7.0 POL credits are required including at least 2.0 credits at
the 300 level.

Limited Enrolment – Students enrolling at the end
of first year (4.0 credits) must obtain a CGPA of at
least 2.00 and a mark of at least 65% in 1.0 POL
credit. Students applying to enrol after second year
(8.0 credits) must obtain a CGPA of at least 2.30 and
a mark of at least 70% in each of 2.0 POL credits.

1. POL200Y5, POL 214Y5

2. 1.0 credit from each of two the following three fields:
   (a) Comparative Politics - POL203Y5, 204Y5,
       218Y5, 354Y5, 360H5, 361H5, 362H5, 363H5,
       300Y5, 302Y5, 303Y5, 304Y5, 309Y5, 322Y5,
       440Y5, 443H5, 438H5
   (b) International Relations - POL208Y5, 310Y5,
       327Y5, 340Y5, 343Y5, 486Y5, 487H5
   (c) Public Policy and Public Administration -
       POL250Y5, 316Y5, 317Y5, 336Y5, 346Y5,
       353Y5, 355Y5, 368Y5, 369Y5; ENV 250Y5, 3551Y5,
       359Y5, 452H; JPE250Y5; JEP 356H5, 351H5, 452H

3. 3.0 additional POL credits
Minor Program ERMIN2015 Political Science (Arts)

4.0 POL credits are required including at least 1.0 300-level credit and no more than 1.0 at the 100 level.

Enrolment in Political Science Specialist, Major and Combined Specialist programs is limited.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

100-Level Courses 100-level POL courses are designed to introduce students to different approaches to studying politics and to some of the theories and concepts employed by political scientists. No 100-series course is a prerequisite for upper-year POL courses.

The specific content of any 100-level course and the approach taken in it will vary from year to year depending on the instructors. For example, in one year POL114H5 might focus on international relations and in the following year it might look in detail at a particular region of the world. Similarly, in one year a course might be taught through extensive use of films and novels and the next year it might rely primarily on academic texts.

POL111H5 Canada in Comparative Perspective (SSc)
Examines major facets of Canadian government and politics within a broad comparative context asking what is different or unique about Canada and what resembles political systems elsewhere in the world, primarily western industrialized countries. Comparative analysis is used to foster a deeper understanding of Canada and its politics. [24L, 12T] 
Exclusion: POL224Y1

POL112H5 Democracy in Theory and Practice (SSc)
Examines current ideas about what constitutes ‘democracy’ and how real-world political systems measure up to democratic ideals. Through examination of formal government institutions and informal political practices, assessments will be made of the strengths and weaknesses in modern democracies. Case studies may be drawn from Canada or from other countries which claim to be democratic. [24L, 12T] 
Exclusion: POLA51H3

POL113H5 Ideas and Ideologies (SSc)
In this course students are introduced to basic concepts in politics such as authority, sovereignty, legitimacy, citizenship, jurisdiction, civil rights and civil liberties. These concepts are then used to examine the fundamental differences between major political ideologies, such as democracy, liberalism, socialism, fascism, conservatism, anarchism and communism. [24L, 12T]

POL114H5 Politics in the Global World (SSc)
Examines the politics of globalization in its various forms (economics, cultures, environmental and military) as well as the consequences of, management of and resistance to, globalization. Address topics such as whether globalization challenges the capacity of national societies and their governments to deal with global issues such as the environment, redistribution of wealth, security and human rights, both within countries and across borders. [24L, 12T] 
Exclusion: POLA83H3

POL200Y5 Political Theory (SSc)
The development of political thought to the 17th century. Among the theorists examined are Plato, Aristotle, Machiavelli, Hobbes and Locke. [48L, 24T] 
Prerequisite: 1.0 POL credit/4.0 credits

POL203Y5 Politics and Government of the United States (SSc)
A comparative study of the development of American government and the main elements of the American political tradition; the structure and functioning of executives, legislatures, courts, bureaucracies, parties and pressure groups in federal and state government; characteristic processes of American politics such as voting, bargaining and regulation; and resultant patterns of public policy. [48L] 
Exclusion: POL 203Y1, POLC92H3, POLC93H3 
Prerequisite: 1.0 POL credit/4.0 credits

POL208Y5 Introduction to International Relations (SSc)
Themes: What causes war? How can peace be achieved and sustained? What is the nature of international society and order? What trends are emerging in international affairs as we begin a new century? The main goal of the course is to provide the conceptual and theoretical tools to understand and study world affairs in order to address these questions. Will critically assess the nature and role of actors, institutions, and political and economic forces in shaping world events. [48L, 24T] 
Exclusion: POL 208Y1, POLB80H3, POLB81H3 
Prerequisite: 1.0 POL credit/4.0 credits

POL214Y5 Canadian Government and Politics (SSc)
Canada’s political system: its key governmental institutions and informal political practices, assessments will be made of the strengths and weaknesses in modern democracies. Case studies may be drawn from Canada or from other countries which claim to be democratic. [24L, 12T] 
Exclusion: POLA83H3, (110H5, 111H5), POL 214Y1, 224Y1, POLB50Y3 
Prerequisite: 1.0 POL credit/4.0 credits
POL218Y5 Introduction to Comparative Politics (SSc)
An introduction to the main themes, concepts and methods in comparative politics. Comparative politics compares the ways people and institutions interact, in different countries and regions of the world (including both developing and developed), to produce what we call "politics." The course brings to bear different interpretive frameworks (political culture, political economy, identity politics, and institutional analysis) to help us understand this interaction. Topics include: the formation, development and eventual decay of political institutions such as the nation-state, political regimes, parties, party systems and local governments; the ideas and interests shaping political behaviour; and the reasons why, and the ways in which, groups mobilize politically. [48L]
Prerequisite: 1.0 POL credit/4.0 credits

POL242Y5 Methods (SSc)
This course offers an introduction to political science research methods. The course will cover basic approaches to political science, the choices that researchers have to make when designing their research and basic methods of analysis for both qualitative and quantitative data. Topics include: validity and reliability, levels of measurement, questionnaire design, experiments, elite interviews, participant observation and policy evaluation. Prerequisite: 1.0 POL credit/4.0 credits

JPE250Y5 Environmental Politics in Canada (SSc)
Analyzes environmental issues in Canadian politics. Topics include: regulation and property rights, the politics of agenda-setting; sustainable development; science in politics; the impact of federalism; and global influences on domestic policy-making. Substantive issues could include climate change, biodiversity, drinking water, land use and the degradation of natural resources. [48L]
Exclusion: POL250Y5, ENV250Y5, ENV320H1
Prerequisite: 3.5 credits

POL300Y5 Topics in Comparative Politics (SSc)
Content of course will vary from year to year. [48L]
Exclusion: POL 300Y1, POLC42H3
Prerequisite: 2.0 POL credits

POL301H5 Topics in Political Theory (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. Prerequisite: POL 200Y

POL302Y5 Politics of Western Europe and the European Union (SSc)
Political institutions and processes in Western Europe, with special reference to Britain, France, Germany and Italy. Evolution of the European Union, its institutions and policy-making system. [48L]
Exclusion: POL 207Y1, POLB93H3
Prerequisite: 2.0 POL credits, including POL218Y5

POL303Y5 The Politics of Islam (SSc)
The course examines the theory and practice of Islamic politics in the modern era. It also looks at Western foreign policy and Western cultural reactions to politics in the Muslim world. The aim is to acquaint students with the diversity within the Muslim world and help them better understand some of the most pressing political issues raised by contemporary Islam.
Exclusion: POL300Y5, POL300Y1, POLC96H3, POLC97H3
Prerequisite: any 2.0 POL credits

POL304Y5 Politics of South Asia (SSc)
This course surveys systems of government and political processes across South Asia, with attention to state formation, nationalism, ethnicity, democracy vs. authoritarian forms of governance, social movements, political violence, insurgencies, political economy, corruption, and other important issues afflicting South Asian states currently. The focus will be mostly on India and Pakistan and possibly some of the other countries in south Asia.
Prerequisite: POL 208Y/POL 218Y or permission of instructor based on strong interest in South Asia

POL309Y5 The State, Planning and Markets (SSc)
A study of the political economy of planning and markets, the history of both forms of organization, the political philosophies of liberalism and Marxism upon which they have been based, and the issues of economic efficiency, justice and democratic control in capitalism and socialism. [48L]
Prerequisite: POL200Y

POL310Y5 Managing International Military Conflict (SSc)
Analysis of different aspects of conflict management, including security regimes, U.N. peacekeeping, mediation, bilateral as well as multilateral techniques. [48L]
Exclusion: POLC09H3
Prerequisite: POL208Y5

POL316Y5 Contemporary Canadian Federalism (SSc)
Constitutional, political, administrative, and financial aspects of federal-provincial relations, regionalism and cultural dualism. [48L]
Exclusion: POL 316Y1, POLC57H3
Prerequisite: POL100Y/5/102Y1/ (110H5, 111H5)/214Y5

POL317Y5 Comparative Public Policy and Administration (SSc)
Major theories and concepts in the fields of public administration and public policy, drawing on the experience of advanced industrialized nations. [48L]
Prerequisite: POL203Y/218Y/302Y/309Y/353Y
POL320Y5 Modern Political Thought (SSc)
The development of political thought in the 18th and 19th centuries, including Rousseau, Burke, Hume, Kant, Hegel, the English Utilitarians (Bentham and J.S. Mill), Marx and Nietzsche. [48L]
Exclusion: POL 320Y1, POLC73H3
Prerequisite: POL200Y5

POL322Y5 Enlightenment and Theocracy (SSc)
A survey of modern political theories, from Machiavelli onwards, bearing on the problem of religion and politics. The course includes discussions of Hobbes, Spinoza, Locke, Rousseau, and Kant, as well as anti-liberal thinkers such as Maistre and Nietzsche. Themes include toleration, the Enlightenment, civil religion, and theocracy.
Prerequisite: POL 200Y, but POL 320Y is recommended

POL327Y5 Comparative Foreign Policy (SSc)
Comparative study of the foreign policies of Russia/USSR, the United States, Great Britain, France and Germany. [48L]
Exclusion: POL 326Y1, POLC82H3, POLC83H3
Prerequisite: POL208Y5

POL336Y5 Ontario Politics (SSc)
Examines the influence of social and economic forces on contemporary Ontario politics, with emphasis on major recent changes in the Ontario political system. Topics include: political parties and elections, structures of governance (cabinet, legislature, etc.), local government and selected public policy issues. [48L]
Exclusion: POL336H1
Prerequisite: POL100Y5/ 102Y1/ (110H5, 111H5)/ 214Y5

POL340Y5 International Law (SSc)
International law as an instrument of conflict resolution. Recognition, sovereign immunity, subjects of international law, and jurisdiction are some of the subjects examined. [48L]
Exclusion: POL 340Y1
Prerequisite: POL208Y5

POL343Y5 Politics of Global Governance (SSc)
Examines the changing nature and forms of governance in the international system. It explores why and how international institutions and organizations arise; the goals, roles, and effectiveness of institutions in managing global problems and creating order and stability, and whether the rules and norms created by such institutions alter state behaviour, influence domestic policies, and/or challenge state sovereignty. [48L]
Exclusion: POL 343Y1, POLC87H3
Prerequisite: POL208Y5

POL346Y5 Urban Politics (SSc)
This course compares urban politics in North America and Western Europe, with a particular emphasis on Canadian cities, and examines how urban political dynamics in different local and national settings shape responses to urban policy issues. The course also examines the changing role of cities in the global economy, introducing key theories and concepts in urban political analysis.
Exclusion: POL 349Y1
Prerequisite: Any 2.0 POL credits

JEP351H5 Comparative Environmental Policy (SSc)
This course is an introduction to comparative environmental policy. The main focus of the course will be Canada-US-Mexico comparative policy around climate change, biodiversity, water resources, and pollution. Other countries may be examined as larger themes related to sustainable development and environmental justice will be covered in detail. [24L]
Exclusion: ENV351H5
Prerequisite: 9.0 credits, ENV250Y5
Recommended Preparation: This course is recommended for students with an interest in comparative politics and policy. Previous courses in comparative and international political science, geography and sociology will be an asset.

POL353Y5 Canadian Public Policy: From the Golden Age to the Era of Globalization (SSc)
Examines the changing international context of Canadian public policy and its implications for the scope of public policy in Canada. Reviews the course of public policy over the postwar period and the changing capacity of the national government to respond to the pressures and challenges of the international economy. Focuses on the implications of these developments for specific areas of public policy, such as macroeconomic policy, social policy, industrial policy, trade policy and cultural policy. [48L]
Exclusion: POL209Y5, POL 316Y, POLC57H3, POLC54H3
Prerequisite: POL100Y5/ (110H5, 111H5)/ 214Y5

POL354Y5 Russian Politics (SSc)
The formation and development of the Soviet System of government under Lenin and Stalin; Soviet politics in the post-Stalin era and the struggle for reform; the collapse of Communist party rule and the Soviet state; government and politics in the new Russia, with comparisons to other successor states. [48L]
Exclusion: POL 204Y5, POL 204Y1, POL 354H1, POLC89H3
Prerequisite: 2.0 POL credits
**POL355Y5 Multiculturalism and Citizenship (SSc)**

How are laws, policies, and social norms affected by the overwhelmingly multicultural character of contemporary societies? This course examines how the realities of contemporary multiculturalism have reshaped civic life, both in Canada and in other societies. The course will attempt to cover both empirical and theoretical-normative approaches to these issues.

*Exclusion:* POLC85H3  
*Prerequisite:* Any 2.0 POL credits

**POL360H5 State, Society and Regime Change in Latin America (SSc)**

Comprehensively analyzes states and societies in Latin America and the historical foundations of political regimes in the region. Examines types of political regimes (authoritarian and democratic) and the sources and types of regime change, with special emphasis on democratization. Theoretical discussion is followed by case studies. [24L]  
*Exclusion:* POL 305Y1, POLC91H3  
*Prerequisite:* POL201Y5/218Y5

**POL361H5 After Regime Change: The Quality of Democracy in Latin America (SSc)**

Explores Latin America’s efforts to build a liberal democratic order in the face of powerful challenges. Examines both the advances and setbacks of democracy in the region since the early 1980s. Particular attention is devoted to problems of institutional design and the potential contribution of institutional engineering. [24L]  
*Exclusion:* POLC91H3  
*Prerequisite:* POL360H5

**POL368H5 Women and Politics (SSc)**

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.  
*Exclusion:* POL 351Y1, POL 450H1  
*Prerequisite:* 2.0 POL credits

**POL369Y5 Media and Politics (SSc)**

The role of the mass media in shaping (perceptions of) the political world and in enhancing or diminishing democracy; government regulation of media; the question of bias in political reporting; media ownership and concentration; the political significance of ‘new’ media; the interplay of media technology and politics. [48L]  
*Exclusion:* POL213Y  
*Prerequisite:* 2.0 POL credits/2.0 CCIT/VCC credits

**JEP356H5 Environmental Justice (SSc)**

Environmental Justice is about the fair treatment of all people in the creation and implementation of environmental policies. It also provides a critical framework to analyze and understand inequalities of an environmental kind. These inequalities are often based around identities of race, class and gender, such that marginalized groups are made to bear the burden of environmental externalities like pollution. Why are First Nations in Canada less likely to have access to safe drinking water? Why are industrial plants often in low-income neighborhoods? After critical examinations of the theories and foundations of environmental justice, this course uses a case study approach to understanding the concepts and the ways in which it has shaped modern society. [24L, 12T]  
*Prerequisite:* 8.5 credits

**POL390H5 Topics in Comparative Politics (SSc)**

Content of course will vary from year to year. Consult with the *Political Science Handbook*.  
*Prerequisite:* POL 218Y5

**POL399Y5 Research Opportunity Program (SSc)**

This course provides a richly rewarding opportunity for students in their third year to work in the research project of a professor in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.  
*Prerequisite:* 1.0 POL credit

**POL404Y5 Political Thought from Freud to Foucault (SSc)**

The purpose of the course is to survey the work of some leading political thinkers of the 20th century. The seminar will begin with a discussion of Sigmund Freud and Max Weber, and thereafter will focus on six key political philosophers: Hannah Arendt, Leo Strauss, Alasdair MacIntyre, Michael Foucault, Jurgen Habermas and John Rawls.  
*Prerequisite:* POL 200Y  
*Restrictions:* 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists). 3) Prior completion of POL 320Y is desirable though not required

**POL438Y5 Topics in Comparative Politics (SSc)**

Content of course will vary from year to year. Consult the *Political Science Handbook*. [24S]  
*Prerequisite:* POL218Y5  
*Restrictions:* 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).
POL440Y5 Politics and Governments of Eastern Europe (SSc)
Comparative analysis of the former Communist states of Eastern Europe and the post-Communist successor states. [48S]
Prerequisite: POL204Y5/ 208Y5/ 354Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL443Y5 Topics in Comparative Politics (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Prerequisite: POL218Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL446H5 Politics of the South Asian Diaspora in Comparative Perspective (SSc)
This course examines the politics of South Asian diasporas in Canada, scaled at local, provincial, and national levels. Major themes include democratic representation, multiculturalism, social mobilization, and dilemmas of cultural autonomy. Other diasporic groups globally - both South Asian and otherwise - are examined for the purpose of comparison.
Prerequisite: POL 218Y or permission of the instructor

POL455Y5 The Craft of Political Research (SSc)
A first-hand exploration of the conceptual, analytic and practical issues arising in the conduct of research in political science. After reading books and articles published by UofT political scientists, students will meet with the authors to discuss the authors' research, addressing concerns such as framing the research question, developing a research design, securing funding, conducting interviews and archival research, gathering quantitative data, analysis and publication of results. [48S]
Prerequisite: Enrollment limited to POL Specialists and Joint Specialists with at least 6.0 POL credits and P.I.
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL475H5 Global Environmental and Sustainability Politics (SSc)
This course examines the challenges faced by humanity in dealing with global environmental and sustainability problems and the politics of addressing them. Focuses on both the underlying factors that shape the politics of these problems - such as scientific uncertainty, North-South conflict, equity concerns, globalization and production and consumption patterns - and explores attempts at the governance of specific global or transnational environmental and sustainability issues by state and non-state actors.
Prerequisite: POL 208Y5

POL476H5 Topics in Political Economy (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL477H5 Topics in Political Economy (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL478Y5 Moral Reason and Economic History (SSc)
A study of the interaction between political philosophy and economic history. The course involves alternative conceptions of the relation between individuals and the community, between the economy and the political order, between what ‘is’ and what ‘ought to be.’ [48S]
Prerequisite: POL320Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

JEP452H5 Politics and Policy of Wildlife Conservation (SSc)
This course is an in-depth analysis of conservation policy in Canada. The course begins with an overview biodiversity crisis facing the planet and then moves to an overview of Canada’s approach to managing biodiversity across the country. We will carefully examine the federal Species at Risk Act as well as the provincial and territorial wildlife legislation. The remaining of the course will be aimed at making improvements to the Canadian strategy. During the course of the semester, the students will focus on the recovery of endangered species in Canada through the development of a recovery strategy for a specific species.[24L]
Exclusion: ENV452H5
Prerequisite: ENV100Y5, ENV250H5
POL484Y5 Topics in Political Thought (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [48S]
Prerequisite: POL320Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL485H5 Topics in Political Thought (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Prerequisite: POL320Y
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL486Y5 Topics in International Relations (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [48S]
Prerequisite: POL208Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL487H5 Topics in International Relations (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Prerequisite: POL208Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL490H5 Topics in Canadian Politics (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24S]
Prerequisite: POL100Y5/ (110H5, 111H5)/ 214Y5
Restrictions: 1) 400-series POL courses are limited to POL Specialists and Joint Specialists; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists).

POL495Y5 Undergraduate Reading Course (SSc)
This is a student-initiated course of reading and research on a specialized topic of interest to the student. It is normally only open to students enrolled in Political Science Specialist and Major programs. Students wishing to enrol must find a faculty member willing to supervise the course, develop a program of study in consultation with the supervisor and obtain written approval for the course from the chair. Prerequisite: Permission of Instructor and of the Chair

POL496H5 Undergraduate Reading Course (SSc)
This is a student-initiated course of reading and research on a specialized topic of interest to the student. It is normally only open to students enrolled in Political Science Specialist and Major programs. Students wishing to enrol must find a faculty member willing to supervise the course, develop a program of study in consultation with the supervisor and obtain written approval for the course from the chair. Prerequisite: Permission of Instructor and of the Chair
Professional Writing and Communication (HBA)

Professors
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Professional Writing and Communication (PWC) refers to the principles of communication articulated in classical rhetoric and updated through contemporary theory and practice in professional settings. PWC treats communication as interdisciplinary and socially situated. Program courses emphasize communications based on primary research.

The PWC curriculum grows out of composition, genre, and discourse theories – research grounded in anthropology, philosophy, psychology, sociology, linguistics and literary theory. PWC students examine the way communication, especially written communication, works in professional, academic, artistic, personal and public settings.

PWC aims to produce critical thinkers and flexible, reflective writers and researchers who apply their knowledge of language and communications principles across disciplines.

Note on Writing-intensive Courses: To count a writing-intensive course towards the completion of the Professional Writing and Communication Major or Minor, students must submit to the student advisor evidence that 50% or more of the course final mark is based on written and/or oral presentation work. Students must submit a copy of the course syllabus or a letter from the course instructor.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
BIO Biology (page 78)
CCT Communication, Culture, Information and Technology (page 115)
CLA Classics (page 103)
ENG English (page 166)
HSC Biomedical Communications (page 88)
JAL Linguistics (page 280)
LIN Linguistics (page 280)
PHL Philosophy (page 305)
PSY Psychology (page 332)
SOC Sociology (page 341)
WRI Professional Writing and Communication (page 326)

Limited Enrolment – Admission into the PWC Major Program is by application. To be considered for admission into the program, students MUST submit the application available at www.utm.utoronto.ca/pwc, in addition to requesting the Subject POSH on ACORN.

Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements

1. Completion of 4.0 credits.
2. A minimum Cumulative Grade Point Average of at least 2.5 OR a grade of at least 75% in WRI203H5. The actual CGPA requirements or grade requirements in any particular year may exceed these values in order for us to balance enrolments and teaching resources.
3. PWC Direct On-Line Applications and Application Procedures are available on the Professional Writing and Communication website at: www.utm.utoronto.ca/pwc

Applications are accepted only during Subject POSH periods.

First Year or 2nd: WRI203H5 (a prerequisite for all other WRI courses)

Upper Years: A minimum of 2.5 credits from any WRI course.
A maximum of 2.0 Elective credits from:
ENG266H5/ 271H5/ 357H5
HSC300H5/ HSC301H5/ 302H5/
PHL255H5/ 350H5/
PSY315H5/ 374H5/ 376H5
SOC309H5/ 384H5

A maximum of 2.0 credits of approved writing-intensive courses.

The Major Program requires 7.0 credits, including at least 2.0 at the 300/400 level. This program must be combined with another major or specialist.

Major Program ERMAJ1302 Professional Writing and Communication (Arts)
Minor Program ERMIN1302 Professional Writing and Communication (Arts)

This program must be taken as part of an Honours degree. The Professional Writing and Communication Minor must be combined with another major or specialist.

4.0 credits are required including at least 1.0 at the 300/400 level:

**Limited Enrolment** -- Enrolment in this program is limited to students who have:
1. Completed 4.0 credits; 2. A minimum Cumulative Grade Point Average (CGPA) of at least 2.0 OR a grade of at least 70% in WRI203H5.

First Year or 2nd: WRI203H5 (a prerequisite for all other WRI courses)

Upper Years: 1.5 - 3.5 WRI credits; A maximum of 2.0 credits of approved writing-intensive courses or writing-related elective courses. Please contact the department for information on acceptable courses.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

WRI203H5 Expressive Writing (SSc)
Examines theory and offers practice in expressive narrative, the most basic prose mode and the foundation for other prose modes. Students explore ideas about product and process, form and meaning. Students will experiment with syntactic structures to explore how the form of language serves, or fails to serve, intention and the expression of meaning that may be understood and interpreted by others. The course draws on theorists including Aristotle, Chomsky, Kinneavy, Britton, Bakhtin. [24L, 3T]

Prerequisite: WRI203H5

WRI299Y5 Research Opportunity Program (SSc)
This courses provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

WRI303H5 Specialized Prose (SSc)
Examines theory and offers practice in nonfiction prose with a range of specialized purposes. Students will explore conceptions of genre and the way genre shapes, and is shaped by, the social context of communications. The course considers rhetorical devices and figures of speech, such as metaphor and irony, and the way these formal elements influence meaning and the way their application depends on a community of understanding. The course draws from a range of theorists from Aristotle to Rorty, Bazerman, and Fish [24L, 3T]

Prerequisite: WRI203H5

WRI307H5 Science and Writing (SSc)
Examines science as rhetoric and the way this rhetoric mixes with other rhetorics from an interdisciplinary perspective appropriate for science students and for humanities and social science students. The course examines scientific writing and journalistic writing about science. Through theory and applied research and writing, students consider the special features of science rhetoric including protocols for research and documentation. This course draws from a range of theorists including Kuhn, Popper, Hempel, Hacking. [24L, 3T]

Prerequisite: WRI203H5

WRI310H5 Social and Professional Languages (SSc)
Examines language by approaching it through its social users – ethnic groups, genders, and social classes – and its contextualized usages – the languages of publishing, advertising, law, technical communications, academe and the electronic media. The course explores the functions of these languages and the roles of such forces as dictionaries, social change, and new communications technologies in the evolution of these languages. [24L, 3T]

Prerequisite: WRI203H5

WRI320H5 History and Writing (SSc)
Examines written history as rhetoric and considers various conceptions of history and procedures for historical research and writing with reference to a range for models from Thucydides to contemporary writers of specialized and local histories. Students will conceptualize, design, and carry out primary source historical research to produce original history using locally available sources and materials. [24L, 3T]

Prerequisite: WRI203H5

WRI325H5 Community and Writing (SSc)
Examines writing/communication as a social act that both shapes and is shaped by the discourse community where it takes place. Students will explore genre as part of a social system with reference to theories by Fairclough, Kuhn, Lemke, Rorty, Geertz, Swales, Bakhitin. Students will design and carry out primary research that explores the social character of communication. [24L, 3T]

Prerequisite: WRI203H5
WRI327H5 Writing in Social Media: The Impact of Web 2.0 (SSc)
Examines theory and offers practice in writing in Social Media. The course explores the growth of the Web 1.0 model to the Web 2.0 model, from information gathering to interactive and cooperative information/opinion dissemination. Students will critically examine the rhetorical practices of Social Media users and how these practices currently shape communications network. Students will create and maintain blogs. The course draws on a range of theorists and social media experts including Marshall McLuhan, Darren Barefoot and Julie Szabo, Ken Wilber, Chris Brogan and Julien Smith.
Prerequisite: WRI203H5

WRI330H5 Oral Rhetoric (SSc)
Examines the rhetoric of speech drawing on theorists from Plato to Havelock to Ong, and considers implications of "great leap models" that present orality and literacy on a continuum. This course considers a range of oral practices from informal to formal, and from spontaneous to research-based and examines a range of rhetorical modes: dialogue, storytelling, "street-talk," reporting, debate and presentational address. Significant course time will be devoted to students' oral performance, both individual and team-based. [24L, 3T]
Prerequisite: WRI203H5

WRI340H5 Critical Reading and Listening (SSc)
Examines the role and responsibility of the communicator across a range of rhetorical settings extending from the private to the public sphere. Drawing on theorists such as Baudrillard, Bakhtin, Eco, Fairclough, Foucault, Habermas, Lacan and Lemke for principles of discourse analysis, students learn to recognize, analyze and question the social, political, cultural, ethical and economic dynamics of "text" in order to become critical interpreters of rhetoric across a range of multi-modal, multi-medial forms. [24L, 2T]
Prerequisite: WRI203H5

WRI360H5 Finance and Writing (SSc)
Examines organizational discourse with special attention to financial analysis and financial documents as rhetorical elements. Students will design and carry out primary research into organizations such as publicly listed companies and non-profit organizations and will examine different modes for reporting research findings. Principles of discourse analysis and genre theory provide a conceptual framework. Students do not need backgrounds in accounting or finance to manage this course. [24L, 3T]
Prerequisite: WRI203H5

WRI363H5 The Story Behind the Data: Communicating in a World of Big Data (SSc)
This course examines theory and offers practice in analyzing, interpreting, and communicating data in an understandable and engaging manner. The course explores the growing relevance and allure of Data, and Big Data. Students will learn to interpret and use raw data to "tell a story through the numbers" by creating infographics, writing informative articles from their own data mining, and presenting further findings at the end of the semester. The course draws on a range of theorists and research/data experts including Arvind Sathi, Kenneth Cukier, Viktor Mayer-Schonberger, and Eric Siegel.
Prerequisite: WRI203H5

WRI365H5 Editing: Principles and Practice (SSc)
Examines theory and practice of editing in a professional communications environment. The course will consider principles of editing and the editorial process as it applies to various forms of writing, from daily news, to magazines, books, web pages and blogs. Study will include examination of the building blocks of an editor's skills - grammar, spelling, syntax, punctuation - and the means employed by an editor working with a writer to achieve clarity, accuracy and immediate comprehension.
Exclusion: None
Prerequisite: WRI203H5
Corequisite: None
Recommended Preparation: None
None

WRI370H5 Writing about Place (SSc)
Examines writing about geographic places and the multiple rhetorics — scientific, historical, geographical, social, political, economic — that come into play. Students will design and carry out original primary research to develop their writing projects. [24L, 3T]
Prerequisite: WRI203H5

WRI375H5 Writing about Environment and Ecology (SSc)
Examines the evolving rhetoric of scientific, journalistic, legal and political writing about environmental issues. The course will consider eco-linguistic theory and eco-critical discourse analysis. Through theory and applied research, including primary research, and writing, students will consider protocols, research standards, and ethics in writing about environment and appraise current issues around the emerging language of sustainability. [24L]
Prerequisite: WRI203H5

WRI380H5 Documentary Scripting and Production for Electronic Media (SSc)
Examines theories and research and production techniques for texts meant for electronic media. Students will design and carry out original primary research to script, edit and produce texts for podcasts. [24L, 3T]
Prerequisite: 2.0 WRI credits
WRI390H5 Independent Studies (SSc)
A research/writing project designed by the student in consultation with a faculty member. Independent Study students will produce a substantial body of writing at a high professional standard submitted in weekly installments and will develop their drafts in editing sessions with other Independent Studies students. Students will also design and carry out a reading program. The Project Supervisor will be chosen in consultation with the Program Coordinator. Students may not take WRI390H5 and WRI391H5 in the same term.
Prerequisite: 8.0 credits including 3.0 WRI credits with a mark of 77% or higher in each and permission of Program Coordinator. Check web for application details. Web: www.utm.utoronto.ca/pwc

WRI391H5 Independent Studies (SSc)
A research/writing project designed by the student in consultation with a faculty member. Independent Study students will produce a substantial body of writing at a high professional standard submitted in weekly installments and will develop their drafts in editing sessions with other Independent Studies students. Students will also design and carry out a reading program. The Project Supervisor will be chosen in consultation with the Program Coordinator. Students may not take WRI390H5 and WRI391H5 in the same term.
Prerequisite: 8.0 credits including 3.0 WRI credits with a mark of 77% or higher in each and permission of Program Coordinator. Check web for application details. Web: www.utm.utoronto.ca/pwc

WRI392H5 Research and Writing (SSc)
Examines principles, procedures and practice of original research that culminate in writing and terms that accompany the discourse of research: evidence, results, validity, theory, data, significance with reference to theorists such as Eisner, Geertz, Bogden and Biklen, Clifford and Marcus, Glesne and Peshkin, Strauss and Corbin. Students will design and carry out limited qualitative research projects and will consider criteria for evaluating communications values in research-based writing. [24L, 3T]
Prerequisite: 2.0 WRI credits

WRI395H5 Re-languaging: Writing Across Cultures and Languages (SSc)
Explores the issues beyond translation that bi- or multilingual writers face when they relanguage experiences in one culture and language into another. Students will consider humour, stereotypes, cultural representations, identities, rhetorical and narrative norms through the theoretical lenses of Bhabha, Bakhtin, Halliday, Lemke, Hall, Trinh and others. [24L, 3T]
Prerequisite: 2.0 WRI credits

WRI410H5 Professional Writing and Communication Internship 1 (SSc,EXP)
This course is a practical internship and is available only upon application from PWC Majors. Through a placement, students will apply their expertise in writing, editing and communications. Students must plan well in advance for their placement and work closely with CCIT/PWC placement officer to determine eligibility and suitability. A report of the placement, samples of work completed on the placement and a presentation about it will be required at the end of the placement. These, and the employer’s assessment, will determine the course mark.
Exclusion: CCT410H5, 411H5
Prerequisite: Completion of 13 credits; minimum CGPA 2.5; and permission of the Internship Coordinator.

WRI411H5 Professional Writing and Communication Internship II (SSc,EXP)
This course is a practical internship and is available only upon application from PWC Majors who have completed WRI410H5. The course is intended for students who have the opportunity to continue their WRI410H5 internship for a second semester. A report of the placement, samples of work completed on the placement and a presentation about it will be required at the end of the placement. These, and the employer’s assessment, will determine the course mark.
Exclusion: CCT410H5, 411H5
Prerequisite: WRI410H5, completion of 13 credits; minimum CGPA 2.5; and permission of the Internship Coordinator.

WRI420H5 Making a Book (SSc)
Examines principles, procedures and practices in book publishing. Students, working collaboratively, will collect material for, design, edit, typeset, print and assemble books. Students will consider philosophical, aesthetic, and economic factors that guide publishing, editing and design decisions. Students must apply using the on-line application form on the PWC website to take this course. Students who do not receive formal permission may not take this course. [24L, 3T]
Prerequisite: 3.0 WRI credits and P.I.

WRI430H5 Journalistic Investigation (SSc)
Examines principles, practices, and rhetorical issues in journalistic investigation and writing. The course will consider various models. Students will design and carry out investigative projects that culminate in a series of journalistic articles. [24L, 3T]
Prerequisite: 1.5 WRI credits and P.I.
WRI488H5 Food and Writing (SSc)
This course examines narrative approaches to researching and writing about food-related topics. Students will design and carry out research projects that culminate in a series of life stories, narrative articles/chapters, or personal essays that investigate complex relationships surrounding food in society.
Exclusion: Food and Writing taken previously as WRI490H5
Prerequisite: 2.0 WRI credits
Corequisite: None

WRI490H5 Special Topics in Writing (SSc)
An in-depth examination of topics in writing. Topics vary from year to year, and the content in any given year depends upon the instructor. [24L]
Prerequisite: 3.0 WRI credits and permission of instructor

Psychology (HBSc)

The Psychology Department offers the following programs:
1) Psychology
2) Exceptionality in Human Learning
3) Behaviour, Genetics and Neurobiology

We also participate in the following program offered in conjunction with Forensic Science:
1) Forensic Psychology

Please consult the above programs listed elsewhere in this calendar.

Professors Emeriti
T.M. Alloway, B.A., M.A., Ph.D.
K.R. Blankstein, B.A., M.A., Ph.D.
A.S. Fleming, B.Sc., Ph.D.
G.W. Kraemer, B.A., B.Sc., M.S., Ph.D.
G. Moraglia, M.A., M.Sc., Ph.D.
P. Pliner, B.S., Ph.D.
J. Polivy, B.Sc., M.A., Ph.D.
E.M. Reingold, M.A., Ph.D.
S.E. Trehub, B.Com., M.A., Ph.D.

Professors
J.P. Andersen, B.Sc., M.A., Ph.D.
B. Beston, B.Sc., Ph.D.
E.N. Carlson, B.A., M.A., Ph.D.
C.G. Chambers, B.A., M.A., Ph.D.
M. Daneman, B.A., M.A., Ph.D.
N.A.S. Farb, B.A., M.A., Ph.D.
R.T. Gerlai, M.Sc., Ph.D.
D.J. Graham, B.A., M.A., Ph.D.
M.M. Holmes, B.A., M.A., Ph.D.
E.A. Impett, B.Sc., M.A., Ph.D.
E.K. Johnson, B.A., M.A., Ph.D.
S.B. Kamenetsky, B.A., M.A., Ph.D.
T. Malti, B.Sc., M.A., Ph.D., Habil.
L.J. Martin, B.Sc., M.Sc., Ph.D.
D.A. Monks, B.Sc., M.A., Ph.D.
M.K. Pichora-Fuller, B.A., M.Sc., Ph.D.
E.G. Schellenberg, B.Sc., Ph.D.
U. Schimmack, B.A., M.A., Ph.D.
B. Schneider, B.A., Ph.D.
M.L. Smith, B.Sc., M.Sc., Ph.D.
D. Urbszat, B.Sc., LL.B., M.A., Ph.D.
D. VanderLaan, B.A., M.Sc., Ph.D.
I. Zovkic, B.A., M.A., Ph.D.

Chair
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Room 4092, Deerfield Hall
905-828-3960
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Academic Counselor
Jodie Stewart
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Psychology is the science that examines the structure and function of behaviour in humans and animals. It is concerned with the processes by which behaviour is acquired, maintained, and developed through adaptive interaction with the physical and social aspects of the environment. Emphasis is on the genetic, physiological, sensory, cognitive, personal development, and social structures that mediate behaviour.

Among the topics covered by Psychology courses are life-span developmental changes in behaviour, modes of sensing, perceiving and responding to the environment, learning and cognition, the origins and implications of drives, motives, conflicts and emotions, and the wide variety of individual and species differences that are produced by differences in genetic background, physiology and past experience.

Psychological science strives to achieve the highest levels of rigor and objectivity in its study of behaviour by relying upon an extensive array of scientific methodologies and instrumentation. Since Psychology is concerned with the behaviour of all organisms, the study of animal behaviour constitutes an important part of many Psychology courses. An intensive examination of empirical research findings is paramount in all Psychology courses.

Students who are interested in Psychology as a career must be prepared for several years of graduate study. Persons who hold a PhD in Psychology find employment in universities, research institutes, the educational system, hospitals and clinics, government agencies and large corporations; a few work as self-employed consultants or therapists. The BSc with a concentration in Psychology is not in itself a professional qualification. People holding bachelor’s degrees in Psychology typically find employment in business, technical, educational or social-service areas. Formal or on-the-job training is usually required. Generally undergraduate courses in Psychology may be valuable to students planning professional careers in medicine, law, nursing and education, for example, and to anyone who wishes to acquire the fundamentals of modern society’s understanding of behaviour.

Further information is available from the Undergraduate Director.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- BIO Biology (page 78)
- ECO Economics (page 153)
- PSY Psychology (page 332)
- SOC Sociology (page 341)
- STA Statistics (page 356)

Specialist Program ERSPE1160 Psychology (Science)

At least 10.0 credits in Psychology are required. At least 5.0 credits must be at the 300/400 level of which at least 1.0 must be at the 400 level. A single course can be used to satisfy only one Psychology program requirement.

**Limited Enrolment** – Enrolment in this program is limited to students who have:
1. completed Gr.12(4U) Biology and Advanced Functions or equivalent;
2. completed 8.0 credits;
3. completed PSY201H5, 202H5 (or equivalent), and at least 1.5 FCE in 200 series PSY courses with a minimum average of 77% for those five half courses
4. a minimum CGPA of 3.0.

Psychology Department website:
www.utm.utoronto.ca/psychology

First Year: PSY100Y5

Second Year:
1. PSY201H5, 202H5 or equivalent
2. PSY210H5, 290H5
3. one of the following: PSY270H5, PSY274H5, 280H5
4. one of the following: PSY220H5, 230H5, 240H5
5. one additional half credit at the 200 level

Third Year:
1. PSY309H5
2. One laboratory course from the following: PSY319H5, 329H5, 379H5, 399H5
3. 2.5 credits from the following courses: 0.5 credit must be taken from each group:

Fourth Year:
1. PSY400Y5/ 403H5/ 404H5/ 405H5/ 406H5
Major Program ERMAJ1160 Psychology (Science)

6.5 credits in Psychology are required, including 2.0 at the 300/400 level. A single course can be used to satisfy only one Psychology program requirement.

Minor Program ERMIN1160 Psychology (Science)

4.0 credits are required, including 1.0 at the 300 level.

Limited Enrolment – Enrolment in this program is limited to students who have:
1. completed Gr.12(4U) Biology and Advanced Functions or equivalent;
2. completed 4.0 credits;
3. a grade of at least 61% in PSY100Y5; and
4. a minimum CGPA of 2.0.

Students not initially meeting these requirements may be admissible after meeting the second-year requirements. Further information is available on the Psychology Department website: www.utm.utoronto.ca/psychology

First Year: PSY100Y5

Higher Years:
   (a) PSY290H5
   (b) one of the following: PSY270H5, PSY274H5, 280H5
   (c) one of the following: PSY210H5, 220H5, 230H5, 240H5
2. 1.0 credit in PSY at the 300 level.

Important notes about Psychology programs and courses.
1. Enrolment in all programs offered by the Psychology Department is limited. Students who do NOT earn a sufficiently high grade in PSY100Y5 to be eligible for enrolment may reapply when they satisfy the second-year requirements and are encouraged to consult with the undergraduate advisor. Further information is available on the Psychology Department web site, www.utm.utoronto.ca/psychology.
2. Access to courses. PSY309H5, 319H5, 329H5, 379H5, 399H5 and all 400-level courses have limited enrolments and are normally restricted. Access to all other 300-level courses is controlled by the department. Priority is given to students enrolled in programs offered by the Psychology Department. Spaces may be allotted on the basis of CGPA. Highest priority is given to students enrolled in one of the Specialist Programs. Consult the UTM Registration Guide (available at www.utm.utoronto.ca) for specific information.
3. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).
4. Students who wish to take Psychology courses at the St. George Campus may do so provided that they have completed the prerequisite courses and have obtained permission from the Psychology Undergraduate Advisor at the St. George Campus. If they wish to use these courses to fulfill UTM program requirements, they must also consult the Undergraduate Advisor at UTM.

IMPORTANT: Students without pre-requisites or written permission of the Undergraduate Advisor can be de-registered from courses at any time.

List of Courses

**PSY100Y5 Introductory Psychology (SCI)**
An examination of the science of behaviour, and use of the scientific method in the study of human and animal behaviour. This course, which includes 12 two-hour computer labs, is a prerequisite for all other Psychology courses except for PSY201H5 and 202H5. [48L, 20P] 
*Exclusion: PSY100H1/ PSYA01H3/PSYA02H3*

**PSY201H5 Research Design and Analysis in Psychology I (SCI)**
Basic descriptive and inferential statistics. [24L, 12T] 
*Prerequisite: Any Grade 12 (4U) Mathematics*

**PSY202H5 Research Design and Analysis in Psychology II (SCI)**
Design of experiments and more advanced methods of statistical analysis, including complex analysis of variance. [24L, 12T] 
*Prerequisite: PSY201H5*

**PSY210H5 Introduction to Developmental Psychology (SCI)**
An examination of theories, methods, and psychological processes relevant to the study of development, in general, and child development in particular. Topics include historical and philosophical perspectives as well as empirical research on age-related changes in perceptual, cognitive, and social processes. [36L] 
*Exclusion: PSY210H1/ PSYB20H3/PSYB21H3*
*Prerequisite: PSY100Y5*

**PSY220H5 Introduction to Social Psychology (SCI)**
A survey of classic and contemporary research in social psychology. Topics include the self, social cognition, attitudes, social influence, relationships, emotions, culture, stereotyping, altruism and aggression. [36L] 
*Exclusion: PSY220H1/ PSYB10H3*
*Prerequisite: PSY100Y5*

**PSY230H5 Introduction to Personality (SCI)**
An introduction to contemporary personality research. The course focuses on the understanding of individual differences in personality traits. Topics include: measurement of individual differences; the contribution of personality traits and situations to the understanding and prediction of thoughts, feelings, and behaviours; genetic, biological, cultural, and cognitive causes of individual differences in personality traits; and individual differences in unconscious processes, goals, values, and emotions. To increase the self-relevance of research findings, students take a personality test at the beginning of the term. [36L] 
*Exclusion: PSY230H1/ PSYB30H3*
*Prerequisite: PSY100Y5*

**PSY240H5 Introduction to Abnormal Psychology (SCI)**
A survey of contemporary issues in theory and research on abnormal behaviour and its treatment. Topics include the definition of abnormal behaviour, causes and treatment of disorders, diagnosis and assessment, incidence and prevalence, biological and psychological interventions, prevention, as well as legal and ethical issues. [36L] 
*Exclusion: PSY240H1/ PSYB32H3*
*Prerequisite: PSY100Y5*

**PSY270H5 Introduction to Cognitive Psychology (SCI)**
An introduction to contemporary theories and research related to human cognition. Topics include attention, memory, language, and problem solving. [36L] 
*Exclusion: PSY270H1/ PSYB57H3*
*Prerequisite: PSY100Y5*

**PSY274H5 Introduction to Psychology of Human Communication (SCI)**
A survey of research on human communicative abilities from a cognitive/perceptual perspective. Topics include human vs. non-human communication, spoken vs. signed languages, co-speech gesture, and relationships among music, language, and general cognition. [36L] 
*Prerequisite: PSY100Y5*

**PSY280H5 Perception (SCI)**
An introduction to current empirical research in perceptual science, with primary emphasis on vision and audition. Topics in vision include anatomy and physiology of the visual system, the perception of contrast, colour, form, depth and motion. Topics in audition include anatomy and physiology of the auditory system, sound localization, the perception of pitch, loudness, and timbre. [36L] 
*Exclusion: PSY280H1/ PSYB51H3*
*Prerequisite: PSY100Y5*
PSY290H5 Introduction to Physiological Psychology (SCI)
An examination of principles underlying the study of the nervous system and behaviour, including aspects of normal and abnormal development. [36L]
Exclusion: PSY290H1/ PSYB64H3
Prerequisite: PSY100Y5

PSY299Y5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Exclusion: PSY299Y1
Prerequisite: Completion of 4.0 FCE including PSY100Y5

PSY309H5 Experimental Design and Theory (SCI,EXP)
Practical problems in research design and interpretation of experimental findings. Practice in the critical evaluation of research findings. Students will gain experience in the processes involved in collecting and analyzing data and in using computers to set up psychological experiments. [24L, 24P]
Exclusion: PSY309H1
Prerequisite: PSY(201H5, 202H5)/equivalent, 1.0 credit in PSY at the 200 level

PSY310H5 Adolescence and Emerging Adulthood (SCI)
A survey of research findings and theories concerning the physical, cognitive, personality, and social growth of adolescents and emerging adults. Topics include pubertal development, changes in parent/adolescent relationships, role of peers, identity development, high-risk behaviours, and development through transitional periods. [36L]
Prerequisite: PSY201H5/ equivalent, 210H5/ 213H5

PSY311H5 Social Development (SCI)
A survey of contemporary research and theory in social development during infancy and childhood with consideration of the cultural context of development. Topics include interactional development, attachment, understanding self and others, sex role development, parenting and socialization, and outcome of development. [36L]
Exclusion: PSY311H1/ PSYC23H3
Prerequisite: PSY201H5/ equivalent, 210H5/ 213H5

PSY312H5 Cognitive Development (SCI)
A survey of contemporary research and theory related to the development of thinking, intelligence and language. [36L]
Exclusion: PSY312H1
Prerequisite: PSY201H5/ equivalent, 210H5/ 213H5, 270H5

PSY313H5 Adult Development and Aging (SCI)
An introduction to current research in human development from young adulthood through old age. Adult development will be examined in terms of the interplay of biological, socio-cultural, and psychological determinants, with special emphasis on psychological factors. Topics include the demographics of aging, research methods and problems, developmental changes in sensory-perceptual systems, memory, intelligence, personality, as well as issues related to mental health, dying and bereavement. [36L]
Exclusion: PSY213H5/ PSY313H1
Prerequisite: PSY201H5/ equivalent, one additional second year course in PSY

PSY315H5 Language Acquisition (SCI)
An examination of language acquisition from a psychological perspective. Topics include the acquisition of speech sounds, words, sentence structure, and conversational abilities, as well as patterns of development in special populations. [36L]
Exclusion: JLP315H1

PSY316H5 Infant Perception and Cognition (SCI)
This course focuses primarily on human perceptual and cognitive development during the first 2 years of life. A heavy emphasis is placed on experimental work with normally developing infants. Topics include but are not limited to face recognition, colour and depth perception, auditory localization, object categorization, speech and language processing, learning and memory, intelligence and social influences on development. [36L]
Exclusion: PSY316H1
Prerequisite: PSY201H5/ equivalent, 210H5/ 270H5/ 280H5

PSY318H5 Developmental Neuropsychology (SCI)
A survey of brain development, its relation to normal cognitive and behavioural development, the effects of early brain damage on development, and specific neurological disorders of childhood. [36L]
Prerequisite: PSY201H5/ equivalent, 210H5/ 213H5, 252H5/ 290H5/ 295H5
PSY319H5 Developmental Psychology Laboratory (SCI,EXP)
Readings, laboratory exercises and research projects designed to familiarize students with methods relevant to research with infants and children. [36P]
*Exclusion:* PSY319H1/ PSYC26H3
*Prerequisite:* PSY(201H5, 202H5)/ equivalent, 210H5/ 213H5, 309H5

PSY320H5 Social Psychology: Attitudes (SCI)
Attitudes are persistent evaluations (preferences, likes and dislikes). This course examines the measurement of attitudes, the formation of attitudes to new objects, and the change of existing attitudes. General principles are illustrated with examples from various domains, such as propaganda and advertising, stereotyping and prejudice, attitudes towards health behaviours, and self-evaluations (self-esteem, life-satisfaction). [36L]
*Exclusion:* PSY320H1
*Prerequisite:* PSY201H5/ equivalent, 220H5

PSY321H5 Cross-cultural Psychology (SCI)
An examination of culture-blind and culture-bound aspects of traditional psychology. Topics include issues of diversity, cultural influences on basic psychological processes, the impact of culture on social and developmental processes and research applications. [36L]
*Exclusion:* PSY321H1/ PSYC14H3

PSY324H5 The Science of Wellbeing (SCI)
What makes people happy? Does money buy happiness or do unhappy people not know where to shop? Are people in California happier than people in Ontario? Does marriage make men happier and women unhappier? This course reviews the scientific evidence regarding these and other questions about the determinants of happiness from an interdisciplinary perspective (psychology, economics, sociology, philosophy, & biology) that ranges from molecular genetics to cross-national comparisons. [36L]
*Exclusion:* PSY336H1
*Prerequisite:* PSY201H5/ equivalent, 220H5/ 230H5

PSY325H5 Psychology of the Self (SCI)
An examination of theory and research on the self from the perspectives of personality, developmental, and social psychology. Examples of topics associated with self development that will be covered are relationships, motivations, psychological stages, individual differences, cognition, culture, autobiographical memory, and narrative perspectives on the self. [36L]
*Exclusion:* PSYD12H3
*Prerequisite:* PSY201H5/ equivalent, 210H5/ 220H5/ 230H5

PSY327H5 Interpersonal Relationships (SCI)
The objective of this course is to review what relationship science can tell us about close relationships, with a particular focus on romantic relationships. We will explore questions such as: Why do we want to be in relationships, what informs our choice of relationship partners, what predicts satisfaction and stability in relationships, and what is the role of sexuality in relationships? These and other questions will be examined from a variety of theoretical perspectives and will be applied to better understand real-world relationship functioning. General topics include theory and methods of relationships, attraction, social cognition, interdependence, attachment, sexuality, culture and gender, jealousy, and thriving relationships. [36L]
*Exclusion:* PSY424H1/ PSYD11H3
*Prerequisite:* PSY201H5/ equivalent, 220H5/ 230H5

PSY328H5 Psychology and the Law (SCI)
An examination of relevant research and contemporary methodologies examining phenomena encountered in the justice system. Topics include jury decision-making, violence and risk assessment, eye-witness evidence, insanity, psychopathy and anti-social personality disorder, sentencing, treatment of special offender groups, and criminal profiling. Students will learn how to apply the scientific method to examine behaviours that occur in a legal context. [36L]
*Exclusion:* PSY328H1/ PSYC39H3
*Prerequisite:* PSY201H5/ equivalent, 220H5/ 240H5

PSY329H5 Social/Personality Laboratory (SCI,EXP)
Readings, laboratory exercises, and research projects designed to familiarize students with methodologies relevant to empirical research in social/personality psychology. [36P]
*Exclusion:* PSY329H1/ PSYC11H3
*Prerequisite:* PSY(201H5, 202H5)/ equivalent, 220H5/ 230H5, 309H5

PSY331H5 Social Psychology of Emotion (SCI)
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. [36L]
*Exclusion:* PSY331H1
*Prerequisite:* PSY201H5/ equivalent, 220H5/ 230H5/ 240H5

PSY333H5 Health Psychology (SCI)
Examines research evidence concerning the impact of psychological factors on physical health and illness. [36L]
*Exclusion:* PSY333H1
*Prerequisite:* PSY201H5/ equivalent, 230H5/ 240H5

PSY334H5 The Science of wellbeing (SCI)
Readings, laboratory exercises and research projects designed to familiarize students with methods relevant to research with infants and children. [36P]
*Exclusion:* PSY334H1
*Prerequisite:* PSY(201H5, 202H5)/ equivalent, 210H5/ 213H5, 309H5

PSY335H5 Psychology of the Self (SCI)
An examination of theory and research on the self from the perspectives of personality, developmental, and social psychology. Examples of topics associated with self development that will be covered are relationships, motivations, psychological stages, individual differences, cognition, culture, autobiographical memory, and narrative perspectives on the self. [36L]
*Exclusion:* PSYD12H3
*Prerequisite:* PSY201H5/ equivalent, 210H5/ 220H5/ 230H5
PSY340H5 Abnormal Psychology: Adult Disorders (SCI)
This advanced course provides an in-depth examination of current theory and research related to the origin, diagnosis, classification and treatment of adulthood psychological disorders. Readings and discussion will provide a biopsychosocial framework from which to explore contemporary explanations of psychopathology. Students will investigate how culture, societal norms, and environmental factors may shape what is considered to be abnormal adult behaviour. [36L]
Exclusion: PSY342H1/ PSYB32H3
Prerequisite: PSY201H5/ equivalent, 240H5

PSY341H5 Abnormal Psychology: Disorders of Children and Adolescents (SCI)
Considers concepts of normal, abnormal and delayed development. Schemes of classification and diagnosis, approaches to identification of causes, antecedents, and consequences, as well as contemporary treatment methods are critically evaluated. In addition, resilience in the face of adversity will be addressed, since risk and traumatic events often do not lead to disorders. The emphasis is on rigorous research as a primary source of knowledge about psychological disorders and empirically supported treatment. [36L]
Exclusion: PSY341H1
Prerequisite: PSY201H5/ equivalent, 210H5, 240H5
Recommended Prerequisite: PSY340H5

PSY343H5 Theories of Psychotherapy (SCI)
Considers the theories and techniques of the major classic and contemporary approaches to psychological treatment (psychotherapy) for personality and behavioural disorders, research supporting and/or growing out of the theories, and critical examination of these theories. [36L]
Exclusion: PSY343H1/ PSYC36H3
Prerequisite: PSY201H5/ equivalent, 230H5/ 240H5

PSY344H5 Forensic Psychology (SCI)
An exploration of the role of psychology in forensic science (the application of scientific inquiry into criminal investigation). Topics, which will vary from year to year, could include the assessment of criminal responsibility, competency issues, psychiatric disorders associated with crime, criminal profiling, behavioural analysis of a crime scene, prediction of dangerousness, workplace and family violence, sexual assault/abuse/rape, recovered memories, detection of malingering and deception, deindividuation and bystander intervention, social psychology of the jury, use of psychological tests in legal cases, witness preparation/interrogation, and the psychologist as expert witness. [36L]
Exclusion: PSYC39H3
Prerequisite: PSY240H5

PSY345H5 Exceptionality: Disability and Giftedness (SCI)
A survey of contemporary theory and research related to exceptionality with a special emphasis on disability and educational issues. Topics include controversial psychosocial issues, legal, family, and multicultural issues, disability across the lifespan, communication disorders, hearing and visual impairment, autism, and acquired brain injury. [36L]
Exclusion: PSY442Y5
Prerequisite: PSY210H5/ 213H5

PSY346H5 Abnormal Psychology: The Biological Paradigm (SCI)
An examination of contemporary theory and research related to the origin, prevention, and treatment of psychological disorders from a biological perspective. The course will focus on the role of behaviour genetics, structures in the brain, and biochemistry in the nervous system in specific disorders (e.g., schizophrenia, mood and anxiety disorders, aggression, premenstrual syndrome, sleep disorders) and will discuss alternative approaches to their treatment (e.g., psychopharmacologic versus behaviourally-oriented therapies). [36L]
Prerequisite: PSY201H5/ equivalent, 240H5, 252H5/ 290H5/ 295H5

PSY351H5 Evolutionary Psychology (SCI)
Application of the theory of biological evolution to understanding the origins and structure of the human mind. [36L]
Prerequisite: PSY201H5/ equivalent, 270H5/ 274H5, 252H5/ 290H5/ 295H5

PSY352H5 Animal Behaviour (SCI)
An introduction to animal behaviour from a biological perspective, stressing ecological and evolutionary aspects of behaviour. The course will review the neural, endocrine and physiological mechanisms mediating animals’ natural behaviours, as well as how gene-environment interactions during development modify these behavioural mechanisms. [36L]
Exclusion: BIOC18Y5, 328H5, PSY252H5
Prerequisite: PSY201H5/ equivalent, 290H5

PSY353H5 Social Neuroscience (SCI)
The course will focus on the development and adult organization of brain mechanisms underlying the perception of social information and production of diverse social behaviours in mammalian species. Circumstances and events that can lead to diminished function and psychopathology in humans will be considered. [36L]
Exclusion: PSY473H1/ PSYC23H3/PSYD17H3
Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5

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PSY354H5 The Biopsychology of Sex (SCI)
This course is an introduction to the scientific study of human sexuality. Topics covered may include sexual development, sexual orientation, sex practices, sexuality across the lifespan, sexual dysfunction and sexually transmitted diseases. [36L]
Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5

PSY355H5 Animal Behaviour Genetics (SCI)
An introduction to the genetic analysis of behaviour. The concepts and methods of classical Mendelian genetics, quantitative genetics, and recombinant DNA technology-based reverse and forward genetic approaches will be discussed as they relate to the analysis of animal behaviour. [36L]
Exclusion: PSY390H1
Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5

PSY362H5 Animal Cognition (SCI)
A comparative survey of cognitive processes in animals from an ecological and evolutionary perspective. The course will examine topics including perception, working and reference memory, simple associative and complex relational learning, and concept formation. [36L]
Exclusion: BIO320H5, PSY362H1
Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5, 270H5

PSY371H5 Higher Cognitive Processes (SCI)
This course covers selected topics pertaining to higher cognitive processes including expertise, consciousness, creativity, and human and artificial intelligence. [36L]
Exclusion: PSY371H1
Prerequisite: PSY201H5/ equivalent, 270H5

PSY372H5 Human Memory (SCI)
Current theories and data on human memory: Processes involved in encoding, storage, and retrieval. Neuropsychological mechanisms and theories will be considered. [36L]
Exclusion: PSY372H1
Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5, 270H5

PSY374H5 Psychology of Language (SCI)
An examination of contemporary approaches to the psychological study of language and speech, with emphasis on the biological, cognitive, and cultural aspects of language use. Topics include language comprehension, language production, and language disorders. [36L]
Exclusion: JLP374H1
Prerequisite: PSY201H5/ equivalent, 270H5/ 274H5/ 315H5

PSY376H5 Psychology of Bilingualism (SCI)
A survey of contemporary research on bilingualism from a psychological perspective. Topics include the representation of multiple languages in the mind/brain, the acquisition of a second language by children and adults, and effects of bilingualism on linguistic and nonlinguistic behaviour. [36L]
Prerequisite: PSY201H5/ equivalent; PSY270H5/ 274H5/ 315H5/ 374H5

PSY379H5 Cognitive Psychology Laboratory (SCI,EXP)
Readings, laboratory exercises, and research projects designed to familiarize students with methodologies relevant to empirical research in cognitive psychology. [36P]
Exclusion: PSY379H1/ PSYC58H3
Prerequisite: PSY(201H5, 202H5)/ equivalent, 270H5/ 274H5, 309H5

PSY384H5 Speech Perception and Production (SCI)
The production and perception of spoken language, from an interdisciplinary perspective. Topics include perceptual and cognitive aspects of speech perception, speech signal acoustics, articulation of speech sounds, audio-visual speech integration, speech synthesis, and contextual influences on speech communication. Practical instruction in spectrogram reading and acoustic analysis. [36L]

PSY387H5 Psychology of Music (SCI)
An examination of the psychological foundations of music perception and performance. Consideration of processing differences between naïve and experienced listeners, biological foundations of music processing, cultural contributions to music processing, theoretical perspectives on the origins of music, music and emotion, and the non-musical implications of musical training. [36L]
Exclusion: CCT371H5/ PSYC56H3
Prerequisite: PSY201/ equivalent; PSY210H5/ 270H5/ 274H5/ 280H5.
Recommended Preparation: Basic ability to read music.

PSY391H5 Psychology of Pain (SCI)
An introduction to the biological and psychological aspects of pain, as a multidimensional bodily sensation, an adaptive solution to threatening stimuli and a clinical problem. Pain will be introduced from a phenomenological perspective, focusing on the ways in which social, situational, psychological and organismic factors can alter pain. An awareness of the current challenges and unanswered questions in pain research and management will be fostered. [36L]
Prerequisite: PSY201H5/ equivalent, 290H5
Epigenetics encompasses the study of stable alterations in gene activity that occur independent of changes to genetic sequence. Epigenetics has been implicated in all aspects of behaviour, from responding to maternal behaviour in early life to mediating cognitive function in aging and dementia. This course will describe how epigenetics shapes development, learning, memory, stress response, and mental illness in animal and human models. [36L]

Prerequisite: PSY201H5/ equivalent, 290H5

This course will review major topics in cognitive neuroscience, with an emphasis on human function. Sample topics include issues such as memory disorders and models of memory, split brain research, language and aphasia, attention, emotion, and executive functions. [36L]

Exclusion: PSY493H1/ PSYC31H3/PSYC55H3

Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5, 270H5

An evaluation of relations between the hormonal system and brain/behaviour in a variety of species (including humans). Behavioural/functional systems to be considered include the reproductive behaviours (sexual and maternal), aggression, circadian rhythms, seasonal rhythms, eating, affective states, learning and memory. [36L]

Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5/BIO204H5

An examination of experimental findings and theory documenting the plasticity of the brain and its relationship to behaviour. The course will discuss the molecular, synaptic, cellular and circuitry components of neural plasticity in relation to learning and experience. [36L]

Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/ 295H5

An examination of the psychological mediators of motivational systems, including reward and aversion learning, stress, and the consequences of early life environments. Emphasis will be placed on neural mechanisms underlying motivated behaviour in animal models, including dysregulation of these systems in various conditions, such as drug addiction and depression. [36L]

Prerequisite: PSY201H5/ equivalent, 252H5/ 290H5/BIO204H5

Supervised demonstration experiments designed to familiarize students with methods of collecting, analyzing, and reporting data from ethological and physiological experiments with animal subjects. Students handle selected species of animals. [36P]

Exclusion: PSY399H1/ PSYC06H3

Prerequisite: PSY202H5/ equivalent, 252H5/ 290H5/ 295H5

Independent research supervised by individual faculty members. Seminars on general topics relevant to the conduct of independent research, student research proposals, and the presentation of findings. Admission by academic merit. (Interested students in their fourth (or final) year should obtain and submit an application to the Psychology office by the end of April. [72S, 72P]

Exclusion: PSY400Y1/ PSYD98Y3

Prerequisite: PSY202H (or equivalent); Minimum last AGPA of 3.2 (varies from year to year and is rarely below 3.4)

Corequisite: PSY309H5/ 399H5

A critical analysis of the historical, conceptual, and methodological foundations of influential approaches to the study of mind and behaviour (e.g., behaviourism, psychoanalysis, humanistic psychology, cognitive science). [36S]

Prerequisite: 1.0 300 level credit in Psychology

Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.

Prerequisite: PSY201H5 equivalent; 1.0 300-level credit in Psychology; minimum last AGPA of 3.0 or above

Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.

Prerequisite: PSY201H5 equivalent; 1.0 300-level credit in Psychology; minimum last AGPA of 3.0 or above

Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.

Prerequisite: PSY201H5 equivalent; 1.0 300-level credit in Psychology; minimum last AGPA of 3.0 or above

Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.

Prerequisite: PSY201H5 equivalent; 1.0 300-level credit in Psychology; minimum last AGPA of 3.0 or above

Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.

Prerequisite: PSY201H5 equivalent; 1.0 300-level credit in Psychology; minimum last AGPA of 3.0 or above
PSY410H5 Special Topics in Developmental Psychology (SCI)
In depth examination of selected topics in developmental psychology. (Topics change periodically.) [36S]
Exclusion: PSY410H1/PSYD22H3
Prerequisite: PSY210H5, 1.0 credit from PSY311H5, 312H5, 315H5, 316H5, 318H5, 319H5, 341H5, 345H5, 442Y5

PSY415H5 Special Topics in Adult Development and Aging (SCI)
In depth examination of selected topics in adult development and aging. (Topics change periodically.) [36S]
Exclusion: PSY213H5, 1.0 credit from PSY311H5, 312H5, 315H5, 319H5, 320H5, 321H5, 325H5, 343H5, 333H5, 340H5, 345H5, 374H5, 385H5, 442Y5

PSY420H5 Special Topics in Social Psychology (SCI)
In depth examination of selected topics in social psychology. (Topics change periodically.) [36S]
Exclusion: PSY420H1/PSYD12H3/PSYD15H3/PSYD16H3
Prerequisite: PSY220H5, 1.0 credit from PSY311H5, 319H5, 320H5, 321H5, 325H5, 329H5, 343H5, 333H5, 340H5, 341H5

PSY430H5 Special Topics in Personality (SCI,EXP)
In depth examination of selected topics in personality. (Topics change periodically.) [36S]
Exclusion: PSY430H1/PSYD30H3/PSYD32H3
Prerequisite: PSY343H5, one of PSY311H5, 320H5, 321H5, 325H5, 329H5, 331H5, 340H5

PSY440H5 Special Topics in Abnormal Psychology (SCI)
In depth examination of selected topics in abnormal psychology. (Topics change periodically.) [36S]
Exclusion: PSY440H1/PSYD33H3
Prerequisite: PSY340H5, one of PSY320H5, 321H5, 331H5, 343H5, 333H5, 341H5, 344H5, 345H5, 346H5, 385H5, 442Y5

PSY442Y5 Practicum in Exceptionality in Human Learning (SCI,EXP)
Seminar and practicum on issues relating to the life-long development of individuals with disabilities. Seminar at UTM; practicum involves supervised placements in schools or social service agencies. Course is required for students enrolled in the Exceptionality in Human Learning Specialist program (Primary Junior CTEP students are exempted – please consult program requirements) and is available to Psychology Specialists, Exceptionality in Human Learning Majors and Psychology Majors and Minors on a competitive basis. Course fulfills the 400-level seminar requirement for the Psychology Specialist Program. Admission by academic merit. Interested students in their fourth or final year should obtain and submit an application to the Psychology office by the end of April. [72S, 80P]
Exclusion: PSY345H5
Prerequisite: 10.0 completed credits, including PSY210H5/213H5, 1.0 300 level credit in Psychology

PSY471H5 Special Topics in Cognitive Psychology (SCI)
In depth examination of selected topics in cognitive psychology. (Topics change periodically.) [36S]
Exclusion: PSY471H1/PSYD50H3
Prerequisite: PSY270H5, 1.0 credit from PSY312H5, 315H5, 360H5, 362H5, 372H5, 374H5, 379H5, 393H5, 397H5

PSY474H5 Special Topics in Human Communication (SCI)
In depth examination of selected topics in psychological approaches to human communication. (Topics change periodically.) [36S]
Prerequisite: 1.0 300 level credit in Psychology including PSY315H5/374H5, one of PSY312H5, 315H5, 316H5, 319H5, 374H5, 385H5, 379H5

PSY480H5 Special Topics in Perception (SCI)
In depth examination of selected topics in perception. (Topics change periodically.) [36S]
Exclusion: PSY480H1/PSYD51H3
Prerequisite: PSY280H5, 1.0 300 level credit in Psychology

PSY490H5 Advanced Topics in Biological Psychology (SCI)
In depth examination of selected topics in biological psychology. (Topics change periodically.) [36S]
Exclusion: PSY490H1/PSYD66H3
Prerequisite: PSY270H5/290H5/295H5/BIO204H5; 1.0 credit from PSY346H5, 362H5, 372H5, 395H5, 397H5, 398H5, 399H5, BIO304H5
PSY495H5 Special Topics in Neuropsychology (SCI)
In depth examination of selected topics in neuropsychology. (Topics change periodically.) [36S]
Prerequisite: PSY290H5/295H5, 1.0 credit from PSY315H5, 318H5, 346H5, 362H5, 372H5, 374H5, 379H5, 393H5, 397H5

Science Education (HBSc)
As of 2011-12, Science Education is no longer offered. Students currently enrolled in this program will be allowed to continue.

Program Advisor
Don Philip
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Undergraduate Assistant
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Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses
Note: These courses count towards the BSc degree.

SCI395H5 Science Education: Basic Concepts (SCI)
Basic concepts in formal (school and university) and informal (public and extra-curricular) science education, as an important part of the sciences, and as an independent discipline. [24L]
Exclusion: SCI398Y5
Prerequisite: Enrolment in a HBSc Major or Specialist program; 10.0 completed credits.
No longer offered as of 2013-14.

SCI396H5 Science Education: Special Topics (SCI)
Special topics in formal (school and university) and informal (public and extra-curricular) science education. Includes focused discussions, guest lectures, and student presentations. [24L]
Exclusion: SCI398Y5
Prerequisite: SCI395H5
No longer offered as of 2013-14.

SCI499H5 Science Education Project (SCI)
A major science education project and report, carried out under the supervision of a faculty member in the physical, mathematical, or life sciences. The project may be in formal education (school, university) or informal (public) education.
Prerequisite: SCI398Y5/SCI395H5, SCI396H5, 4th-year status and PI.
No longer offered as of 2013-14.
Sociology (HBA)

Professors Emeriti
M. Blute, B.A., M.A., Ph.D.
D. Brownfield, B.A., M.A., Ph.D.
D.F. Campbell, B.A., M.A., Ph.D.
H. Friedmann, A.B., M.A., Ph.D.
B. Green, B.A., Ph.D.
E. Silva, B.A., M.A., Ph.D.
J.H. Simpson, B.A., B.D., Th.M., Ph.D.
M.W. Spencer, A.B., M.A., Ph.D.

Professors
Z. Baber, B.A., M.A., Ph.D.
J. Baker, B.A., M.A., Ph.D.
S. Baumann, B.A., M.A., Ph.D.
E. Berrey, A.B., Ph.D.
H.Y. Choo, B.A., M.S., Ph.D.
R. Contreras, B.A., M.A., Ph.D.
C. Cranford, B.A., M.A., Ph.D.
R. Dinovitzer, B.A., M.A., Ph.D.
L. Farah Schwartzman, B.A., M.A., Ph.D.
P. Goodman, B.A., M.A., Ph.D.
K. Hannah-Moffat, B.A., M.A., Ph.D.
S. Hoffman, B.A., Ph.D.
N. Innocente, B.A., M.A., M.A.
J. Johnston, B.A., M.A., Ph.D.
J.B. Kervin, A.B., Ph.D.
A. Korteweg, B.A., M.A., Ph.D.
S. Liu, LL.B., M.A., Ph.D.
N. Maghbouleh, B.A., M.A., Ph.D.
P. Maurutto, B.A., M.A., Ph.D.
A. Miles, B.A., M.A., Ph.D.
M. Milkie, B.A., M.A., Ph.D.
A. Owusu-Bempah, B.A., M.A., Ph.D.
D. Pettinicchio, B.A., M.A., Ph.D.
A. Rubin, B.A., Ph.D.
E. Schneiderhan, B.A., M.A., Ph.D.
W. Zhang, B.S., M.A., Ph.D.

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TBA

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Sociologists study how families work; how individuals change over the life course; how norms and laws are made, broken, enforced, and changed; how inequalities of gender, class, and race emerge, continue, and change; how cities, regions, nations, and international institutions work as organized sets of relationships; how power is exercised and resisted; how individuals, groups, and organizations communicate or fail to communicate; how cultural meanings relate to patterned social relationships; and more. Sociology thus creates theories about a broad range of human activity. Sociologists study these questions in two complementary ways. First, they gather data about large numbers of individuals to discover patterns of behaviour and interpret them through statistical analysis. Second, they gather in-depth data by interviewing and observing individuals and groups, and interpret these data through qualitative methods. A degree in Sociology leads to careers in social policy, government, education, health, public opinion research, community and social services, non-governmental, cooperative, business and non-profit organizations, criminology and corrections, industrial and labour relations, evaluation research, and environment.

Students may select from a variety of special areas of interest in their Specialist or Major programs. They may also consult with the department for other combinations of courses such as those emphasizing Canadian society, interpersonal relations, or research methods. The Department offers Specialist, Major, and Minor programs in Sociology, and Specialist and Major programs in Criminology and Socio-Legal Studies.

IMPORTANT NOTES for SOCIOLOGY PROGRAMS

Program requirements have substantially changed in all programs offered by the Department of Sociology. These changes only apply to students registering in any of these programs as of April 2007. Students enrolled in any programs prior to this date should follow the requirements in the U of T Mississauga Calendar for the year that they enrolled in their program.

SOC101Y5 will be accepted in place of SOC100H5
SOC200Y5 is equivalent to SOC221H5 plus SOC222H5
SOC300Y5 is equivalent to SOC350H5 plus SOC351H5
SOC314Y5 is equivalent to SOC231H5 plus SOC232H5

SOC221H5 and 222H5: Students majoring or specializing in Sociology should enrol in SOC221H5 and 222H5 in their second year.

SOC350H5 equivalents for Specialists only: For Sociology Specialists required to take SOC350H5, the following course is the only acceptable equivalent: STA220H5. In no other circumstance may students count STA220H5 toward a Major or Minor in Sociology.

Sociology website: See our website for program requirements, faculty information, course documents and contact information: www.utm.utoronto.ca

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.
Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
SOC Sociology (page 341)
STA Statistics (page 356)

Specialist Program ERSPE1013 Sociology (Arts)

10.0 credits in Sociology are required.

**Limited Enrolment** – Students applying at the end of first year (4.0 credits) must have a grade of at least 70 in SOC100H5 and a CGPA of at least 2.0. Students who do not earn a grade of at least 70 in SOC100H5 and a CGPA of at least 2.0 at the end of first year (4.0 credits) must have a grade of at least 73 in each of 2 half SOC courses (1.0 credits) at the 200 level and a CGPA of at least 2.0.

**First Year:** SOC100H5
Students may enrol in 200-level SOC courses after successfully completing SOC100H5.

**Higher Years:** Please be aware of the upper year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enroll in 300 and 400 level courses. Students without prerequisites can be removed at any time. No waivers will be granted.

1. SOC221H5, 222H5 (see IMPORTANT NOTES above)
2. SOC231H5,
3. 5.0 additional SOC credits of which 1.0 credit must be at the 300 level and 1.0 credit must be at the 400 level.

Minor Program ERMIN1013 Sociology (Arts)

4.0 credits in Sociology are required.

**Limited Enrolment** – Students applying at the end of first year (4.0 credits) must have a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0. Students who do not earn a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0 at the end of first year (4.0 credits) must have a grade of at least 70 in each of 2 half SOC courses (1.0 credits) at the 200 level and a CGPA of at least 2.0.

**First Year:** SOC100H5
Students may enrol in 200-level SOC courses after successfully completing SOC100H5.

**Higher Years:** Please be aware of the upper year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enroll in 300 and 400 level courses. Students without prerequisites can be removed at any time. No waivers will be granted.

1. SOC221H5, 222H5 (see IMPORTANT NOTES above)
2. SOC231H5,
3. 5.0 additional SOC credits of which 1.0 credit must be at the 300 level and 1.0 credit must be at the 400 level.

Major Program ERMAJ1013 Sociology (Arts)

7.0 credits in Sociology are required.

**Limited Enrolment** – Students applying at the end of first year (4.0 credits) must have a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0. Students who do not earn a grade of at least 67 in SOC100H5 and a CGPA of at least 2.0 at the end of first year (4.0 credits) must have a grade of at least 70 in each of 2 half SOC courses (1.0 credits) at the 200 level and a CGPA of at least 2.0.

**First Year:** SOC100H5
Students may enrol in 200-level SOC courses after successfully completing SOC100H5.

**Higher Years:** Please be aware of the upper year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enroll in 300 and 400 level courses. Students without prerequisites can be removed at any time. No waivers will be granted.

1. SOC221H5, 222H5 (see IMPORTANT NOTES above)
2. SOC231H5, 350H5, 387H5
3. 1.0 SOC credit at the 400 level of which 0.5 credit must be a seminar
4. 6.0 additional SOC credits of which 3.0 credits must be at the 300/400 level.

List of Courses

**SOC100H5 Introduction to Sociology (SSc)**
An introduction to the conceptual and empirical foundations of the discipline. The relationship between theory and research in the study of society will be stressed. [24L]

**Exclusion:** SOC101Y5, 101Y1, 102H1, 103H1, SOCA01H3, SOCA02H3
SOC202H5 Cultural Sociology (SSc)
Formerly SOC302H5: This course introduces students to the field of cultural sociology, which seeks to understand how ideas, meanings, values and beliefs are created, and how they are also implicated in foundational sociological issues such as inequality, identity, social change, and social organization. These linkages are examined through topics such as popular culture, the mass media, science, religion, art, language, knowledge, public opinion, food, advertising and consumerism. [24L]
Exclusion: SOC302H5
Prerequisite: SOC100H5

SOC205H5 Theories in Criminology (SSc)
Formerly SOC305H5: This course will cover major theoretical paradigms in the field of criminology, including, among others, classical, positivist, strain, control, social learning, critical, feminist, postmodern and critical race theories. [24L, 12T]
Exclusion: SOC305H5
Prerequisite: SOC100H5

SOC208H5 Crime and Organizations (SSc)
An analysis of the intersection between crime and organizations. This course introduces students to various organizational theories and examines crime by organizations, crime within organizations, and crime that is "organized." [24L]
Prerequisite: SOC100H5

SOC209H5 Introduction to Criminology and Socio-Legal Studies (SSc)
An introduction to sociological and criminological analyses of "crime", law, and the operation of the Canadian criminal justice system. Emphasis on law and criminal justice and how it is shaped by social, political, and economic considerations. [36L]
Exclusion: CRI205H1, CRI210H1
Prerequisite: SOC100H5

SOC211H5 Deviance and Social Control (SSc)
A sociological analysis of deviant behaviour that examines theories of its genesis, social definition, maintenance, control, and social consequences. [24L]
Exclusion: SOC212Y1, 212H1
Prerequisite: SOC100H5

SOC216H5 Sociology of Law (SSc)
Major theoretical and substantive debates in the sociology of law. How race, gender and social inequality shape legal institutions, the law and the broader social context. [24L]
Exclusion: SOC213Y1, CRI215H1
Prerequisite: SOC100H5

SOC219H5 Gender, Crime and Justice (SSc)
This course explores how gender impacts crime and criminalization and how gender shapes the way criminal justice is conceptualized and delivered. Possible topics may include masculinity & criminalization; domestic violence; gender & court outcomes; and women’s prisons. [24L]
Exclusion: CRI380H1
Prerequisite: SOC100H5

SOC220H5 Criminology, Law and Public Policy (SSc)
This course analyses policies and policy formation related to crime and law with particular attention to policing, courts, and punishment in the Canadian context and comparatively. Course material sheds light on debates that exist within the fields of crime and law, as well as how those debates impact society more generally. [24L]
Exclusion: CRI390H1
Prerequisite: SOC100H5

SOC221H5 The Logic of Social Inquiry (SSc)
Logic of Social Inquiry compares the logic of quantitative and qualitative research. Key topics include the relationship between theory and research, conceptualization and measurement of sociological concepts and sampling strategies in the quantitative and qualitative traditions. This course is recommended for students in their second year. [24L, 12T]
Exclusion: SOC200Y5, 200Y1, 200H1, SOCB05H3
Prerequisite: SOC100H5

SOC222H5 Measuring the Social World (SSc)
This course addresses how we are able to measure social concepts such as social characteristics, social attitudes, and social actions. Descriptive statistics and their presentation in tables and graphs will be presented in some detail. A very basic introduction to inferential statistics and sampling will also be presented. This course is recommended for students in their second year. [24L, 12T]
Exclusion: SOC200Y5, 200Y1, 202H1
Prerequisite: SOC100H5

SOC224H5 Sociology of Education (SSc)
This course considers how schools are shaped by society and how societies shape schools. It will cover what some of our key sociological thinkers have said about education in society. Topics include race, gender, and class inequalities and how schools socialize. [24L]
Prerequisite: SOC100H5

SOC227H5 Sociology of Work and Occupations (SSc)
This course covers work and post-industrialization in Canada today. It considers labour force participation, and social differences and inequalities across different groups, including gender, class, and ethnicity/race. It also examines managerial cultures and styles, and workers’ responses and resistance to managerial control. [24L]
Exclusion: SOC207Y5, 207Y1, 207H1, SOCB54H3
Prerequisite: SOC100H5

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SOC230H5 The Sociological Enterprise (SSc)
This course builds on the foundational sociological principles and ideas taught in SOC100H5. It does so through an engagement with significant projects, typically books, and will build students’ writing abilities at the same time. Each week the course will engage with issues facing sociologists studying in a particular area, such as criminology, gender, work, political sociology, cultural sociology, and health, as well as other major subfields within the discipline. As part of the course, students will be asked to consider different ways to think and write about the individual and society, social processes, stratification, inequality, organizations, demography, power, and social change. [24L]
Prerequisite: SOC100H5

SOC231H5 Classical Sociological Theory (SSc)
This course presents a discussion and analysis of classical sociological theory including such luminaries as Marx, Durkheim and Weber among others. [24L]
Exclusion: SOC314Y5, 203Y1
Prerequisite: SOC100H5

SOC232H5 Contemporary Sociological Theory (SSc)
This course presents a discussion and analysis of contemporary sociological theory from approximately the 1920s through the present period. [24L]
Exclusion: SOC314Y5, 203Y1
Prerequisite: SOC100H5

SOC236H5 Globalization (SSc)
How do individuals relate to the complex and over-used concept of “globalization”? This course will explore major theories and controversies in the field of globalization scholarship, looking at the phenomena from the perspective of global capitalists, anti-globalization social movements, consumers, states, and citizens. Students will critically evaluate common claims made about globalization, and acquire tools to assess the validity of competing perspectives. [24L]
Exclusion: SOC277Y5
Prerequisite: SOC100H5

SOC239H5 Sociology of Health and Illness (SSc)
This course examines the social causes of illness and disease, the sociology of illness experience, and the sociology of risks to health. The course addresses only peripherally issues related to formal health care provision, health care work, and the structure of health care systems. [24L]
Exclusion: SOC243H1, 242Y1
Prerequisite: SOC100H5

SOC240H5 Introduction to Social Policy (SSc)
This course will examine how human needs are met by states. It focuses on the sociological, political and economic forces that help create new policies and reshape existing social policies. The course will provide a survey of welfare state policies, economic policies and family policies. It will also focus on the outcomes of social policy as these affect various constituencies and social groups such as the economically underprivileged and disadvantaged, racial and ethnic minority groups, and people with disabilities. [24L]
Prerequisite: SOC100H5

SOC244H5 Sociology of Families (SSc)
The development and variation in contemporary families will be presented. Topics may include cross-cultural comparisons, the impact of legal, economic and political factors as well as change in the meaning of the term "family". [24L]
Exclusion: SOC214Y5, 214Y1, 214H1, SOCB49H3
Prerequisite: SOC100H5

SOC253H5 Race and Ethnicity in the Americas (SSc)
This course will take a comparative historical approach, examining how different racialized and ethnicized social systems evolved in different regions of the Americas. We will focus on examples from Canada, United States and Latin America. We will examine the different relationships between Europeans, Africans, indigenous peoples and their descendants in different regions both historically and today. Topics will include colonialism, slavery and migration. [24L]
Exclusion: SOC332H5
Prerequisite: SOC100H5

SOC263H5 Social Inequality (SSc)
Examines the causes, prevalence and manifestations of social, political and economic inequalities, internationally and within Canada. The effects of gender, age, ethnicity-race, among other characteristics, are carefully analyzed in Canada and cross-culturally. [24L]
Exclusion: SOC301Y5, 363H5, 220H1, SOCB47H3
Prerequisite: SOC100H5

SOC275H5 Sociology of Gender (SSc)
This course introduces students to the sociology of gender showing how gender is a relationship of power that structures our everyday lives from intimate relationships through global political and economic forces. We will focus on gender and gender differences as produced in historically and locally specific ways where gender differences intersect with those of race, ethnicity, class, religion, sexuality and other structures of inequality. [24L]
Exclusion: SOC365H5, 265H1, SOCB22H3
Prerequisite: SOC100H5
SOC299Y5 Research Opportunity Program (SSc,EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.

SOC300H5 Special Topics in Criminology (SSc)
This course will explore a particular area within criminology. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC301H5 Canadian Prisons (SSc)
This course will examine trends and approaches within the correctional system in Canada. It will explore the historical and contemporary context of correctional practices. Attention will be paid to the differential impact of Canadian corrections on Aboriginal people and other minority groups. [24L]
Prerequisite: SOC100H5, 209H5

SOC303H5 White-collar and Corporate Crime (SSc)
This course explores the individual, organizational, and ecological dimensions of white-collar and corporate crime. Topics generally include financial and environmental crime, workplace safety, and organizational deviance. As well, the social, political, and criminal justice responses to these crimes will be examined. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC304H5 Comparative Social Policy (SSc)
This course will examine social policy in comparative perspective. It will compare policy domains, processes and outcomes across different countries, levels of government and over time. Policy domains may include environment, health, education, care, crime and employment. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC240H5

SOC307H5 Crime and Delinquency (SSc)
This course focuses on methods of measuring crime and delinquency such as official data, victimization surveys, self-reports, and observational studies as well as limitations of such methods. The relationship of this research to public policy on crime and delinquency and its use in evaluating theories is considered. Social welfare issues linked to cases of dependency and neglect are considered. [24L]
Exclusion: SOC306Y1
Prerequisite: SOC205H5, 209H5, 221H5

SOC308H5 Sociology of Gun Violence (SSc)
This course examines the cultural, criminological, sociological and public policy dimensions of gun violence in North America. Possible topics include: popular representations of guns and gun violence; the socio-spatial conditions of gun violence; gun cultures; US exceptionalism in gun violence; cross-border gun crime; and the framing of gun violence as a public policy concern. Particular attention will be given to the impact of race, ethnicity, gender and class in structuring gun violence. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC309H5 Sociology of Mass Communication (SSc)
This course examines the theories, methods, and findings of sociological studies of media production, content, and reception. The focus is on understanding how communication theories are adjudicated by empirical findings. Topics include race and gender in the media, bias in the news, media ownership, the film industry, and the role of the media in politics. [24L]
Exclusion: SOC309Y5
Prerequisite: SOC221H5, 231H5, 1.0 SOC credit at the 200 level

SOC310H5 Youth Justice (SSc)
The youth criminal justice system in Canada. Topics include historical and contemporary shifts in the youth justice system, young offender legislation, public perceptions and media representations of juvenile delinquency, current research and theories on youth crime and crime prevention strategies. Particular attention is paid to the treatment of specific groups. [24L]
Exclusion: CRI370H1, SOC310H1
Prerequisite: SOC100H5, 209H5

SOC311H5 Special Topics in Law (SSc)
This course will provide an in-depth exploration of a specific topic in law. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC313H5 Crime in Canadian Society (SSc)
This course will examine social responses to the problem of crime in society. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC316H5 Crime Prevention and Security (SSc)
The growth of political, economic, community and academic interest in crime prevention and security. How segments of society or particular physical sites are constructed as security risks in need of regulation. The regulation of security, including crime prevention, community safety, risk reduction and surveillance. These issues are then examined in relation to specific empirical developments such as private policing, restorative justice, community policing and gated communities. [24L]
Prerequisite: SOC205H5, 209H5, 221H5
SOC317H5 Shopping and Society (SSc)
Formerly SOC217H5: This course provides an overview of the Sociology of Consumption. The study of consumption provides an entry point for examining the intersection between culture, economics, and the environment. Potential topics include the following: the shopping experience, consumption as status, the environmental impact of consumerism, fashion cycles, and identity construction through consumption. [24L]
Exclusion: SOC217H5
Prerequisite: SOC100H5, 1.0 SOC credit at the 200 level.
Recommended Preparation: SOC202H5

SOC318H5 Sociology of Mental Health and Mental Disorders (SSc)
An overview of the link between social inequality and inequality in distress, focusing on differences in mental health across social groups and the role of stress and coping resources in explaining group differences. Exclusion: SOC363H1
Prerequisite: SOC205H5/ 231H5, 221H5, 0.5 SOC credit at the 200 level.

SOC322H5 Criminal Justice and Inequality (SSc)
This course examines the intersections between social inequality and the criminal justice system in Canada and internationally. The course will explore the impact of practices and policies on race, class, gender and other forms of social inequality. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC323H5 Law and Society (SSc)
This course is primarily concerned with the relationship between legal, social and moral regulation. The law can either promote social change or defend the status quo. Most of us believe that the law reinforces certain social values (justice, rights, equality and fairness). This course critically assesses the extent to which law embodies these values, and how these values are challenged by different segments of society. The course will outline key debates about the power of law and legal governance. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC325H5 Developments in Law and Society (SSc)
This course adopts a socio-legal analytical approach to explore new developments within law and society. Topics will vary from year to year. See department website for details. [24L]
Exclusion: SOC346H5 (Special Topics in Crime and Law: Human Rights and Security, offered in Fall 2015 only)
Prerequisite: SOC205H5, 209H5, 221H5

SOC326H5 Policing (SSc)
This course will examine the nature of policing, its structure and function. Attention is given to the theoretical analyses of policing, the history of policing and to its public and private forms. The course will focus on 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. [24L]
Exclusion: CRI335H1, SOCC11H3
Prerequisite: SOC100H5, 209H5

SOC328H5 Drugs in the City (SSc)
This course will explore illegal urban drug markets in Canada and the United States. Specifically, it will focus on how urban drug markets and drug use are influenced by drug cycles, moral panics, the economy, and criminal justice policy. Moreover, it will sociologically analyze the business practices, subcultures, and gendered interactions of drug market participants. [24L]
Prerequisite: SOC205H5, 209H5, 221H5
NOTE: Students who completed SOC421H5 in the Fall of 2014 are not eligible to take SOC328H5.

SOC330H5 Immigration and Crime (SSc)
This course will examine the nature of policing, its structure and function. Attention is given to the theoretical analyses of policing, the history of policing and to its public and private forms. The course will focus on 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. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC332H5 Race and Ethnicity I (SSc)
This course will engage the historical roots of racism primarily in the Americas, including the various diasporas to the Americas. [24L]
Prerequisite: SOC205/231H5, 221H5

SOC333H5 Sociology of Health Care and Health Policy (SSc)
This course examines factors that influence the organizational structure of healthcare systems, how these organizations develop, how they are maintained, and how they can be changed. Topics also include the social forces that influence the relationship between healthcare providers and recipients, and the evolving health policies that structure the provisioning of health care. [24L]
Exclusion: SOC244H1, 242Y1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
SOC334H5 Aging and Society (SSc)
This course will examine (1) theoretical and empirical issues regarding demographic, economic, and social processes of aging as they affect individuals, families, and societies; (2) the variations in the process and meaning of aging across gender, ethnicity, and class; and (3) public policy issues concerning aging with regard to the process of public policy-making and effectiveness of relevant programs and services. [24L]
Exclusion: SOC246H1, 245Y1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC335H5 Political Sociology (SSc)
This course will introduce students to the classic and contemporary view of political processes in small groups, organizations, institutions, communities and societies. Specific topics to be covered may include revolutions, state formation, ethnic nationalism, 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. [24L]
Exclusion: SOC260H1, SOCC39H3
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC263H5

SOC336H5 Social Surveys (SSc)
Students will learn “the art of asking questions”, the principles of attitude measurement and the elements of sampling and ethical review procedures. Topics include, “sensitive topics”, “how to avoid asking leading questions”, “how to collect and manage textual data”, and “what is an adequate response rate?” [24L]
Exclusion: SOC430H5
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC222H5

SOC338H5 Legal Developments in Criminology (SSc)
This course will survey new legal developments in the field of criminology and criminal law. It will explore the intersections between criminal law and other forms of regulation in society. Topics will vary from year to year. See department website for details. [24L]
Exclusion: SOC300H5 (Summer 2015, Fall 2015, Winter 2016)
Prerequisite: SOC205H5, 209H5, 221H5

SOC340H5 Social Change (SSc)
Understanding social transformation is at the heart of sociological inquiry. This course introduces students to the sociological analysis of social change Û particularly how societies evolve into complex systems. The course examines how social, political and economic institutions are transformed by social change, as well as how these institutions can themselves promote social change. We also examine how citizens can affect change through social and political participation. In addition to classical foundations, the course covers a range of contemporary themes including inequality and stratification, social movements, globalization, and law and justice. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC341H5 Contemporary Issues in the Sociology of Work (SSc)
This course will focus on key changes in the world of work since the 1970s and their implications for different groups. We will engage different sides of debates about such issues as women in the workforce, recent immigrant and migrant workers, unions and mobility. Throughout the course, emphasis will be placed on how class, gender, ethnic and race relations shape work and occupations. [24L]
Exclusion: SOC228H5, SOCC15H3
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC227H5

SOC344H5 Sociological Approaches to Social Psychology (SSc)
This course provides an overview of sociological approaches to social psychology, with an emphasis on how individuals’ thoughts, behaviors, and emotions are influenced by both situations and larger social structures. Theoretical perspectives including symbolic interaction, group processes, and social structure and personality will be examined in depth and applied to understanding various topics; these may include self and identities, socialization, attitudes, emotions, deviance, mental health, and collective behavior. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC345H5 Special Topics in Sociology (SSc)
This course explores a particular area within sociology. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC346H5 Special Topics in Crime and Law (SSc)
This course will explore a particular area within crime and law. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5
SOC349H5 Sociology of Food (SSc)
Sociological analysis of food in global, regional and intimate contexts. It links cultural and structural aspects of the food system, historically and in the present. Students will investigate and report on inter-cultural food practices in Canada. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC350H5 Quantitative Analysis (SSc,SCI)
The course is a continuation of SOC222H5 (Measuring the Social World) and introduces students to more advanced applications of regression analysis. In addition to producing and interpreting regression models, this course also focuses on diagnostic tools for addressing outliers and multicolinearity, as well as regression with categorical independent variables and dependent variables (including a basic introduction to logistic regression). This course is mainly project based. Students will develop their own research questions and hypotheses and use statistical software to analyze data in order to provide evidence for their hypotheses. [24L, 12T]
Exclusion: SOC300Y5, SOC300H1, BIO360H5, 361H5, ECO220Y5, 227Y5, any STA course, except STA107H5.
Prerequisite: SOC221H5, 222H5, 231H5

SOC352H5 Gender and Care (SSc)
This course will examine how gender shapes the work of care, and its value in society. It will look at both unpaid and paid care and the relationship between them. It will compare how care is organized and its value in different countries, and institutions (ranging from hospitals to homes) and consider care provided to children, elderly people and adults with disabilities. Contemporary topics include care from the recipient's perspective, and new efforts to value care work. [24L]
Prerequisite: SOC100H5, 263H5/ 275H5/ WGS200Y5

SOC354H5 Global Sociology (SSc)
Approaches to transnational networks, structures and processes, such as diasporic networks, transnational corporations, and social movements. [24L]
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC355H5 Sociology of the Professions (SSc)
Becoming a professional (doctor, accountant, lawyer, engineer, nurse, etc) remains a coveted goal for many young adults and their parents. But what is a profession, and what do these disparate groups have in common? This course lays the groundwork for understanding how the professional projects define professions, limit entry, create internal inequalities and try to maintain their prestige. The role of policy is key to our understanding of the professions, and we will focus on the role of policies in the creation of professions, in the substance of professional work such as ethics, autonomy and commercialism, and on the role of policies in addressing social concerns of inequality and diversity in the professions. [24L]
Exclusion: SOC345H5 Advanced Topics in Sociology (Sociology of the Professions, Winter 2013).
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC356H5 Population and Society (SSc)
This course will discuss the interrelationship between human population and societal issues such as aging, reproductive health, gender, environment, and social policy. It will examine population structure and dynamics in relation to social, economic, political, and cultural elements of change in both developing and developed world. It will also examine historical population policy developments and the diversified national policies in relation to policy formulation, implementation, and effectiveness. [24L]
Exclusion: SOC312Y5, 312H1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC359H5 Gendered Identities (SSc)
This course will focus on the production of gendered selves, femininity and masculinity, sexuality and sexual identities. We will draw from theoretical and empirical work in the sociology of gender and related disciplines, emphasizing the ways in which gender intersects with class, ethnicity, race, religion and other forces of difference in the production of identities. [24L]
Exclusion: SOC365H5
Prerequisite: SOC205H5/ 231H5, 221H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC263H5/ 275H5/ WGS200Y5

SOC361H5 Sociology of Organizations and Industrial Relations (SSc)
This course examines the structure and culture of organizations, including the range of management cultures, and how relationships among unions, management, and employees are affected by the social structure and culture of both the employer and the union as organizations. [24L]
Exclusion: SOC317Y5, 317Y1
Prerequisite: SOC100H5, 227H5
SOC362H5 Sex, Gender and Work (SSc)
This course will look at the situation faced by women in the workplace and workforce, and the implications for male employees. We will focus on classic and current research, theory and debates about sex segregation in jobs and occupations, the wage and earnings gap, and access to and exercise of authority by women in management positions. [24L]
Exclusion: SOC317Y5, 317Y1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC227H5

SOC371H5 Sociology of Punishment (SSc)
Punishment cannot be analyzed outside of its historical, cultural, economic, political and social context. This course offers students a critical, multidisciplinary approach to the study of punishment in Canadian society. [24L]
Exclusion: CRI340H1
Prerequisite: SOC205H5, 209H5, 221H5

SOC375H5 Sociology of International Migration (SSc)
This course will analyze the forces that cause people to leave the country of their birth. We will look at why some countries become predominantly leaving countries, and other immigrant receiving countries. Possible topics include the politics of integration, multiple citizenships, refugee and settlement policies, the development of transnational social spaces and transnational governance structures. Attention will also be given to the dynamics of race, ethnicity, class, and gender in structuring international growth. [24L]
Exclusion: SOC344Y1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOC378H5 Law, Crime and Justice (Formerly Law, Crime and Disrepute) (SSc)
This course draws on case law to explore a particular area within law and justice. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC379H5 Sociology of Crime (SSc)
This course will review current ways of thinking about crime and society's response to it. Particular attention will be paid to the intersection of crime control and law enforcement. [24L]
Prerequisite: SOC205H5, 209H5, 221H5

SOC380H5 Gender, Politics and Society (SSc)
This course analyzes the social structural forces that produce gender and the ways in which gender affects political and social change. Possible topics include: migration, social movements, social policy and the welfare state, and globalization. We will also pay special attention to the ways in which gender intersects with class, ethnicity, race, religion and other forces of difference. [24L]
Exclusion: SOC365H5
Prerequisite: SOC205H5/ 231H5, 221H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC263H5/ 275H5/ WGS200Y5

SOC382H5 Genocide and Memory (SSc,EXP)
This research-based course will engage students with the following two questions: Why does genocide happen? How do we construct, present, and maintain our memories of these terrible social phenomena? Specifically, students will consider these questions through international field experiences with a focus on cultural and historical sites in countries that will vary from year to year based on feasibility. Students will spend the first part of the course learning about the sociology of genocide. Students will also be exposed to general theories of culture and the social construction of memory, and will be trained in qualitative methods, with a focus on basic field observation and field note writing. Students will take this knowledge and training into the field, using a sociological lens to look at genocide museums and memorials, and the people who visit them. The course will culminate in a final project based on the students' observations and analysis during one of several course field trips. [24S] An interview may be required, with priority going to UTM Sociology and Criminology Majors and Specialists.

SOC384H5 Media Ethics and Policy: Controversies in Mass Communication (SSc)
Formerly SOC284H5: This course examines conflicts and controversies in the media. The goal of the course is to analyze power struggles within the realm of the media in order to understand how they both reflect and can reinforce broader social inequalities. Special emphasis is paid to the role of media policies and regulations. Topics include censorship, violence, pornography, marketing, intellectual property and privacy. [24L]
Exclusion: SOC284H5
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level
Recommended Preparation: SOC202H5
SOCS7H5 Qualitative Analysis (SSc)
This course surveys various qualitative methods sociologists use. Students gain insight into the craft of sociology through reading examples of different qualitative methods, discussing the theories behind the methods, and by conducting hands-on research exercises. The objective of this course is to learn to evaluate qualitative sociological work and to know how to design and conduct a qualitative research project. [24L, 12T]
Exclusion: SOC302H1
Prerequisite: SOC221H5, 231H5, 0.5 SOC credit at the 200 level

SOCS9H5 Independent Research (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor. Intended for Sociology Specialists and Majors who have completed 10.0 credits, and who wish to explore in depth a particular subject area in Sociology. Students must have completed the required second year method and theory courses (SOC221H5, 222H5, 231H5), and have attained an 70% average in SOC courses. Students may take a maximum of 2.0 credits of independent studies. Not more than 1.0 credit may be taken with the same instructor.

SOCS92H5 Independent Research (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor. Intended for Sociology Specialists and Majors who have completed 10 credits, and who wish to explore in depth a particular subject area in Sociology. Students must have completed the required second year method and theory courses (SOC221H5, 222H5, 231H5), and have attained a 70% average in SOC courses. Students may take a maximum of 2.0 credits of independent studies. Not more than 1.0 credit may be taken with the same instructor.

SOCS93H5 Independent Research in Criminology and Law (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor for the Criminology and Socio-Legal Studies Program. Intended for Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits and who wish to explore in depth a particular subject area in Criminology and Socio-Legal Studies. In order to enrol, students must have attained an average of at least 70% in SOC courses. Students may take a maximum of 2.0 credits, or its equivalent, of independent studies. No more than 1.0 credit may be taken with the same instructor.
Prerequisite: SOC205H5, 209H5, 221H5

SOCS94H5 Independent Research in Criminology and Law (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor for the Criminology and Socio-Legal Studies Program. Intended for Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits and who wish to explore in depth a particular subject area in Criminology and Socio-Legal Studies. In order to enrol, students must have attained an average of at least 70% in SOC courses. Students may take a maximum of 2.0 credits, or its equivalent, of independent studies. No more than 1.0 credit may be taken with the same instructor.
Prerequisite: SOC205H5, 209H5, 221H5

SOCS99Y5 Research Opportunity Program (SSc,EXP)
This course provides a richly rewarding opportunity for students in their third or fourth year to work in the research project of a professor in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: SOC221H5, 222H5, completion of at least 10.0 credits

SOCS02H5 Understanding Human Action (SSc)
This course addresses a fundamental question in the social sciences: Why do people do what they do? Readings and discussion focus on classic and current sociological approaches to understanding human action, giving attention to topics such as rational calculation, decisions, cultural processes, values, attitudes, identities, perception, interaction, situational influences, and automatic cognitive processing. A recurring theme is the tension between individual and situational explanations of behavior. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC350H5

SOCS04H5 Special Topics in Social Policy (SSc)
This lecture course will explore a particular area within Social Policy. Topics will vary from year to year. See department website for details. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC240H5

SOCS10H5 Senior Seminar in Inequality (SSc)
This course offers an in-depth examination of selected topics in the sociology of inequality. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level.
SOC411H5 Senior Seminar in Social Institutions (SSc)
This course offers an in-depth examination of selected topics in the sociology of social institutions. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level.

SOC412H5 Senior Seminar in the Sociology of Work (SSc)
This course offers an in-depth examination of selected topics in the sociology of work. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC227H5

SOC413H5 Senior Seminar in the Sociology of Gender (SSc)
This course offers an in-depth examination of selected topics in the sociology of gender. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC227H5

SOC414H5 Senior Seminar in Political Sociology (SSc)
This course offers an in-depth examination of selected topics in political sociology. See department website for information about the current course. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC335H5

SOC416H5 Senior Seminar in the Sociology of Culture (SSc)
This course offers an in-depth examination of selected topics in the sociology of culture. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC202H5

SOC417H5 Senior Seminar in the Sociology of Globalization (SSc)
This course offers an in-depth examination of selected topics in the sociology of globalization. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC236H5

SOC418H5 Senior Seminar in the Sociology of Health (SSc)
This course offers an in-depth examination of selected topics in the sociology of health. [24S]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level.

SOC420H5 Senior Seminar in Crime and Deviance (SSc)
Restricted to Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits. Topics will vary from year to year, see Department for details. [24S]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC421H5 Senior Seminar in Criminology (SSc)
Restricted to Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits. Topics will vary from year to year, see Department for details. [24S]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC423H5 Identity Crime (SSc)
This interactive course concentrates on identity theft and fraud. It provides a critical examination of definitions of, sociological explanations for, and responses to identity crime. Identity crime is examined in the broader context of privacy, national security and organized crime. [24L]
Exclusion: SOC346H5 Special Topics in Crime and Law: Identity Crime (Fall 2012 and Fall 2013)
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level.

SOC425H5 Gender in Global Contexts (SSc)
This lecture course looks at gender relations from a global perspective, focusing on how the social, political and economic aspects of globalization affect gender relations within various (local) contexts. Possible topics include gender and international migration, women's activism in local/global perspective and post-colonialism. [24L]
Prerequisite: SOC221H5, 222H5, 231H5/ 205H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC263H5/ 275H5/ WGS200Y5

SOC429H5 Disability, Politics and Society (SSc)
This course situates disability within a social and political context. We will focus on how disability has served as a basis of exclusion from social, political, and economic institutions, and the ways in which actors have sought to undermine this system of discrimination. We will investigate a variety of themes including policy and judicial transformations, the evolution of the disability rights movement, the role of disability non-profit groups, and collective identity. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level.
SOC430H5 Developments in Sociological Theory (SSc)
This course presents a discussion and in-depth analysis of strands in contemporary sociological theory from the 1920s to the present day. Topics may include race and ethnicity, gender, class, post-colonial theory, queer theory, intersectionality, symbolic interactionism, new institutionalism, post-structuralism, and culture. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level

SOC432H5 Sociology of Genocide (SSc)
This lecture course will lead students through an in-depth consideration of why genocides occur. [24L]
Exclusion: SOC445H5
Prerequisite: SOC205H5/231H5, 221H5, 222H5, 1.0 SOC credit at the 300 level

SOC433H5 Power and Cultural Politics (SSc)
This lecture course will ask students to engage with classic and contemporary views on power and its relation to the social bases of politics and social movements. [24L]
Exclusion: SOC324H5
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level

SOC444H5 Advanced Topics in Sociology (SSc)
An in-depth examination of selected topics in Sociology. Topics in this lecture course will vary from year to year. See department website for details. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level

SOC445H5 Advanced Topics in Sociology (SSc)
An in-depth examination of selected topics in Sociology. Topics in this lecture course will vary from year to year. See department website for details. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level

SOC446H5 Advanced Topics in Crime and Law (SSc)
An in-depth examination of selected topics in crime and law. Topics in this lecture course will vary from year to year. See department website for details. [24L]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC447H5 Advanced Topics in Criminology (SSc)
An in-depth examination of selected topics in criminology. Topics in this lecture course will vary from year to year. See departmental website for information about the current course. [24L]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC448H5 Advanced Topics in Socio-Legal Studies (SSc)
An in-depth examination of selected topics in socio-legal studies. Topics in this lecture course will vary from year to year. See department website for information about the current course. [24L]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC450H5 Walls to Bridges: Carceral Seminar (Formerly Inside-Out: Prisons and Punishment) (SSc, EXP)
Based on the Walls To Bridges Program model, this course matches a group of University of Toronto students ("outside" students) with an approximately equal number of incarcerated students ("inside" students) who study together as peers at an off-campus setting. Topics will vary by instructor, but will often revolve around questions of punishment, prisons, and governance. Most class sessions will be held inside the institution (e.g., penitentiary, detention centre, halfway house, etc.). Inside and outside students will work together on small teams to develop and then present a final project. Students must apply per department instructions. [24L] Preference given to Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 12.0 credits.
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, P.I.

SOC452H5 Contemporary Issues in Higher Education (SSc)
This course explores the debates and discussions centered on a selection of contemporary issues in postsecondary education in Canada and elsewhere. This may include topics such as the massification and corporatization of higher education, the reliance on sessional labour for instruction, and trends towards credentialism. The course combines instructor- and student-led discussions and inquiry. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level
Recommended Preparation: SOC224H5

SOC456H5 Senior Seminar in Law and Society (SSc)
The course will examine substantive debates in law and society. Restricted to Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits. Topics will vary from year to year, see Department for details. [24S]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level
SOC457H5 Sociology of Race and Ethnicity (SSc)
This lecture course offers a theoretical and methodological discussion that will teach students to think sociologically about race and ethnicity. We will examine why the link between race and biology is problematic and the scientific evidence for it; how can we think about race and ethnicity without assuming that people are naturally divided into groups; social processes of ethnic and racial classification and ethnic and racial boundaries; ethnic and racial inequality, and how it is reproduced and contested. [24L]
Prerequisite: SOC221H5, 222H5, 231H5/205H5, 1.0 SOC credit at the 300 level

SOC459H5 Science, Technology and Society (SSc)
The focus of this lecture course will be on the varied social contexts of the emergence, development and consequences of science and technology in the modern world. In addition to critical sociological perspectives on science and technology, possible topics could include genomics, reproductive technologies, surveillance, the internet and social media, domestic technology, warfare, nuclear technologies, etc. [24L]
Prerequisite: SOC221H5, 222H5, 231H5, 1.0 SOC credit at the 300 level

SOC460H5 Migrant Labour (SSc)
This lecture course will focus on the intersection of citizenship status and class by examining the position and experiences of various categories of migrant labour in North America, Europe and other regions. Migrant groups include those with temporary status who come to work for a specific time frame in a particular job, those with no status (the undocumented) who work mainly in an informal, unregulated economy, and immigrants with permanent resident status who work in a range of industries and occupations. We will read and write about theoretical and empirical work in the sociology of migration and related fields. [24L]
Prerequisite: SOC221H5, 222H5, 231H5/205H5, 1.0 SOC credit at the 300 level

SOC475H5 Sociology of Law and Lawyers (SSc)
This lecture course examines law and society through the lens of the legal profession. Law represents one of our most elite and influential professions; lawyers are responsible not only for the administration of justice, but also are key players in the country’s economic and political life. This course will rely on empirical research to cover topics related to law school, where lawyers work and the work that they do. [24L]
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC480Y5 Experiential Learning (SSc,EXP)
Through a part-time, unpaid individual or team work placement, students apply sociological knowledge gained primarily through previous course work. Placements may be made at municipal social service departments or non-profit agencies providing social services, social movement or community-based organizations working for social change, courts or parole offices, for-profit workplaces or other organizations. Students will learn how to plan and execute a real-world project. Placements will typically be tied to a specific project and students will be involved in developing the project’s terms of engagement and deliverables. Students will normally write a report at the end of the course. The final report will demonstrate how the students’ sociological knowledge related to a real life setting, and how their engagement with experiential learning shaped their academic knowledge. Specialists in Sociology and Criminology and Socio-Legal Studies will be given priority. An interview may be required. CGPA 2.5
Prerequisite: Fourth year standing (completed 14.0 credits), P.I.

SOC491H5 Independent Research (SSc)
Open only to students who have completed 15.0 credits and have a 70% average in SOC courses. To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor. Intended for Sociology Specialists and Majors who wish to explore in depth a particular subject area in Sociology. Students must have completed the required method and theory courses (SOC221H5, 222H5, 231H5, 350H5, 387H5). Students may take a maximum of 2.0 credits of independent studies. Not more than 1.0 credit may be taken with the same instructor.

SOC492H5 Independent Research (SSc)
Open only to students who have completed 15.0 credits and have a 70% average in SOC courses. To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor. Intended for Sociology Specialists and Majors who wish to explore in depth a particular subject area in Sociology. Students must have completed the required method and theory courses (SOC221H5, 222H5, 231H5, 350H5, 387H5). Students may take a maximum of 2.0 credits of independent studies. Not more than 1.0 credit may be taken with the same instructor.

University of Toronto Mississauga
SOC493H5 Independent Research in Criminology and Law (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor for the Criminology and Socio-Legal Studies program. Intended for Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits and who wish to explore in depth a particular subject area in Criminology and Socio-Legal Studies. In order to enrol, students must have attained an average of at least 70% in SOC courses. Students may take a maximum of 2.0 credits of independent studies. No more than 1.0 credit may be taken with the same instructor.
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC494H5 Independent Research in Criminology and Law (SSc)
To enrol, a student must submit a specific proposal and obtain the approval of both the instructor and the Faculty Advisor for the Criminology and Socio-Legal Studies program. Intended for Criminology and Socio-Legal Studies Specialists and Majors who have completed at least 10.0 credits and who wish to explore in depth a particular subject area in Criminology and Socio-Legal Studies. In order to enrol, students must have attained an average of at least 70% in SOC courses. Students may take a maximum of 2.0 credits of independent studies. No more than 1.0 credit may be taken with the same instructor.
Prerequisite: SOC205H5, 209H5, 221H5, 222H5, 0.5 SOC credit at the 300 level

SOC499Y5 Research Opportunity Program (SSc,EXP)
This course provides a rewarding opportunity for students in their fourth year to undertake relatively advanced work in the research project of a professor in return for 499Y course credit. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: SOC221H5, 222H5, completion of at least 15.0 credits.

South Asian Civilizations (HBA)
This program offers a comprehensive exploration of South Asia and the South Asian diaspora, drawing on a range of disciplinary approaches. Through diverse course offerings, students can study South Asian history, religion, politics, languages, societies, and cultures. The program is geared toward building an engagement with the South Asian region as well as with South Asian diasporic contexts. Students may take courses in a number of departments that focus on South Asia. As a complement to the students other chosen programs, the Minor in South Asian Civilizations can prepare students for careers in a competitive global context in which South Asia plays an important role.

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Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
ARA Language Studies (page 275)
DTS Diaspora and Transnational Studies (page 144)
FAH Fine Art History (FAH) (page 51)
HIN Language Studies (page 275)
HIS History (page 238)
POL Political Science (page 319)
PRS Language Studies (page 275)
RLG History of Religions (page 251)
SAN Language Studies (page 275)
SOC Sociology (page 341)
VCC Visual Culture and Communication (page 371)
WGS Women and Gender Studies (page 375)

Minor Program ERMIN1333 South Asian Civilizations (Arts)
4.0 credits, including at least 1.0 credits at the 300/400 level.
Students wishing to complete a South Asian Civilizations Minor Program must successfully complete 4.0 credits from
the courses listed in Group A or B below. These must include courses from two of the following disciplines: History (HIS), Religion (RLG), Women and Gender Studies (WGS), or Diaspora and Transnational Studies (DTS) within the Department of Historical Studies, Political Science (POL), Language Studies (LAN), Visual Studies (VCC, CIN, FAH), Sociology (SOC), and Anthropology (ANT).

First Year: Recommended: ANT102H5, HIS101H5, POL114H5, RLG101H5, SOC100H5, VST100H5 (maximum 1.0 credits)

Higher Years:

- 1.0 credit from the following list of courses:
  DTS201H5, HIN212Y5, HIS282H5, RLG204H5, RLG205H5, RLG206H5, RLG207H5, RLG208H5; SAN291Y5
- 3.0 credits from the following list of courses:
  Group A: Core Courses
  ANT310H5, ANT316H5, ANT320H5; CIN302H5; DTS201H5; FAH385H5; GGR367H5; HIN212Y5, HIN311H5, HIN312Y5, HIN411H5, HIN412Y5; HIS282H5, HIS382H5, HIS386H5, HIS394H5, HIS484H5; POL303Y5, POL304Y5, POL446H5; PRS210Y5, PRS310Y5; RLG204H5, RLG205H5, RLG206H5, RLG207H5, RLG304H5, RLG307H5, RLG308H5, RLG310H5, RLG347H5; RLG348H5, RLG356H5, RLG360H5, RLG371H5, RLG373H5, RLG374H5, RLG449H5, RLG460H5; SAN291Y5, SAN392Y5; VCC306H5, VCC360H5, VCC406H5.
  Group B: Secondary Courses
  In consultation with the Academic Counsellor of the Department for Historical Studies and depending on the focus of the course, the following courses may qualify on a year-to-year basis: ARA211Y5, ARA212Y5, ARA312Y5, ARA412Y5; HIS366H5; HIS366H5; HIS493H5; RLG305H5, RLG370H5, RLG450H5, RLG451Y5, RLG452H5, RLG470H5; SOC354H5, SOC375H5, WGS335H5, WGS368H5.

Note: Students are responsible for checking the co- and prerequisites for all courses.
the Psychology department (PSY201H5 and PSY202H5),
the Sociology department (SOC350H5 and SOC351H5). In
addition, the Statistics department offers (STA218H5) for
the Management department. These courses are not
intended for students planning to pursue a degree in
statistics, mathematics, or computer sciences.

Introductory Statistics and Probability Courses: Calculus
Based U of T Mississauga Statistics courses STA107H5,
followed by STA256H5, STA258H5 and STA260H5 form a
calculus based introduction to probability and applied
statistics. These courses are intended for students planning
to pursue a degree in statistics, mathematics, or computer
science. Various other departments accept these courses
in place of a non-calculus based introduction to applied
statistics course.

Students enrolled in STA programs may participate in the
PEY program. For more information visit
www.pey.utoronto.ca

Students should also review the Degree Requirements
section prior to selecting courses.

Students should also review the Degree Requirements
(Page 29) section prior to selecting courses.

For courses in this area see:
- BIO Biology (page 78)
- CSC Computer Science (page 133)
- ECO Economics (page 153)
- MAT Mathematics (page 298)
- PSY Psychology (page 332)
- SOC Sociology (page 341)
- STA Statistics (page 356)

Specialist Program ERSPE1540 Statistics,
Applied (Science)

12.0 credits are required.

Limited Enrolment – Enrolment in the Specialist
program is limited to students with a minimum of 4.0
courses to include at least 60% in STA107H5 or 60%
in STA256H5/ 257H5; and MAT137Y5 or 60% in
MAT135Y5/ 134Y5 or 55% in MAT233H5; a minimum
cumulative grade point average, to be determined
annually.

First Year: CSC108H5; MAT102H5, 134Y5/ 135Y5/
137Y5, 223H5/ 240H5
Second Year: MAT232H5/ 233H5, 212H5/ 244H5;
STA256H5, 258H5, 260H5
Third Year: STA302H5, 304H5, 305H5, 348H5
Third and Fourth Years: 2.0 credits from (STA312H5,
313H5, 413H5, 431H5, 437H5, 441H5, 457H5); 2.0 credits
from (CSC322H5, 411H5; MAT302H5, 311H5, 332H5,
NOTES:
1. MAT133Y5 is included in the credit count only if the student also completes MAT233H5 (in which case MAT232H5 is not required).
2. ECO220Y5 cannot be substituted for STA256H5 and/or STA258H5 and/or STA260H5.
3. ECO227H5 can be substituted for STA256H5 and 258H5, but not for STA260H5.
4. STA107H5 is highly recommended in first year, but it is not required.
5. MAT378H5 is highly recommended for students intending to pursue graduate level studies in statistics.

Minor Program ERMIN1540 Statistics, Applied (Science)
4.5 credits are required.

First Year: MAT133Y5/134Y5/135Y5/137Y5, MAT232H5/233H5

Second Year: STA256H5, 258H5

Third Year: 1.0 additional credits made up of any combination of any other STA course OR PSY201H5, 202H5; BIO360H5, 361H5; SOC350H5; ECO220Y5

Fourth Year: 1.0 STA credits at the 300/400 level

NOTES:
1. ECO220Y5 cannot be substituted for STA256H5 and/or STA258H5 and/or STA260H5.
2. ECO227Y5 can be substituted for STA256H5 and 258H5, but not for STA260H5.

Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

STA107H5 An Introduction to Probability and Modelling (SCI)
Introduction to the theory of probability, with emphasis on the construction of discrete probability models for applications. After this course, students are expected to understand the concept of randomness and aspects of its mathematical representation. Topics include random variables, Venn diagrams, discrete probability distributions, expectation and variance, independence, conditional probability, applications such as queues. [36L, 12T]

Exclusion: STA256H5, 257H5; ECO227Y5

Corequisite: MAT134Y5/135Y5/137Y5/233H5

STA215H5 Introduction to Applied Statistics (SCI)
This course introduces the basic concepts, logic, and issues that form statistical reasoning. Topics include descriptive statistics, exploratory data analysis, elementary probability, sampling distributions, point and interval estimation, hypothesis testing for normal and binomial data, and regression analysis. [36L, 12T]

Exclusion: STA218H5, 220H5, 256H5, 257H5; STAB22H5; ECO220Y5, 227Y5; PSY201H5; PSYB07H3; SOC350H5
STA218H5 Statistics for Management (SCI)
Acquaints students with the statistical principles that managers need in order to extract information from numerical data, and to understand the formal principles of decision-making under conditions of uncertainty. Covers descriptive statistics, elementary probability, expected values, sampling distributions, point and interval estimation, hypothesis testing for normal and binomial data, and multiple regression analysis. [36L, 12T]
Exclusion: STA215H5, 220H5, 256H5, 257H5, STAB22H5; ECO220Y5, 227Y5; PSY201H5; PSYB07H3; SOC350H5;
This course is open only to students accepted into Management Specialist (ERSPE2431), Management Major (ERMAJ2431) or Human Resource Management and Industrial Relations Specialist (ERSPE1882).

STA219H5 Mathematics of Investment and Credit (SCI)
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. [36L, 12T]
Prerequisite: MAT134Y5/ 135Y5/ 137Y5/ 233H5

STA220H5 The Practice of Statistics I (SCI)
An introductory course in statistical concepts and methods, emphasizing exploratory data analysis for univariate and bivariate data, sampling and experimental designs, basis 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. [24L, 12T]
Exclusion: STA215H5, 218H5, 256H5, 257H5, 220H1, STAB22H3; ECO220Y5, 227Y5; PSY201H5; PSYB07H3; SOC350H5

STA221H5 The Practice of Statistics II (SCI)
A sequel to STA220H5, 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. [24L, 12T]
Exclusion: STA221H1, 256H5, 257H5, 257H1, 258H5, STAB27H3, 302H5; BIO360H5; ECO220Y5, 227Y5; PSY202H5; PSYB08H3
Prerequisite: STA215H5/ 220H5

STA256H5 Probability and Statistics I (SCI)
(Formerly STA257H5) This course covers probability including its role in statistical modeling. Topics include probability distributions, expectation, continuous and discrete random variables and vectors, distribution functions. Basic limiting results and the normal distribution presented with a view to their applications in statistics. [36L, 12T]
Exclusion: STA257H5, 257H1, STAB52H3; ECO227Y5
Prerequisite: MAT134Y5/ 135Y5/ 137Y5/ 75%+ in MAT133Y5
Corequisite: MAT233H5 for students with MAT133. For others, MAT232 is strongly recommended.

STA258H5 Statistics with Applied Probability (SCI)
A survey of statistical methodology with emphasis on the relationship between data analysis and probability theory. Topics covered include descriptive statistics, limit theorems, sampling distribution, point and interval estimation both classical and bootstrap, hypothesis testing both classical and bootstrap, permutation tests, contingency tables and count data. A statistical computer package will be used. [36L, 12T]
Exclusion: STA248H1, 255H1, STAB57H3, ECO227Y5
Prerequisite: STA256H5/ 257H5

STA260H5 Probability and Statistics II (SCI)
(Formerly STA261H5) A sequel to STA256H5 giving an introduction to current statistical theory and methodology. Topics include: estimation, testing, and confidence intervals; unbiasedness, sufficiency, likelihood; simple linear and generalized linear models. [36L, 12T]
Exclusion: STA261H5, 261H1, STAC58H3
Prerequisite: STA256H5/ 257H5/ ECO227Y5

STA302H5 Regression Analysis (SCI)
Analysis of the multiple regression model by least squares; statistical properties of the least square analysis, including estimation of error; residual and regression sums of squares; distribution theory under normality of the observations; confidence regions and intervals; tests for normality; variance stabilizing transformations, multicolinearity, variable search methods. [36L, 12T]
Exclusion: STA302H1, STAC67H3
Prerequisite: STA258H5; MAT223H5/ 240H5
Priority is given to students enrolled in Statistics Specialist or Major programs.
STA304H5 Surveys, Sampling and Observational Data (SCI)
The sample survey is a widely used technique for obtaining information about a large population at relatively small cost. Only probability samples can provide both an estimator and a measure of sampling error from the data itself. In addition to sampling error, non-sampling errors (refusals, not-at-home, lies, inaccuracies, etc.) are always present, and can produce serious biases.

The course covers: 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. [36L, 12T] 
Exclusion: STA304H1
Prerequisite: STA107H5/ 256H5/ 257H5/ECO227Y5
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA305H5 Experimental Design (SCI)
This course covers topics in the design and analysis of experiments. The topics covered include analysis of variance, randomization, confounding, block designs, factorial designs, orthogonal polynomials and response surface methods. Applications include agricultural experiments, laboratory experiments, and industrial experiments, including quality control techniques. [36L, 12T] 
Exclusion: STA332H5, 305H1
Prerequisite: STA302H1/ 302H5/ 331H5/ECO327Y5
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA310H5 Bayesian Statistics in Forensic Science (SCI)
An introduction to the principles and procedures of statistics for the forensic sciences. The course covers both classical and Bayesian methodologies. Topics from classical statistics include confidence intervals for means and proportions, hypothesis tests on means and proportions, introduction to ANOVA, introduction to regression, contingency tables, and logistic regression. Topics from Bayesian statistics include subjective probability, conditional probabilities, prior and posterior probabilities, empirical Bayes estimates. The course will use real life case studies to develop statistical methodologies. Statistical computing will be required. [36L, 12T] 
Exclusion: STA302H4/442H5/ 441H1
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA311H5 Statistics for Forensic Sciences II (SCI)
A continuation of STA310H5. Topics from Bayesian statistics include conditional probabilities, estimation, likelihood ratios, prior and posterior probabilities and distributions. Applications to forensic sciences include propositions, relevant and irrelevant information, discriminating power, value of evidence, transfer evidence, introduction to fibre and DNA analysis. Statistical computing will be required. [36L, 12T]

Priority is given to students enrolled in Statistics Specialist or Major programs.

STA312H5 Topics in Statistics: Applied Statistical Modelling (SCI)
Introduction to a topic of current interest in statistics. Content will vary from year to year. Computer packages are used. [36L, 12T]
Prerequisite: STA258H5/ ECO327Y5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA313H5 Topics in Statistics: Applications of Statistical Models (SCI)
Introduction to a topic of current interest in statistics. Content will vary from year to year. Computer packages are used. [36L, 12T]
Prerequisite: STA258H5/ ECO327Y5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA348H5 Introduction to Stochastic Processes (SCI)
Discrete Markov chains with a finite number of states, random walks, single-server queues, continuous-time Markov chains, Poisson processes, branching processes, birth and death process, M/M/n queues, Monte-Carlo simulation may be introduced. [36L, 12T] 
Exclusion: STA347H1, STAC63H3
Prerequisite: STA260H5/ 261H5; MAT224H5/ 240H5
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA378H5 Research Project (SCI,EXP)
Research project. The project topic will vary from year to year. Interested students must consult with statistics faculty, at least two months prior to registration, to determine the project's topic and scope. Enrolment by permission of instructor only. 
Prerequisite: Permission of instructor and department; Minimum 2.5 CGPA.
Priority is given to students enrolled in Statistics Specialist or Major programs.
STA388H5 Topics in Statistics (SCI, EXP)
Introduction to a topic of current interest in statistics. Content will vary from year to year. Enrolment by permission of instructor only.
Prerequisite: Permission of instructor and department; Minimum 2.5 CGPA.
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA390H5 Modern Applied Statistics (SCI)
Topics from modern statistics for applied sciences. May include: bootstrap estimation and testing, Monte Carlo simulation, Bayesian estimation and testing, empirical Bayes methods. Statistical computing will be required. [36L, 12T]
Exclusion: STA414H1
Prerequisite: STA256H5/257H5; MAT134Y5/135Y5/137Y5/233H5
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA399Y5 Research Opportunity Program (SCI)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early February and students are invited to apply in early March. See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Permission of instructor and department. Corequisite: STA302H5, 302H1
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA413H5 Estimation and Testing (SCI)
This course covers advanced topics in probability and mathematical statistics. Topics include convergence in probability, convergence in distribution, and convergence with probability one, sufficiency, completeness, Rao-Blackwell and Lehman-Scheffe theorems, and asymptotics. [36L, 12T]
Exclusion: STA412H5, 422H1, 452H1
Prerequisite: STA260H5/261H5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA431H5 Structural Equation Models (SCI)
Random vectors and matrices, univariate and multivariate regression with measurement error, latent variables, model identification, the LISREL model, path analysis, confirmatory factor analysis, longitudinal data analysis, robustness of the normal model. A statistical computing package will be used. [36L, 12T]
Prerequisite: STA258H5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA437H5 Applied Multivariate Statistics (SCI)
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 the partial multiple and canonical correlations; multivariate analysis of variance; profile analysis and curve fitting for repeated measurements; classification and the linear discriminant function. There will be extensive use of statistical computing packages. [36L, 12T]
Exclusion: STA437H1, STAD37H3
Prerequisite: STA302H1/302H5/331H5/ECO327Y5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA441H5 Methods of Applied Statistics (SCI)
Vocabulary of data analysis, Tests of statistical significance, Principles of research design, Introduction to unix and SAS, Applications of statistical methods such as Multiple regression, Factorial ANOVA, Mixed linear models, Multivariate analysis of variance, Repeated measures, Logistic regression, Generalized linear models, Permutation tests and Bootstrapping. [36L, 12T]
Exclusion: STA442H5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA457H5 Applied Time Series Analysis (SCI)
This course develops the theory and methodology for the statistical analysis of time series. The methods may be broadly characterized as time domain methods based on correlation (Box-Jenkins), or frequency domain methods based on a decomposition of the series into cycles (Fourier). The course develops both of these to the point where they may be applied using standard statistical software. Model identification, estimation and forecasting are discussed. Applications in social and physical sciences are used. [36L, 12T]
Exclusion: STA457H1, STAD57H3
Prerequisite: STA302H1/302H5/331H5/ECO327Y5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.
STA478H5 Statistics Research Project (SCI)
Research project. The project topic will vary from year to year. Interested students must consult with statistics faculty, at least two months prior to registration, to determine the project’s topic and scope. Enrolment by permission of instructor only.
Prerequisite: Permission of instructor and department, minimum CGPA 2.5.
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA488H5 Topics in Statistics (SCI)
Introduction to a topic of current interest in statistics. Content will vary from year to year. Enrolment by permission of instructor only.
Prerequisite: Permission of instructor and department; Minimum 2.5 CGPA.
Priority is given to students enrolled in Statistics Specialist or Major programs.

Student Development and Transition

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As part of UTM’s commitment to supporting student development, the Office of Student Transition offers a variety of for-credit and not-for-credit classroom experiences that teach students transferable skills to support their academic success.

For new UTM students, the following transition courses are available: utmONE and utmONE Scholars. These for-credit, first-year offerings help integrate students into the academic culture of UTM. Additionally, LAUNCH is a not-for-credit option that matches students with an upper-year mentor from the same academic discipline who will guide a class of first-year students through the first term of university.

utmONE: These interdisciplinary, theme-based courses (utm111H5 - utm115H5) teach academic skills through the lens of an intellectually engaging topic. utmONE allows students to develop a deeper understanding of academic expectations and practices to enhance their learning and success at UTM. Specific skills that may be targeted include oral and written communication, critical thinking, information literacy, and analytical abilities. Additionally, a series of tutorial sessions will introduce students to essential elements of a holistic student experience (such as career exploration, health and wellness, and co-curricular engagement). All first-year students not participating in utmONE Scholars are eligible to enrol in utmONE.

utmONE Scholars: These seminars (utm190H5 - utm196H5) bring together highly motivated students to engage in meaningful discussion of intellectually stimulating topics alongside some of UTM’s most distinguished faculty members. utmONE Scholar seminars are academically rigorous experiences designed for first-year students who have demonstrated outstanding academic achievement. These interdisciplinary seminars will offer students the opportunity to explore their intellectual potential in small group settings. A strong emphasis will be placed on critical inquiry, frequent writing, and collaborative learning. Students will be selected via a competitive application process.

LAUNCH: These are engaging and interactive weekly sessions (utm101H5, utm102H5, utm103H5) taught by academically successful upper-year students enrolled in the student’s academic discipline. Through the development of an academic support network consisting of a senior mentor and peers, students develop new academic skills required to be successful at the university level as well as gain a greater awareness of the resources available to students across campus. LAUNCH is free to all new students. No credit is awarded for LAUNCH.
Exclusion:


List of Courses

utm101H5 LAUNCH: Business, Commerce and Management
These are informative weekly sessions taught by academically successful upper-year students enrolled in Business, Commerce and/or Management. Through engaging pedagogy you will develop strong study habits, discover the wide range of resources available to you as a student at UTM, and build a strong community with other first-year students in your academic discipline. LAUNCH is free to all new students. No credit is awarded for LAUNCH.

utm102H5 LAUNCH: Science, Mathematics and Psychology
These are informative weekly sessions taught by academically successful upper-year students enrolled in Science, Mathematics, and/or Psychology. Through engaging pedagogy you will develop strong study habits, discover the wide range of resources available to you as a student at UTM, and build a strong community with other first-year students in your academic discipline. LAUNCH is free to all new students. No credit is awarded for LAUNCH.

utm103H5 LAUNCH: Humanities and Social Science
These are informative weekly sessions taught by academically successful upper-year students enrolled in Humanities and/or Social Science. Through engaging pedagogy you will develop strong study habits, discover the wide range of resources available to you as a student at UTM, and build a strong community with other first-year students in your academic discipline. LAUNCH is free to all new students. No credit is awarded for LAUNCH.

utm111H5 utmONE: Tools of the Trade (SSc,SCI)
This course is an introduction to the common problem-solving tools used in the sciences and social sciences. It is designed to address the fundamental skills needed for comprehension and effective communication in these areas. The skills being addressed may include critical analysis of texts (primary literature, review papers, textbooks), use of databases to gather, manipulate and visualize data; interpretation and presentation of data; information gathering and writing skills (lab reports, critical essays); and oral presentations. Specific examples will be drawn from a variety of current research topics in both the sciences and social sciences. [24L, 12T]

utm112H5 utmONE: Power of Expression (HUM,SSc)
This course asks big questions about what creative expression is, how it influences society, and what role it plays in people's lives. Students will explore expression as social and cultural production, as intervention, and as a tool for social dialogue through assignments and small group activities that develop and refine key skills relevant to the humanities and social sciences. [24L, 12T]

utm113H5 utmONE: Humans in Nature: Interactions and Impacts (SSc,SCI,EXP)
This course will explore how humans have utilized the natural world and the impacts it has had on both the global environment and human societies. We will focus on topics such as human and natural history, conservation, sustainability, resource exploitation, domestication, GMOs, and our fascination with nature. The course will include a field component in our campus environment. [24L, 12T]

utm114H5 utmONE: Technology and Innovation: Historical, Social and Economic Perspectives (SSc,EXP)
This course will explore the enormous opportunities and the complex challenges presented by technological development. Topics discussed will include the history of technological changes over the last decades, their effects on the social and economic environment, including new opportunities in different industries (from publishing, to education, to information technology and pharmaceuticals), the impact on income distribution, the ethical challenges related to scientific progress and its application, and the effect on the participation of women and minorities in the workforce (especially in high-tech industries). In this course, students will interact with local technology companies as well as policymakers. [24L, 12T]

utm115H5 utmONE: Communication Among Cultures (HUM,SSc,EXP)
This course is an introduction to inter-cultural communication primarily in the areas of writing and speaking. It is designed to address fundamental skills related to language use in the academic setting by focusing on topics such as customs, attitudes, beliefs, and values. Specific examples will be drawn from real-life university situations, and multiple viewpoints on the nature of diversity in communication will be discussed. [24L, 12T]
utm190H5 utmONE Scholars: The Drama of Politics (HUM,SSc)
This course in political theatre explores prominent themes such as justice, tyranny and rebellion as presented dramatically in plays offering distinct perspectives on political power. The course includes short student performances. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm191H5 utmONE Scholars: Science Meets Society (SSc,SCI)
This course explores debates within society and policy implications surrounding complex current research questions in science that require creative, multidisciplinary thinking. Students will hone skills in research and presentation. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm192H5 utmONE Scholars: Language, Culture, and Mind (HUM,SSc)
The course introduces students to cutting edge research questions and methods of inquiry in the study of language through the lenses of different disciplines such as language as a communicative tool (Anthropology), language as an internal system (Linguistics) and language as a cognitive object (Psychology). [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm193H5 utmONE Scholars: Nations Colliding? (HUM,SSc)
This course investigates the complexity of our global interconnectedness through the lens of a substantive topic. Questions vary annually, but may include: Do all nations benefit equally from this increasing connectivity? How do global connections affect culture? What strategies offer long-term sustainability? What are the impacts of interconnectedness, both to individual citizens and to societies at large? Questions will be explored using a multidisciplinary approach. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm194H5 utmONE Scholars: Religion and Politics (HUM,SSc,EXP)
This course aims to engage with the current political challenges that religion in its diverse manifestations poses to secular society and political systems. This seminar will encourage students to become more thoughtful and self-critical about how society responds socially and politically to these challenges in the 21st-century. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm195H5 utmONE Scholars: Curiosity and Control: Voyages of Discovery to North America (HUM,SCI,EXP)
Students will investigate how both a curiosity for novelty and a desire for control motivated the so-called "Age of Discovery" and shaped the experiences of First Nations, Africans, and Europeans in medieval and early modern North America. With a focus on how people adapted to new environments, this course will provide opportunities for students to explore historical questions with contemporary resonance from the perspectives of both science and the humanities. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars
utm196H5 utmONE Scholars: Building Global Justice (HUM,SSc)
This course focuses on themes of social justice, global change, and conflict through the lens of multiple disciplines. Through the exploration of concepts such as class, race, gender, religion, culture, and power on a global level, students will be involved in assignments and small group activities that develop and refine key skills that contribute to student success in university courses. [24S]
This course is open to high achieving first-year students only. All interested students must apply and a select group of academically successful students will be accepted into utmONE Scholars. The application can be found here: http://uoft.me/scholars

utm290H5 Launching your Research (SSc,SCI,EXP)
This course will provide hands-on, field and laboratory-based learning from a broad spectrum of disciplines. Students will participate and ultimately lead every aspect of designing and undertaking a comprehensive research program. This will include 1) designing a team-based interdisciplinary research project complete with a testable hypothesis subjected to state-of-the-art methodology and instrumentation, 2) gathering of primary, field-based data, 3) rigorous interpretation of the trends highlighted during data processing, and with the intention of 4) broad dissemination of the novel results through peer-review publishing. Each research team will learn and employ the Agile method of project management, which focuses on breaking up daunting research projects into a series of small manageable tasks to ensure successful project completion. [24L, 24T]
Prerequisite: utm190H5, utm191H5, utm192H5, utm193H5, utm194H5, utm195H5, utm196H5

utm377H5 Why the First Year of University Matters: The Impact of Peer Mentoring (HUM,EXP)
This course explores contemporary issues in higher education with a focus on experiences, issues and challenges commonly encountered by undergraduate students during their first year of university. Interdisciplinary in its focus, topics of exploration include an examination of adult and student development theories, models of student engagement and an investigation into mindset, levels of persistence, habits of mind and personality characteristics that impact student success. An internship component is required. Students taking the course will assume a peer-mentoring role to apply and contextualize theories and skills learned in the course. This is a closed course open only to those students who have successfully secured a peer-mentoring position with the First Year Peer Mentoring program. [24L, 12T]
Exclusion: EDS377H5
This course is cross-listed as EDS377H5. Students in the Education Minor should enrol in EDS377H5. Students not in the Education Minor should enrol in UTM377H5.

Theatre, Drama and Performance Studies (HBA)

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The study of Theatre, Drama and Performance examines the relationship between the artists who create written texts intended for production, the artists who turn scripts into performances, and the audiences who experience the resulting theatrical event. It is the study of the event itself, and the acts of creation involved in producing that event. Understanding Theatre, Drama and Performance involves the study of plays, actors, theatres, designers and audiences from the classical Greek stage to the most modern experimental performance. Theatre, Drama and Performance Studies offers three programs:
• Theatre and Drama Studies (Specialist; joint program between U of T Mississauga and Sheridan College)
• Theatre, Drama and Performance Studies Major
• Theatre, Drama and Performance Studies Minor

The focus of Theatre, Drama and Performance Studies at U of T Mississauga, both curricular and extra-curricular, is the Erindale Studio Theatre and the Multi-Media Studio Theatre. The Erindale Studio Theatre is used for performances of Theatre Erindale, the production company of the Specialist Program, and for performances of the U of T Mississauga Drama Club. MiST is used for teaching and co-curricular and extra-curricular performances by all programs.

Courses in related topics are given in many disciplines. A list of these courses is given in the General Notes for All Programs below, and students interested in the field are advised to consider taking some of them. No more than a combination of 15.0 Drama-related courses may be taken.

Enrolment in any Program of Study, including the second year of the Theatre and Drama Studies program, requires completion of 4.0 previous credits or their equivalent. Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
- CIN Cinema Studies (page 101)
- CLA Classics (page 103)
- DRE Drama (page 365)
- DRS Drama (page 365)
- ENG English (page 166)
- FRE French (page 210)
- GER Language Studies (page 275)
- ITA Italian (page 261)

Specialist Program ERSPE1880 Theatre and Drama Studies (Arts)

The Specialist Honours Program in Theatre & Drama Studies, offered jointly with Sheridan Institute, involves the study of plays, actors, theatres, designers and audiences from the classical Greek stage to the most modern experimental performance. We give students the opportunity to earn a two-year (equivalent) conservatory diploma in professional actor training from Sheridan within a Specialist degree in performance history and theory and dramatic literature from U of T Mississauga. This high-powered combined program prepares students for a career on the stage or behind the scenes in professional theatre world, or for drama teaching at the high school or university level.

12.0 credits are required.

Limited Enrolment – Enrolment in this program is limited to students who are successful in an audition, conducted in the spring of each year. For audition requirements, please see the website www.utm.utoronto.ca/reg/audition. Enrolment in all studio courses (DRS) is restricted to students in the program. Students applying to proceed to the second year of the Theatre and Drama Studies program must have completed 4.0 credits with a minimum CGPA of 2.0.

Please note: "Taking a year off" from this program is possible, if difficult, after first year, problematic after second year, and impossible after third year. Returning at any point requires a successful re-audition and interview and also depends on the availability of space in the class you wish to join.

First Year: DRE/ENG121H5, 122H5; DRS121H5, 122H5
Second Year: DRE200H5, 222H5; DRS221H5, 222H5
Third Year: 1.0 further DRE at the 300/400 level; DRS321H5, 322H5, 325H5, 326H5
Fourth Year: 1.0 further DRE course at 300/400 level; DRS421H5, 422H5, 425H5, 426H5; 2.0 additional credits in drama-related courses.

Students must take a minimum 0.5 DRE at the 400 level in either third or fourth year.

Major Program ERMAJ2468 Theatre, Drama and Performance Studies (Arts)

Theatre, Drama and Performance Studies (TDPS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the TDPS program includes courses that examine theatre history, dramatic literature, critical theory,
playwriting, devising, and intermedial performance, among others. TDPS provides students with first-rate academic experience and credentials, while offering them ample opportunities for creative application of acquired knowledge and skills through practical components and practice-based research projects. All courses are taken at U of T Mississauga.

7.0 credits are required, as follows:

**First and Second Years:** DRE/ENG121H5, 122H5, DRE200H5, 222H5

**Higher Years:** 1.0 DRE at the 300 level and 4.0 credits from the drama-related courses, at least 1.0 at the 300+ level.

See Notes for all programs, below.

**Minor Program ERMIN2468 Theatre, Drama and Performance Studies (Arts)**

Theatre, Drama and Performance Studies (TDPS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the TDPS program includes courses that examine theatre history, dramatic literature, critical theory, playwriting, devising, and intermedial performance, among others. TDPS provides students with first-rate academic experience and credentials, while offering them ample opportunities for creative application of acquired knowledge and skills through practical components and practice-based research projects. All courses are taken at U of T Mississauga.

4.0 credits are required, as follows:

**First and Second Years:** DRE/ENG121H5, 122H5, DRE200H5, 222H5

**Higher years:** 1.0 300/400 DRE credit and 1.0 further DRE from the drama-related courses.

**NOTES FOR ALL PROGRAMS**

1. Additional DRE courses and the following drama-related courses can be used to fulfill the requirements for any Theatre, Drama and Performance Studies program: CIN202H5, 301H5*; 302H5*; 303H5*; CLA300H5; ENG220Y5, 330H5, 331H5*, 335H5*, 336H5*, 337H5, 340H5*, 341H5*, 342H5*, 352H5*, 424H5*/425H5*/426H5* (when drama related), 434H5*/435H5*/436H5* (when drama related), 460H5*/461H*/462H5*/463H5* (when drama related), 470H5*/471H5*/472H5*/473H5* (when drama related), FAH475H5, FRE317H5, 393H5, 397H5; GER353H5, 355H5*; ITA242Y5/243Y5*, 244Y5/245Y5, 306H5/307H5, 312Y5/313Y5*, 314Y5/315Y5*, 342Y5/343Y5*, 372Y5*, 490Y5*, 495Y5*

* = Departmental prerequisites

2. Students enrolled in Specialist and Major programs in Drama who have completed 2.0 DRE credits may enrol in ENG330H5, 331H5, 335H5, 336H5, 340H5, 341H5, 342H5

**Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time. Pre- and co-requisites will be strictly enforced.**

**List of Courses**

**DRS:** These are studio courses limited by audition to those in the Theatre and Drama Studies Program; although participatory in nature, these courses may also require some written work.

**DRE courses are taught at Sheridan Institute, Trafalgar Campus.**

**DRE courses are taught at U of T Mississauga.**

**DRE121H5 Traditions of Theatre and Drama (HUM,EXP)**

An introductory survey of the forms and history of world drama from the classical period to the nineteenth century in its performance context. May include later works influenced by historical forms and one or more plays in the Theatre Erindale schedule of production. May include a research performance component. This course is also listed as ENG121H5. [36L]

*Exclusion:* DRM100Y1; ENG125Y1

**DRE122H5 Modern and Contemporary Theatre and Drama (HUM,EXP)**

An introductory survey of the forms and history of world drama from the late nineteenth century to the present in its performance context. May include later works influenced by historical forms and one or more plays in the Theatre Erindale schedule of production. May include a research performance component. This course is also listed as ENG122H5. [36L]

*Exclusion:* DRM100Y1; ENG125Y1

**DRE200H5 Canadian Theatre History (HUM)**

A survey of the history of theatre in Canada, with particular emphasis on developments since the mid-twentieth century. [36L]

*Exclusion:* DRM268H1

**Prerequisite:** DRE/ENG121H5, 122H5, or permission of the U of T Mississauga program director.
DRE221Y5 Shakespeare (HUM, EXP)
A study of 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; Henry V; Twelfth Night; Measure for Measure; Hamlet; King Lear; Antony and Cleopatra; The Tempest. The course provides an in-depth theatre-historical and practical introduction to Shakespeare's work and gives students the opportunity to engage with a wide range of approaches to the staging of his plays. [72L]
Exclusion: ENG220Y5
Prerequisite: DRE/ENG121H5, 122H5 or permission of U of T Mississauga program director.

DRE222H5 The Performance Text (HUM, EXP)
An introduction to the techniques of dramaturgical analysis, through the study of a range of texts to which students might be exposed as theatre practitioners and audience members. Focus will be on the relationship between the performance event and its associated written text. Examples will emphasize modern and contemporary drama, as well as a range of styles, and will include one or more Theatre Erindale productions, and other appropriate productions, as well as a practical workshop component. [36L]
Exclusion: DRE240H5, 242H5, 244H5, 246H5
Prerequisite: DRE/ENG121H5, 122H5 or permission of U of T Mississauga program director.

DRE299Y5 Research Opportunity Program (HUM, EXP)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.

DRE342H5 Studies in Twentieth Century Performance Styles (HUM)
A seminar on a topic chosen by the instructor, having a particular focus on twentieth century theories of performance. Includes optional practical workshop component. [24S]
Prerequisite: two of DRE200H5/ 220H5, 222H5, 240H5, 242H5, 244H5, 246H5 or permission of the U of T Mississauga program director.

DRE344H5 Studies in Theatre and Drama 1 (HUM)
Topic varies from year to year, depending on faculty research interests. [24S]
Prerequisite: 4.0 credits, including at least 1.0 Humanities course.
Recommended Preparation: DRE/ENG121H5, 122H5

DRE346H5 Studies in Theatre and Drama 2 (HUM)
Topic varies from year to year, depending on faculty research interests. [24S]
Prerequisite: 4.0 credits, including at least 1.0 Humanities course.
Recommended Preparation: DRE/ENG121H5, 122H5

DRE347H5 Studies in Theatre and Drama 3 (HUM)
Topic varies from year to year, depending on faculty research interests. [24S]
Prerequisite: 4.0 credits, including at least 1.0 Humanities credit.
Recommended Preparation: DRE/ENG121H5, 122H5

DRE348H5 Production Dramaturgy (HUM)
Plays from the Western theatrical tradition in contemporary productions. [24S]
Prerequisite: DRE/ENG121H5, 122H5, 200H5/ 220H5, 222H5, or permission of the U of T Mississauga program director.

DRE350H5 Film Genres in Performance (HUM)
An introduction to the concept of genre through a selection of filmed and videotaped performances, playscripts, and theoretical readings. A number of genres will be covered, including some of: comedy, melodrama, police drama, western, science fiction, and horror. Includes optional practical workshop component. [24S; 24P]
Exclusion: CIN305Y
Prerequisite: 4.0 credits, including at least 1.0 Humanities course.

DRE352H5 Stage to Screen (HUM)
A theoretical and historical study of the relationship between live and recorded media, with special consideration of the translation/adaption from theatrical production to film and television production. Discussion will focus on case studies. Includes optional practical workshop component. [24S; 24P]
Prerequisite: 4.0 credits, including at least 1.0 Humanities.

DRE356H5 Theory of Drama (HUM)
A study of theories of drama, theatre and performance, with a special emphasis on semiotics. Topics will include the relationship between theatre and other modes of social interaction (the fashion show, the political convention), theatre and other performing arts, and theatre/drama as a literary genre. May include one or more Theatre Erindale and other productions in the syllabus. [24S]
Prerequisite: 4.0 credits, including at least 1.0 Humanities course.
Recommended Preparation: DRE/ENG121H5, 122H5
DRE358H5 The Audience and the Theatre (HUM)
A theoretical and historical examination of the theatrical performance with a focus on the role of the audience. Topics will include the shifting relationship with performers, both collaborative and manipulative, a reflection on what makes theatre audiences different from other audiences, and what precisely happens at various stages of the playgoing experience. The second part of the semester will be devoted to a series of historical case studies, ranging from ancient Greece through Shakespearean England to 17th-century Spain and 20th-century Germany. [24S] 
Prerequisite: 4.0 credits, including at least 1.0 Humanities course.
Recommended Preparation: DRE/ENG121H5, 122H5

DRE360H5 Developmental Dramaturgy (HUM)
A theoretical, historical, and practical study of the process of developmental dramaturgy. The course will include a survey and analysis of historical and contemporary interpretations of the role of dramaturgy in the creation of new work. Students will also participate in the practical application of dramaturgical strategies and techniques. [24S] 
Prerequisite: DRE/ENG121H5, 122H5; DRE200H5/220H5, 222H5

DRE362H5 Playwriting (HUM,EXP)
An introduction to the art and craft of writing for the stage. Through a variety of practical exercises, students will be encouraged to explore the unique properties of the theatrical environment. Topics for investigation will include general issues (such as language, plot structure, characterization, metaphor, and symbolism, etc.) as well as issues specific to the theatrical context (such as theatrical time and space, movement, engagement with an audience, relationship to other theatre practitioners, etc.). The class will involve writing in and out of class, as well as exercises in effective and constructive critique of one another's work. [36S] 
Prerequisite: 4.0 credits, including at least 1.0 Humanities; permission of instructor. Admission to this limited enrolment course will be determined by the evaluation of a portfolio to be submitted by May 15 if an "F" course, by November 1 if an "S" course. Contact the Department for further information.

DRE366H5 Women in Theatre (HUM)
Topics in the history of women in English-language theatre. Topics will vary from year to year, depending on available faculty. May include a practical workshop component. [24S] 
Prerequisite: 4.0 credits including at least 1.0 Humanities
Recommended Preparation: DRE/ENG121H5, 122H5

DRE380H5 Repertory Theatre in Practice: The Shaw Festival (HUM,EXP)
A study of the role of repertory theatre in the historical and current development of dramatic literature and performance practices, held-on-site at the Shaw Festival in Niagara-on-the-Lake, Ontario. Students will attend productions and lectures, interview actors, directors, designers, and administrators, and collaborate on a staged reading with the assistance of company members. Topics may include the performance history of plays by Shaw, Chekhov, Ibsen, Wilde, and other playwrights within the Festival's mandate, the analysis of production elements from the perspectives of directors, actors, and designers, and the relevance of "classical" drama for the modern world. There is a nonrefundable fee associated with this course beyond tuition, for which the accepted students are responsible. 
Prerequisite: 6.0 credits, including DRE121H5, DRE122H5, DRE200H5, and DRE222H5 or approved equivalent courses.
Recommended Preparation: Any DRE course on the 300- or 400-level; ENG340H5; ENG341H5

DRE392H5 Independent Study 1 (HUM,EXP)
An independent project in theatre and drama studies, chosen by the student and supervised by a member of the faculty. The form of the project will be determined in consultation with the supervisor. A written proposal, signed by the supervisor, must be submitted for approval to the Program Director by May 15 if an "F" course, by November 1 if an "S" course. Proposal forms are available from the Undergraduate Advisor. Independent Study courses may not be taken simultaneously. 
Exclusion: DRM390Y5, DRE390Y5 
Prerequisite: Permission of the U of T Mississauga program director, and completion of three DRM/DRE/DRS credits.

DRE394H5 Independent Study 2 (HUM,EXP)
An independent project in theatre and drama studies, chosen by the student and supervised by a member of the faculty. The form of the project will be determined in consultation with the supervisor. A written proposal, signed by the supervisor, must be submitted for approval to the Program Director by May 15 if an "F" course, by November 1 if an "S" course. Proposal forms are available from the Undergraduate Advisor. Independent Study courses may not be taken simultaneously. 
Exclusion: DRM390Y5, DRE390Y5 
Prerequisite: Permission of the U of T Mississauga program director, and completion of three DRM/DRE/DRS credits.
DRE399Y5 Research Opportunity Program (HUM,EXP)
For senior undergraduate students who have developed some knowledge of a discipline and its research methods, this course offers an opportunity to work on the research project of a professor. Students enrolled have an opportunity to become involved in original research, develop their research skills and share in the excitement and discovery of acquiring new knowledge. Project descriptions for the following fall-winter session are posted on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details
Exclusion: DRE299Y5

DRE420H5 Senior Seminar 1 (HUM)
A senior research seminar in Theatre and Performance. Topic will vary with instructor. [24S]
Prerequisite: 9 credits, including DRE/ENG121H5, 122H5; DRE200H5/222H5; or permission of the U of T Mississauga program director.

DRE422H5 Senior Seminar II (HUM)
A senior research seminar in Theatre and Performance. Topic will vary with instructor. [24S]
Prerequisite: 9 credits, including DRE/ENG121H5, 122H5; DRE200H5/222H5; or permission of the U of T Mississauga program director.

DRE463H5 Senior Seminar III (HUM)
A senior research seminar in performance and popular culture. Topic will vary with instructor. [24S]
Prerequisite: 9 credits, including DRE/ENG121H5, 122H5; DRE200H5/222H5; or permission of the U of T Mississauga program director.

DRS121H5 Acting 1 (HUM,EXP)
This course will introduce the elements of practical Vocal, Physical, Textual, and Improvisational training for the novice actor, together with an Introduction to Theatre Organization, with an emphasis on releasing the natural impulse. In addition, the student will spend a minimum of 3 hours per week (averaged) in Stagecraft Labs gaining basic backstage and front-of-house skills, and in production-related duties. Typical production tasks are concentrated in 3- to 9-week periods and may include evenings and/or Saturdays. [108P (72 studio classes plus minimum 36 labs and/or production)]
Corequisite: DRE/ENG121H5, 122H5

DRS122H5 Acting 2 (HUM,EXP)
The continuation of Acting 1 (see above). Stagecraft Labs are replaced, outside class hours, by a minimum of 3 hours per week (average) of production-related duties over the term. [108P (72 studio classes plus minimum 36 labs and/or production)]
Prerequisite: DRS121H5
Corequisite: DRE/ENG121H5, 122H5

DRS211H5 Acting 3 (HUM,EXP)
Half of this course will continue and build upon the work begun in first year in Voice, Text, and Movement. The other half will be an Introduction to Scene Study, including character analysis for the actor, with realistic material from the Canadian and International repertoire. The student will be assigned a minimum of 75 hours of production-related duties outside class time over the year; typical tasks are concentrated in 3- to 9-week periods and may include evenings and/or Saturdays. [108P (72 studio classes plus minimum 36 labs and/or production)]
Prerequisite: At least 4.0 credits including DRS121H5, 122H5 and DRE/ENG121H5, 122H5
Corequisite: At least one of DRE200H5/220H5, 222H5, 240H5, 242H5, 244H5, 246H5

DRS221H5 Acting 4 (HUM,EXP)
The continuation of DRS211H5 Acting 3. [108P (72 studio classes plus minimum 36 labs and/or production)]
Prerequisite: DRS221H5

DRS215H5 Acting 5 (HUM,EXP)
Vocal, Physical, and Interpretive Techniques for the developing actor now become more specialized. Unarmed Combat, Period Movement, Contact Improvisation, Ensemble Singing, Intermediate Voice, Professional Practice, and various classical and contemporary styles are included (components may vary with the availability of Guest Instructors). In addition, each student will be scheduled regularly for a half-hour Tutorial to work on acting problems in a one-on-one situation. [108P (96 studio classes plus tutorials)]
Prerequisite: DRS221H5 and permission of instructor, DRE/ENG121H5, 122H5
Corequisite: DRS325H5

DRS222H5 Acting 6 (HUM,EXP)
The continuation of DRS215H5, Acting 5. Tutorials culminate in the major solo performance and dramaturgy exercise called the Junior Project. [108P (96 studio classes plus tutorials and junior project)]
Prerequisite: DRS215H5 and permission of instructor
Corequisite: DRS326H5

DRS321H5 Production 1 (HUM,EXP)
The student will be cast in a public production, involving 12-33 hours of rehearsal and performance evenings and Saturdays for up to 9 weeks of the term. (Note that, at this level, evening classes in other departments are not possible.) [144P (average)]
Prerequisite: DRS222H5 and permission of instructor, DRE/ENG121H5, 122H5
Corequisite: DRS321H5

Programs
**DRS326H5 Production 2 (HUM,EXP)**
The student will be cast in a second public production, involving 12-33 hours of rehearsal and performance evenings and Saturdays for up to 10 weeks of the term. (Note that, at this level, evening classes in other departments are not possible.) [144P (average)]

**Prerequisite:** DRS325H5 and permission of instructor

**Corequisite:** DRS322H5

**DRS421H5 Acting 7 (HUM,EXP)**
Work on Voice, Text, and Movement continues at an advanced level. Solo Singing, Senior Voice, Character Mask, Dance for Actors, and an Introduction to Sword are included (components may vary with the availability of Guest Instructors). Regular half-hour Tutorials continue, with emphasis on the development of individual audition material. Professional Practice classes include cold reading, mock auditions, and the realities of acting as a business. Styles include Acting for the Camera and other Media Workshops, as well as classes that could range from the Greeks to the Absurdist. [108P(96 studio classes plus tutorials)]

**Prerequisite:** DRS322H5, 326H5, and permission of instructor, 1.0 DRE credit at 300 level

**Corequisite:** DRS425H5

**DRS422H5 Production 3 (HUM,EXP)**
The student will be cast in a third public production, involving 12-33 hours of rehearsal and performance evenings and Saturdays for up to 9 weeks of the term. (Note that, at this level, evening classes in other departments are not possible.) [156P (average)]

**Prerequisite:** DRS326H5 and permission of instructor, 1.0 DRE credit at 300 level.

**Corequisite:** DRS421H5, DRE421H5

**DRS426H5 Production 4 (HUM,EXP)**
The student will be cast in a fourth public production, involving 12-33 hours of rehearsal and performance evenings and Saturdays for up to 10 weeks of the term. (Note that, at this level, evening classes in other departments are not possible.) [156P (average)]

**Prerequisite:** DRS425H5 and permission of instructor

**Corequisite:** DRS422H5

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**Visual Culture**

**Professors**

K. Jain, B.A., M.A., Ph.D.
L. Kaplan, B.A., M.A., Ph.D.
J.P. Ricco, B.A., A.M., Ph.D.
M. Sutherland, B.F.A., M.A., Ph.D.

**Chair**

Alison Syme
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**Assistant to Chair**

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**Undergraduate Counsellor**

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In today’s world, global cultures are visual cultures. Social relations, political events, entertainment, and entire new fields of individual and collective creativity and expression all take distinctly visual forms and rely upon the production, circulation, and reception of images. The program in Visual Culture equips students with the analytical methods and critical tools necessary to take an active and informed role, not only in studying but also in shaping 21st-century visual culture. By bringing historical and theoretical study from multidisciplinary perspectives to bear upon real-world practices and debates, including the expansion of digital technology into all aspects of our daily lives, the Visual Culture minor prepares students to meet the challenges and potentials of contemporary global visual cultures.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:

- ANT Anthropology (page 40)
- CLA Classics (page 103)
- ENG English (page 166)
- HIS History (page 238)
- VCC Visual Culture and Communication (page 371)

**Minor Program ERMIN1210**

4.0 total credits are required, including at least 1.0 credit at the 300/400 level.

**First Year:** VCC101H5

**Second Year:** At least 1.0 credit at the 200 level in VCC/CIN

**Upper Years:** 2.5 credits at the 300/400 level in VCC/CIN/VST or CLA235H5, ENG235H5, ANT208H5. In consultation with the undergraduate counsellor HIS494H5 may qualify on a year-to-year basis.
Visual Culture and Communication (HBA)

Professors
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L. Kaplan, B.A., M.A., Ph.D.
J.P. Ricco, B.A., A.M., Ph.D.
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Visual Culture and Communication (VCC) is an interdisciplinary undergraduate curriculum that provides students with a foundation in both visual cultural and communication studies (history, theory, and criticism) and digital communication practices (with courses taught at Sheridan Institute). The Specialist Program offers grounding in both the analysis of visual culture and the practices of visual communication. Students also take courses that are drawn from the Communication, Culture, Information & Technology program.

Increasingly, global cultures are dominated by visual communication, from art to advertising, propaganda to documentary photography, and film to websites. People of all generations are becoming active producers and consumers of visual culture. As digital technology expands, expertise in visual communication and design becomes essential for meeting the challenges of the global culture. VCC will prepare students to take an active and informed role in shaping 21st-century visual culture by bringing historical and theoretical study from multidisciplinary perspectives to bear on contemporary practice and debate.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
CCT Communication, Culture, Information and Technology (page 115)
CIN Cinema Studies (page 101)
FAH Fine Art History (FAH) (page 51)
FAS Fine Art Studio (FAS) (page 62)
VCC Visual Culture and Communication (page 371)
VST Fine Art History (FAH) (page 51)

Specialist Program ERSPE1200 Visual Culture and Communication (Arts)

12.5 credits are required, including at least 1.0 credits at the 400 level in VCC.

Limited Enrolment – Enrolment in this program is highly competitive and will be limited as follows (meeting the minimum requirements does not guarantee admission):
1. Minimum of 4.0 credits to include CCT109H5, CCT110H5, FAH101H5, and VCC101H5.
2. Minimum Cumulative Grade Point Average (CGPA) determined annually. It is generally between 2.7 and 3.0 and never lower than 2.2.
3. Minimum 65% average among CCT109H5, CCT110H5, FAH101H5, and VCC101H5 with at least 60% in each course.

Tuition fees for students enrolling in this Department of Visual Studies program will be higher than for other Arts and Science programs.

Specialists in VCC are strongly urged to structure their studies as follows:

First Year: 2.5 credits: CCT109H5, CCT110H5, FAH101H5, and VCC101H5

Second Year:
- 1.0 credits from: CCT270H5, CCT250H5, CCT204H5
- 1.0 credits from: CCT200H5, CCT206H5, CCT210H5,
- 1.0 credits from: VCC205H5, VCC236H5, VCC290H5

Third Year:
- 1.5 credits from any VCC courses at the 300/400 level;
- 1.0 credits from any CIN or FAH course at the 300/400 level, VST410H5;
- 2.0 credits: CCT336H5, CCT351H5, CCT352H5, CCT353H5

Fourth Year:
- 1.5 credits from CCT357H5, CCT452H5, CCT434H5; with permission up to 1.0 credits may be taken from FAS246H5, FAS346Y5, FAS347Y5 (Note: there are prerequisites for most 200/300-level courses in FAS.)
- 1.0 credits: VCC400H5 and one other 0.5 VCC credit at the 400 level
Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

List of Courses

VCC101H5 Introduction to Visual Culture (HUM)
(Formerly CCT201H5/ VCC201H5) Introduces the ways in which we use and understand images across the realms of art, advertising, mass media, and science, with examples drawn from painting, photography, film, television, and new media. Presents a diverse range of recent approaches to visual analysis and key theories of visual culture. [24L, 12T]
Exclusion: FAH201H5, CCT201H5, VCC201H5
Recommended Preparation: CCT109H5 or FAH101H5/ FAH202H5

VCC205H5 Monsters (HUM)
This course examines monster movies and television shows alongside readings from monster literature, comics, and critical essays. It considers the social significance of the monster in order to learn something about how the threat of the monster relates to historical anxieties concerning mass-media technologies, social deviance, and the hybrid forms of visual media culture that we typically associate with the era of 21st-century convergence culture but define the genre of monster media from its ancient beginnings. [24L, 12T, 24P]
Exclusion: VCC340H5
Prerequisite: VCC101H5/ VCC201H5

VCC207H5 Urban Sites and Sounds (HUM)
Introduces students to histories and theories of urban spaces emphasizing the modern city. Drawing from history, architecture, geography, and media studies, the course explores how urban change is evident in the spaces, forms, and sounds of the modern city. Case studies of specific urban environments depending on instructor’s research emphasis. [24L, 12T]
Prerequisite: VCC101H5/ VCC201H5

VCC236H5 North American Consumer Culture: 1890-Present (HUM)
Examines the history and theoretical treatments of mass consumerism in North American society. We will look at the relationship between the market and cultural politics, cultural production, and mass consumption. Specific topics include: the shift from mass production to mass consumption; the growth of department stores; the rise of advertising; the relationship of race, class, and gender to consumer capitalism; the development of product brands; and the emergence of global marketing. [24L]
Exclusion: HIS336H5, VCC336H5
Prerequisite: VCC101H5/ VCC201H5 or HIS271Y5

VCC290H5 Topics in Visual Culture and Communication (HUM)
An examination of a topic in Visual Culture. Topics vary from year to year; the content in any given year depends on the instructor. This will be a lecture course. [24L, 12T]
Prerequisite: VCC101H5

VCC304H5 Visual Culture and the Politics of Identity (HUM)
Examines the ways in which social-cultural identities are constructed by, and at times disrupt, various visual technologies, logics, and representational strategies. Issues and problems to be addressed include nationality, stereotyping, invisibility, and surveillance. Course materials will be drawn from modern and contemporary art and visual culture, and will also include readings from the fields of feminism, race studies, queer theory, and performance studies. [24L, 12T]
Prerequisite: CCT200H5 or VCC101H5/ VCC201H5

VCC306H5 Visual Culture and Colonialism (HUM)
Many of our most popular and influential image technologies, visual forms, and ways of thinking about images first developed in the second half of the 19th century: the heyday of European colonialism. This course re-examines the visual culture of modernity in the light of this deeply colonial genealogy, through forms such as photography, colour printing, film, exhibitions, postcards, maps, scientific illustrations, and the body as image. [24L]
Exclusion: VCC302H5
Prerequisite: VCC101H5/ VCC201H5

VCC308H5 Activism in Visual and Media Culture (HUM)
This course will examine political and social activism in visual and media culture focusing on the role that visual representation has played in social movements and how artists/activists have employed visual media to achieve specific ends that challenge and resist dominant visual representations and political formations. [24L,12P]
Prerequisite: VCC101H5/ VCC201H5

VCC309H5 Society and Spectacle (HUM)
Spectacles have been vehicles of social and political power at varying historical moments and locations. Since Guy Debord’s Society of the Spectacle was published in 1967 the term has been deployed as a critical concept for thinking about visual culture. This course takes up a number of historical case studies in order to locate and situate phenomena associated with spectacle and spectacular visual entertainments. Topics may include the role of images in mediating contemporary social relations and the connection between spectacle and violence. [24L, 24P]
Exclusion: VCC209H5
Prerequisite: VCC101H5/ VCC201H5

2016-2017 Calendar
VCC334H5 Media Realities (HUM)
This course examines the relationship between mass media technologies and the idea of "reality" with an emphasis on the electronic and digital forms that dominate the discourse of "reality" in contemporary media culture, television, and the Internet. It will explore such questions as: How do shifting aesthetic conventions of realism, "reality" programming, and documentary inflect both theoretical and historical understandings of what constitutes reality? And how do our ideas of media technology inform these conventions and the understandings they produce? [24L, 24P]
Prerequisite: VCC101H5/ VCC201H5

VCC338H5 Picturing the Suburbs (HUM)
This course considers how images of suburbia circulate between two interrelated but often counter-posed realms of visual culture: the popular genres of film, television, and new media entertainment and the iconography of "high" art practices such as painting, photography, and avant-garde film. In the process it addresses such fundamental issues as the relation between art and mass production, the aesthetics of private and public space, and the role that visual media play in constructing the socio-political space of the built environment. [24L, 24P]
Prerequisite: VCC101H5/ VCC201H5

VCC360H5 South Asian Visual Culture (HUM)
Popular imagery from the Indian subcontinent is now increasingly visible in the global arena, particularly via the West's discovery of 'Bollywood.' But what have these images meant to South Asians themselves, what are their histories, what traditions and practices do they draw on? This course introduces key concepts for understanding South Asian visual culture and its multifaceted postcolonial modernity. Images examined include popular prints, film, photography, comic books, urban environments, advertisements, crafts, art, propaganda, rituals, television, and the internet. [24L]
Prerequisite: VCC101H5/ VCC201H5

VCC390H5 Topics in Visual Culture and Communication (HUM)
An in-depth examination of topics in visual and media culture, from both historical and contemporary perspectives. Topics vary from year to year, and the content in any given year depends upon the instructor. [24L]
Prerequisite: VCC101H5/ VCC201H5

VCC399Y5 Research Opportunity Program (ROP) (HUM)
This course provides a richly rewarding opportunity for third or higher year students who have developed some knowledge of visual culture and communication to work on the research project of a professor in return for 399Y course credit. Students enrolled have an opportunity to become involved in original research, enhance their research skills, and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See Experiential Learning Programs (Page 34) for more details.
Exclusion: CCT299Y5, CCT399Y5
Prerequisite: VCC101H5/ VCC201H5, a minimum of 10.0 credits.

VCC400H5 Advanced Project (HUM)
This course is designed to serve as a capstone course for VCC specialists. Students engage with advanced readings in the field and refine skills in critical analysis of selected topics in VCC. A major focus is the design and implementation of an advanced research project selected in consultation with an instructor. [36S]
Exclusion: CCT400H5, HSC400H5
Prerequisite: VCC101H5/ VCC 201H5 and completion of 13.0 credits. Open only to VCC specialists.

VCC405H5 Individual Project (HUM)
A research project carried out under the supervision of a faculty member. Students will carry out a research project on a selected topic related to VCC. Students must obtain signed permission from the faculty member they would like to have as their supervisor.
Prerequisite: Completion of 13.0 credits and CCT400H5
Enrolment is limited

VCC406H5 Post-Colonialism and the Image (HUM)
How has the legacy of modern colonialism across the globe impacted how we see images, how we think about them, and how do images perpetuate or overturn the legacy of colonial power relations? This course introduces students to the key concepts and debates in post-colonial theory as they relate to visual studies. [24S]
Prerequisite: VCC101H5/ VCC201H5, VCC306H5
Recommended Preparation: VCC304H5

VCC407H5 Architectures of Vision (HUM)
Based upon Michel Foucault's work on modern architectures of surveillance, control, and discipline, this course examines such modern and contemporary architectural-visual formations as the museum, domestic interior, cinema, and the residential and commercial skyscraper. Ways in which these sites have come to define notions of citizenship, privacy and publicity, and community will be of particular focus and concern. [24S]
Prerequisite: 13.0 credits including a minimum of 1.0 VCC credit and VCC101H5/ VCC201H5.
Recommended Preparation: FAH289H5; VCC304H5
VCC409H5 Capital, Spectacle, War (HUM)
This course investigates the conjunction of contemporary
global capitalism, spectacle, and militarized neo-liberal
governmentality in order to develop a critical understanding
of the inter-related forces that constitute the most current
and politically and ethically pressing events in the world
today. These may include the war on terror, the disaster film
genre, technologies of surveillance, politics of humiliation
and scandal, and theological and financial speculation and
visions of the future. Readings will draw upon both historical
and in many cases the latest work in political theory, cinema
and new media studies, critical philosophy, and religious
studies. [24S]
Prerequisite: VCC101H5/ VCC201H5, VCC309H5 plus at
least 1.0 in VCC

VCC411H5 Real Space to Cyberspace (HUM)
This course examines the re-conception of traditional
understandings of architecture and space – public and
private – brought about by digital technologies. Notions of
space affect our conceptions of political, social, and inner
life; this course investigates the impact of hyperspace and
virtual reality on real and imagined space in a global
context. [24S]
Prerequisite: FAH101H5/ 105H5; VCC101H5/ 201H5 plus
at least 1.0 credits in VCC.

VCC415H5 Theory and Criticism of Photography and
New Media (HUM)
Introduces a variety of approaches for interpreting,
criticizing, evaluating, and theorizing photographs and
photography in general. Examines how the thinking of
photography is revisioned via major theoretical models.
Concludes with a unit on theory and criticism of New Media.
[24S]
Prerequisite: VCC101H5/ VCC201H5, FAH291H5/
FAH391H5 and 1.0 credit in VCC at 300/400 level

VCC425H5 Art and Media Culture (HUM)
Explores intersections of art, pop culture, and mass media
in Europe and North America between World War II and
1970. Reviews how the definition of art moved into an
expanded field of media culture. [24S]
Prerequisite: 13.0 credits including VCC101H5/ VCC201H5
and a minimum of 1.0 VCC credit.
Recommended Preparation: FAH289H5; VCC308H5

VCC427H5 Participatory Media (HUM)
In order to explore the complex social and political issues
surrounding the discourse of democratic participation in
today’s “new media” culture, this course provides a
historical and theoretical survey of “old” media technologies
that embrace the aesthetics of participation, running from
popular theatre forms (including vaudeville and
Chautauqua) to call-in radio shows, avant-garde and
novelty films, activist video art, and the audience-based talk
and game shows of fifties television that most directly
prefigure the participatory genres of contemporary media
programming. [24S,24P]
Prerequisite: VCC101H5/ VCC201H5 plus at least 1.0 in
VCC

VCC490H5 Topics in Visual Culture and Communication
(HUM)
An in-depth examination of topics in visual and media
culture, from both historical and contemporary perspectives.
Topics vary from year to year, and the content in any given
year depends upon the instructor. [24S]
Prerequisite: 13.0 credits including VCC101H5/ VCC201H5
and a minimum of 1.0 VCC credit.
Women and Gender Studies (HBA)

Professors
R.C. Lord, B.A., M.A., Ph.D.
V. Tahmasebi-Birgani, B.A., M.A., Ph.D.

Director
Dr. Joan Simalchik
Room 210D, Erindale Hall
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joan.simalchik@utoronto.ca

Departmental Supervisor
Duncan Hill
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historical.studies@utoronto.ca

Academic Counsellor
Sharon Marjadsingh
Room 209A, Erindale Hall
905-569-4914
sharon.marjadsingh@utoronto.ca

The Women and Gender Studies program examines questions of gender in every field of study, focusing particularly on the perspectives of women and on feminist analyses. This focus, which crosses disciplinary lines, can be carried into many areas, such as Anthropology, Literature, Art, History, Linguistics, Philosophy, Politics, Psychology, Religion and Sociology.

Students should also review the Degree Requirements (Page 29) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 40)
CCT Communication, Culture, Information and Technology (page 115)
CLA Classics (page 103)
FAH Fine Art History (FAH) (page 51)
FRE French (page 210)
GGR Geography (page 224)
HIS History (page 238)
JAL Linguistics (page 280)
PHL Philosophy (page 305)
PSY Psychology (page 332)
RLG History of Religions (page 251)
SOC Sociology (page 341)
VCC Visual Culture and Communication (page 371)
WGS Women and Gender Studies (page 375)

Major Program ERMAJ1443 Women and Gender Studies (Arts)

7.0 credits are required including WGS200Y5, 2.0 WGS credits at the 300+ level and 0.5 WGS credits at the 400 level.

NOTE: Some “WGS” credits were formerly labelled “ERI”.

Limited Enrolment – Students enrolling at the end of first year (4.0 credits) must obtain a CGPA of at least 1.80 and a mark of at least 65% in WGS200Y5. Students applying to enrol after second year (8.0 credits) must obtain a CGPA of at least 2.00 and a mark of at least 65% in WGS200Y5.

First Year: WGS101H5 (recommended)

Higher Years:
• WGS200Y5
• 2.0 WGS credits at the 300/400 level
• 0.5 WGS credits at the 400 level
• 3.5 credits from any WGS courses or the following list of electives:
  ANT211H5, ANT331H5, ANT335H5; CCT340H5; CLA319H5; FAH435H5; FRE391H5; GGR313H5; HIS308H5, HIS310H5, HIS314H5, HIS326Y5, HIS374H5, HIS386H5, HIS441H5, HIS454H5; JAL355H5; PHL243H5, PHL267H5, PHL367H5; POL368Y5; PHL311H5, PHL354H5; RLG314H5, RLG449H5, RLG462H5; SOC216H5, SOC263H5, SOC275H5, SOC332H5, SOC359H5, SOC362H5, SOC380H5, SOC413H5, SOC425H5; VCC304H5.

Minor Program ERMIN1443 Women and Gender Studies (Arts)

4.0 credits are required, including WGS200Y5 and 1.0 WGS credits at the 300/400 level.

First Year: WGS101H5 (recommended)

Higher Years:
• WGS200Y5
• 1.0 WGS credits at the 300/400 level
• 2.0 credits from WGS courses or from the following list of electives:
  ANT211H5, ANT331H5, ANT335H5; CCT340H5; CLA319H5; FAH435H5; FRE391H5; GGR313H5; HIS308H5, HIS310H5, HIS314H5, HIS326Y5, HIS374H5, HIS386H5, HIS441H5, HIS454H5; JAL355H5; PHL243H5, PHL267H5, PHL367H5; POL368Y5; PHL311H5, PHL354H5; RLG314H5, RLG449H5, RLG462H5; SOC216H5, SOC263H5, SOC275H5, SOC332H5, SOC359H5, SOC362H5, SOC380H5, SOC413H5, SOC425H5; VCC304H5.
Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.

**List of Courses**

**WGS101H5 Introduction to Women and Gender Studies (HUM)**
This foundation course introduces the core ideas students will explore throughout their studies in Women and Gender Studies. It immerses students in a highly participatory and provocative encounter with history, social theory, politics, policy, art and culture seen through a gender lens. It provides an interdisciplinary overview of the historical 'waves' of women's movements for equality in a global context and background to the development of Women/Gender Studies as a site of learning and feminist inquiry. [24L, 10T]

*Exclusion:* WGS160Y1/ WGSTA01H3/WGSTA03H3; May not be taken with or after WGS200Y5.

**WGS102H5 Reading and Writing in Women and Gender Studies (HUM)**
Using key feminist texts, this course advances students thinking, reading and writing in the discipline of Women and Gender Studies. The emphasis is placed on the development and application of interdisciplinary skills in the interpretation, analysis, criticism, and advocacy of ideas encountered in Women and Gender Studies. [24L, 10T]

*Recommended Preparation:* WGS101H5

**WGS200Y5 Theories in Women and Gender Studies (HUM)**
This course provides an opportunity to engage in an in-depth examination of specialized and scholarly work within women and gender studies with a focus on the diverse, multidisciplinary and transnational expressions of feminist thought. It incorporates study of the themes and debates concerning the socially constructed categories of femininity, masculinity and gender and in historical and contemporary contexts. [48L, 20T]

*Exclusion:* ERI200Y5, NEW160Y1, WGS160Y1, WSTA01H3, WGSTA03H3, WGS260H1

*Recommended Preparation:* WGS101H5

**WGS202H5 Fundamentals of Research in Women and Gender Studies (HUM)**
This interdisciplinary course focuses on the visions and methods that feminist scholars use to study women's and gender issues within and across a range of traditional disciplines. The course explores feminist epistemologies and research methods to understand how to carry out feminist research. We will focus on how feminist scholars challenge dominant theories of knowledge and the major methodologies employed in the social sciences and humanities. [24L]

**WGS205H5 Introduction to Feminism and Popular Culture (HUM)**
This course explores the forms and functions of popular culture and its representation and understanding of the social category of women. It examines specific media forms including, but not limited to, film, song, visual arts, music, video, television, advertising and new media forms. It critically analyzes the impact of these portrayals on women in society while examining the cultural constructions of race, sexuality, class and ability. [36L]

*Exclusion:* WGS271Y1; WSTB13H3; May not be taken with or after WGS470H5.

**WGS210H5 Women and Work in Contemporary Canada (HUM)**
This course covers a wide range of issues relating to female participation in public and private sectors of the today's Canadian workforce. It examines the relevance of education, perceptions, sexuality and family issues. Services and infrastructure, as well as collective bargaining are also addressed. [36L]

**WGS215H5 Introduction to Women, Public Policy and the Law (HUM)**
This course introduces students to women's position in Canada as political actors and provides gender-based analysis in relation to public policy and law in Canada. Students will study women's historical participation in and exclusion from policy decision-making processes, and evaluate the impact of feminism and women's activism on Canadian public policies. Using intersectional framework, the course will also examine different ways in which public policies can be made more responsive to gender and diversity concerns as well as the role public policy can play in overcoming gender inequalities. We will investigate key historical changes in public policies affecting Canadian women in such areas as family, workplace, education, poverty-welfare, sexuality and reproductive laws, immigration and refugee laws, and global issues. The course concludes with women's achievements in this area. [24L, 10T]

*Exclusion:* WSTC14H3

*Recommended Preparation:* WGS101H5

**WGS250H5 Women in Families (HUM)**
This course studies how the notion of family is conceptualized and organized transnationally and historically and examines the multiple familiar roles of women in diverse contexts. [36L]

*Recommended Preparation:* WGS200Y5

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WGS299Y5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for students in their second year to work in the research project of a professor in return for 299Y course credit. Students enrolled have an opportunity to become involved in original research, learn research methods and share in the excitement and discovery of acquiring new knowledge. Participating faculty members post their project descriptions for the following summer and fall-winter sessions in early February and students are invited to apply in early March. 
See Experiential Learning Programs (Page 34) for more details.
Prerequisite: Completion of at least 4.0 and not more than 9.0 credits.

WGS301H5 Representing Islam (HUM)
The course explores historical and contemporary debates regarding the construction of gender in Islam. It examines historic and literary representations, ethnographic narratives, legal and human rights discourses, the politics of veiling, and Islamic feminism. This course situates Muslim women as complex, multidimensional actors engaged in knowledge production and political and feminist struggles, as opposed to the static, victim-centered, Orientalist images that have regained currency in the representation of Muslim women in the post 9/11 era. [24L]
Exclusion: NEW368H1; WSTC13H3
Prerequisite: WGS200Y5

WGS335H5 Women, Migration and Diaspora (HUM)
This course examines the process of migration to Canada from a gender perspective, noting the interplay between structural impediments and women’s own agency. Historical perspectives on migration and government policy, and on ways women have rebuilt lives and shaped communities.
[24L]
Exclusion: ERI335H5, NEW335H1; WGS380H1; WSTB06H3

WGS336H5 Political Aesthetics and Feminist Representation (HUM)
This course evaluates the ways in which the category "women" has been constructed, enacted and embodied, historically and contemporarily, in Western art forms and performance including theatre and literature. It interrogates the ways in which the art forms have been altered by feminist theoretical models and focuses on modes of representation and the possibilities, limitations and criticisms suggested by them. [24L]
Exclusion: JNV300H1
Recommended Preparation: WGS200Y5/ WGS205H5

WGS337H5 Special Topics in Women and Gender Studies (HUM)
A special topic by guest instructor. Topics vary from year to year. Check the web site for current offerings. [24L]
Recommended Preparation: WGS200Y5

WGS340H5 Black Feminisms: Diasporic Conversations on Theory and Practice (HUM)
This course examines how Black Feminisms are theorized, produced and practiced, by predominantly Black women scholars, activists and cultural producers located in the diaspora Ú Canada, the United States and the Caribbean.[24L]
Prerequisite: WGS101H5/ WGS200Y5

WGS343H5 The Montreal Experience: Sex and Gender in la Cité (HUM,EXP)
This course examines how gender and sexuality intersect with factors such as nationhood, language, politics, religion, geography, and the arts in Quebec. After six classroom sessions, the class will travel Montreal for 4-5 days, where they will visit museums, cultural institutions and attend guest lectures at various institutions. This experiential learning opportunity allows students to engage in deeper learning to see the issues and histories they have been studying come to life.
Recommended Preparation: WGS101H5/ WGS200Y5

WGS345H5 Genealogies of South Asian Feminisms (HUM)
This course examines the histories of activism for and by women in South Asia (India, Pakistan, Bangladesh, Sri Lanka) from the colonial period to the present. Topics include colonialism, the Partition of 1947, war, religion, development, labour, nationalism, and the family/reproductive rights.[24L]
Prerequisite: WGS200Y5

WGS350H5 Critical Race Theory in Women and Gender Studies (HUM)
The course’s central focus is an examination of the way race and gender operate together in structuring social inequality. It offers the analytical tools for exploring the interconnections between race and gender, along with other systems of domination, and incorporates perspectives from women of colour and from women in the global “South.”
[24L]
Exclusion: WSTB11H3
Prerequisite: WGS200Y5 or P.I.
Recommended Preparation: WGS368H5

WGS353H5 Theories of Masculinity (HUM)
Working with gender studies’ theories, this course draws on social and cultural constructions and practices to offer a complex reading of masculinities. It explores contemporary debates of the ways in which masculinities have been theorized and experienced in practices and identity formation. [24L]
Exclusion: WGS275H1
Recommended Preparation: WGS101H5/ WGS200Y5
WGS354H5 Gender, Sexuality and Sport (HUM)
This course explores how gender, sexuality and other intersectional identity markers work within and against structures of privilege and oppression in the world of sport. It takes up topics and themes that inform popular culture and influence the construction of social norms. [24L]
Recommended Preparation: WGS101H5/WGS200Y5

WGS355H5 Wired Women: Gender, Cyberspace and New Information Technology (HUM)
The course examines how computer technologies facilitate women’s participation in cyberspace and how women define and construct their involvement. It studies the simultaneous generation of new modalities of empowerment and disempowerment including language, role-playing, communication, gaming, and networking and conduits for sex trafficking, harassment and other forums of exploitation. [24L]
Recommended Preparation: WGS200Y5

WGS365H5 Gender, Justice and the Law (HUM)
This course discusses the construction and representation of women in Canadian and International law. It analyzes specific contexts and historical issues including employment, sexuality, reproduction, deviance and a variety of justice theories relating to gender. [24L]
Exclusion: WGS365H1; WSTC16H3
Recommended Preparation: WGS200Y5

WGS366H5 Women and Psychology (HUM, SSc)
An interdisciplinary analysis of the relationship of women to a variety of psychological and psychoanalytical theories and practices. Topics include gender development, stereotyping and gender roles, the impact of gender on intimate relationships, women and the psychological establishment, women’s mental health issues and feminist approaches to psychoanalysis. [24L]
Exclusion: PSYD18H, WGS372H1, WGS378H1
Prerequisite: WGS200Y5
Recommended Preparation: WGS367H5

WGS367H5 Women and Health (HUM, SSc)
Feminist theories and frameworks examining the interconnections between women, health and biomedicine in North America and transnationally. [24L]
Exclusion: ERI367H5, NEW367H1, WGS367H1, WSTC21H3
Prerequisite: WGS200Y5
Recommended Preparation: WGS200Y5

WGS368H5 Women in World Cultures (HUM)
Examines the diversity and shared experiences of women in western and non-western societies. This is primarily a history course, supplemented with some contemporary perspectives. It compares women in diverse economic, cultural and religious settings. [24L]
Exclusion: ERI368H5; NEW368H1; WGS368H1

WGS369Y5 Gender, Colonialism and Cultural Resistance (HUM)
An introduction to some of the main concerns and debates associated with post-colonialism. Historical exploration of how subordination was forged and resisted in specific colonial settings. Examination of nationalist discourses, diasporic spaces, and feminisms. [24L]
Exclusion: NEW369Y1; WGS369H1
Recommended Preparation: WGS200Y5

WGS370H5 Gender, Sexuality, Identity (HUM)
This course examines philosophical, psychoanalytic and literary texts on love, passion, and desire from a gender studies perspective. Theoretical in "ethos", the course seeks to understand the role of love in the construction of gendered identity and sexuality. It explores, among other things, the tension between the notion of love as a threat to the integrity of the self on the one hand and the ideal of love as a site of psychic, bodily, and spiritual rebirth on the other. [24L]
Exclusion: WGS374H1
Prerequisite: WGS200Y5 or P.I.

WGS373H5 Gender, Violence and Resistance (HUM)
This course will focus on how gender and violence shapes and impacts the lives of women and LGBT persons. The course will explore the concept of gender and the myriad of ways in which it has been shaped by historical, and contextual relations of power and privilege. The course will explore how scholars in the feminist/women’s movement have defined the concept of violence as it impacts women and girls. [24L]
Exclusion: WGS373H1, WSTB12H3
Recommended Preparation: WGS200Y5

WGS410H5 Independent Project in Study of Women & Gender (HUM)
An opportunity to carry out an extended research project under the supervision of a faculty member. A proposal must be presented to the faculty member and consent obtained before the end of the July registration period.
Exclusion: ERI410H5; WGS411Y5
Prerequisite: WGS200Y5, 2.0 WGS300+ level credits.

WGS411Y5 Independent Project in Study of Women & Gender (HUM)
An opportunity to carry out an extended research project under the supervision of a faculty member. A proposal must be presented to the faculty member and consent obtained before the end of the July registration.
Exclusion: ERI411Y5; WGS410H5
Prerequisite: WGS200Y5, 2.0 WGS300+ level credits.
WGS419H5 Gender and Disability (HUM,SSc)
A critical interdisciplinary investigation of how gender impacts on central topics in disability studies: the normalized body and cultural representations; sexuality; violence; the cognitive and social roles of medicine; transnational perspectives on disability; and disability rights and issues of social justice including the experience of people with disabilities and responses of resistance. [24S]
Exclusion: WGS366H1
Prerequisite: WGS200Y5, 1.0 WGS300+ level credits.

WGS420H5 Engendering Human Rights (HUM)
This seminar analyzes human rights responses to particular gendered sites of historical repression including examples of genocide, torture and war. It includes reactions generated from government and international organizations as well as remedies developed by victims/survivors. [24S]
Exclusion: WSTD04H3
Prerequisite: WGS200Y5, 1.0 WGS300+ level credits/HIS338H5/ HIS438H5

WGS421H5 Engendering Ethics (HUM)
This course situates feminist ethics within the context of Western moral theories, and will consider the challenges that have been posed to this tradition from careful consideration of the category of women's experience. It will examine foundational texts in the history of ethics as well as more recent feminist interventions in such paradigms. The course complements the study of the theoretical texts with analysis and discussion of contemporary social and political issues pertaining to gendered selves. [24S]
Prerequisite: WGS200Y5, 1.0 WGS 300+ level credits

WGS430H5 Diasporic Sexualities (HUM)
This course examines how sex and sexuality are culturally and socially constructed in transnational contexts. It will pay particular attention to how gender, sex and sexuality differences are regulated and performed in historical and contemporary sites and how globalization influences relationships in both private and public domains. [24L]
Exclusion: WGS430H1
Prerequisite: WGS200Y5
Recommended Preparation: WGS353H5/ WGS370H5

WGS434H5 Special Topics in Women & Gender Studies (HUM)
A special topic by a guest instructor. Topics vary from year to year. Check the web site for information about this offering each term. [24S]
Prerequisite: WGS200Y5, 1.0 WGS300+ level credits.

WGS435Y5 Women and Gender Studies Practicum (HUM,EXP)
The practicum allows advanced WGS students to combine theory and practice through part-time unpaid placement with a community agency, government body, educational or social change organization. [24S]
Exclusion: WGS470Y1; WSTC23H3
Prerequisite: WGS200Y5
Recommended Preparation: 1.0 WGS300+ level credits.

WGS450H5 Theories of Sexuality (HUM)
This course offers a critical overview of contemporary theories of sexuality. Topics include heterosexuality, homosexuality, and bisexuality; transgenderism and transsexuality; essentialism and constructivism; desire, pleasure, fantasy and ideology; normativity and resistance; performativity and queer theory; as well as emotional risk and vulnerability. [24S]
Exclusion: WSTD03H3
Prerequisite: WGS200Y5, 1.0 WGS300+ level credits.

WGS455H5 Queer Theory (HUM)
This course examines the theories, histories and experiences of ‘queer’ in Canada and transnationally. It incorporates the diversity of emergent cultural expressions of LGBTQ sexuality understood beyond definitions of social identities. [24S]
Exclusion: WGS376H1
Prerequisite: WGS200Y5
Recommended Preparation: WGS370H5

WGS470H5 Feminism and Popular Culture (HUM)
This course examines the ambivalent relationship between feminist theory and popular culture. Major themes include: the visual construction of the gendered, sexualized, and racialized subject; power and ideology; the gaze, desire, and fetishization; fantasy, seduction, and idealization; as well as the possibility of resistant and/or counter hegemonic interpretations. [24S]
Prerequisite: WGS200Y5, 1.0 WGS300+ level credits.
Recommended Preparation: WGS368H5/ WGS369Y5

WGS497Y5 Independent Reading (HUM)
Student-initiated project of reading and research, supervised by a member of the Department. Primarily intended for students in a Major program. After obtaining a supervisor, a student must apply to the Department of Historical Studies. A maximum of 1.0 credit in a reading course is permitted.
12.8 Departmental Structure and Programs

University of Toronto Mississauga Departmental Structure and Programs

University of Toronto at Mississauga offers undergraduate and graduate programs of extremely high quality. Our programs are offered through 15 academic departments and one institute. Each program is taught by outstanding academics and supported by professional and friendly administrative staff. For a complete listing of programs offered, please see the program section of this Calendar. For a listing of faculty, please consult the listings for each program. Our departmental structure is as follows:

**Anthropology**

Department Chair: Professor Heather M.-L. Miller  
E-mail: anthrochair.utm@utoronto.ca  
Undergraduate Administrator: Angela Sidorak, Room 396, Terrence Donnelly Health Sciences Complex  
Contact: utm.anthro@utoronto.ca, 905-828-3726  
Program Areas Offered: Anthropology (Arts), Anthropology (Science)

The Anthropology program offers students the general background necessary for the advanced training required for professional positions. It is the special concern of the faculty to introduce students to research methods and to involve them in the research programs of the department. Students planning an Anthropology concentration should consult faculty members for advice.

For more information on the department visit www.utm.utoronto.ca/anthropology

**Biology**

Department Chair: Professor Sasa Stefanovic  
E-mail: biochair.utm@utoronto.ca  
Undergraduate Advisor: Diane Matias, Room 3057, William G. Davis Bldg.  
Contact: d.matias@utoronto.ca  
Program Areas Offered: Behaviour, Genetics and Neurobiology (Specialist), Biology (Specialist, Major, and Minor), Bioinformatics (Specialist), Biomedical Communications (Minor), Biotechnology (Specialist), Comparative Physiology (Specialist), Ecology and Evolution (Specialist), Forensic Science (Specialist, Major), Molecular Biology (Specialist), Paleontology (Major)

The Biology Department at U of T Mississauga encompasses a large and diverse group of research disciplines, state-of-the-art facilities, and computational support systems with a faculty committed to undergraduate and graduate education as well as primary research. Undergraduate students with an interest in biology who have good writing, verbal and mathematical/computational skills will find contemporary biology programs at U of T Mississauga exciting and rewarding. A degree in biology (or one of the other biology-related programs) provides a foundation for further training in such areas as environmental science, law, biotechnology, genetic counseling, forensics, bioinformatics, health professions, public health, governmental regulatory agencies, biomedical ethics, professional writing, teaching, basic research and for a wide array of career opportunities in industry, government, and education.

**Chemical and Physical Sciences**

Chair: Claudiu Gradinaru  
E-mail: claudiu.gradinaru@utoronto.ca  
Undergraduate Assistant: Elizabeth Kobluk  
Room 4061, William G. Davis Building  
Contact: elizabeth.kobluk@utoronto.ca, 905-828-3800  
Program Areas Offered: Astronomy, Astronomical Sciences, Biological Chemistry, Biomedical Physics, Chemistry, Earth Science, Forensic Science - Chemistry, Geology, Physics

The chemical and physical sciences are central to our understanding of life, matter, and the formation of Earth and the Universe. Chemical and physical scientists combine laboratory experimentation, physical measurements and observations with theory, mathematical and computer models to study all natural systems at scales ranging from single atoms, molecules and cells to planets, stars and the Universe. Students in our programs are prepared for future graduate and professional studies in the chemical and physical sciences as well as exciting careers in medicine, dentistry, pharmacy, biotechnology, information technology, materials science, resource exploration, environmental monitoring, and science teaching.

**Concurrent Teacher Education Program (CTEP)**

CTEP Program and Internship Co-ordinator: John Smith  
E-mail: john.smith@utoronto.ca  
Academic Advisor: Belinda Grayburn  
Room 261C, North Building  
Contact: belinda.grayburn@utoronto.ca

**Economics**

Department Chair: Professor Varouj Aivazian  
E-mail: varouj.aivazian@utoronto.ca  
Student Advisor: Ruby Mack  
Room 127A, Kaneff Building  
Contact: ruby.mack@utoronto.ca, 905-828-5404  
Program Areas Offered: Economics, Financial Economics, Economics and Political Science, International Affairs,
Human Resources and Industrial Relations (HRIR). (Please Note: The HRIR (ERMAJ1882) program is under review and will not be available for entry after August 31, 2012 (pending final decision by Governing Council). Students already in the program will be allowed to complete it.)

Economics is a social science that encompasses a particular range of human behaviour and has a strong influence on the structure, well-being, and development of a society. Much of human activity is directed towards the satisfaction of material wants. In many areas of the world, the greater part of human effort must be directed towards meeting the most elemental demands for food, clothing, and shelter. Even in technologically advanced societies, where these basic requirements can be met with comparative ease, the desire for more goods and services never appears to be fully satisfied. In consequence, every society - regardless of whether it is capitalist, socialist, or communist in political orientation - is both competitive and cooperative. It is competitive because its members contend with one another to satisfy their individual wants from a limited supply of productive resources. It is cooperative because the greatest supply of goods is available when the activity of producing them is coordinated and organized. Economics deals with any issue arising out of the conflict between the demand for goods and services, and a limited supply of resources to satisfy those demands.

**English and Drama**

**Department Chair:** Professor Holger Syme  
**E-mail:** holger.syme@utoronto.ca  
**Undergraduate Advisor:** Dianne Robertson  
Room 309A, Erindale Hall  
**Contact:** dianne.robertson@utoronto.ca, 905-828-5201

**Program Areas Offered:** English, Canadian Studies, Theatre and Drama Studies, Theatre, Drama and Performance Studies

The Department of English and Drama offers three English programs that are the same as those on the St. George campus and three Drama programs unique to U of T Mississauga. Faculty expertise includes all literary forms; their historical, social, and material contexts; literary and performance theory; theatre history; and creative writing. The department's faculty also teach courses in the Graduate Department of English and at the Centre for Drama, Theatre and Performance Studies.

**Geography**

**Department Chair:** Professor Kathi Wilson  
**E-mail:** chair.utm.geography@utoronto.ca  
**Academic Counsellor:** Sabrina Ferrari, Room 3282, William G. Davis Building  
**Contact:** sabrina.ferrari@utoronto.ca, 905-828-5465

**Program Areas Offered:** Geocomputational Science, Geographical Information Systems, Geography, Environmental Management, Environmental Science

Geography studies earth surface processes that determine the current use of the environment as expressed in patterns of human land use. Geography draws on the earth sciences to understand variations in the physical environment, as well as on the social sciences and humanities to understand the ways in which human beings create and organize the regions, economies and landscapes that cover our globe. Geographical Information Systems (GIS) are further aspects of the discipline, focused on the acquisition, management and display of spatial information. By combining their interest in physical and human processes, geographers play a crucial role in studying environmental problems and in developing strategies for dealing with them at global, regional and local scales. Environmental Management and Environmental Science are interdisciplinary program streams that are administered by the Geography Department.

For more on Geography, please visit: geog.utm.utoronto.ca
For more on Environment, please visit env.utm.utoronto.ca

**Historical Studies**

**Department Chair:** Rebecca Wittmann  
**E-mail:** historical.studies@utoronto.ca  
**Academic Counsellor:** Sharon Marjadsingh, Room 209A, Erindale Hall  
**Contact:** sharon.marjadsingh@utoronto.ca, 905-569-4914

**Program Areas Offered:** Classical Civilization, Diaspora and Transnational Studies, History, History and Political Science, History of Religions, Latin American & Caribbean Studies, South Asian Civilizations, and Women and Gender Studies.

Historical Studies is a transdisciplinary department established by the merging of Classics, Religion and History in January 2005. This department provides students with a globally-framed historical education that encompasses programs in Classical Civilization, Diaspora and Transnational Studies, History, History and Political Science, History of Religions, Latin American & Caribbean Studies, South Asian Civilizations, and Women and Gender Studies. Students completing these programs will attain a deep and critical historical comprehension of the interplay of classical civilization, world religions and historical societies.

Please visit www.utm.utoronto.ca/historicalstudies for updated information on the department.

**Language Studies**

**Department Chair:** Emmanuel Nikiema  
**E-mail:** emmanuel.nikiema@utoronto.ca  
**Undergraduate Counsellor:** Rosa Ciantar  
**Contact:** rosa.ciantar@utoronto.ca, 905-828-3725

**Program Areas Offered:** Education Studies, French and Italian, French Studies, Functional French, Francophone Studies, French Language and Literature, Italian, Language Teaching and Learning: French and Italian, Language

The Department of Language Studies bases its mission on the notion that language and culture are inseparable and that the study of other cultures also offers new perspectives. By stressing cultural, linguistic, and critical skills, the department prepares students to succeed in further study and gives its graduates an important advantage as they pursue careers in an increasingly competitive global environment. The department is recognized as a leader in literary and critical scholarship, interdisciplinary innovation in curriculum and technology, and for its tradition of excellence in teaching and pedagogical research. Please visit www.utm.utoronto.ca/language-studies for additional information on the department.

Management

Department Chair: Professor Mihkel Tombak
E-mail: mihkel.tombak@utoronto.ca
Student Advisor: Mary Wellman, Room 215, Kaneff Centre
Contact: mary.wellman@utoronto.ca, 905-828-5309

Program Areas Offered: Commerce, Management

Commerce Programs (BCom and HBA/HBSc Major)
The Commerce programs combine economics and the various sub-disciplines of business and management enabling students to develop analytical skills and gain knowledge of institutions. The programs require the study of a range of management disciplines and of topics in economics. The Specialist Program in Accounting allows students to complete the prerequisite studies for professional accounting qualifications.

Management Programs (BBA and HBA/HBSc)
The Management Specialist program leads to a BBA degree. Most of the courses have been specifically designed as part of an integrated package. The program provides the student with an understanding of the important aspects of management and with an integrated set of management skills. The Human Resource Management and Industrial Relations (HRMIR) Specialist provides students with a good grounding in the management disciplines and a specialized education in HRMIR. It will allow students to complete the prerequisites for the CHRP designation. The Management Major program leads to either an Honours BA or an Honours BSc degree, depending on your second discipline. For example, Chemistry and Management will prepare you for a career in the chemical industry; English and Management for publishing.

Please visit our website for updated information on the Department: www.utm.utoronto.ca/management

Mathematical and Computational Sciences

Department Chair: Konstantin Khanin
E-mail: chairmcs.utm@utoronto.ca
Undergraduate Counsellor: Yvette Ye, Room 3012, Deerfield Hall
Contact: ugmcs.utm@utoronto.ca, 905-828-3801

Program Areas Offered: Bioinformatics, Computer Science, Mathematical Sciences, Statistics

The Department of Mathematical and Computational Sciences is an amalgamation of Computer Science, Mathematics and Statistics, and provides opportunities for study in all of these disciplines. An overview of each discipline, as well as course offerings and program requirements, are listed under "Bioinformatics," "Computer Science," "Mathematics" and "Statistics."

Philosophy

Department Chair: Diana Raffman
E-mail: chair.philosophy.utm@utoronto.ca
Undergraduate Advisor: Dianne Robertson
Room 309A, Erindale Hall
Contact: dianne.robertson@utoronto.ca, 905-828-5201

Program Areas Offered: Logic, Philosophy, Philosophy of Science

Philosophy asks and tries to answer some of the deepest and most persistent questions about ourselves and our relations to each other and the natural world: What is knowledge? What is justice? What is goodness? Who am I? What am I? Philosophy tries to answer these questions by employing a highly reflective methodology: by employing concepts, reasoning and strategies of explanation that have themselves been critically assessed within philosophy for their clarity, soundness and cogency. Philosophers are also aided in answering these questions by a critical engagement with the views, spread over millennia, of the likes of Plato, Aristotle, Descartes, Leibniz, Hume, Kant, Hegel, Nietzsche, Frege and many others, on these very questions. Specialists, Majors and Minors can look forward to a substantial engagement with deep issues and thinkers.

Political Science

Department Chair: Professor Ed Schatz
E-mail: ed.schatz@utoronto.ca
Academic Counsellor: Norma Dotto, Suite 3125, William G. Davis Bldg.
Contact: norma.dotto@utoronto.ca, 905-828-3921

Program Areas Offered: Political Science (Specialist, Major, Minor), Joint Programs with History and Economics

Political Science is an enormously wide-ranging discipline and U of T Mississauga faculty cover all its main branches. Courses reflect on questions such as: Who has the right to rule? How do we balance freedom and social order? How
should Western democracies respond to the threat of terrorism? Is the Prime Minister of Canada little more than an elected dictator? Does the spread of the internet and other modern communications technologies offer a whole new range of opportunities for citizen participation and influence on government or does it subject citizens to government surveillance and control of their lives on an unprecedented scale? Can international agreements like the Kyoto Accord be effective?

Political science attempts to explore these and other key questions of the modern world in a systematic fashion, emphasizing evidence, argument and analysis.

Some Political Science graduates use their degrees in their jobs in government, in private sector firms dealing with government and in organizations attempting to influence public policy.

**Psychology**

**Department Chair:** Professor Meredyth Daneman  
**E-mail:** psychair.utm@utoronto.ca  
**Associate Chair and Undergraduate Director:** Dr. Stuart Kamenetsky, Room 4004, CCT Building  
**Contact:** stuart.kamenetsky@utoronto.ca, 905-828-3958  
**Academic Counsellor:** Jodie Stewart, Room 2037B, William G. Davis Building  
**Contact:** jodie.stewart@utoronto.ca, 905-828-5414

**Program Areas Offered:** Behaviour, Genetics and Neurobiology, Exceptionality in Human Learning, Psychology, Forensic Psychology (with Forensic Science)

Psychology is the science that examines the structure and organization of behaviour in animals and humans. It is concerned with the means by which behaviour is acquired, and explores the mechanisms of adaptation to the social and physical environments. Emphasis is on cognitive, social, physiological, genetic and other factors that determine or affect behaviour.

Among the topics covered by Psychology courses are developmental changes in behaviour, learning, the structure and organization of the senses, modes of perceiving and responding to the environment, genetic events that shape behaviour, the origins and implications of drives, motives, conflicts, and emotions, and the wide variety of individual and species differences that are produced by differences in genetic endowment, physiology and past experience.

**Sociology**

**Department Chair:** Professor Anna Korteweg  
**E-mail:** anna.korteweg@utoronto.ca  
**Associate Chair, Undergraduate Affairs, Sociology:** Professor Cynthia Cranford

Among the topics covered by Psychology courses are developmental changes in behaviour, learning, the structure and organization of the senses, modes of perceiving and responding to the environment, genetic events that shape behaviour, the origins and implications of drives, motives, conflicts, and emotions, and the wide variety of individual and species differences that are produced by differences in genetic endowment, physiology and past experience.

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Some Political Science graduates use their degrees in their jobs in government, in private sector firms dealing with government and in organizations attempting to influence public policy.
South Asia, and engage a variety of theoretical and methodological perspectives. DVS programs also are designed to foster the development of critical reading and writing skills. The department's collaborative programs with Sheridan offer the possibility for students to receive both practical and academic studies in Art and Art History and in Visual Culture and Communication. The department houses the award-winning Blackwood Gallery and the Visual Resource Library. Graduates of DVS programs go on to careers in arts and design, curatorial and museum work, web design, teaching and arts journalism, as well as pursuing graduate study in art history, architecture, cinema studies, cultural studies, curatorial studies, studio art, and related fields.

Units within the department:

**Blackwood Gallery**
Website: www.blackwoodgallery.ca
General Inquiry: 905-828-3789

**Visual Resources Library**
Room 3021, CCT Building
Website: www.utm.utoronto.ca/vrl
Contact: 905-569-4610

**Institute of Communication, Culture, Information & Technology (ICCIT)**

Director: Professor Anthony Wensley
E-mail: iccit.utm@utoronto.ca
General Inquiry: 905-569-4489

**Communication, Culture, Information & Technology (CCIT)**

Director: Professor Anthony Wensley
E-mail: anthony.wensley@utoronto.ca
Undergraduate Advisor: Rose Antonio
E-mail: rose.antonio@utoronto.ca

**Program Areas Offered:** Communication, Culture, Information & Technology; Digital Enterprise Management; and Interactive Digital Media

General Inquiry: 905-569-4398

**Professional Writing and Communication (PWC)**
Director: Professor Guy Allen
E-mail: guy.allen@utoronto.ca
Student Advisor: Lisa Peden
E-mail: lisa.peden@utoronto.ca

**Program Areas Offered:** Professional Writing and Communication
General Inquiry: 905-569-4398

### 13 Officers: U of T Mississauga and University of Toronto

A list of officials of the University of Toronto can be found at: www.governingcouncil.utoronto.ca

### 14 Codes and Policies

Codes and policies of particular importance to students include, but are not limited to:

- Code on Behaviour on Academic Matters
- Code of Student Conduct
- University Assessment and Grading Practices Policy
- Policy on Official Correspondence to Students
- Discipline Codes
- Guidelines Concerning Access to Student Academic Records

They are available at www.governingcouncil.utoronto.ca/policies.
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