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2020-2021 Calendar  
University of Toronto Mississauga
1 AMENDMENTS

September 15, 2020: Courses deleted with approval from governance ANT461H5, CCT209H5, and WGS450H5

August 19, 2020: New faculty program advisors for Chemistry and Physics See program pages for more information

August 5, 2020: Update to ISP100H5 Assigned "NDA" (No distribution requirement assigned)

July 9, 2020: Update to ISP courses Removal of distributions (HUM, SCI, SSC) for ISP100H5 and ISP010H5

July 9, 2020: Specialist program in Visual Culture and Communication (Arts) (ERSPE1200) Program entry and program completion requirements to include updates to ISP

July 9, 2020: New Institute has been approved The Institute for the Study of University Pedagogy (ISUP)

July 7, 2020: Department name change Effective July 2020, the Department of Geography is now the Department of Geography, Geomatics and Environment.

July 7, 2020: Administrative updates For the Department of Economics; Criminology, Law and Society; Sociology.

July 7, 2020: Course description (editorial) New link for CPS401Y5 application forms.

July 7, 2020: Specialist program in Anthropology (Arts) (ERSPE1775) Program completion requirements under Higher Years changed from 6.0 additional ANT credits to 6.5 additional ANT credits for students entering the program in 2020-2021.

2 Important Information

2.1 Understanding the Calendar

This Calendar serves as an academic information guide and statement of the most important rules and regulations for students seeking to enrol at the University of Toronto Mississauga, and is published annually online. It outlines the rules, regulations, and academic curriculum to inform students throughout their enrolment and pursuit of their goals.

The academic information listed in this Calendar is applicable for the year(s) to which the Calendar applies. For each program of study offered by the University, the courses necessary to complete the minimum requirements of the program are 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.

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.

Registration Guides

Supplementary registration guides contain specific registration and enrolment instructions. The information contained in these guides is as important as that in this Calendar, and can be found are available at www.utm.utoronto.ca/guides.

Statement on Amendments and COVID-19

Ontario’s response to the COVID-19 pandemic continues to evolve. Changes will likely occur as the province and its municipalities adjust to new data about the virus. In these circumstances, please be advised that the manner of delivery of courses, co-curricular opportunities, programs and services is subject to change, in accordance with university policies. The University thanks its students, faculty, and staff for their flexibility during these challenging times as we work together to maintain the standards of excellence that are the hallmark of the University.

While every effort is made to ensure that the information is complete and correct at the time of publication, contents may change. Amendments (if any) to this Calendar will be posted under the AMENDMENTS section that is available online. Staff, faculty, and students are advised to check www.utm.utoronto.ca/calendar for updates or consult the Office of the Registrar.

2.2 Changes in Programs of Study and/or Courses

If the University must change the content of programs of study or withdraw them, all reasonable 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.

2.3 Officials of the University of Toronto

A list of officials of the University of Toronto can be found at: www.governingcouncil.utoronto.ca

University of Toronto Mississauga
## 2.4 Responsibilities of Students

### Regulations, Codes, 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 they have 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](http://www.governingcouncil.utoronto.ca/policies).

Those which are of particular importance to students are:

- Code of Behaviour on Academic Matters
- Code of Student Conduct
- Discipline Codes
- Guidelines Concerning Access to Student Academic Records
- Policy on Official Correspondence with Students
- Policy on Sexual Violence and Sexual Harassment
- University Assessment and Grading Practices Policy
- Officials of the University of Toronto

### Registration and Fees

By virtue of enrolment, students 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 they have paid tuition and incidental fees, or have made appropriate arrangements to pay.

Students who defer their fee payment pending receipt of the Ontario Student Assistance Program (OSAP) or other awards, acknowledge that they continue to be responsible for payment of all charges, including any service charges that may be assessed. The University reserves the right to alter the fees and other charges described in the Calendar. For details, see the Student Accounts website at [www.fees.utoronto.ca](http://www.fees.utoronto.ca).

Students who are still registered in a course after the final date to 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.

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 informed of their academic status, via their U of T email address shortly after final grades are posted on ACORN. They will not be permitted to register in any courses until after their suspension period is completed. Any fees paid toward tuition and other applicable fees will be refunded in full.

### Academic Responsibilities

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

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

### Understanding Academic Information and Requirements

Course descriptions, 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 and degree in a timely manner. When researching courses and programs, students are encouraged to pay particular attention to exclusions, prerequisites, and corequisites.

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. 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.
Responsibilities of Students

Seeking Support

Students are responsible for seeking guidance from a responsible university officer if they are in any doubt regarding information in this Calendar. Academic Advisors are available in the Office of the Registrar to offer support and guidance for all students seeking clarification on information listed in this Calendar. Faculty advisors or undergraduate assistants in each academic department can offer program-specific support.

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.

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, they 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.

Personal Information and Accounts

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:

- Legal name
- Legal status in Canada

Any change of the following must be recorded on ACORN:

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

Student Number

Each student at the University of Toronto 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 numbers. The University assumes and expects that students will protect the confidentiality of their student identification number.

Student Card (TCard)

A TCard is a wallet-sized photo identification card that all University of Toronto students are required to have. 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 replacement fee of $20 for lost or stolen cards. The university is not responsible for funds accumulated on the TCard if it has been lost.

University Email Address

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 email address. It is the student's responsibility to check their utoronto.ca email on a regular basis.

UTORid

A UTORid is a student-specific account name that allows access to a variety of services, such as: ACORN, Quercus, utoronto.ca email, Degree Explorer, online services of the Office of the Registrar, UTMail+ and the on-campus wireless network.
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 Advanced Education and Skills Development 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 Ministry of Advanced Education and Skills Development 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 Ministry of Advanced Education and Skills Development 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.

Confidentiality and Advising Notes

UTM staff may write and share advising notes to support the delivery of excellent student service. Advising notes may be made to document interactions with a student (in person, in writing and/or over the phone) and accessed on a need-to-know basis by other departments also involved in advising, to collaboratively support student success. Notes are factual, relate to the student’s academic record, and document issues and options discussed and university service referrals. A student may request to see the advising notes pertaining to their record. If you have any questions or concerns, please contact Cesar Mejia, UTM Freedom of Information Liaison, at cesar.mejia@utoronto.ca.

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.” Students should also thoroughly review the information at the Academic Integrity web page, www.utm.utoronto.ca/academic-integrity.
### Sessional Dates

This calendar is applicable for the Fall 2020, Winter 2021, and Summer 2021 sessions.

The key sessional dates that are listed below do not include other important financial and academic deadlines that students need to know and monitor. Please see [www.utm.utoronto.ca/importantdates](http://www.utm.utoronto.ca/importantdates).

#### 2020

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 07</td>
<td>Labour Day (Holiday) - University closed</td>
</tr>
<tr>
<td>September 09</td>
<td>Fall-Winter Session classes begin in F and Y courses</td>
</tr>
<tr>
<td>September 22</td>
<td>Last day to add F &amp; Y courses for Fall-Winter Session</td>
</tr>
<tr>
<td>October 12</td>
<td>Thanksgiving Day (Holiday) - University closed</td>
</tr>
<tr>
<td>October 13 - 16</td>
<td>Fall Reading Week - No classes University is open</td>
</tr>
<tr>
<td>December 08</td>
<td>Last day of classes for F courses. Classes in Y courses break for holidays.</td>
</tr>
<tr>
<td>December 09</td>
<td>Study Break</td>
</tr>
<tr>
<td>December 10 - 22</td>
<td>Final Exams for F Session courses. Term tests may be held in Y courses</td>
</tr>
<tr>
<td>December 23 -</td>
<td>December Holiday - University closed</td>
</tr>
</tbody>
</table>

#### 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 04</td>
<td>Fall-Winter Session S courses begin and Y courses resume</td>
</tr>
<tr>
<td>January 17</td>
<td>Last day to add S courses for Winter</td>
</tr>
<tr>
<td>February 15</td>
<td>Family Day (Holiday) - University closed</td>
</tr>
<tr>
<td>February 16 - 19</td>
<td>Reading Week - No Classes University is open</td>
</tr>
<tr>
<td>April 01</td>
<td>Last day of classes for S &amp; Y courses</td>
</tr>
<tr>
<td>April 02</td>
<td>Good Friday - University closed</td>
</tr>
<tr>
<td>April 06 - 07</td>
<td>Study Break</td>
</tr>
<tr>
<td>April 08 - 22</td>
<td>Final Exams for S &amp; Y courses</td>
</tr>
<tr>
<td>May 03</td>
<td>Summer Session classes begin in all F and Y Courses</td>
</tr>
<tr>
<td>May 09</td>
<td>Last day to add F &amp; Y courses for Summer Session</td>
</tr>
<tr>
<td>May 24</td>
<td>Victoria Day (Holiday) - University closed</td>
</tr>
<tr>
<td>June 14</td>
<td>Last day of classes for F courses for Summer Session</td>
</tr>
<tr>
<td>June 16</td>
<td>Study Break for Summer Session Y courses</td>
</tr>
<tr>
<td>June 17 - 19</td>
<td>Final Exams for F courses for Summer Session</td>
</tr>
<tr>
<td>July 01</td>
<td>Canada Day (Holiday) - University closed</td>
</tr>
<tr>
<td>July 05</td>
<td>Summer Session classes begin in S courses; Y courses resume</td>
</tr>
<tr>
<td>July 11</td>
<td>Last day to add S courses for Summer</td>
</tr>
<tr>
<td>August 02</td>
<td>Civic Day (Holiday) - University closed</td>
</tr>
<tr>
<td>August 16</td>
<td>Last day of classes for S and Y courses, Summer Session</td>
</tr>
<tr>
<td>August 18 - 20</td>
<td>Final Exams for S and Y courses, Summer Session</td>
</tr>
</tbody>
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4 Admission Information

4.1 General Admission Information

Admission information, requirements, and applications can be found at www.utm.utoronto.ca/future or by contacting U of T Mississauga’s Student Recruitment & Admissions Office at:

Student Recruitment and Admissions
University of Toronto Mississauga
3359 Mississauga Road, Room 1270, Innovation Complex
Mississauga, ON L5L 1C6
Canada
Tel: 905-828-5400
Fax: 905-569-4301 Send us an email at: uoft.me/askutm

Applicants must present a satisfactory academic record equivalent to the Ontario Secondary School Diploma, from recognized academic institutions and meet the published academic requirements to be considered.

The admissions qualifications outlined are the minimum qualifications. Meeting them does not guarantee admission to the University.

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

4.2 English Language Requirement

English is the language of instruction and examination at the University, and success in our degree programs requires a high level of English language proficiency.

Applicants whose first language is not English (i.e. is not the first language they learned at home as a child) are required to provide evidence of adequate English facility for admission consideration, unless they qualify for an exemption. For details, please visit www.utm.utoronto.ca/future-students/apply/english-language-requirements

Applicants who meet the admission and program-specific requirements, but not the University's English Language Requirements, may be admitted with the condition that they successfully complete an Academic Culture and English (ACE@UTM) program. More information is available at www.utm.utoronto.ca/ace.

4.3 Admission from Secondary School

Ontario

Applicants must present 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 prerequisites for their intended program of study.

Canada (Outside Ontario)

Applicants from Québec 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.

Applicants from other Canadian provinces and territories must present their high school/secondary school diploma, and meet prerequisites for their intended program of study. For more information, please visit www.utm.utoronto.ca/future-students/apply/canadian-high-school.

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.future.utoronto.ca/international/welcome-us-students.

International

Applicants who have studied in a country outside of Canada or the United States should go to www.utm.utoronto.ca/future-students/apply/international-high-school for specific admission requirements.

Secondary School Transfer Credits

Applicants who have been admitted and have taken any Advanced Placement, International Baccalaureate, French Baccalaureate, GCE, or CAPE subjects during secondary school may be eligible for transfer credit. Transfer credits are assessed after an offer of admission has been accepted, and after the University receives official final results directly from the examining board. Details are available at www.utm.utoronto.ca/transfer
4.4 Admission with Previous Post-secondary Studies

Applicants who have acceptable standing at other accredited post-secondary institutions may be considered for admission. Admission will be based on an applicant’s overall academic record and the most recent year of full-time studies. Competitive applicants usually have a strong Cumulative Grade Point Average (CGPA) in addition to all program prerequisites.

Admitted students with previous post-secondary studies outside of the U of T Faculty of Arts & Science and U of T Scarborough must apply and pay for the Transfer Credit Application. For more information, please visit www.utm.utoronto.ca/transfer.

Students have 12 months from the start of their first academic year at U of T Mississauga to request changes to their assessment. Changes may include: submission of outstanding course outlines for review, departmental interviews (if applicable), reassessment or credit adjustment requests, and requesting generic and unspecified credits without exclusions be marked as "extra".

U of T Faculty of Arts and Science (A&S) and U of T Scarborough (UTSC)

Applicants from the Faculty of Arts & Science and/or U of T Scarborough who are admitted to U of T Mississauga do not need to submit the Transfer Credit Application. Courses and grades will automatically be retained, be included in the Cumulative Grade Point Average (CGPA), and remain on ACORN.

Upon admission, students must abide by U of T Mississauga rules and regulations. Only U of T Mississauga programs (subject POSs) may be used to satisfy program and degree requirements for graduation. Furthermore, all previous Faculty of Arts & Science or U of T Scarborough courses and grades will be subject to U of T Mississauga policies.

Other Divisions at U of T

Candidates who have acceptable standing at other undergraduate divisions of the University (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) must submit the Transfer Credit Application. For more information, please visit www.utm.utoronto.ca/transfer.

Grades for courses from these divisions will not be retained, included in the Cumulative Grade Point Average (CGPA), or remain on ACORN.

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 or when a student is admitted to pursue Commerce/Management at U of T Mississauga. For more information, please visit www.utm.utoronto.ca/future-students/apply/canadian-college.

Other Universities

Applicants who have studied at an accredited university (or other equivalent post-secondary institution) but did not receive a university degree can receive a maximum of 10.0 transfer credits.

Applicants 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. Applicants may not complete a second degree in the same field of study as their first degree. For more information, please visit www.utm.utoronto.ca/future-students/apply/international-college-or-university.

4.5 Second Undergraduate Degree

Applicants who hold an undergraduate degree, or equivalent, from another post-secondary institution, and 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, applicants are urged to determine whether a second degree is necessary for their purposes. For example, courses taken as a non-degree student may satisfy admission requirements for a graduate or professional program.

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 (BCom) or Bachelor of Business Administration (BBA) as a second degree. This is due to the extensive overlap of courses between these degrees.

Students may receive a maximum of 5.0 transfer credits towards a second degree. For more information, please visit www.utm.utoronto.ca/future-students/apply/canadianuniversity.
Admission Information

U of T Mississauga Alumni

Students who have completed their first degree at U of T Mississauga and wish to be admitted to a second undergraduate degree program are recommended to seek academic advising in the Office of the Registrar prior to applying. For more information, please visit www.utm.utoronto.ca/registrar.

See also Second Degree Requirements (Page 22)

U of T St. George and U of T Scarborough Alumni

Students who have completed their first degree at U of T (but not U of T Mississauga) and wish to be admitted to a second undergraduate degree program must apply using U of T Internal Application at www.utm.utoronto.ca/future-students/apply/internal-transfer. Students may not complete the same degree type as their first degree (HBA, HBSc, BBA, or BCom).

4.6 Admission to Non-Degree Studies

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

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. Some courses are not available to Non-Degree students (e.g. Management [MGM and MGT]).

The policy governing Non-Degree students is the Governing Council Policy, "Association, Admission, and Registration" which can be found at http://uoft.me/nondeg.

Non-Degree with Previous Degree Completed

Applicants who have completed degree studies at an accredited institution with strong grades may be eligible for admission to Non-Degree Studies to take 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. For more information, please visit www.utm.utoronto.ca/future-students/apply/non-degree-visiting-students.

Non-Degree Visiting Students

Applicants with a valid Letter of Permission (LOP) and an academic transcript showing they are in good academic standing from another accredited North American university may apply to U of T 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. Returning Non-Degree Visiting U of T Mississauga students must re-apply for admission to each session. For more information, please visit www.utm.utoronto.ca/future-students/apply/non-degree-visiting-students.

Note: Former U of T Mississauga students, who are currently registered at another North American university, and wish to take U of T Mississauga courses to count towards their degree at their home university, must apply to U of T Mississauga as a Visiting Student.

Non-Degree Bridging Students

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

Non-Degree Senior Citizen Students

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.

While senior citizens must pay tuition fees, they are eligible for an exemption from compulsory non-academic incidental fees. For more information, please visit www.utm.utoronto.ca/bridging.

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. They will remain on probation upon return, and will be under the regulations for academic status outlined in Academic Status of U of T Mississauga Calendar.

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. While on probation, students are not eligible to enrol in courses for transfer credit at another university or post-secondary institution.

Restricted to a Reduced Course Load

Students restricted to a reduced course load on admission may take a maximum of 3.0 credits in the Fall-Winter session and a maximum of 1.5 credits in the Summer session. Once they have earned at least 4.0 credits at U of T Mississauga with a minimum Cumulative Grade Point Average (CGPA) of 2.0, these students may request to have this restriction removed by meeting with an Academic Advisor at the Office of the Registrar.

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 is considered. If granted, the deferral of admission will also include a deferral of any entrance scholarship(s) awarded and the residence guarantee, if applicable.

To request a deferral, students must log in to the Join U of T applicant website and submit the Deferral Request Form under the "More About Your Offer" section no later than September 1, or as soon as official, final transcripts are available.

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

Fees normally consist of tuition, incidental and ancillary fees (including items such as the U of T Mississauga shuttle bus, Health and Counselling Centre, athletics, student services, and student organizations).

Fees 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.

Domestic student and international student fees are established by the Governing Council, and are subject to change any time upon approval. For detailed information, please consult the Student Accounts website (www.fees.utoronto.ca).

5.2 Types of Tuition Fees

Tuition fees are assessed by course or program, depending on the program(s) of study you are registered in. The University reserves the right to alter the fees and other charges described in the Calendar.

Course Fees

Course fees are assessed based on the number of credits a student is enrolled in. When a course is added, the course fee is charged immediately (not including waitlisted courses), regardless of when the course begins. When a course is dropped, the course fee is reversed in accordance with the refund schedule, which can be found on the Student Accounts website (www.fees.utoronto.ca).

Program Fees

Program fees are assessed when a student is registered in a specialized deregulated fee program with enrolment in a minimum number of credits. As the minimum number of credits can vary by program, see below for further details:

- Students who are in the Commerce Specialist 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 Accessibility Services, may opt to pay the deregulated per course fee instead of the deregulated program fee by speaking with the Accessibility Services.
Students who accept a deregulated program Subject POS (Program of Study) will be back-charged deregulated fees for all courses commencing with the session after 4.0 credits were completed.

5.3 Tuition Fee Invoice

Tuition fees will be posted on a student's financial account on ACORN after enrolment in at least one course has taken place. The invoice will provide a detailed breakdown of the fees for each term or session that a student has registered in, including tuition fees, incidental and ancillary fees, and other applicable fees. Additionally, a student's current invoice will also update as funds are credited to their account through payments made by the student, or University of Toronto scholarships, awards, bursaries or grants.

Returning students may review current or past tuition fee invoices, including any outstanding balances owed to the university from a previous session. Students may print a copy of their invoice at any time, as they will not be mailed.

5.4 Payments

Students must pay their tuition fees or request a fee deferral by the appropriate deadline in order to complete their registration. Students who do not pay or defer their fees will be removed from their courses, and will be subject to the late registration fee if they wish to re-enrol in courses for the upcoming term or session.

Tuition fees are paid through the bank, on ACORN using a credit card, or through other available options. 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. For a complete list of payment options, visit the Office of the Registrar website at www.utm.utoronto.ca/registrar.

5.5 Fee Deferral

A fee deferral is a special, temporary arrangement to ensure that a student may register by the appropriate deadline, with an understanding that fees must be paid once their financial aid is received. Students who are registered on the basis of an approved fee deferral remain financially responsible for their outstanding balance, and must make their payments by the appropriate deadline(s) in order to avoid service charges. Fee deferrals may be requested on ACORN.

More information can be found under Outstanding Fees (Page 13). Further information on fee deferrals can be found on the Student Accounts website at www.fees.utoronto.ca.

Eligibility

Students who are receiving financial aid (i.e., OSAP or other government student loans) or scholarships, and are not able to make a tuition payment on their own by the deadline may request a fee deferral in order to register for the upcoming session(s).

Students who are receiving a scholarship or award may be eligible if the amount of their award is greater than the Minimum Payment to Register, as listed on their invoice. Students who receive financial sponsorship (for example, by their home government) may register via sponsorship by sending the appropriate documents to the Student Accounts office.

In order to be approved for a fee deferral, students must not have any outstanding fees from a previous session.

5.6 Outstanding Fees

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 or upcoming 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 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).

5.7 Refunds

Students who drop one or more courses may be eligible for a fee refund depending on the course drop 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).

6 Scholarships and Financial Aid

6.1 Scholarships and Awards

Recognition of Exceptional Academic Achievement

Dean’s List This 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. A notation will be added to the student’s academic transcript.

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)

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.

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.future.utoronto.ca/finances/financial-aid), or from the OSAP website (ontario.ca/osap).

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.future.utoronto.ca/finances/financial-aid/other-loans-and-student-lines-credit).

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 Accessibility Services Office (www.utm.utoronto.ca/accessibility) or the University of Toronto Enrolment Services Office (www.future.utoronto.ca/finances/financial-aid/financial-aid-students-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.future.utoronto.ca/finances/financial-aid/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)

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.


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 this Calendar, and support for personal, academic, or financial concerns that influence academic performance from admissions to graduation.

For more information about our office, please visit 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:

- Accessibility Services
- Career & Employment Resources
- Centre for Student Engagement
- Community Service Learning
- Diversity & Equity
- Health & Counselling
- Indigenous Student Supports
- International Student Support & Study Abroad
- Leadership Programs
- Orientation & Transition Programs
- Department of Recreation, Athletics & Wellness
- Student Housing & Residence Life

For more information, please visit 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 held 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.

For more information, please visit www.ombudsperson.utoronto.ca.
8 Degree Requirements

8.1 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

Students must follow the degree requirements listed in the Calendar for the Session they were admitted to the university as a degree student. For example, if you were admitted to the University beginning September 2017, you would follow the degree requirements listed in the 2017-2018 Calendar. The degree type a student will receive depends on the program(s) they complete. In the Program Section, each program title lists the degree received (for instance, "English (Arts),” “Geography (Science),” etc.).

The word “credit,” is used in the listing of degree requirements, means a full course or two half courses. In order to obtain academic standing in a course, a student must receive at least a passing grade (50%) in that course. Additionally, credits earned are applied toward your degree requirements chronologically in the order in which they were completed.

8.2 Honours Bachelor of Arts (HBA) Requirements

To qualify for an Honours Bachelor of Arts (HBA) degree, a student must meet the following requirements:

Course Requirements: Complete at least 20.0 credits (i.e. with a grade of 50% or more or CR), meeting the following criteria:

- At least 13.0 credits at the 200+ level including a minimum of 6.0 credits at the 300/400 level (no more than 1.0 credit at the 300/400 level of transfer credit may be counted with the exception of courses taken through an official university exchange program).
- No more than 15.0 credits may have the same three-letter designator (e.g. "ANT," "ENG," etc.)

Distribution Requirements:

- Complete at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences.
- See Distribution Requirements (Page 21) for further information.

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 Bachelor of Arts, but have a cumulative GPA below 1.85 may elect to graduate with a 4-year Bachelor of Arts degree provided they are in good standing (i.e. CGPA is 1.50 or more).

Program Requirements for an Honours Bachelor of Arts Degree:

- One specialist in an Arts area, OR
- Two Major programs in an Arts area, OR
- One Major in an Arts area plus one Major in a Science area, OR
- One Major and two Minors. At least one Major, or both Minors, must be in the Arts area for an HBA

Statement concerning the change in degree requirements: Effective as of September 2020, a maximum of 6.0 credits at the 100-level for degree credit is no longer being enforced. Instead, students must complete a minimum of 13.0 credits at the 200+level and higher, including a minimum of 6.0 credits at the 300+ level.

Note: Students who combine programs must check the program requirements listed in this Calendar to ensure that their chosen programs have 12 distinct credits among them. Students who combine one Major in the Arts with one Major in Science may be eligible to receive either an HBA or HBSc. In such cases, students will be awarded an HBSc unless notification is given to the Office of the Registrar.

Students may consult with an Academic Advisor in the Office of the Registrar regarding degree requirements. Consult the departmental program advisor regarding program requirements.

8.3 Honours Bachelor of Science (HBSc) Requirements

To qualify for an Honours Bachelor of Science (HBSc) degree, a student must meet the following requirements:

Course Requirements: Complete at least 20.0 credits (i.e. with a grade of 50% or more or CR), meeting the following criteria:

- At least 13.0 credits at the 200+ level including a minimum of 6.0 credits at the 300/400 level (no more than 1.0 credit at the 300/400 level of transfer credit may be counted with the exception of courses taken through an official university exchange program).
- 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.
Degree Requirements

Bachelor of Commerce (BCom) Requirements

- At least 13.0 credits at the 200+ level including a minimum of 6.0 credits at the 300/400 level (no more than 1.0 credit at the 300/400 level of 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 (see Commerce (BCom, HBA) (Page 130) Program).

Program Requirements:

- Complete the requirements of a specialist program in Commerce (BCom, HBA) (Page 130).

Distribution Requirement:

- Complete at least 1.0 credit from each of the following divisions: Humanities, Sciences, Social Sciences
- See Distribution Requirements (Page 21) for further explanation.

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 BSc except for the GPA requirement may elect to graduate with a 4-year BSc degree provided they are in Good Standing (i.e. CGPA is 1.50 or more).

Program Requirements for an Honours Bachelor of Science Degree:

- One specialist in a Science area, OR
- Two Major programs in a Science area, OR
- One Major in a Science area plus one Major in an Arts, OR
- One Major and two Minors. At least one Major, or both the Minors, must be in the Science area for an HBSc

Statement concerning the change in degree requirements: Effective as of September 2020, a maximum of 6.0 credits at the 100-level for degree credit is no longer being enforced. Instead, students must complete a minimum of 13.0 credits at the 200+level and higher, including a minimum of 6.0 credits at the 300+ level.

Note: Students who combine programs must check the program requirements listed in this Calendar to ensure that their chosen programs have 12 distinct credits among them. Students who combine one Major in the Arts with one Major in Science may be eligible to receive either an HBA or HBSc. In such cases, students will be awarded an HBSc unless notification is given to the Office of the Registrar.

Students may consult with an Academic Advisor in the Office of the Registrar regarding degree requirements.
Consult the departmental program advisor regarding program requirements.

8.5 Bachelor of Business Administration (BBA) Requirements

This is a four-year, honours degree program. 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:

- At least 13.0 credits at the 200+ level including a minimum of 6.0 credits at the 300/400 level (no more than 1.0 credit at the 300/400 level of transfer credit may be counted with the exception of courses taken through an official university exchange program).
Combined Degree Programs

Degree Requirements

• No more than 15.0 credits may be taken for degree credit from the following: COM/MGD/MGT/MGM

Program Requirements:

• Complete the requirements of a specialist program in Management (HBA, BBA) (Page 357).

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 21) for further information.

Grade Requirement:

• Achieve a Cumulative GPA of 1.85 or more by the time of graduation.
• Students who meet all the requirements for the Bachelor of Business Administration (BBA) but have a cumulative GPA below 1.85 may graduate with a Bachelor of Arts (BA) degree provided they are in Good Standing (i.e., cumulative GPA is 1.50 or above). In doing so, students who elect to graduate with a BA degree will not be eligible to upgrade to a BBA degree, but may upgrade their BA to an HBA. For more information, refer to Upgrading a U of T Mississauga Bachelors Degree (Page 22).

Statement concerning the change in degree requirements: Effective as of September 2020, a maximum of 6.0 credits at the 100-level for degree credit is no longer being enforced. Instead, students must complete a minimum of 13.0 credits at the 200+level and higher, including a minimum of 6.0 credits at the 300+ level.

Note: Students may consult with an Academic Advisor in the Office of the Registrar regarding degree requirements. Consult the departmental program advisor regarding program requirements.

8.6 Combined Degree Programs

The Combined Degree Programs (CDP) in Honours Bachelor of Science or Honours Bachelor of Arts /Master of Teaching is designed for students interested in pursuing professional teacher preparation.

Students earn a bachelor’s degree from UTM and an accredited professional Master of Teaching (MT) degree at the Ontario Institute for Studies in Education (OISE). They will be recommended to the Ontario College of Teachers for an Ontario Teacher’s Certificate of Qualifications as elementary or secondary school teachers. Distinct advantages include:

• early application to the MT program (in Year 3) and conditional admission to the MT program;
• eligibility for certification as a teacher in Ontario; and
• eligibility to apply for doctoral study.

This CDP permits the completion of both degrees in six years with 1.0 credit (full-course equivalent [FCE]) that may be counted towards both the undergraduate and graduate degrees.
<table>
<thead>
<tr>
<th>UTM Major or Specialist Program</th>
<th>Teaching Subjects completed with the completion of the Major or Specialist Program required courses</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist in Astronomical Sciences</td>
<td>Science - Physics</td>
<td></td>
</tr>
<tr>
<td>Specialist in Biological Chemistry</td>
<td>Science - Chemistry, Science - Biology, Science - General</td>
<td>Any 2 of these 3</td>
</tr>
<tr>
<td>Specialist in Biology</td>
<td>Science - Biology</td>
<td></td>
</tr>
<tr>
<td>Major in Biology</td>
<td>Science - Biology</td>
<td></td>
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<tr>
<td>Major in Biology for Health Sciences</td>
<td>Science - Biology</td>
<td></td>
</tr>
<tr>
<td>Specialist in Chemistry Science</td>
<td>Chemistry</td>
<td></td>
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<tr>
<td>Major in Chemistry</td>
<td>Science - Chemistry</td>
<td></td>
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<tr>
<td>Specialist in Comparative Physiology</td>
<td>Science - Biology</td>
<td></td>
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<tr>
<td>Specialist in Ecology and Evolution Chemistry</td>
<td>Science - Biology, Science - General</td>
<td></td>
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<tr>
<td>Specialist in Forensic Biology</td>
<td>Science - Biology</td>
<td></td>
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<tr>
<td>Specialist in Forensic Chemistry</td>
<td>Science - Chemistry</td>
<td></td>
</tr>
<tr>
<td>Specialist in Molecular Biology</td>
<td>Science - Biology, Science Chemistry, Science - General</td>
<td>Any 2 of these 3</td>
</tr>
<tr>
<td>Major in Physics</td>
<td>Science - Physics</td>
<td></td>
</tr>
<tr>
<td>Specialist in Mathematical Sciences</td>
<td>Mathematics</td>
<td></td>
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<tr>
<td>Major in Mathematical Sciences</td>
<td>Mathematics</td>
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</tr>
<tr>
<td>Specialist in French Studies</td>
<td>French (Second Language)</td>
<td></td>
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<tr>
<td>Major in French Studies</td>
<td>French (Second Language)</td>
<td></td>
</tr>
<tr>
<td>Specialist in Language Teaching and Learning: French and Italian</td>
<td>French (Second Language)</td>
<td></td>
</tr>
<tr>
<td>Major in Language Teaching and Learning: French</td>
<td>French (Second Language)</td>
<td></td>
</tr>
</tbody>
</table>
Minimum Admission Requirements

- Applicants must apply to, and be accepted by, at least one of the above listed undergraduate programs at UTM and also the OISE Master of Teaching program. Applicants must satisfy the admission requirements of each program.
- Students must be enrolled full-time and be in Good Standing in their chosen undergraduate program with a B+ average (3.3) in Year 2 of their program to be eligible for admission into the MT and the Combined Degree Program; students must normally complete a minimum of 5.0 credits over the three terms (Fall, Winter and Summer) during each year of study (where necessary, exceptions will be made for students in PEY programs).
- Qualified undergraduate students in Year 3 of their chosen undergraduate program(s) may apply to the Master of Teaching program and the Combined Degree Program; those accepted will receive a conditional offer to admission to the graduate program and be admitted to the CDP.

Admission to the MT Program will have the following conditions:

- Students must maintain a B+ average (3.3) or higher in their final year of study;
- Students must complete the requirements of their chosen undergraduate program;
- Students must demonstrate conferral of the BSc/BA degree;
- Students must provide at least two letters of reference (see: www.oise.utoronto.ca/mt/Home.html)
- Students must complete the prerequisites for two teaching subjects irrespective of the grade level they ultimately intend to teach.
  - Students are required to complete a minimum of 6.0 credits in their primary teaching subject, and a minimum of 3.0 credits in their secondary teaching subject (some secondary teaching subjects require more than 3.0 credits; students should consult the OISE website for more information);
  - Students must have completed 3.0 credits in their primary teaching subject, and 1.5 credits (or more where applicable) for their secondary teaching subject by the time they are conditionally admitted to the MT program (i.e., by the second term of Year 3 of the undergraduate program);
- The table above identifies the primary teaching subject each UTM program fits into; students may need to complete additional courses to fulfill the minimum 3.0 credits required for the secondary teaching subject. Students are advised to consult often with the academic supervisor of their chosen undergraduate program to ensure they fulfill all the necessary requirements of the Combined Degree Program;
- Meet other qualifications as specified by the MT program:
  - Applicants are admitted under the General Regulations of the School of Graduate Studies;
  - Applicants must also satisfy the Department of Curriculum, Teaching and Learning's additional admission requirements stated below.
  - Applicants must have an appropriate bachelor's degree with the equivalent of a University of Toronto B+ or better in the final year. Note: all students admitted to the MT via the Combined Degree Program must have a higher average grade requirement than that required for admission to the MT alone.
  - In their Statement of Intent, applicants should indicate their preferred concentration (i.e., Primary/Junior, Junior/Intermediate, or Intermediate/Senior) and describe three significant teaching and/or teaching-related experiences that they have had, especially with groups of children. With reference to these experiences, applicants should identify insights gained about teaching and learning, and explain how, based on these insights, they might contribute to the education of students in today's schools. Included in their resumé, applicants are requested to list, in chart form, the extent of their teaching experiences. The chart should include dates, location of experience, role, and number of hours working with students.
  - A police record check is required in a practicum setting in both Year 1 and 2 of the program.

Program Requirements:

- Students must complete the full academic program requirements of their undergraduate program(s) and degree, as well as those of the Master of Teaching;
- Students must be registered full-time, and carry a full course load in each year of study, throughout their chosen undergraduate program;
- Students who are admitted to the CDP receive conditional offers of admission to the MT during Year 3 of their chosen undergraduate program, and will commence the MT during Year 4 when they are enrolled in the 1.0 FCE graduate elective courses;
- In Year 4 of undergraduate studies, combined degree program students must take 1.0 credit (FCEs) in graduate courses as designated by the OISE MT program. The 1.0 graduate FCE will count both towards the undergraduate degree and the MT. A Combined Degree Program student is graded as a graduate student and required to meet graduate expectations in the graduate courses.

Students admitted to the CDP follow the academic path to completion outlined below:

First Year: Curricular Path: Undergraduate courses in accordance with chosen undergraduate program.
Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc/ HBA program and degree requirements. See specific program entry in this Calendar for specific program requirements.

Second Year: Curricular Path: Undergraduate courses in accordance with chosen undergraduate program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc/ HBA program and degree requirements. See specific program entry in this Calendar for specific program requirements.

Third Year: Curricular Path: Undergraduate courses in accordance with chosen undergraduate program.

Specific Requirements: 5.0 full-course equivalents (FCEs) toward the HBSc/ HBA program and degree requirements. See specific program entry in this Calendar for specific program requirements. In the Fall session, students apply to the MT program. Upon conditional acceptance, they are enrolled in the CDP.

Fourth Year: Curricular Path: Undergraduate courses in accordance with chosen undergraduate program. MT courses in accordance with the U of T regulations for the MT program.

Specific Requirements: 4.0 full-course equivalents (FCEs) toward the HBSc/ HBA program and degree requirements. See specific program entry in this Calendar for specific program requirements. 1.0 FCE in MT courses as designated by the OISE MT program; this 1.0 FCE will be counted towards the overall requirements of the HBSc and MT degree requirements.

Fifth Year: Curricular Path: Graduate courses in accordance with the U of T regulations for the MT program.

Specific Requirements: 4.5 FCEs of Year 1 MT program requirements.

Sixth Year: Curricular Path: Graduate courses in accordance with the U of T regulations for the MT program.

Specific Requirements: 4.5 FCEs of Year 2 MT program requirements.

Program Length: 6 years full-time Time Limit: BSc/BA + 3 years MT

Contact Information: Honours Bachelor of Science (HBSc)/Honours Bachelor of Arts (HBA) University of Toronto Mississauga www.utm.utoronto.ca

- For programs in Biology, Biology for Health Sciences, Comparative Physiology, Ecology and Evolution, Molecular Biology, contact the Department of Biology: www.utm.utoronto.ca/biology/home
- For programs in Astronomical Sciences, Biological Chemistry, Chemistry and Physics, contact the Department of Chemical and Physical Sciences: www.utm.utoronto.ca/cps
- For programs in Forensic Biology and Forensic Chemistry, contact the Forensic Science program: www.utm.utoronto.ca/forensic/forensic-science

For programs in Mathematical Sciences, contact the Department of Computational and Mathematical Sciences www.utm.utoronto.ca/math-cs-stats

For programs in French and Language Teaching & Learning, contact the Department of Language Studies: www.utm.utoronto.ca/language-studies/department-language-studies

Master of Teaching (MT) Ontario Institute for Studies in Education www.oise.utoronto.ca/oise Department of Curriculum Teaching and Learning www.oise.utoronto.ca/ctl

8.7 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

Some courses have two assigned distributions. In these cases, the course will count towards one distribution requirement, but cannot fulfill two requirements simultaneously. Please note that not all courses offered fulfill distribution requirements. Additionally, courses used to fulfill program requirements may also be used to fulfill distribution requirements.

Students who are unsure about their distribution requirements or who need information on another U of T campus should contact the Office of the Registrar.

Students wishing to use transfer credit(s) to fulfill distribution are responsible for confirming with the Office of the Registrar that the credit is acceptable for this purpose.

8.8 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/HSBc/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.
Planning for Graduation

Using Degree Explorer, the University of Toronto’s degree planning tool (www.acorn.utoronto.ca/degree_explorer.php), 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, or September for November Convocation to see if their Subject POSts have been confirmed by the relevant department(s). They can view their eligibility to graduate in early May for June Convocation, or 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. It is recommended that students make an appointment prior to entering their final year.

Policy on Debts Owed to the University

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 (see Outstanding Fees (Page 13)). However, indebted graduands will be allowed to participate in convocation and have their names appear in the convocation program. Degree parchments are held by the Office of Convocation for pick up one year following each graduation ceremony.

8.9 Upgrading a U of T Mississauga Bachelors Degree

Students who have previously graduated with a Bachelor of Arts (BA) or Bachelor of Science (BSc) degree may choose to upgrade to an Honours degree in the same field. For example, a BA may be upgraded to an Honours Bachelor of Arts and a BSc may be upgraded to an Honours Bachelor of Science. Participation in the graduation ceremony is only allowed for the conferral of the initial bachelor degree.

8.10 Second Degree Requirements

Students beginning a second degree at U of T Mississauga are normally granted 5.0 credits: 4.0 credits at the 100 level, and 1.0 credit at the 200 level, regardless of the number of previous degrees held. As such, they are exempt from the first year of degree requirements at U of T Mississauga.

Current students from another division of U of T should contact Enrolment Services concerning admission to U of T Mississauga. Also see Admission with Post-Secondary Studies section in this Calendar.

University of Toronto alumni 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), and are advised to seek academic advising in the Office of the Registrar.

Students who are graduates of another university may apply to take a similar degree in a different area of study, and should refer to the Admissions section of this Calendar.

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.

9 Understanding Programs

9.1 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.

9.2 Specialists, Majors and Minors

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 credits at the 300/400 level, 1.0 credit at the 400 level.

Major Programs: consist of 6.5 to 9.0* credits, including at least 2.0 credits at the 300/400 level.

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

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

9.3 Program Enrolment

Eligibility

Students must enrol in the appropriate program, or combination of programs in the session in which they have completed, or will complete, 4.0 credits. All degree students must enrol in at least one specialist, two majors, or one major and two minors. A maximum of 3 programs are allowed as long as one is a minor.

Students who are admitted with 4.0 transfer credits or more, must enrol in a program.

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 Program Requirements (Page 23), and the specific requirements for each program for more information.

U of T Mississauga students may only enrol and complete programs listed in this Calendar. Enrolment in programs offered at other U of T campuses or divisions is not permitted.

Choosing a Program

Students enrol in programs online via ACORN, the online student information system.

For limited enrolment programs, see the Program Selection Guide for dates and deadlines for program enrolment. The guide is available online at www.utm.utoronto.ca/guides.

9.4 Program Requirements

Every program in this Calendar lists its requirements - the courses that must be completed in order to successfully complete the curriculum. Specific program requirements for each program can be found in this Calendar under PROGRAMS (Page 47).

Students will follow the program requirements listed in the Calendar for the session that they enrolled in the program (e.g., if you enrolled into a program in the Summer of 2017, you would follow the program requirements listed in the 2017-2018 Calendar). Make sure to check the program requirements each time you consider adding or changing courses, or if you consider changing programs of study.

Please note that completion of a program is only one part of the degree requirements. For more information, see Degree Requirements (Page 16).

NOTE: 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.

9.5 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

9.6 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

10 Experiential and International Opportunities

10.1 Experiential Learning (EXP)

Experiential learning courses will have an EXP notation at the end of the course title. These courses require 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.

### 10.2 Research Opportunity (ROP)

The Research Opportunity Program (ROP) provides an opportunity for students to earn 0.5 - 1.0 credit by participating in a faculty member’s research project.

The ROP is an instructor-based approval program. Each 299Y5, 399Y5 and 499Y5 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.

Registered University of Toronto undergraduate students in a degree program are eligible to submit an application and participate in the ROP. Visiting students and exchange students from partner institutions may also be eligible to participate in the ROP with approval from the Experiential Education Unit, Office of Vice-Principal Academic and Dean.

**Note:**

- Students are permitted to accept and complete more than one ROP299/399/499 course, as long as they are not within the same term.
- Students are encouraged to review all prerequisites and instructor preferences prior to the time of application.
- Students are encouraged to speak with an Academic Advisor in the Office of the Registrar or the Undergraduate Advisor for the program concerning prerequisites, exclusions, or program/degree requirements.

The ROP application and approval process is done online through the ROPAPP using a student’s UTORid. For more information, please visit [www.utm.utoronto.ca/rop](http://www.utm.utoronto.ca/rop).

### 10.3 Professional Experience Year (PEY)

The Professional Experience Year (PEY) provides students with an opportunity to gain work experience in fields related to their programs of study. Successful applicants will spend 12 to 16 months working in a related industry. PEY does not qualify for degree credit, but will appear on a student’s transcript as PEY200Y5 as a record of its completion.

**Eligibility**

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. This internship period normally occurs after second or third year.

**Application Process**

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 must seek approval from their department chair before applying to PEY. Students pay a non-refundable application fee at the time of application. The PEY program strives to provide opportunities for all students registered in it, but cannot guarantee employment.

**Fees**

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.

**Contact**

For further information, contact the Professional Experience Year Office at 416-978-6649.

### 10.4 International Exchanges (INT)

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. Funding support is available for many international opportunities.
Understanding Courses Summer Abroad

Visit https://www.utm.utoronto.ca/international/outbound-opportunities for details on the learning abroad opportunities available to you.

More information is available 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
Website: www.utm.utoronto.ca/international/outbound-opportunities

10.5 Summer Abroad

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 1.0 credit, 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 science Abroad 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 Understanding Courses

11.1 Definition of a Course

A course is a unit of teaching that focuses on a specific discipline area (e.g. English or Mathematics), and takes place within a specific timeframe. It will be led by an instructor (or instructors), and have a fixed roster of students, who may receive a grade and academic credit upon its completion.

Each course is assigned a credit value. Full-year courses are worth 1.0 credit (indicated by a “Y” in the course code). Half-year courses are worth a 0.5 credit (indicated by an “H” in the course code).

A few courses held over a full year are valued at a 0.5 credit (“H5Y”) and a few courses held over one-half a year are valued at 1.0 credit (“Y5F” or “Y5S”). Students should ensure they accurately identify the credit value of each course.

Y = 1.0 credit H = 0.5 credit

11.2 How to Read a Course Code

Each course at the University of Toronto is assigned a course code to provide information such as: which area of study the course belongs to, the level of study, which U of T campus it is offered at, its credit value, and more.

Course Designations

The first three characters in a course code (i.e., ANT, AST, BIO) indicate the department offering the course. Most courses are listed under the department that is responsible for that subject. For example, ANT = Anthropology courses.

Course Number

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

Course Suffixes

The “Y” or “H” following the Course Number in this Calendar indicates the credit value:

Y = a full credit course, for which 1.0 credit is given. H = a half-credit course, for which 0.5 credit is given.

Campus Code

The eighth and last character in a course code indicates which campus a particular course is offered.

UTM = 5 St. George = 1 UTSC = 3
Section Codes Listed in the Timetable

Section codes will appear next to the course code on the Timetable website to identify the period of instruction. Section codes are as follows:

- 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.

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: www.utm.utoronto.ca/timetable.

Meeting Types and Duration of Instruction

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

In the Fall/Winter Session, the normal period of instruction is 24 weeks, with each term 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.

Course Sections Listed in the Timetable

The first 3 characters denote type of meeting 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.

Experiential Learning (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. See Experiential and International Opportunities (Page 23).

International Component

Some course titles are followed by INTL-O or INTL-R. This indicates a study-abroad component, such as a field trip to a different country. INTL-O indicates that the international component is optional; INTL-R indicates that the international component is a required part of the course, and additional expenses may apply.

Other Symbols

- (P.I.) - Permission of instructor required to enrol.
- (I) - Open to first-year students (shown after 200+ course number).
- The comma (,) the semi-colon (;) the ampersand (&) and the plus sign (+) all mean "AND."
- The slash (/) means "OR"

11.4 Corequisites, Exclusions, Extras, Prerequisites, Recommended Preparation, and Supplemental Courses

Corequisite

A requirement to be undertaken concurrently with another course. 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. The corequisite will be waived if a student has previously obtained standing in it, or if the department consents.
Exclusion

An exclusion is a course that is deemed to have content that significantly overlaps with another course. Exclusions will be listed below the course description.

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 that is listed as an exclusion, they should consult with the departmental advisor 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.

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.

Extra Course

These 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, prerequisite, or corequisite requirements.

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.

Recommended Preparation:

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

Supplemental Course

These 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.

12 Registration and Course Enrolment

12.1 Definition of 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 (www.acorn.utoronto.ca).

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

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

Confirmation of Registration

After course enrolment, students are required to complete their registration by paying or deferring their fees. This will change their ACORN registration status from invited to registered. A registered status will secure a student’s enrolment in the courses that they have selected.

Students requiring written proof of registration may request a Confirmation of Enrolment letter online at www.utm.utoronto.ca/forms. A fee is charged. All other requests should be made at the Office of the Registrar.

12.2 Year of Study

A student's year of study depends upon the total number of credits that have been passed, and/or awarded as transfer credits

<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>
12.3 Course Enrolment at UTM

Using ACORN

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 drop courses, change sections, list current courses, obtain final grades, and confirm intention to graduate.

Students using ACORN can view their entire academic record, request or declare programs (minors, majors, specialists), order transcripts, print tax forms, print invoices and view their financial account balances and detailed charge and payment information.

A step-by-step guide on how to use ACORN can be found at http://help.acorn.utoronto.ca.

Choosing Courses

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

1. 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.
2. All prerequisite, corequisite and exclusion requirements must be met.

It is the students’ responsibility to check course prerequisites, corequisites and exclusions prior to enrolling. Students who enrol in a course for which they are ineligible may be removed from the course.

Repeating Passed Courses

Students may repeat a specific passed course only once, regardless of the grade earned. Students (both degree and non-degree) may only repeat any course in which they have already obtained credit (i.e., a mark of 50% or higher or CR) under the following conditions:

1. When students need to achieve a higher grade in a course for entry to a limited-enrolment program;
2. When students need to achieve a minimum grade in a course to satisfy a course prerequisite;
3. When students need to demonstrate a level of performance for an external credential or future graduate study.

Both the original and the repeated course will appear on the student's academic record. The repeated course will be designated "extra" (will not be included in GPA calculations or in the degree credit count) unless the student designates it as a Second Attempt for Credit (see below). If the student chooses the Second Attempt for Credit option, the first attempt will be designated "extra."

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.

Second Attempt for Credit (SAC) Degree students at the University of Toronto Mississauga may designate up to a total of 1.0 repeated credits to be counted toward GPA calculations and in the degree credit count (referred to as Second Attempt for Credit, or SAC). In these cases, the first attempt will be designated "extra" (will not be included in GPA calculations or in the degree credit count), and the second attempt will count toward credit totals and GPA.

SAC requests are made by submitting their Second Attempt for Credit (SAC) form online at www.utm.utoronto.ca/forms The choice is restricted to repeated courses previously approved with a Course Enrolment Exception form but is not restricted as to year, level of course, or campus.

In courses with a final exam, the SAC option must be requested no later than the last day of classes in the term in which the course was offered. In courses with no final exam, the deadline to request CRC is before the date of the final test or the due date of the final assignment.

SAC requests are made by submitting their Second Attempt for Credit (SAC) form online at www.utm.utoronto.ca/forms This option is not available for non-degree students.

Auditing Courses

The U of T 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.

Course Conflicts

Students are strongly discouraged from enrolling in courses where scheduled lectures, tutorials or practicals conflict with other courses in which they have already enrolled.

Students who enrol in courses with conflicting lectures, tutorials or practicals may not receive accommodations for conflicting exams, assignments, lecture material, in-class participation, etc.
Course Loads and Overloads

Full-Time versus Part-Time Status

Students who are enrolled in 3.0 credits or more in the Fall-Winter session (September to April) are considered to be full-time, and should attempt to balance their course load evenly between the Fall and Winter terms. Students who are enrolled in 1.5 credits or more in the Summer session (May to August) are considered to be full-time.

Students are considered to be part-time if they are enrol in 2.5 credits or less in the Fall-Winter session, or 1.0 credit or less in the Summer session.

The standard course load for a 20.0 credit, four-year honours degree is 5.0 credits per year.

Course Overloads

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.

12.4 Course Enrolment Outside of UTM

Courses at U of T St. George/U of T Scarborough

U of T Mississauga students are eligible to take courses at other U of T campuses. Enrolment for U of T Mississauga students in U of T Scarborough or U of T St. George 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.

Students must check with their U of T Mississauga academic department before enrolling in a course on other U of T campuses if they wish to have it fulfill their program requirements. The academic department can ensure that the courses are acceptable toward program requirements.

Students should check the Calendar and Timetable documents from the other campuses 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), and Credit/No Credit (CR/NCR) option.

Courses at Other Universities with a Letter of Permission (LOP)

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 15).

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

1. have a cumulative GPA of 1.50 or more;
2. 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 submit the Post-admission Transfer Credit Application 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 submit the Post-admission Transfer Credit Application 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.

Studying Elsewhere without an LOP

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 www.utm.utoronto.ca/lop

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 https://student.utm.utoronto.ca/transfercredit/choose.php

12.5 Enrolment Limitations

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.

12.6 Dropping Courses

Definition of Dropping Courses

Students who wish to drop a course, or courses, must do so on ACORN by the academic drop deadline. Academic dates and deadlines can be found on the Office of the Registrar website.

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 Deadlines for Dropping Courses (Page 30) and Petitions (Page 36).
Late Withdrawal Without Academic Penalty

In the event there are extenuating circumstances preventing a student from completing a course, students would need to petition for Late Withdrawal Without Academic Penalty (WDR). See Petitions (Page 36) for more information.

12.7 Withdrawal and Return from Absence

Cancelling Registration

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 waitlisted for, and cancel their registration on ACORN as soon as possible or, at the latest, by the last date to cancel courses without academic penalty. If students withdraw from a session within a refund period, they must cancel their registration for the session on ACORN before a reversal of fees is issued (see schedule at www.fees.utoronto.ca).

Additionally, students are advised that they must:
1. pay all outstanding fees;
2. return any books to the Library and pay any outstanding fines;
3. vacate any laboratory or athletic lockers and return any university equipment in their possession.

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 participate in class, including attending and submitting assignments, will result in a poor or failing grade.

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.

Return from Absence

Students will need to complete a request to reactivate their student record online (www.utm.utoronto.ca/forms) and pay a fee if their last AND most recent registration was at U of T Mississauga 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 in at least one course (i.e., grades or late withdrawals) 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 U of T Mississauga should follow the procedure outlined in Studying Elsewhere without an LOP (Page 30).

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

Undergraduate Leave of Absence Policy for International Students

Approved Leave of Absence will be permitted for international undergraduate students at UTM who have completed at least one academic term (e.g. Fall 2019 or Winter 2020) with academic standing that is not “On Suspension” or “Refused Further Registration”. Students may request a leave of one term (Fall or Winter) or one academic session (Fall-Winter), for up to a maximum of two consecutive academic years. A Leave of Absence will not be approved for newly admitted (first year or transfer) students who have not yet begun their studies at UTM. Please refer to the policy “Deferring Admission” in the UTM Academic Calendar.

Students may request a leave for the following reasons:

- Serious health, personal or family issues
- Issues related to child birth or child care
- Military service

Students may extend an already approved leave up to and not exceeding two years. Extension beyond two consecutive years will not be approved. Students may elect to continue the leave beyond two years; however, the continuation of the leave will not be documented as an Approved Leave of Absence.

Students do not pay tuition or incidental fees for the period covered by the leave. While on an approved leave, students are not permitted to register for courses, use university student services, participate in student internships, or undergraduate research. They are not eligible for scholarships or awards.

A student who has obtained approval for a Leave of Absence under this policy is not exempt from academic deadlines, financial responsibilities, current or future policies, and fees schedules.

13 Course Work Regulations

13.1 Term Work

Assignments (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
Study Breaks, Reading Weeks, and Examination Periods

13.2 Study Breaks, Reading Weeks, and Examination Periods

Study Breaks take place immediately following the last day of classes of each term. Reading Weeks are scheduled in the Fall (four days following Thanksgiving Monday) and in the Spring (four days following Family Day).

During Study Breaks or Reading Weeks:

- No new content may be introduced
- Optional review sessions may be held
- Instructors may offer extended office hours, at their discretion
- Presentations that are being graded may not be held
- Term tests may not be held
- Make up tests may be scheduled during study break
- Make up tests may be scheduled during reading week, only if mutually agreed upon by instructor and students.

During the Examination Periods:

- No make-up tests or mid-term tests may be held
- Oral exams (including presentation exams) must be scheduled through the Office of the Registrar as per all other exams.

13.3 Re-marking Pieces of Term Work

A student who believes that their 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, they 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 will 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 will 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 will determine a final mark taking into account both available marks.

13.4 Grades Review and Department Appeals

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.

**Departmental Appeals**

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.

**13.5 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 examination period. Term tests may be held outside of regularly scheduled class time (including Saturdays), provided that the term test date and time are available to students in the course syllabus before the first class.

**13.6 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, they must consult the missed test policy in their course syllabus, and follow the instructions outlined to request special consideration for this term work. 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 who is granted special consideration 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 they are 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.

**13.7 Declaration of Temporary 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. Students declare absences via their ACORN account on the day of their absence (or by the day after, at the latest).

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

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.

**14 Examinations**

**14.1 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 schedule is available at www.utm.utoronto.ca/exams. Please note that students cannot re-write an examination that they have already attempted.
Examination Conflicts

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.

Final exam start times are 9:00 a.m., 1:00 p.m., and 5:00 p.m.

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

In the event of a University closure due to unforeseen circumstances such as inclement weather, other emergency, etc., which results in the cancellation of final examinations, the final examination will be rescheduled to the day following the end of the exam period.

14.2 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 where a regularly scheduled course or test at another U of T division conflicts with a UTM final exam, the regularly scheduled course or test will take precedence. The student is responsible for contacting the Office of the Registrar to ensure that the conflict is declared so that appropriate arrangements to reschedule the final exam can be made.

14.3 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.

14.4 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 bag and put them on the floor under their chair. The student must not touch or open the bag during the exam.
5. All electronic devices with storage, including but not limited to, cell phones, smart watches, smart devices tablets, laptops, calculators, etc., 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 bag 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 may be used at an exam except those authorized by the Instructor or Chief 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. No extra time will be given. Students who are more than 30 minutes late for a final exam must report immediately to the Office of the Registrar in the Innovation Complex, Room 1235.
12. 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.
13. 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.
14. 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.

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

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

14.5 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 (Page 35).

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

14.6 External Exams

Students are normally required to write final U of T Mississauga exams on campus. However, if special circumstances arise, they may petition to write a final exam at an external examination centre.

In-class Courses

Students taking in-class courses who are unable to attend the campus to write their final examination(s) and have an exceptional reason, may petition for permission to write the examination at an external examination centre. To do so, the student must submit an online petition under the “Other” category no later than four weeks before the beginning of the examination period. In the petition, the student must clearly indicate the following: that it is a request for an external exam, the name of the centre that the student intends to write at and appropriate contact information.

If the petition is granted, the examination will be written on the originally scheduled date and time at the external examination centre. 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. Such permission is granted only in exceptional circumstances.

Online Courses

In order to be eligible to write a final examination at an external examination centre, students must be located more than 125 km travel distance from campus and have no other exams on campus during the examination period. If the student is eligible and requires invigilation at an external examination centre (i.e., other than UTM), they must submit a petition under the “Other” category no later than 4 weeks after the start of term.

In the petition, the student must clearly indicate the following:

1. that it is a request for an external exam
2. the name of the centre that the student intends to write at and appropriate contact information.

Before the petition is submitted students should review the FAQs for External Examinations – Online Courses (http://tartarus.utm.utoronto.ca/faq).

If the petition request is submitted by the deadline, and the proposed external examination centre is confirmed by the Office of the Registrar, the student may proceed with making arrangements and payment with the centre. The student is responsible for any fees charged by the external examination centre. If the proposed external examination centre cannot be confirmed for any reason, the student will be required to find an alternate location. For more information, students should contact the Office of the Registrar.

14.7 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 missed their final exam due to illness or extenuating circumstances are advised to read Deferred Examinations (Page 35), or visit the Office of the Registrar website for more information.

Students who miss a deferred exam will receive a mark of zero for the exam in the calculation of the final grade. Only under exceptional circumstances (e.g., hospitalization or severe personal emergency), and when supported with strong and compelling evidence, will a petition for a further deferred exam be considered. Students who are granted further deferrals of unwritten final examinations will write the exam the next academic session in which the course is offered.

14.8 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. A $15 fee applies. An “Exam Reproduction Request(s)” form can be found online at www.utm.utoronto.ca/forms.

Requests for a photocopy of the exam must be made within six months of the date of the exam. After that date, all examinations are destroyed.
Examination Grade Re-Check or Re-read

Requests for clerical re-checks and examination re-reads must be made within six months of the date of the exam.

Students who feel that an error has been made in the calculation of their exam grade, may request a clerical re-check with the relevant department.

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).

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. Failure to do so may result in the instructor refusing to re-read an examination.

Please note that the exam grade may increase, decrease or remain unchanged.

15 Petitions

15.1 Definition of Petitions

A petition is a student's formal request for an exception to the rules and regulations of the University. A request must be submitted via the online petition system at [http://registrar.utm.utoronto.ca/student/petitions](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.

The University is governed by a series of rules and regulations that are intended to ensure that all our students are treated equitably and fairly. We acknowledge, however, that in some instances there are valid reasons why students should be granted an exception from these rules. In considering petitions, the Committee on Standing is sensitive to the needs of students who are experiencing problems that are beyond their power to foresee or control, but may not always be able to grant the request.

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.

15.2 Types of Petitions

For a complete list of all petition types and guidelines for submission see the Office of the Registrar website ([www.utm.utoronto.ca/registrar/current-students/petitions](http://www.utm.utoronto.ca/registrar/current-students/petitions)).

15.3 Deferred Examinations (Petition)

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 ([http://student.utm.utoronto.ca/petitions](http://student.utm.utoronto.ca/petitions)) within 72 hours of the missed examination. All supporting documents and payment must also be submitted 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.

Students who are granted a petition to defer their final exam are not excused from any of the work of the course, but may be allowed to write their examination at a later date.

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 further deferral 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 write the exam the next academic session in which the course is offered.

When a student's petition for a deferred examination in a given course is granted, 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, the "SDF" notation will be replaced by the original grade with a grade of "0" for the final examination in the calculation of the final grade. If a petition for a further deferral is granted, the SDF notation will remain on record until the deferred exam has been graded and the amended grade has been approved.

A student who writes a deferred examination in a course that serves as a prerequisite for subsequent courses may enrol in those courses at the discretion of the department, provided that the term mark in the prerequisite (deferred) course is at least 60%. Failure to pass the prerequisite course or to meet other departmental grade standards may result in cancellation of enrolment in the subsequent courses.
15.4 Late Withdrawal Without Academic Penalty (WDR)

Petitions requesting late withdrawal from courses must be filed within six months after the end of the session in which a 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.

15.5 Extension of Time Beyond the End of Term

Instructors have the authority to grant an extension of time for students to submit completed term work before the end of the examination period. 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. The student is expected to consult the instructor about a proposed deadline before petitioning for an extension of time.

When a petition for an extension of time in a given course is granted, 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 hand in the term work by the deadline, the "SDF" notation will be replaced by the original grade with a grade of "0" for the term work in the calculation of the final grade. If a petition for a further extension is granted, the SDF notation will remain on record until the term work has been graded and the amended grade has been approved.

15.6 Supporting Documentation for Petition

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 Accessibility, automobile collision or police reports, death certificate, and supporting documentation from employers, lawyers and other related personnel.

15.7 Appeals

If a student's initial petition request is denied, they may appeal (through the following stepwise processes).

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: In order to appeal the decision of the Committee on Standing, students may download the appeal form from the Academic Appeals Subcommittee website (www.utm.utoronto.ca/dean/academic-appeals-subcommittee). Appeals must be submitted by fax or e-mail within 90 days of the decision of the Committee on Standing.

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.

16 Academic Records

16.1 Transcript and Final Grades

Transcript

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

Individual courses that a student drops by the appropriate academic drop deadline are not shown. Courses in which a student is granted Late Withdrawal After the Drop Date (LWD) will appear on the transcript with the notation LWD. Courses in which a student is granted withdrawal without academic penalty by petition will appear on the transcript with the notation WDR.

Digital copies (eTranscript) or paper copies of the transcript can be ordered through ACORN account or other methods described at www.transcripts.utoronto.ca

A fee of $15 for each transcript ordered is charged to a student's account (if there is an outstanding tuition balance on your account, service charges will apply). Payment can be made online using a credit card.

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

**Final Grades**

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 standing is also available on ACORN and is assessed following GPA calculations. Academic standing is assessed twice a year: at the end of the Fall-Winter session and the end of the Summer session. See Academic Standing (Page 40) for more details on how status is assessed and its implications.

Students may view their final grades on ACORN once they are posted, and they are expected to check the status of their final grades online. In accordance with Ontario's Freedom of Information and Protection of Privacy Act, the Office of the Registrar protects student privacy and will not disclose final grades to students or their designates over the phone, email, or other means of communication.

**Language Citation**

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.
16.2 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></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></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></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></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: A final grade is not available as the course is still in progress.
- **LWD** LATE WITHDRAWAL AFTER THE DROP DATE: If the deadline to drop a course has passed, students may submit a request for a late withdrawal by the appropriate deadline. A notation of LWD will appear on the transcript in lieu of a numerical grade, and will have no impact on the GPA. This notation will appear next to the course code and title under the session in which the course was taken. While there is no academic penalty, students remain responsible for all applicable tuition fees associated with the course.
- **NGA** NO GRADE AVAILABLE: Applied temporarily to a course with an unresolved final mark.
- **SDF** STANDING DEFERRED: This notation will appear on a transcript in lieu of a numerical grade when the completion of a course has been delayed due to exceptional circumstances. Authorized by the Committee on Standing, this notation is by approval only, via petition.
- **WDR** LATE WITHDRAWAL WITHOUT ACADEMIC PENALTY: By approval only, the Committee on Standing will authorize a WDR notation for an incomplete course that has been dropped after the relevant deadline. In cases where a student has faced exceptional circumstances outside of their control, a petition may be submitted online. While there is no academic penalty, students remain responsible for all applicable tuition fees associated with the course.

### 16.3 Grade Point Average

There are three types of grade point averages:

1. **Sessional GPA** is based on all passed and failed courses completed in a single term (i.e., Fall or Winter) or session (Summer). Sessional GPA is calculated three times during the academic year: Fall term (September-December), Winter term (January-April), or Summer session (May-August).
2. **Annual GPA** is based on all passed and failed courses completed in the Fall-Winter session only (September-April), and is calculated at the end of the Winter term.
3. **Cumulative GPA** takes into account all passed and failed courses.

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

Grade point average (GPA) is the weighted sum 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.

The minimum cumulative GPA required to remain in good standing is 1.50. More information on grade calculation can be found in the Course Work Regulations (Page 31) 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 16) section of this Calendar.

Every course in which students remain registered after the last date to withdraw without academic penalty (LWD) will appear on their transcript.

UTM’s CGPA calculator is available at http://student.utm.utoronto.ca/cgpa. Students can access the tool by using their UTORid to login. Students may also use the U of T GPA Calculator at https://gpacalc.utoronto.ca/calculator.

### 16.4 Academic Standing

There are four kinds of academic standing: In Good Standing; On Probation; On Suspension; Refused Further Registration.

Students who have attempted at least 0.5 credits at the university will be assessed for academic standing as follows:

1. Students who achieve a cumulative GPA of at least 1.50 are considered to be in **good standing**.
2. Students will 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 (Fall/Winter or Summer) during which they are on probation:
   (a) have a cumulative GPA of 1.50 or more will 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, will 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, will be suspended for one calendar year unless they have been suspended previously, in which case they will be suspended for three calendar years.

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

Students whose academic performance has resulted in probation, suspension or refusal of further registration will be notified by email. 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 students’ registration in that session and refund their tuition fees.

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.

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 program 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.

In courses with a final exam, the CR/NCR option must be requested or cancelled no later than the last day of classes in the term in which the course was offered. In courses with no final exam, the deadline to request or cancel CR/NCR is before the date of the final test or the due date of the final assignment.

The CR/NCR option cannot be used for a course in which the student has committed an academic offence. If a student has requested the CR/NCR option in a course in which they commit 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.

17 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 Esteban Parra  
E-mail: anthrochair.utm@utoronto.ca  
Undergraduate Administrator: Angela Sidiariak, Room 396, Terrence Donnelly Health Sciences Complex  
Contact: utm.anthro@utoronto.ca, 905-828-3726  
Program Areas Offered: Anthropology (Arts), Anthropology (Science)
Anthropology is the study of humankind from its beginning to the present day. Many disciplines concern themselves with humans, but only anthropology seeks to understand the whole panorama of human existence - in geographic space and evolutionary time - through comparative and holistic study.

The interests of UTM’s full-time faculty members reflect the broad mandate of anthropology, covering all four subfields: archaeology, linguistic anthropology, socio-cultural anthropology and biological anthropology. Our strengths include political and environmental anthropology, anthropology of health and forensic anthropology.

Our goal as a department is to train students in the fundamentals of all the subfields. We aim to produce students who are curious about the world in its complexity, who can critically assess the human condition, and who are well versed in the skills, theories, and databases of anthropology. Students can earn either BA or BSc degrees, providing many flexible career options. For more information on the department visit visit www.utm.utoronto.ca/anthropology.

Biology

Department Chair: Professor Joel Levine
E-mail: biocchair.utm@utoronto.ca
Undergraduate Advisor: Diane Matias,
Room 3057, William G. Davis Bldg.
Contact: d.matias@utoronto.ca

Program Areas Offered: Biology (Specialist, Major, and Minor), Biomedical Communications (Minor), Biotechnology (Specialist), Comparative Physiology (Specialist), Ecology and Evolution (Specialist), Health Science (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: Lindsay Schoenbohm
E-mail: cpschair.utm@utoronto.ca
Academic Counsellor: Christina Fortes

Departmental Structure and Programs

Economics

Department Chair: Professor Margarida Duarte
E-mail: margarida.duarte@utoronto.ca
Student Advisor: Ferzeen Sammy
Room KN3252, Innovation Complex
Contact: ferzeen.sammy@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 Alexandra Gillespie
E-mail: alexandra.gillespie@utoronto.ca
Undergraduate Advisor: Megan Janssen
Room 5250, New North Building
Contact: megan.janssen@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, Geomatics and Environment

Department Chair: Professor Yuhong He
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 humans 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 Department of Geography, Geomatics and Environment. 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 Marjadasingh
E-mail: hs.advisor@utoronto.ca

Program Areas Offered: Classical Civilization, Diaspora and Transnational Studies, History, History and Political Science, History of Religions, Latin American & Caribbean Studies, South Asian Humanities, 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 Humanities, 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: Professor Emmanuel Nikiema
E-mail: langstudies.chair@utoronto.ca
Undergraduate Counsellor: Rosa Ciantar
Contact: undergrad.langst@utoronto.ca


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: Natasha Hanif
Room 2270, Kaneff Centre
Contact: mgadvisor@utoronto.ca, 905-569-5752

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
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: chairmcgutm@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: Jane Medeiros
Rm 206, Academic Annex
Contact: ugadvisor.philosophy.utm@utoronto.ca, 905-569-4601

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? 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: Dr. Ashley Monks
E-mail: psychair.utm@utoronto.ca
Associate Chair and Undergraduate Director: Dr. Stuart Kamenetsky
Room 4006, Deerfield Hall
Contact: stuart.kamenetsky@utoronto.ca, 905-828-3958
Academic Counsellor: Jodie Stewart
Room 4094, Deerfield Hall
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 Philip Goodman
E-mail: p.goodman@utoronto.ca
Associate Chair, Undergraduate: Professor Erik Schneiderhan
E-mail: e.schneiderhan@utoronto.ca
Academic Counsellor: Ania Joly
E-mail: ania.joly@utoronto.ca
Program Officer: Joanna Mackie
E-mail: joanna.mackie@utoronto.ca
Website: www.utm.utoronto.ca/sociology

Program Areas Offered: Sociology, Criminology, Law and Society

The Department of Sociology offers five programs: a Minor, Major and Specialist in Sociology and a Major and Specialist in Criminology, Law and Society. Sociologists study social structures and social processes. These structures include, the family, social class, race and ethnic relations, religious affiliation, criminal behaviour and the criminal justice system, the global system and the environment among many others. As a science, sociologists are committed to rigorous research including both quantitative and qualitative data. The Criminology, Law and Society 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: a) students who at a later stage may wish to pursue more advanced work in areas related to, for example, law, criminology, criminal justice, public policy, or social work; and b) students wanting to know more about the complexities of criminal and deviant behaviour, and the administration of legal and criminal justice, particularly in relation to public policy issues.

Visual Studies

Department Chair: Alison Syme
E-mail: dvschair.utm@utoronto.ca
Undergraduate Counsellor: Stephanie Sullivan

E-mail: s.sullivan@utoronto.ca
Contact: Ph. 905-828-3899, Fax: 905-569-4262
Website: www.utm.utoronto.ca/dvs

Program Areas Offered: Art History (Specialist, Major, Minor), Art and Art History (Specialist, Major), Cinema Studies (Minor), Visual Culture and Communication (Specialist), Visual Culture (Minor)

The Department of Visual Studies (DVS) examines the place of visuality in human experience through a wide range of methods, theories, and media. In fostering deep and critical engagement with visual evidence, DVS programs help students develop expertise in visual literacy, a fundamental skill in today’s image- and media-saturated environment. Courses offered in the DVS examine the history, production, and reception of a range of visual media, including painting, sculpture, architecture, and the built environment; contemporary art, curatorial studies, and museum culture; photography, new media, popular culture, and advertising; and time-based media, including film and television. Course offerings cover many geographical and chronological settings, from ancient Rome to contemporary 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 Rhonda McEwen
Associate Director and Program Advisor (DEM): Brett Caraway
Associate Director and Program Advisor (PWC): Tracey Bowen
E-mail: iccit.utm@utoronto.ca
General Inquiry: 905-569-4489
Undergraduate Program Coordinator: Truc Tran
Room 3010, CCT Building
E-mail: truc.tran@utoronto.ca
Program Areas Offered: Communication, Culture, Information & Technology; Digital Enterprise Management, Professional Writing and Communication.
18 PROGRAMS

Anthropology (HBA, HBSc)

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M. Kleindienst, B.A., M.A., Ph.D.
B. Sigmon, B.S., M.S., Ph.D.

Professors
V.F. Bozcali, B.A., M.A., Ph.D.
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S. Fukuzawa, B.Sc., Ph.D.
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H.M-L. Miller, B.A., M.Sc., M.A., Ph.D.
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E. Parra, B.Sc., M.Sc., Ph.D.
T.L. Rogers, B.A., M.A., Ph.D.
D.R. Samson, B.A., M.A., Ph.D.
T. Sanders, B.A., M.A., M.Sc., Ph.D.
S. Scharper, B.A., M.A., Ph.D.
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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, sociocultural and linguistic. We also have strengths in forensic anthropology and medical anthropology. Our faculty studies a broad array of topics and can be viewed at: https://www.utm.utoronto.ca/anthropology/people/full-time-faculty/about-our-faculty.

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, ANT310H5, ANT312H5, ANT314H5, ANT318H5, ANT320H5, ANT327H5, 300-level prehistory courses for regions of interest (ANT309H5, ANT313H5, ANT316H5, ANT317H5), ANT358H5 and/or ANT364H5, ANT407H5, ANT414H5, ANT415H5, ANT416H5, ANT460H5 (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, ANT306H5 or ANT318H5, ANT312H5, ANT314H5, ANT331H5, ANT332H5, ANT333H5, ANT334H5, ANT337H5, ANT338H5, ANT340H5, ANT341H5, ANT407H5, ANT415H5, ANT434H5, ANT436H5, ANT438H5, ANT439H5, ANT441H5, and prehistory courses for regions of interest (e.g., ANT317H5 for Ontario and 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, ANT312H5, ANT331H5, ANT332H5, ANT333H5, ANT334H5, ANT337H5, ANT338H5, ANT340H5, ANT341H5, ANT407H5, ANT415H5, ANT434H5, ANT436H5, ANT437H5, ANT438H5, ANT439H5, and prehistory courses for regions of interest (e.g., ANT317H5 for Ontario and Eastern North America). Students may also want to consider courses available through Forensic Science and Biomedical Communications and Biology.

Linguistic Anthropology: ANT362H5, ANT364H5, ANT365H5, ANT401H5, ANT460H5; JAL253H5, JAL353H5, JAL355H5. Students may also want to consider courses available through Linguistics.
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**Sociocultural Anthropology:** ANT335H5, ANT351H5 or ANT354H5, ANT357H5, ANT358H5, ANT360H5, ANT364H5, ANT365H5, ANT460H5. Of all these strongly recommended courses, the methods course should be a top priority for specialists and majors.

**Generalist Anthropology** (broad grounding in the various subfields, for maximum career flexibility): Consider taking these core second-year courses: ANT200H5, ANT201H5, ANT202H5, ANT203H5, ANT204H5, ANT206H5, ANT207H5; Advanced courses: ANT312H5, ANT314H5, ANT318H5, ANT331H5 and 335H5, ANT334H5, ANT337H5, ANT338H5, ANT358H5, ANT362H5, ANT365H5, ANT365H5, ANT438H5, ANT460H5

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 21).

Students should also review the Degree Requirements (Page 15) section prior to selecting courses.

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**Specialist Program ERSPE0105 Anthropology (Science)**

10-10.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits (including ANT101H5 and ANT102H5), and a CGPA of at least 2.0 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5), and achieved a CGPA of at least 2.0.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits and a GPA of at least 2.0 in ANT101H5 and ANT102H5 and ISP100H5 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5 and ISP100H5), and achieved a GPA of at least 2.0 in all ANT courses (including JAL and HSC courses) as well as ISP100H5.

**First Year:**

- For students entering the program in 2020-2021: ANT101H5 and ANT102H5
- For students entering the program in 2021-2022 (and beyond): ANT101H5 and ANT102H5 and ISP100H5

**Second Year:**

- ANT200H5 and ANT201H5 and ANT202H5 and ANT203H5 and ANT204H5
- ANT206H5 or ANT207H5
- For students entering the program in 2021-2022 (and beyond): ANT220H5

**Higher Years:**

- For students entering the program in 2020-2021: 6.0 additional ANT credits, of which 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 credit at the 400 level.

- For students entering the program in 2021-2022 (and beyond): 5.5 additional ANT credits, of which at least 4.0 must be ANT science courses. At least 3.5 of the 5.5 credits must be at the 300/400 level, including 1.0 credit at the 400 level.

**NOTE:** HSC403H5 and HSC404H5 are science credits and can be used to fulfill ANT program requirements.

**Specialist Program ERSPE1775 Anthropology (Arts)**

10-10.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits (including ANT101H5 and ANT102H5), and a CGPA of at least 2.0 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5), and achieved at least 65% in any two of ANT204H5 or ANT206H5 or ANT207H5, and achieved a CGPA of at least 2.0.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits and a GPA of at least 2.0 in ANT101H5 and ANT102H5 and ISP100H5 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5 and ISP100H5), and achieved a GPA of at least 2.0 in all ANT courses (including JAL and HSC courses) as well as ISP100H5.

**First Year:**

- For students entering the program in 2020-2021: ANT101H5 and ANT102H5
- For students entering the program in 2021-2022 (and beyond): ANT101H5 and ANT102H5 and ISP100H5

**Second Year:**

- ANT200H5 and ANT201H5 and ANT202H5 and ANT203H5 and ANT204H5
- ANT206H5 or ANT207H5
- For students entering the program in 2021-2022 (and beyond): ANT220H5
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• For students entering the program in 2020-2021: ANT101H5 and ANT102H5
• For students entering the program in 2021-2022 (and beyond): ANT101H5 and ANT102H5 and ISP100H5

Second Year:

• ANT204H5 and ANT206H5 and ANT207H5
• For students entering the program in 2020-2021: (ANT200H5 and ANT201H5) or (ANT202H5 and ANT203H5)
• For students entering the program in 2021-2022 (and beyond): (ANT200H5 and ANT201H5) or (1.0 credit from ANT202H5 or ANT203H5 or ANT220H5)

Higher Years:

• For students entering the program in 2020-2021: 6.5 additional ANT credits. At least 4.0 of these credits must be at the 300/400 level, including 1.0 credit at the 400 level.
• For students entering the program in 2021-2022 (and beyond): 6.5 additional ANT credits. At least 4.0 credits must be at the 300/400 level, including 1.0 credit at the 400 level.

NOTE: JAL253H5 and JAL353H5 and JAL355H5 are social science credits and can be used to fulfill ANT program requirements.

Major Program ERMAJ0105 Anthropology (Science)

7.0-7.5 credits are required.

Limited Enrolment – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits (including ANT101H5 and ANT102H5), and a CGPA of at least 2.0 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5), and achieved a CGPA of at least 2.0.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits and a GPA of at least 2.0 in ANT101H5 and ANT102H5 and ISP100H5 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5 and ISP100H5), and achieved a GPA of at least 2.0 in all ANT courses (including JAL and HSC courses) as well as ISP100H5.

For students entering the program in 2020-2021: ANT101H5 and ANT102H5
• For students entering the program in 2021-2022 (and beyond): ANT101H5 and ANT102H5 and ISP100H5

Second Year:

• ANT200H5 and ANT201H5 and ANT202H5 and ANT203H5 and ANT204H5
• ANT206H5 or ANT207H5
• For students entering the program in 2021-2022 (and beyond): ANT220H5

Higher Years:

• For students entering the program in 2020-2021: 3.0 additional ANT credits, of which 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 credit at the 400 level.
• For students entering the program in 2021-2022 (and beyond): 2.5 additional ANT credits, of which at least 2.0 must be ANT science courses. At least 1.0 of the 2.5 credits must be at the 300 level, including 0.5 credit at the 400 level.

NOTE: HSC403H5 and HSC404H5 are science credits and can be used to fulfill ANT program requirements.

Major Program ERMAJ1775 Anthropology (Arts)

7.0-7.5 credits are required.

Limited Enrolment – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits and a CGPA of at least 2.0 is required. Additionally, within the 4.0 credits, ANT101H5 and ANT102H5 must be completed with a minimum grade of 65% in both. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5), and achieved at least 65% in any two of ANT204H5 or ANT206H5 or ANT207H5, and achieved a CGPA of at least 2.0.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits and a GPA of at least 2.0 in ANT101H5 and ANT102H5 and ISP100H5 is required. Students applying to enrol after second year must have completed 8.0 credits (including ANT101H5 and ANT102H5 and ISP100H5), and achieved a GPA of at least 2.0 in all ANT courses (including JAL and HSC courses) as well as ISP100H5.

First Year:
• For students entering the program in 2020-2021: ANT101H5 and ANT102H5
• For students entering the program in 2021-2022 (and beyond): ANT101H5 and ANT102H5 and ISP100H5

Second Year:

• ANT204H5 and ANT206H5 and ANT207H5
• For students entering the program in 2020-2021: (ANT200H5 and ANT201H5) or (ANT202H5 and ANT203H5)
• For students entering the program in 2021-2022 (and beyond): (ANT200H5 and ANT201H5) or (1.0 credit from ANT202H5 or ANT203H5 or ANT220H5)

Higher Years:

• For students entering the program in 2020-2021: 3.5 additional ANT credits. At least 1.0 of these credits must be at the 300 level, including 0.5 credit at the 400 level.
• For students entering the program in 2021-2022 (and beyond): 3.5 additional ANT credits. At least 1.0 credit must be at the 300 level, including 0.5 credit at the 400 level.

NOTE: JAL253H5 and JAL353H5 and JAL355H5 are social science credits and can be used to fulfill ANT program requirements.

Minor Program ERMIN1775 Anthropology (Arts)

4.0 credits are required.

First Year:

• ANT101H5 and ANT102H5

Second Year:

• 1.5 credits from ANT200H5 or ANT201H5 or ANT202H5 or ANT203H5 or ANT204H5 or ANT206H5 or ANT207H5 or ANT220H5

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 ANT social science credits. HSC403H5 and HSC404H5 are counted as ANT 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 or 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 or 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 or 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 or ANT200Y1
Prerequisite: ANT101H5
Recommended Preparation: ANT102H5

ANT202H5 Biological Anthropology: Human Variation and Adaption (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 or ANT203Y1 or ANTB15H3
Prerequisite: ANT101H5

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 or ANT203Y1 or ANTB14H3
Prerequisite: ANT101H5 or 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 or ANT207H1 or 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 or BIO152H5

ANT206H5 Culture and Communication (SSc)
Introduction to linguistic anthropology and sociolinguistics. This includes: the issue of meaning in language, the use 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 or ANT253H1 or 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, 12T]
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]

ANT2010H5 Fantasies, Hoaxes and Misrepresentations of the Ancient World (SCI)
Have you ever wondered why television programs like Ancient Aliens are so popular or if they have any merit? Have you also wondered why outrageous ideas about the human past seem to be more popular than the message science presents? This course critically evaluates the anatomy of significant hoaxes, outrageous claims, and just plain old "bad archaeology" in popular culture. Students will develop the tools to critically evaluate potential hoaxes and fictional accounts of the past by investigating a wide variety of cases that range from attempts to rewrite history using fake discoveries, to the simply outrageous claims created in order to promote racist agendas, to make money, or just for the fun of duping an unsuspecting public. [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 conceptualize 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 recognize 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]

ANT215H5 How Should One Live? An Introduction to the Anthropology of Ethics (SSc)
Few questions are more obviously important than that which Socrates poses in Plato's Republic: "how should one live?" This course considers the various ways this question has been asked and the answers it has received across a range of very different contexts. It begins with Socrates' address to the Athenian assembly in The Apology and his conclusion that the examined life is the only one worth living. We then turn to the Greek past and the Homeric background against which the reflective life, that Socrates exemplified, stood in stark contrast. With this background in place we will proceed to consider the various ways in which the question of how one should live has been answered across a range of social settings. Drawing on ethnography as well journalism and documentary film we will consider, for instance, Rastafarianism, Jainism, living "off-grid" in North America, deaf communities in the US, transgenderism, and non-binary gender identity. [24L] Recommended Preparation: ANT102H5

ANT216H5 Racketeers, Smugglers and Pirates: Anthropology of Illegality (SSc)
This course will explore anthropological approaches to the study of various forms of illegal activities. Denaturalizing the state-imposed categories of legality and illegality, the course will examine how the legal-illegal divide is constructed contingently, and unpack moralities, inequalities, precarities, and forms of politics that illegal activities both rely on and make possible. The course will bring together recent ethnographies of racketeering, gang violence, piracy, human trafficking and contraband smuggling from different world regions. [24L]
ANT217H5 Anthropology of Law (SSc)
The course is designed to introduce the key concepts, issues, and methods of legal anthropology as a specific field of study in relation to the larger history of the discipline. The course will explore how anthropological works understand and examine the legal and social orders, political and normative authorities, frames of rights, regimes of crime and punishment, and forms of justice-seeking. Accounting for different understandings of law and everyday legal practices, the course readings include canonical texts of legal anthropology as well as recent ethnographies of law. [24L]

ANT218H5 The Social Conquest of Earth (SCI)
This course is a quest for the secret of human uniqueness. The success of *Homo sapiens*, has been described as "a spectacular evolutionary anomaly" that has resulted in human domination of the Earth's biosphere. We will use the comparative method to journey through the Animal Kingdom in hopes of discovering the preadaptive elements that enabled such incredible evolutionary success. On our way we will survey chimpanzee warfare, tool using octopuses, eusocial ants, and night-time hunter-gatherer sentinels - all of which will allow us to better understand the forces that shaped unparalleled cooperative networks in humans. Finally, we will investigate the cognitive and behavioural blessings and curses associated with the drive to belong to a group. The goal of the course is to equip students with a greater understanding of the human condition - and how to leverage this understanding to improve their lives. [24L]

ANT219H5 How Do We Know? The Social Anthropology of Knowledge (SSc)
"How do we know what we know?" is a question that has long concerned anthropologists. And in a world like ours - where "fake news," religious credos and conspiracy theories coexist with common sense, mainstream media and scientific truth(s) - the question seems more important than ever. This course explore anthropological insights into knowledge and the question of how we know. To do so we will examine a range of contemporary knowledge-making activities which may include surveillance, witchcraft, conspiracy, governance, Artificial Intelligence and Big Data. [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]

\textit{Exclusion:} ANT208H1

\textit{Prerequisite:} ANT101H5 and ANT102H5

ANT241H5 Anthropology and the Indigenous Peoples of Turtle Island (in Canada) (SSc)
This course will examine the relationship between the field of anthropology and Indigenous people of Turtle Island. We will examine the past, present, and future manifestations of this relationship. This course will emphasize Indigenous, decolonial, and community scholars. Students will be encouraged to think critically and reflect on their own world views. [24L]

\textit{Exclusion:} ANT241Y5

ANT299H5 Research Opportunity Program (SSc,SCI,EXP)
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 299H5 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. Experiential and International Opportunities (Page 23) for more details.

\textit{Exclusion:} ANT299Y5

ANT299Y5 Research Opportunity Program (SSc,SCI,EXP)
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 and International Opportunities (Page 23) for more details.

\textit{Exclusion:} ANT299H5

ANT300H5 Cultural Heritage Management: The Past in the Present and for the Future (SCI)
Cultural Heritage Management, also known as cultural resource management or applied archaeology, aims to protect traces of the past such as artifacts, archaeological sites and cultural landscapes, that have meaning for people in the present. This course takes a broad look at cultural heritage, why it matters in the present, and why we need to preserve aspects of it for the future. Topics may include stakeholders and the politics of the past, mechanisms for the protection of heritage and archaeological sites, the heritage management industry, and the methods used to identify, document, and mitigate impacts to archaeological sites, and to preserve the materials recovered. [24L]

\textit{Prerequisite:} ANT200H5 and ANT201H5
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
Limited Enrolment and Application Process: see Anthropology department website for more details.

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: ANT200H5 and ANT201H5

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 archeological 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: ANT200H5 and ANT201H5

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: ANT200H5 and ANT201H5

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, choose methods of survey and excavation, describe and organize data for analysis, and summarize findings in a project report. [12L, 24P]
Exclusion: ARH312Y1
Prerequisite: ANT200H5 and ANT201H5
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: ANT200H5 and ANT201H5

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 archaeology; 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: ANT200H5 and ANT201H5

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, 12T]
Prerequisite: (ANT200H5 and ANT201H5) or HIS282H5 or RLG205H5
ANT317H5 Pre-contact Indigenous History of Eastern North America (SCI)
This course is a survey of pre-contact and early contact Indigenous history in the Eastern Woodlands of North America from earliest times (ca. 12-15,000 years ago) until AD 1650. Topics covered will include earliest inhabitants, hunter-gatherer-fisher lifeways, the origins of food production, development of village-dwelling tribal communities, and first contact with Europeans. [24L]
Exclusion: ANT317H1
Prerequisite: ANT200H5 and ANT201H5

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: ANT200H5 and ANT201H5
Limited Enrolment and Application Process: see Anthropology department website for more details.

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: ANT200H5 and ANT201H5
Recommended Preparation: ANT204H5 or ANT207H5

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 or ANT207H5

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: ANT200H5 and ANT201H5

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 and ANT331Y5
Prerequisite: ANT202H5 or ANT203H5 or ANT211H5
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 or ANT335Y1 or ANTC16H3 or ANTC17H3
Prerequisite: ANT202H5 and ANT203H5

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 or ANT335Y1 or ANTC16H3 or ANTC17H3
Prerequisite: ANT332H5

ANT334H5 Human Osteology (SCI)
In this course students are given hands-on experience in the identification of the normal anatomy of the adult human skeleton with accompanying muscle function. Metrical variation, growth and development, bone histology, and methods of individual identification are introduced. [12L, 36P]
Exclusion: ANT334Y5 or ANT334H1 or ANT334Y1 or ANTC47H3
Prerequisite: ANT202H5 and ANT203H5
ANT335H5 Anthropology of Gender (SSc,INTLO)
Survey of the function of gender roles from evolutionary and cultural perspectives. Cross-cultural variation in human sexual behaviour and gender will be examined. In some years, as part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. See Anthropology department website for more details. [24L]
Exclusion: ANT331Y5 or ANT343Y1 or ANT343H1 or ANTC15H3
Prerequisite: ANT204H5 or ANT206H5 or ANT207H5
Recommended Preparation: ANT202H5 and ANT203H5

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 or ANT203H5) and ANT220H5

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. Students conduct anthropometric assessment of growth and body size, nutrition assessment through 24-hour dietary recall, and assessment of physical activity and sleep using triaxial accelerometry. These biometric techniques have numerous applications in both research and clinical settings. Students in this course will develop applied skills in bioanthropological assessment that can be used in the fields of anthropology, population health, public health nutrition, and human development. [12L, 24P]
Prerequisite: (ANT202H5 or ANT203H5) and ANT220H5

ANT340H5 Osteological Theory and Methods (SCI)
This course instructs students in the osteological methods used to interpret the life course of past populations, and the theory underlying these analyses. We will explore how skeletal analyses are employed to interpret group identity and behaviour using a biocultural approach and will address ethical issues pertaining to human remains, including the goals of descendant populations. The theoretical underpinnings of osteobiographical analyses, biological distance studies, paleopathology, and paleodemography will be outlined. Students will observe human morphological skeletal variation as a result of taphonomic processes, sex, age, pathological conditions, and non-metric variance. [24L, 24P]
Exclusion: ANT334Y5 or 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 or ANT204H5) and 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 or ANT207H5
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 and ANTC19H3 and ANTC20H3
Prerequisite: ANT204H5 or ANT207H5

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 or ANT207H5 or POL113H5 or 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 or ANT207H5

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 and ANTC457H5
Prerequisite: ANT204H5

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 and ANTC60H3
Prerequisite: ANT204H5 or ANT207H5

ANT360H5 Anthropology of Religion (SSc)
This course considers anthropological approaches to western and non-western religions and religious phenomena. [24L]
Exclusion: ANTC33H3
Prerequisite: ANT204H5 or ANT207H5

ANT361H5 Language and Culture in Southeast Asia (SSc)
This course will review the rich tradition of research in linguistic anthropology in Southeast Asia while also drawing selectively on the equally rich tradition of research in socio-cultural anthropology. While the course will focus on the structures and uses of language, the discussion will be contextualized within a broader socio-historical and political frame that considers the long history of trade and migration that has shaped the region as well as the more recent legacies of colonialism, nationalism, socialism and post-socialist market reform. [24L]
Prerequisite: ANT204H5 or ANT206H5

ANT362H5 Language in Culture and Society (SSc)
The course aims to introduce students to theoretical questions and contemporary research in linguistic anthropology. Topics include language ideologies, language and media, language and embodiment, as well as core theories in linguistic anthropology. [24L]
Prerequisite: ANT204H5 or ANT207H5 and ANT206H5

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. [12L, 12S]
Prerequisite: ANT204H5 or ANT207H5
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 or ANT206H5 or 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 or ANT206H5 or JAL353H5

ANT367H5 Sister Species: Lessons from the chimpanzee (SCI)
Chimpanzees are our closest living relatives. In this course we will examine chimpanzee behavior, ecology, morphology, physiology, language, intelligence, and genetics. Through lectures, labs, films and writing assignments we will get an intimate look at every aspect of chimpanzee biology and behavior. Among questions asked will be: Why do animals use or not use tools? Why are animals aggressive? How does physiology influence what chimpanzees can eat and what's healthy to eat? Can chimpanzees use language? Do chimpanzees use medicine? Just how different are chimpanzee bones, muscles, and brains from ours? Throughout the class we will turn to use chimpanzees as a model to better understand ourselves and our place in nature. [24L]
Prerequisite: ANT202H5 and ANT203H5

ANT368H5 World Religions and Ecology (SSc,INTLO)
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. In some years, students may additionally have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. [24L]
Exclusion: RLG311H5
Prerequisite: ANT204H5 or ANT207H5 or RLG101H5 or ENV100Y5

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 or ANT207H5 or RLG101H5

ANT370H5 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 or ANT207H5 or ENV100Y5

ANT380H5 Special Topics in Biological Anthropology and Archaeology (SCI)
Special course on selected topics in biological anthropology and/or archaeology; focus of topic changes each year. [24L]
Prerequisite: Appropriate 200-level prerequisite core course requirement(s) will be posted on the departmental website along with the Special Topics title and description prior to course registration.
ANT399Y5 Research Opportunity Program (SSc,SCI,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. Participating faculty members post their project descriptions for the following summer and fall/winter sessions in early March.

For details see Experiential and International Opportunities (Page 23).

Exclusion: ANT399H5

ANT402H5 Wild Nights: Sleep, evolution, and performance in the 21st century (SCI)
Sleep is essential to cognitive function and health in humans, yet the ultimate reasons for sleep - that is, 'why' we sleep - remains mysterious. This course integrates research findings from human sleep studies, the ethnographic record, and the ecology and evolution of mammalian and primate sleep to better understand sleep along the human lineage and in the modern world. Students will learn how to use 'wearable' technology, such as actigraphy, for scientific research. The goal of the course is to empower students with the theoretical and technological tools to be able to not only critically assess their own sleep-wake behaviour and performance but also popular generalizations about how to maximize long-term health outcomes. [12L, 12S]

Prerequisite: (ANT202H5 or ANT203H5 or ANT220H5) and 2.0 credits in 300-400 level Anthropology or Psychology or Biology courses

Recommended Preparation: Priority may be given to students who are considering a Master's thesis in anthropology, psychology, or biology. Basic statistics.

ANT403H5 Social Learning and Cultural Patterns (SCI)
Social learning is fundamental to human experience, through which individuals, societies, and generations share information and practices, and form cultural patterns and norms. Learning how to do something is also learning how to be a member of a society. Understanding social learning enables us to make the connections between the population-level, intergenerational cultural phenomena and the measurable individual-level process. This course uses case studies from anthropology, psychology, and biology to discuss the social, psychological, and biological foundations of social learning and the roles of social learning in enabling the accumulation of knowledge in human societies and shaping cultural patterns. [24S]

Exclusion: None

Prerequisite:
(1) At least three courses from: ANT200H5 or ANT201H5 or ANT202H5 or ANT204H5 or ANT206H5 or ANT218H5
(2) 2.0 credits at the 300-400 level in Anthropology or Psychology or Biology courses
ANT404H5 Current Topics in Palaeoanthropology (SCI)
This course will introduce students to cutting-edge developments in the palaeoanthropological field. The weekly seminars will be strongly research-based, incorporating the latest discoveries, publications and debates. This course will also involve an in-class practical component during which the extensive cast collection in the department will be utilized, together with new 3D methods for fossil visualization. The goal of this course is to: 1) reinforce key theoretical concepts traditionally applied in the field, and 2) provide students with knowledge of the more recent debates and methodological approaches currently pushing the boundaries of palaeoanthropology. [12S, 12P]
Prerequisite: ANT202 and ANT203 and 1.0 credits in 300-level anthropology courses and departmental approval. Recommended Preparation: ANT332H5 and ANT333H5

ANT407H5 Quantitative Methods in Archaeology and Biological Anthropology (SCI)
This course will provide students with the basic analytic background necessary to evaluate quantitative data in biological anthropology and archaeology. Students will be introduced to foundational statistical concepts and research methods suitable for anthropological exploration. The focus will be on analysing univariate and bivariate data using both nonparametric and parametric statistical techniques, hypothesis testing, and methods of data collection. The goal of this course is for students to learn how to manipulate simple datasets, ask and answer theoretically relevant questions, and choose the appropriate statistical test for a given research problem. Students will receive hands-on training during lab components and will learn how to analyse data using relevant statistical software. Students will have access to a number of biological anthropology and archaeology datasets for class assignments. No prior knowledge of statistics and mathematics is required. [24L, 12P]
Exclusion: ANTC35H3 and BIO360H5 and BIO361H5 and ECO220Y5 and ECO227Y5 and PSY201H5 and PSY202H5 and SOC300Y5 and (SOC350H5 and SOC351H5) and STA218H5 and STA220H5 and STA221H5 and STA256H5 and STA258H5 and STA260H5
Prerequisite: (ANT200H5 and ANT201H5) or (ANT202H5 and ANT203H5)

ANT414H5 People and Plants in Prehistory (SCI,EXP,INTLO)
The relationship between plants and people through time offers important insights into our past, particularly human-environmental interaction, plant domestication, and agricultural origins and development. Students will learn archaeological plant remains identification and interpretation skills through a combination of laboratory and seminar sessions. In some years, students may additionally have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. Skills learned in this course are also useful in forensic investigations. Students will develop a project based on archaeological material from Japan and/or Ontario in consultation with the instructor. [12L, 24P]
Prerequisite: ANT200H5 and ANT201H5 and 0.5 credit at a 300-level archaeology course, or permission of department Limited Enrolment

ANT415H5 Faunal Archaeo-Osteology (SCI)
Examination and interpretation of faunal material from archaeological sites, to obtain cultural information regarding the site occupants. [12L, 36P]
Exclusion: ANT415Y5 and ANT415Y1
Prerequisite: (ANT200H5 and ANT201H5) and (ANT306H5 or ANT308H5 or ANT312H5 or ANT318H5)
Recommended Preparation: ANT312H5 or (ANT334H5 and ANT340H5)

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)
Practical experience on an archaeological site during the last two weeks of August, followed by weekly laboratory sessions September to December. Advanced practical experience for students who completed ANT318 and are ready for more advanced field experiences. [27L, 101P]
Prerequisite: ANT318H5
Limited Enrolment and Application Process: see Anthropology department website for more details.
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 and 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 Advanced Seminar in Biological Anthropology and Archaeology (SCI)
Special seminar on selected topics in any scientific aspect of anthropology, including one or more sub-fields; focus of seminar changes each year. [24S]
**Prerequisite:** Appropriate 200-level and 300-level prerequisite core course requirement(s) will be posted on the departmental website along with the Special Topics title and description prior to course registration.

ANT433H5 Advanced Seminar in Sociocultural and Linguistic Anthropology (SSc)
Special seminar on selected topics in any social science aspect of anthropology, including one or more sub-fields; focus of seminar changes each year. [24S]
**Prerequisite:** Appropriate 200-level and 300-level prerequisite core course requirement(s) will be posted on the departmental website along with the Special Topics title and description prior to course registration.

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, 36P]
**Prerequisite:** ANT334H5
**Corequisite:** ANT340H5

ANT435H5 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:** (ANT202H5 and ANT203H5) and 1.0 credits in 300 level Anthropology 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 or ANT204H5) and 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:** (ANT202H5 and ANT203H5) and 1.0 credit in 300 level Biological Anthropology courses

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, 36P]
ANT439H5 is offered in alternate years, alternating with ANT441H5.
**Prerequisite:** ANT205H5 and ANT334H5
**Corequisite:** ANT340H5
**Recommended Preparation:** ANT306H5

ANT441H5 Advanced Bioarchaeology (SCI,EXP)
This course provides students with problem-based, experiential learning in bioarchaeology, including methods of analysis, theoretical issues, and the excavation, documentation and interpretation of a burial. Labs will address analyses and approaches used in CRM when consulting for Indigenous groups and contract archaeologists. Students will collaborate to excavate, analyze, and interpret data, generating a bioarchaeological report of the excavated cemetery. [24L, 24P]
ANT441H5 is offered in alternate years, alternating with ANT439H5.
**Exclusion:** ANTD35H3
**Prerequisite:** ANT334H5
**Corequisite:** ANT340H5
**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: ANT206H5
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. [24S]
Exclusion: ANTD24H3
Prerequisite: ANT204H5 or ANT207H5

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. [24S]
Prerequisite: ANT204H5

ANT463H5 Anthropologies of Water: On Meaning, Value, and Futures (SSc,EXP,INTLO)
This class delves into the topic of water from an anthropological perspective by thinking of water not only as resource but also as meaningful substance, symbol, and mediator of human and non-human relations. Class will consist mainly of discussions of ethnographic readings but also of hands-on class exercises, field-trips, and auto-ethnographic work. In some years, class might consist of one required field trip outside of class time (weekends and/or Reading Week) with additional travel costs that students will be required to pay through ancillary fees. In some years, students may additionally have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. [24S]
Prerequisite: ANT204H5 or ENV100Y5 or permission of department
Recommended Preparation: ANT358H5 and ANT364H5

ANT464H5 The End of Coal: An Ethnographic Approach (SSc,EXP,INTLO)
"Coal is Dead" is a phrase often heard these days, and yet it is quite emphatically not. While coal prices are plunging, countries like China are currently building new coal plants all over Africa. Coal, in other words, is increasingly declared dead even as it is decidedly undead, raising the question of what social, political, cultural, and economic processes make this so-called transition so protracted and piece-meal. This class thus offers a social and cultural approach to the protracted energy transition, asking how the study of coal offers insight into questions of history, politics, race, class, and gender. In some years, there might be at least one required field trip outside of class time (weekends and/or Reading Week) with additional travel costs that students will be required to pay through ancillary fees. In some years, students may additionally have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. [24S]

ANT465H5 The Anthropology of Islam (SSc)
This course offers an upper-level overview of anthropological research on Islam and cultures of the Muslim world. In this seminar-style class, we will critically examine how anthropologists have approached the study of Islam and Muslim communities and whether there is something we can call the "anthropology of Islam." We will approach these questions through the critical reading of challenging theoretical texts from the mid-20th to 21st century, but also by examining various manifestations of the Islamic tradition and the diversity and complexity of Muslim cultures around the world, including in sub-Saharan Africa, the Middle East, North Africa, and Europe. [36S]
Prerequisite: 1.0 credit at the 300-level sociocultural anthropology course or PI.

ANT466H5 Language in Anthropological Thought (SSc)
This course offers an advanced introduction to contemporary linguistic anthropology by means of a survey of recent dissertations and ethnographic monographs. In discussions and readings, we will consider their theoretical foundations, analytic goals and methodological orientations thereby tracking alternative approaches to foundational questions and, at the same time, sketching out some key intellectual genealogies of the field. [24S]
Exclusion: ANT425H1
Prerequisite: ANT204H5 or ANT206H5 and 0.5 credit at the 300-level in sociocultural or linguistic anthropology.
**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,EXP)**
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*

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**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**
- Caskey, A.B., M.A., M.Phil., Ph.D.
- M Hupfield, B.A., M.F.A.
- 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.
- A. Syme, B.A., A.M., Ph.D.

**Assistant Professor, Teaching Stream**
C. Shaw, B.F.A., M.F.A., Ph.D.

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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.
Certificate in Curatorial Studies for Art History and Art and Art History students

This certificate, taken in conjunction with a Major or Specialist degree in Art History or Art and Art History, will help prepare students for graduate work in Curatorial Studies or Museum Studies as well as work in the Arts and Culture sector.

Students must be in good standing in the Major or Specialist program in either Art History or Art and Art History, and have a minimum CGPA of 2.5.

2.5 credits are required: FAH289H5, FAH310H5, FAH451H5, VST410H5, and FAH498H5 or FAH479 or another course in which the study of curating is foregrounded (this course must be approved for certificate credit in advance; see Undergraduate Counsellor)

1.5 credits of these courses may be counted toward both the Certificate and the Art History or Art and Art History Major or Specialist.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
FAH Fine Art History (FAH) (page 65)
ISP Institute for the Study of University Pedagogy (ISUP) (page 316)
VCC Visual Culture and Communication (page 458)
VST Fine Art History (FAH) (page 65)

Specialist Program ERSPE0615 Art History (Arts)

10.0-10.5 credits are required distributed across 4 areas (see notes below). The following program structure is highly recommended:

First Year:
• FAH101H5 and VCC101H5
• 1.0 credit in FAH at the 200 level
• For students entering the program in 2021-2022 (and beyond): ISP100H5

Second Year:
• 2.0 credits in FAH at the 200 level
• 0.5 credit in FAH or 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 or VCC or VST at the 300/400 level, of which 1.0 must be at the 400 level.

Notes:
1. Completion of the Art History Specialist Program must include: FAH101H5 and VCC101H5 and 3.0 credits of FAH at the 200 level and 4.0 credits of FAH or VCC or VST at the 300/400 level, of which 1.0 credit must be at the 400 level. For students entering the program in 2021-2022 (and beyond), ISP100H5 is also required.

2. 2.0 credits from each of the following four areas are required: Ancient & Medieval; 15th-18th Centuries; 19th-21st Centuries; and Visual Culture & 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.

3. For the complete list of VCC courses that satisfy Art History program requirements, please see the departmental website (www.utm.utoronto.ca/dvs).

4. No St. George courses may be substituted for the required 100 or 200 level courses (see Note 5 below for exceptions).

5. No more than 4.0 credits in FAH may be taken at the 200 level. VCC 200 level courses do not satisfy FAH 200 level requirements. 0.5 credit of FAH at the 200 level may be taken at St. George in an area not covered by current UTM offerings (i.e. one of the following courses - FAH248H1 or FAH260H1 or FAH262H1 or FAH270H1 or FAH272H1).

6. Courses in other programs which have a significant Art History or Visual Culture content, such as offerings in CCIT, Cinema Studies, Philosophy, Drama, English History, East Asian Studies, and Near & Middle Eastern Civilizations, may be substituted for up to 1.0 credit of FAH or VCC credit. Permission of the Art History Program Director prior to enrolment is required. For possible course options with appropriate course content, please consult the DVS Undergraduate Counsellor.

7. No more than a total of 16.0 credits of FAH may be completed.

8. 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 credits in one language, or 1.0 credit each in two languages (for a total of 2.0 credits) is recommended. German, French, and Italian are recommended.

Major Program ERMAJ0615 Art History (Arts)

7.0-7.5 credits are required distributed across 4 areas (see notes below). The following program structure is highly recommended:

First Year:
• FAH101H5 and VCC101H5
• 0.5-1.0 credit in FAH at the 200 level
• For students entering the program in 2021-2022 (and beyond): ISP100H5

Second Year:
• 2.0-2.5 credits in FAH at the 200 level

Third Year:
• 2.0 credits in FAH or VCC at the 300/400 level.

Fourth Year:
• 1.0 credits in FAH or VCC or VST at the 400 level.

Notes:
1. Completion of the Art History Major Program must include: FAH101H5 and VCC101H5 plus 2.0 credits of FAH at the 200 level and 3.0 credits of FAH or VCC or VST at the 300/400 level, of which 0.5 credit must be at the 400 level. For students entering the program in 2021-2022 (and beyond) must also complete ISP100H5.

2. A minimum of 1.0 credit from each of the following four areas are required: Ancient & Medieval; 15th-18th Centuries; 19th-21st Centuries; and Visual Culture & Theory. It is highly recommended that students take at least one 300/400 level course in at least three of the four areas. 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.

3. For the complete list of VCC courses that satisfy Art History program requirements, please see the departmental website (www.utm.utoronto.ca/dvs).

4. 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).

5. Courses in other programs which have a significant Art History or Visual Culture content, such as offerings in CCIT, Cinema Studies, Philosophy, Drama, English History, East Asian Studies, and Near & Middle Eastern Civilizations, may be substituted for up to 1.0 credit of FAH or VCC credit. Permission of the Art History Program Director prior to enrolment is required. For possible courses options with appropriate course content, please consult the DVS Undergraduate Counsellor.

6. No more than a total of 10.0 credits of FAH may be completed.

8. 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 credits in one language, or 1.0 credit each in two languages (for a total of 2.0 credits) is recommended. German, French, and Italian are recommended.

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 credit: FAH101H5 and 0.5 credit in FAH at the 200 level

Higher Years:
• 1.5 credit in FAH at the 200 level
• 1.5 credit 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, 12P] Exclusion: FAH101H1 or FAH102H1 or FAH105H5 or FAH202H5 or 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. [24L, 12T]
Exclusion: FAH105H5 or FAH202H5 or FAH101H5 or 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 or VPHB52
Recommended Preparation: FAH101H5 or FAH105H5 or 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 or FAH261H1 or FAH267H5 or FAH271H5) or 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 or FAH261H1 or FAH267H5 or FAH271H5 or 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 or VPHB74H3
Recommended Preparation: FAH101H5 or FAH105H5 or FAH202H5

FAH275H5 Introduction to Indigenous Art in Canada (HUM)
This survey course will introduce students to the advanced technological and innovative material contributions of Indigenous cultural knowledge towards the reshaping of Canadian Culture, Identity and Art today; beginning with the Mississaugas of the New Credit First Nations. Specificity of place, nation, geographical territory, the intervention of colonial government policy, and social movements will be reviewed as they relate to the creation and collection of Indigenous art and established art markets. Object and image making, new technologies, performance art, ceremony, land, hunting, activism, social engagement, and community arts will be covered, as will fashion, dance, song, and storytelling. [24L, 12T]
Recommended Preparation: FAH101H5

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 or VPHB64
Recommended Preparation: FAH101H5 or FAH105H5 or FAH202H5

FAH281H5 An Introduction to Islamic Art and Architecture (HUM)
This course surveys art and architecture of the Islamic worlds, beginning with the emergence of Islam in the seventh century. It examines works of art ranging from the monumental (palaces, mosques, shrines) to the portable (textiles, jewelry, books), spanning the Islamic world from Spain to Central and East Asia. A range of materials and artistic techniques will be considered, as will several religious and secular contexts and different patterns in patronage and workshop production. [24L, 12T]
Recommended Preparation: FAH101H5 or FAH202H5

FAH282H5 Gardens, Homes, and Palaces in the Muslim World (HUM)
How did Muslims live in the pre-modern world, and, how did they interact with their surrounding environment? This course introduces examples of homes, palaces, and gardens dating from the 8th to the 18th centuries. The course includes examples from the Arab world, Turkey, Iran, and South Asia. [24L, 12T]
Recommended Preparation: FAH101H5
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 or FAH105H5 or FAH202H5

FAH287H5 European Art of the Nineteenth Century (HUM,EXP,INTLO)
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 or FAH282H1 or FAH245H1
Recommended Preparation: FAH101H5 or FAH105H5 or FAH202H5
As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process.

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 or VPHB58
Recommended Preparation: FAH101H5 or FAH105H5 or 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 or VPHB58
Recommended Preparation: (FAH101H5 or FAH105H5 or FAH202H5) and FAH288H5

FAH290H5 Topics in Modern Art and Architecture (HUM)
An examination of a topic in modern art and or architecture. Topics vary from year to year; the content in any given year depends upon the instructor.[24L, 12T]
Recommended Preparation: FAH101H5

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 or FAH391H5
Recommended Preparation: (FAH101H5 or FAH105H5 or FAH202H5) and (VCC101H5 or VCC201H5)

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: FAH248H1: Canadian Painting 1665-1960 (formerly FAH286H1) or VPHB60H3: Canadian Visual Art
Recommended Preparation: FAH101H5

FAH295H5 Topics in Art History (HUM)
An examination of a topic in art history. Topics vary from year to year; the content in any given year depends upon the instructor. [24L, 12T]
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 and International Opportunities (Page 23) 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 or FAH105H5 or FAH202H5) and (VCC101H5 or VCC201H5) and 1.0 credits in FAH/VCC at the 200 level or permission of instructor

FAH310H5 Curating Matters: Contexts and Issues in Contemporary Curatorial Practice (HUM)
This course will introduce students to the major critical texts, theories, and debates circulating in the burgeoning international field of contemporary curatorial studies. The course will include lectures, case studies, practice-related assignments, encounters with artists and art professionals, and student presentations that are intended to raise issues and engage debate about contemporary exhibition practices and account for theoretical perspectives and historical context. One objective of this course is to trouble preconceptions of the role of the curator in order to observe the complexity of curatorial models across and beyond art institutions. The class will address the implications of shifting cultural, social, and political contexts for artistic and curatorial practice and their sites. [24S]
Exclusion: VPSB73 or VIS320H1
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and FAH289H5 and 0.5 additional credit in FAH/VCC
Recommended Preparation: FAH288H5 and FAH289H5 and FAH388H5

FAH315H5 Photomontage: History, Theory, and Practice (HUM)
This course investigates the history, theory, and practice of photomontage from its roots in combination printing in the mid-19th century to its key role in the modernist "isms of art" in Europe and North America including Dada, Surrealism, Constructivism, and the Bauhaus to the rise of digital photomontage in the current Photoshop era. It explores a range of practices and applications of photomontage in avant-garde art, commercial advertising, mass media, humorous satire, propaganda, and political activism.
Prerequisite: (FAH101H5 or VCC101H5) and FAH291H5.

FAH322H5 Romanesque Sculpture (HUM)
A study of architectural sculpture in 11th- and 12th-century France and neighboring countries: origins; sources of form and style; social, religious, and functional contexts of selected monuments; also historiography. [24S]
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and (FAH215H5 or FAH216H5) or permission of instructor

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 or FAH202H5) and (FAH215H5 or FAH216H5) or permission of instructor

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 or FAH105H5 or FAH202H5) and (FAH274H5 or 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 or FAH327H1
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and (FAH216H5 or FAH217H5)

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 or FAH105H5 or FAH202H5) and (FAH216H5 or FAH217H5)

FAH351H5 Gothic 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 or FAH202H5) and (FAH215H5 or FAH216H5) or permission of instructor

FAH3351H5 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 or VPHC42
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and (FAH216H5 or FAH217H5)
FAH353H5 The sculptor-architect GianLorenzo Bernini (HUM)
Topics in the sculpture, architecture, methods and biographical legacy of the principal 17th-century artist of the Roman baroque, GianLorenzo Bernini. Focus of the course changes from year to year. [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 and (FAH274H5 or FAH279H5).

FAH356H5 Colonial Latin American Art and Architecture (HUM)
This lecture 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 Brasil. 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 or FAH105H5 or FAH202H5) or permission of instructor
Recommended Preparation: FAH274H5 and FAH279H5 and HIS290H5 and LAS200Y1 and 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, Boullée, Ledoux, and Wright of Derby. [24S]
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and at least 1.5 credits in FAH at the 200-level
Recommended Preparation: FAH279H5 and FAH287H5

FAH375H5 All Our Relations: Indigenous Land Stewardship and Art (HUM, EXP)
This class embraces land- and earth-based skills as tools in the production and maintenance of revitalization efforts in Indigenous culture and knowledge. Throughout the course students will lead the development, production and maintenance of a Community Medicine Garden initiative to be located in the heart of the UTM campus. Topics include environmental liberation, food sovereignty, kinship, gardening as resistance, matriarchy, land stewardship, landscaping with regional indigenous plants. Indigenous feminisms, place-based knowledge and knowledge sharing. Activities will include: film screenings, community feasts, public readings, drumming circles, and guest speakers with Traditional Indigenous knowledge carriers, artists, environmental activists, and local grassroots community-based partners. [24S]
Prerequisite: FAH101H5 and FAH275H5

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 or FAH105H5 or FAH202H5) and (FAH288H5 or FAH289H5)
Recommended Preparation: FAH289H5

FAH382H5 Artists and Craftsmen from the Muslim World (HUM)
What do we know about the pre-modern artists of the Muslim world? This course explores the lives or artist from the Muslim world and what we know about their education, status, styles, techniques and influences. The course includes examples of a calligrapher, a painter, a metalworker, a ceramicist, and an architect. [24S]
Exclusion: FAH395H5 - Topics course: Artists and Craftsmen from the Muslim World
Prerequisite: FAH101H5 and FAH281H5 or FAH282H5

FAH383H5 Cities in the Early modern Muslim World: Istanbul, Isfahan, and Delhi (HUM)
This course explores the three major cities of the pre-modern Muslim empires: Istanbul under the Ottomans, Isfahan under the Safavids, and Delhi under the Mughals. The course addresses the urban formation, architectural style, and visual symbolism of these cities. [24S]
Exclusion: FAH395H5 Topics course: Cities in the Early modern Muslim World: Istanbul, Isfahan, and Delhi
Prerequisite: FAH101H5 and (FAH281H5 or FAH282H5)
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 conversational dialogue 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 or FAH365H1 or FAH392H5 - Topic: Contemporary South Asian Art
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5) and (FAH287 or FAH288H5 or FAH289H5) and VCC201H5 and (FAH288H5 or FAH289H5) or permission of instructor
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 or FAH105H5 or FAH202H5) and at least 1.0 credits in FAH/VCC.

FAH390H5 Topics in Modern Art and Architecture (HUM)
An examination of a topic in modern art and/or 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 and FAH287H5 or (FAH288H5 or FAH289H5) or permission of instructor

FAH392H5 Topics in Modern Art/Architecture (HUM)
An examination of a topic in modern art and/or 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 or FAH105H5 or FAH202H5) and (FAH287 or FAH288H5 or FAH289H5) or permission of instructor

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 or FAH105H5 or FAH202H5) and (FAH203H5 or FAH204H5 or FAH205H5) or permission of instructor

FAH394H5 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 approx. 30 students. [24S]
Prerequisite: FAH101H5 and (FAH287 or FAH288H5 or FAH289H5) or permission of instructor

FAH395H5 Topics in Islamic Art and Architecture (HUM)
An examination of a topic in Islamic art and/or 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 or FAH202H5) and (FAH287 or FAH288H5 or FAH289H5) or permission of instructor

FAH396H5 Topics in Medieval Art and Architecture (HUM)
An examination of a topic in medieval art and/or 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 and (FAH215H5 or FAH216H5) or permission of instructor

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 and International Opportunities (Page 23) for more details. Exclusion: FAH299Y5

VST410H5 Internship in Visual Studies (HUM,EXP)
This internship course provides an 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 and International Opportunities (Page 23) for more details. Exclusion: FAH299Y5

PROGRAMS
FAH415H5 Theory and Criticism of Photography (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. [24S]
Prerequisite: FAH101H5 and (FAH291H5 or FAH391H5) and a minimum of 0.5 at the 300/400 level in FAH.

FAH423H5 Topics 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 or FAH105H5 or FAH202H5), FAH216H5 and at least 1.0 credit in FAH/VCC at the 300/400 level.
Recommended Preparation: FAH105H5 and FAH267H5

FAH424H5 Medieval Collecting and Display (HUM)
This course examines collections of medieval art assembled during the Middle Ages and today. It considers the formation of collections within religious and secular institutions of the Middle Ages (treasuries), and the ways in which objects entered such collections through diplomacy, war, dowries, wills, and new commissions. It examines how the collections expressed historical memory, family ties, religious ideas, and political ideologies, and how the objects were displayed. The course also examines collections of medieval art in the GTA, including those at the Aga Khan Museum, Art Gallery of Ontario, Royal Ontario Museum, and University of Toronto Art Centre. A variety of methodologies will be explored, including Digital Humanities. [24S]
Exclusion: None
Prerequisite: FAH215H5 or FAH216H5 and at least 1.0 credit in FAH/VCC at the 300/400 level.

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 or FAH105H5 or FAH202H5) and (FAH216H5 or FAH217H5 or FAH205H5) and 0.5 at the 300/400 level in Medieval Art or permission of instructor
Recommended Preparation: FAH267H5 or 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 or FAH105H5 or FAH202H5) and (FAH216H5 or FAH217H5) 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 or FAH105H5 or FAH202H5) and (FAH274H5 or FAH279H5) and 0.5 300/400 level course in Renaissance or Baroque Art or permission of instructor

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 or FAH105H5 or FAH202H5) and FAH274H5 and 0.5 credit in FAH at the 300/400 level or permission of instructor
Recommended Preparation: FAH267H5 or FAH271H5
FAH451H5 Curating Now: Turning Concepts into Curatorial Projects (HUM,EXP)
Students will research and develop a curatorial project proposal in the form of an exhibition, a public installation, a public event, a performance, a website, etc., as the culminating assignment for the course. The emphasis of the course will be on the application of knowledge gained in FAH310 and consideration of the multi-level preparatory stages entailed in the mounting of a curatorial project, placing particular emphasis on conceptualization and methodology, and on the premise that curatorial practice is an intellectual endeavour that manifests its ideas in form. Students will learn how to turn a concept into a project proposal and become equipped to develop innovative solutions to future challenges in curatorial practice. [36S]
FAH451H5 may be counted toward either the FAH or the FAS requirements in the Art and Art History program.
Exclusion: FAH480H or VIS320H5
Prerequisite: (FAH101H5 or FAH105H5 or 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 or FAH105H5 or FAH202H5) and (FAH288H5 or FAH289H5) and at least 1.0 in FAH/VCC at the 300-400 level, or permission of instructor
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 or FAH105H5 or FAH202H5) and FAH288H5 and 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: (FAH101H5 or VCC101H5) and (FAH291 or FAH391) and 1.0 credit in FAH or VCC at the 300/400 level or permission of instructor

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 or FAH105H5 or FAH202H5) and (FAH287H5 or FAH288H5) and a minimum of 0.5 in FAH/VCC at the 300 level, or permission of instructor
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 literature studies (English, French, Italian, German). Preference will be given to students in Art History, or literature studies (English, French, Italian, German). Preference will be given to students in Art History, Art & Art History, and Visual Culture and Communication.
Recommended Preparation: (FAH101H5 or FAH105H5 or FAH202H5) and (FAH287H5 or FAH288H5)

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 or FAH105H5 or FAH202H5) and (FAH288H5 or FAH289H5) and 1.0 credit in FAH or VCC at the 300/400 level or permission of instructor
Recommended Preparation: (VCC302H5 or VCC304H5) and 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, Wölflin, Riegl, Warburg, Panofsky, Hauser, Baxandall, Schapiro, Alpers, Clarke, Nochlin, and others. [24S]
Prerequisite: (FAH101H5 or FAH105H5 or FAH202H5). 1.5 in FAH at the 200-level and at least 1.0 in FAH/VCC at the 300 level or permission of instructor
Recommended Preparation: FAH388H5

FAH472H5 Early Modern Mobile Objects (HUM)
This course concerns the global circulation of objects or things in the early modern world (ca. 1500-1700) when new trade routes brought about an unprecedented mobilization of artifacts of visual culture, foodstuffs and other goods. We will be concerned with the manifold appearances of uprooted objects, new arrangements, and the invisible layers of skill, materials, and manufacture that resulted from heightened exchange. Objects of study will range broadly: porcelain, tableware and foodstuffs, screens and silver, naturalia and their elaborate mounts, miniatures, prints and books, paintings (Dutch Still Life, Las Meninas) which put the world of things on display.[24S]
Prerequisite: (FAH101H5 and FAH274H5) or FAH279H5 and 1.0 credit in FAH/VCC at the 300/400 level or permission of instructor

FAH473H5 The Nature of Landscape (HUM)
This seminar takes a historical and comparative view of "landscape" as the representation of land, situating it within European ideas about "nature" and its relationship to ideas about who we are as humans. It compares Western landscape painting traditions with visual forms from other traditions that could be seen as "landscapes," but might be based on very different ideas. These include Indigenous art from Canada, as well as East and South Asian forms. Understanding these multiple traditions equips students for a more globally oriented, historically informed, and critical approach to modern and contemporary art concerned with the environment and our existence in the geological age lately dubbed the Anthropocene. The seminar readings provide the basis for final research papers pertaining to the broad theme of landscape or eco-aesthetics in modern or contemporary art, as well as in other image practices across a range of global traditions.
Prerequisite: FAH101H5 and (FAH287H5 or FAH288H5) and 1.0 credit in FAH/VCC at the 300/400 level.

FAH475H5 Topics in Contemporary Indigenous Art (HUM)
A senior research and creation seminar exploring topics that advance conversations in Contemporary Indigenous art. This course will look at a selection of influential Canadian and International Indigenous Art projects by living artists as case studies. Topic will vary with faculty research interests; the course may cover such matters as environmental justice, accountability in accomplice-building between Indigenous and non-Indigenous artists, and the influence of social movements in shaping local and international conversations on Indigenous Art and culture from Alcatraz and Idle No More to Standing Rock. May include a practical workshop component. May include a research, curatorial or art project.[24S]
Prerequisite: FAH101H5 and FAH275H5 and FAH375H5
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 permission of instructor

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 or FAH202H5) and six FAH courses including a 300+ level half course and permission of instructor

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 permission of instructor

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 permission of instructor

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 permission of instructor

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 permission of instructor

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 permission of instructor

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 permission of instructor

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 permission of instructor
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 permission of instructor

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 permission of instructor

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 or FAH105H5 or FAH202H5) and (FAH203H5 or FAH204H5 or 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 or FAH105H5 or FAH202H5) and (FAH267H5 or FAH271H5) and 1.0 in FAH/VCC at the 300/400 level

FAH492H5 Topics in Modern Art and 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 or FAH105H5 or FAH202H5) and (FAH287H5 or FAH288H5) and at least 1.0 in FAH/VCC at the 300/400 level, or permission of instructor

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 or FAH105H5 or FAH202H5) and (FAH274H5 or 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 or FAH105H5 or FAH202H5) and (FAH288H5 or FAH289H5) and 1.0 in FAH or VCC at the 300/400 level

Recommended Preparation: FAH288H5 and FAH289H5

FAH495H5 Topics in Islamic Art and Architecture (HUM)
An examination of a topic in Islamic art and or 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 20 students. [24S]

Prerequisite: (FAH101H5 or FAH202H5) and (FAH287H5 or FAH288H5) and at least 1.0 in FAH/VCC at the 300/400 level, or permission of instructor

FAH496H5 Topics in Modern Art and 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 or FAH105H5 or FAH202H5) and (FAH287H5 or FAH288H5) and at least 1.0 in FAH/VCC at the 300/400 level, or permission of instructor

FAH498H5 Topics in Curatorial Studies (HUM)
An in-depth examination of a topic in Curatorial Studies. 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 or FAH202H5) and (FAH287H5 or FAH288H5) and at least 1.0 in FAH/VCC at the 300/400 level, or permission of instructor

Recommended Preparation: FAH288H5
Art and Art History (HBA)

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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
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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 an Advanced Diploma in Art and Art History from Sheridan College. Students must achieve a minimum 2.0 GPA in order to be granted the Sheridan Advanced Diploma in Art & Art History.

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.

Certificate in Curatorial Studies for Art History and Art and Art History students

This certificate, taken in conjunction with a Major or Specialist degree in Art History or Art and Art History, will help prepare students for graduate work in Curatorial Studies or Museum Studies as well as work in the Arts and Culture sector.

Students must be in good standing in the Major or Specialist program in either Art History or Art and Art History, and have a minimum CGPA of 2.5.

2.5 credits are required: FAH289H5, FAH310H5, FAH451H5, VST410H5, and FAH498H5 or FAH479 or another course in which the study of curating is foregrounded (this course must be approved for certificate credit in advance; see Undergraduate Counsellor)

1.5 credits of these courses may be counted toward both the Certificate and the Art History or Art and Art History Major or Specialist.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
- FAH Fine Art History (FAH) (page 65)
- FAS Fine Art Studio (FAS) (page 79)
- ISP Institute for the Study of University Pedagogy (ISUP) (page 316)
- VCC Visual Culture and Communication (page 458)
- VST Fine Art History (FAH) (page 65)

Specialist Program ERSPE0714 Art and Art History (Arts)

12.0-12.5 credits are required, comprised of 7.0 credits in FAS and 5.0 credits in FAH or VCC or VST offered at UTM (see detailed notes below). For students entering the program in 2021-2022 (and beyond), ISP100H5 is also required. The following program structure is highly recommended:

First Year:
- FAH101H5 and 1.0 additional credit in FAH at the 200 level
- 2.0 credits from FAS143H5 or FAS145H5 or FAS147H5 or FAS232H5 or FAS236H5 or FAS248H5 (All of these courses are open to first-year students.)
- For students entering the program in 2021-2022 (and beyond): ISP100H5
- VCC101H5
- 1.0 credit of FAH at the 200 level
- Remaining uncompleted credit(s) from the FAS course list identified in 'First Year' (above).

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

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

Notes:
1. Completion of the Art & Art History Specialist Program must include: FAH101H5 and VCC101H5 and FAS143H5 and FAS145H5 and FAS147H5 and FAS232H5 and FAS236H5 and FAS248H5. Of the total 12.0-12.5 credits in the program, 4.0 credits of FAH or VCC or VST or FAS must be at the 300/400 level with 1.0 credit in FAH or VCC or VST at the 400 level and 1.0 credit of FAS at the 400 level. For students entering the program in 2021-2022 (and beyond), ISP100H5 is also required.

2. Students must take at least 2.0 credits, but no more than 2.5 credits, of FAH at the 200 level. Of these 2.0-2.5 credits, at least 1.5 credits must be completed at UTM (see Note 3 below for the required area distribution and Note 4 below for the St. George exceptions allowed). VCC 200 level courses do not satisfy FAH 200 level requirements.

3. At least 1.0 credit of FAH must be completed in each of the following three areas: Ancient & Medieval; 15th-18th Centuries; and 19th-21st Centuries. See the departmental website (www.utm.utoronto.ca/dvs) for the distribution of courses by area.

4. 0.5 credit of FAH at the 200 level may be taken at St. George in an area not covered by current UTM offerings (i.e. one of the following courses - FAH248H1 or FAH260H1 or FAH262H1 or FAH270H1 or FAH272H1).

5. For the complete list of VCC courses that satisfy Art & Art History program requirements, please see the departmental website (www.utm.utoronto.ca/dvs).

6. 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 or Specialist, Art History Major or Specialist, CCIT Major, VCC Specialist, and to newly admitted students who indicated the Art & 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.
7. All 300 and 400 level FAS courses are to be enrolled in on ACORN. Students are required to have completed 1.5 credits in FAH or VCC before beginning their 300/400 level FAS courses.

8. It is recommended that students take at least one of the following ‘practicum’ courses: FAH451H5 or FAS453H5 or FAS454H5 or FAS455H5.

9. No more than 17.0 credits of FAH and FAS may be completed.

10. Students enrolling in any FAS course will be required to pay a fee of $60-$120 per half-credit course ($120-$240 per full-credit course) in ancillary fees to cover consumable materials used in studio as well as take-away materials. These charges will be automatically added to UofT student account upon enrolment in the course on ACORN. For details on ancillary fees, please see the Student Accounts website (www.fees.utoronto.ca).

Major Program ERMAJ0714 Art and Art History (Arts)

8.0-8.5 credits are required, comprised of 4.0 credits in FAS courses and 4.0 credits in FAH or VCC or VST courses offered at UTM (see detailed notes below). For students entering the program in 2021-2022 (and beyond), ISP100H5 is also required. The following program structure is highly recommended:

First Year:

- FAH101H5 and 0.5 additional credit in FAH at the 200 level
- 2.0 credits from FAS143H5 or FAS145H5 or FAS147H5 or FAS232H5 or FAS236H5 or FAS248H5 (All of these courses are open to first-year students.)
- For students entering the program in 2021-2022 (and beyond): ISP100H5

Second Year:

- Remaining uncompleted credit(s) from the FAS course list identified in ‘First Year’ (above).
- 2.0 credit of FAH at the 200 level

Third Year:

- 1.0 credit of FAH or VCC or VST at the 300/400 level
- 1.0 credit of FAS at the 300/400 level

Fourth Year:

- 1.0 credit of FAH or VCC or VST at the 300/400 level
- 2.0 credits of FAS at the 300/400 level

Notes:

1. Completion of the Art & Art History Specialist Program must include: FAH101H5 and VCC101H5 and FAS143H5 and FAS145H5 and FAS147H5 and FAS232H5 and FAS236H5 and FAS248H5. Of the total 12.0-12.5 credits in the program, 4.0 credits of FAH or VCC or VST or FAS must be at the 300/400 level with 1.0 credit in FAH or VCC or VST at the 400 level and 1.0 credit of FAS at the 400 level. For students entering the program in 2021-2022 (and beyond), ISP100H5 is also required.

2. Students must take at least 2.0 credits, but no more than 2.5 credits, of FAH at the 200 level. Of these 2.0-2.5 credits, at least 1.5 credits must be completed at UTM (see Note 3 below for the required area distribution and Note 4 below for the St. George exceptions allowed). VCC 200 level courses do not satisfy FAH 200 level requirements.

3. At least 0.5 credit of FAH must be completed in each of the following three areas: Ancient & Medieval; 15th-18th Centuries; and 19th-21st Centuries. See the departmental website (www.utm.utoronto.ca/dvs) for the distribution of courses by area.

4. 0.5 credit of FAH at the 200 level may be taken at St. George in an area not covered by current UTM offerings (i.e. one of the following courses - FAH248H1 or FAH260H1 or FAH262H1 or FAH270H1 or FAH272H1).

5. For the complete list of VCC courses that satisfy Art & Art History program requirements, please see the departmental website (www.utm.utoronto.ca/dvs).

6. 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 or Specialist, Art History Major or Specialist, CCIT Major, VCC Specialist, and to newly admitted students who indicated the Art & 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.

7. All 300 and 400 level FAS courses are to be enrolled in on ACORN. Students are required to have completed 1.5 credits in FAH or VCC before beginning their 300/400 level FAS courses.

8. It is recommended that students take at least one of the following ‘practicum’ courses: FAH451H5 or FAS453H5 or FAS454H5 or FAS455H5.

9. No more than 17.0 credits of FAH and FAS may be completed.

10. Students enrolling in any FAS course will be required to pay a fee of $60-$120 per half-credit course ($120-$240 per full-credit course) in ancillary fees to cover consumable materials used in studio as well as take-away materials. These charges will be automatically added to UofT student account upon enrolment in the course on ACORN. For details on ancillary fees, please see the Student Accounts website (www.fees.utoronto.ca).
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)
Students explore the use of drawing to investigate contemporary approaches to the production of artwork. Students experiment with a variety of traditional and unconventional materials to investigate figurative drawing, observational drawing, conceptual drawing, and methods of rendering illusionistic space. [72P]
Exclusion: VIS205H1 or VPSA70

FAS145H5 Painting I (HUM,EXP)
Students explore techniques and subject matter of 20th-century painting in relation to contemporary painting practices. Students apply both observational and conceptual approaches through experimentation with painting’s formal elements, traditional and non-traditional painting materials, collage, and abstraction. [72P]
Exclusion: FAS230Y1 or VIS201H1 or VPSA61

FAS147H5 Photography I (HUM,EXP)
Students 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. Students apply their use of photography as a tool for artistic expression and as a medium for communication through discussion, analysis and interpretation. [72P]
Exclusion: VIS217H1 or VIS218H1 or VPSB67

FAS232H5 Print Media I (HUM,EXP)
Students learn relief and intaglio processes by exploring and experimenting with the materials and techniques demonstrated in class, and integrating them with formal and contextual concerns. [72P]
Exclusion: VIS203H1 or VIS303H1

FAS234H5 Print Media II (HUM,EXP)
Students explore the basics of screen printing using hand-drawn and cut stencil imagery. Students are encouraged to link ideas with screen printing methods most suited to their goals. Students integrate digital and photo-based imagery using software, digital photos, and scans. Focus is placed upon individual development through exploration and production. [72P]
Exclusion: VIS206H1 or VIS207H1 or VIS309H1
Prerequisite or Corequisite: FAS232H5 or permission of instructor

FAS236H5 Design I (HUM,EXP)
Students develop an awareness of applied design thinking and theories. Students use design techniques and tools to address a range of design issues through a variety of approaches and media. Students broaden their conception of design and its application in other design and art-related disciplines through creative experimentation. The fundamental principles of design and concept development are explored by students through projects involving typography, images, colour, layout and design software for print and the Web. [72P]
Exclusion: FAS146H5

FAS243H5 Drawing II (HUM,EXP)
Students explore the use of drawing to investigate contemporary approaches to the production of artwork. Students experiment with a variety of traditional and experimental materials to investigate figurative drawing, zines, and independent studio research. [72P]
Exclusion: VIS205H1 or VIS211H1 or VIS305H1 or VPSB74
Prerequisite: FAS143H5 or permission of instructor

FAS245H5 Painting II (HUM,EXP)
Students complete problem-based paintings, each over a three-week period, in response to illustrated discussion/lectures on Canadian and international contemporary painting practices. Students write visiting artist reviews and are introduced to in-depth peer critiques, a range of painting media and techniques, and portfolio documentation. [72P]
Exclusion: FAS230Y1 or VIS201H1 or VIS301H1 or VPSB62
Prerequisite: FAS145H5 or permission of instructor

FAS246H5 Design II (HUM,EXP)
Students continue to develop their investigation of design thinking, theories, techniques and tools. Students study different design strategies and problem solving with practical assignments. Diverse assignments encourage students to articulate a critical awareness of the values associated with their choice of imagery, formal elements and methods of construction. [72P]
Prerequisite: FAS146H5 or FAS236H5 or permission of instructor
FAS247H5 Photography II (HUM,EXP)
Students explore historical and contemporary uses of the medium that emphasize technical, aesthetic and conceptual considerations. Students utilize a variety of printing methods, including fibre-based printing, sequencing and other techniques that further develop the creative aspects of the medium. Use of the video camera and basic video editing are also introduced. [72P]
Exclusion: VIS318H1 or VPSB75
Prerequisite: FAS147H5 or permission of instructor

FAS248H5 Sculpture I (HUM,EXP)
Students delve into basic sculptural processes such as casting, mold-making and construction in both traditional and non-traditional materials. Students explore formal and conceptual concerns relative to contemporary sculpture practices that include considerations of representation, abstraction, form and space, scale and installation. [72P]
Exclusion: VIS204H1 or VIS306H1 or VPSA71
Prerequisite: FAS248H5

FAS258H5 Sculpture II (HUM,EXP)
Students create a strong individualized methodology for developing ideas from initial research, sketches and models, through material and process exploration to a final artwork. Students begin by building an armature and modelling from life with clay in order to develop their powers of observation and hand-skills. Using mold making and woodworking techniques, students apply the sculptural aspects of space and time at the scale of the human body. [72P]
Exclusion: VIS204H1
Prerequisite: FAS248H5

FAS330Y5 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 permission of instructor

FAS334Y5 Print Media III (HUM,EXP)
Students use lithography, digital printing, screen printing, relief printing and etching to establish a personalized approach to print media. Students conduct independent research and technical explorations leading to sophisticated and resolved work. Students present a biographical overview of contemporary and historical print makers to further contextualize their own work, and to become aware of how the medium of print is evolving. [144P]
Exclusion: VIS309H1
Prerequisite: FAS234H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS337Y5 Photography III (HUM,EXP)
Students develop a critically informed photography practice by integrating the history and theory of photography with their production of original work in either an analogue or digital format. Students work with digital imaging technologies, production of digital prints, video, as well as the use of strobe lighting. [144P]
Exclusion: VIS318H1
Prerequisite: FAS247H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS338Y5 Sculpture III (HUM,EXP)
Students develop independent research habits to support self-directed projects in sculpture that are discussed in a peer critique setting. Students compose an artist statement of their intentions and procedures, write gallery and visiting artist reviews, prepare a contemporary Canadian or international artist presentation, and document their artwork. [144P]
Exclusion: VIS306H or VPSB63
Prerequisite: FAS258H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS343Y5 Drawing III (HUM,EXP)
Students explore the use of drawing to investigate contemporary approaches to the production of artwork. Students work with a variety of traditional and unconventional drawing materials and processes to develop a portfolio of artworks. [144P]
Exclusion: VIS305H1 or VPSC55
Prerequisite: FAS243H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS345Y5 Painting III (HUM,EXP)
Students develop independent research habits to support self-directed projects in painting that are discussed in a peer critique setting. Students compose an artist statement of their intentions and procedures, write gallery and visiting artist reviews, prepare a contemporary Canadian or international artist presentation, and document their artwork. [144P]
Exclusion: VIS305H1 or VPSC54
Prerequisite: FAS245H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS346Y5 Design III (HUM,EXP)
Students develop the skills necessary to create real-world art and design-related projects. Students 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 presentation, field trips, guest critics, discussion and critique. [144P]
Prerequisite: FAS246H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS347Y5 Photography III (HUM,EXP)
Students develop a critically informed photography practice by integrating the history and theory of photography with their production of original work in either an analogue or digital format. Students work with digital imaging technologies, production of digital prints, video, as well as the use of strobe lighting. [144P]
Exclusion: VIS318H1
Prerequisite: FAS247H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS348Y5 Sculpture III (HUM,EXP)
Students develop independent research habits to support self-directed projects in sculpture that are discussed in a peer critique setting. Students compose an artist statement of their intentions and procedures, write gallery and visiting artist reviews, prepare a contemporary Canadian or international artist presentation, and document their artwork. [144P]
Exclusion: VIS306H or VPSB63
Prerequisite: FAS258H5 and 1.5 credits in FAH/VCC and permission of instructor
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]
Prerequisite: FAS143H5 and FAS145H5 and FAS147H5 and FAS232H5 and FAS236H5 and FAS248H5, and 1.5 credits in FAH/VCC/VST and permission of instructor

FAS359Y5 Video and Sound (HUM,EXP)
Students explore the use of sound and video to investigate contemporary approaches to the production of time-based artwork. Students work with analogue and digital editing processes, live sound performance, site-specific soundworks, single-channel video, video installation, and will develop a professional portfolio website. [144P]
Exclusion: VIS305H1
Prerequisite: FAS143H5 and FAS145H5 and FAS147H5 and FAS232H5 and FAS236H5 and FAS248H5, and 1.5 credits in FAH/VCC/VST and permission of instructor

FAS369Y5 Performance-Based Art (HUM,EXP)
Students integrate history, theory and production to develop critically informed performance practices with documentation in video and still photography. [144P]
Exclusion: VIS303H1
Prerequisite: FAS143H5 and FAS145H5 and FAS147H5 and FAS232H5 and FAS236H5 and FAS248H5, and 1.5 credits in FAH/VCC/VST and permission of instructor

FAS434Y5 Individual Investigations in Print Media (HUM,EXP)
Students conduct independent research and develop a body of work using print medium(s) of their choice. Students present information on their educational and professional goals after graduation, write an artist's statement about their work, review and discuss articles and videos, and mount a group exhibition of their work. [144P]
Exclusion: VIS311H1 or VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite: FAS334Y5 and 1.5 credits in FAH/VCC and permission of instructor

FAS443Y5 Individual Investigations in Drawing (HUM,EXP)
Students explore the use of drawing to investigate contemporary approaches to the production of artwork. Students work with a variety of traditional and unconventional drawing materials and processes to develop a professional website portfolio. Students participate in peer critiques, and write reflective essays and artist statements. [144P]
Exclusion: VIS305H1
Prerequisite: FAS343Y5 or FAS349Y5 or FAS359Y5 or FAS369Y5 and 1.5 credits in FAH/VCC and permission of instructor

FAS445Y5 Individual Investigations in Painting (HUM,EXP)
Students develop independent research habits to support self-directed projects in painting that are discussed in a peer critique setting. Students write an artist statement of their intentions and procedures, prepare a Canadian and international MFA program presentation, and document their artwork. [144P]
Exclusion: VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite: FAS345Y5 and 1.5 credits in FAH/VCC and permission of instructor

FAS446Y5 Individual Investigations in Design (HUM,EXP)
Students learn to integrate professional art and design strategies, and to research, coordinate and fully realize their own long-term projects. Students work collaboratively on large projects as well as work on mandatory and optional assignments from a range of possible assignments. [144P]
Prerequisite: FAS346Y5 and 1.5 credits in FAH/VCC and permission of instructor

FAS447Y5 Individual Investigations in Photography (HUM,EXP)
Students develop a critically informed photography practice by integrating the history and theory of photography with their production of original work in either an analogue or digital format. Students prepare a presentation comparing two Canadian and/or international MFA programs, in addition to preparing responses to readings and technical assignments. [144P]
Exclusion: VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite: FAS347Y5 or FAS349Y5 or FAS359Y5 or FAS369Y5 and 1.5 credits in FAH/VCC and permission of instructor
FAS448Y5 Individual Investigations in Sculpture (HUM,EXP)
Students produce a coherent body of self-directed artwork based on independent research and written proposals. In-progress and completed artworks are discussed in a peer critique setting. Students write an artist statement of their intentions and procedures, prepare a Canadian and international MFA program presentation, and document their artwork. [144P]
Exclusion: VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite: FAS348Y5 or FAS349Y5 or FAS359Y5 or FAS369Y5 and 1.5 credits in FAH/VCC and permission of instructor

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. Advanced Project students must have a B+ standing in a completed fourth-year studio. A written proposal must be submitted to, and approved by, the department before registration. [144P]
Exclusion: VIS311H1 or VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite: 1.0 FAS 400-level course and FAS451H5 and FAS452H5 and 1.5 credits in FAH/VCC and permission of instructor

FAS451H5 Advanced Project (HUM,EXP)
In this directed study, students undertake a semester-long period 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. Advanced Project students must have a B+ standing in a completed fourth-year studio. A written proposal must be submitted to, and approved by, the department before registration. [72P]
Exclusion: VIS311H1 or VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite or Corequisite: 1.0 FAS 400-level course, Permission of the Department

FAS452H5 Advanced Project (HUM,EXP)
In this directed study, students undertake a semester-long period 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. Advanced Project students must have a B+ standing in a completed fourth-year studio. A written proposal must be submitted to, and approved by, the department before registration. [72P]
Exclusion: VIS311H1 or VIS401H1 or VIS402H1 or VIS403H1 or VIS404H1
Prerequisite or Corequisite: 1.0 FAS 400-level course, Permission of the Department

FAS453H5 Art Education Practice (HUM,EXP)
Students investigate the principles of educational theory and practice for teaching the visual arts to learners including children, adolescents and adults, within a variety of educational settings [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 and Permission of the Department.

FAS454H5 Professional Practice (HUM,EXP)
Students explore the requirements of establishing a career as a practicing visual artist. Topics covered include portfolio development, finding and securing artist residency and exhibition opportunities, ways to support yourself as an artist, grant writing, photo documentation, peer group support, marketing and bookkeeping. [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)
In this practicum course, students gain hands-on teaching experience in a setting of their choice and interact with administrators, teachers, and community leaders. [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)

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 16) section prior to selecting courses.

For courses in this area see:
AST Astronomy (page 84)
CSC Computer Science (page 162)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
PHY Physics (page 394)
STA Statistics (page 445)

Specialist Program ERSPE1025 Astronomical Sciences (Science)

14.0 credits are required.

Limited Enrolment – Enrolment in this program is based on the completion of 4.0 credits, including the following courses: AST110H5; MAT102H5, (MAT135H5, MAT136H5)/MAT135Y5/MAT137Y5/MAT157Y5, MAT223H5/MAT240H5; (PHY136H5,PHY137H5)/(PHY146H5,PHY147H5)

First Year:
AST110H5; MAT102H5, (MAT135H5, MAT136H5)/MAT135Y5/MAT137Y5/MAT157Y5, MAT223H5/MAT240H5; (PHY136H5,PHY137H5)/(PHY146H5,PHY147H5)

Second Year:
AST221H1(St. George Campus), AST222H1(St. George Campus); MAT232H5/MAT233H5, MAT236H5, MAT244H5; PHY241H5, PHY242H5/JCP221H5, PHY245H5

Third Year:
AST320H1(St. George Campus); AST325H1/JCP265H5/CSC108H5, JCP321H5, JCP322H5, MAT311H5, MAT334H5; PHY325H5, PHY347H5

Fourth Year:
AST425Y1(St. George Campus); JCP421H5, PHY451H5, STA220H5/STA256H5

PHY136H5/PHY137H5 will no longer be accepted for admission into this program after the 2017/18 academic year.
Astronomy (HBSc)

Professors
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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.

Astronomy offers courses that could be of interest to every student at U of T Mississauga. Four of these are introductory courses: AST101H5, AST110H5, AST201H5, AST252H5. AST101H5 and AST201H5 are both intended for students from outside the sciences, while AST110H5 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 16) section prior to selecting courses.

For courses in this area see:
AST Astronomy (page 84)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
PHY Physics (page 394)

Major Program ERMAJ2204 Astronomy (Science)

9.0 credits are required.

Limited Enrolment – Enrolment in this program is based on the completion of 4.0 credits, including the following courses: AST110H5; MAT102H5, (MAT135H5, MAT136H5)/MAT135Y5/ MAT137Y5/ MAT157Y5, MAT223H5/ MAT240H5; (PHY136H5, PHY137H5)/(PHY146H5, PHY147H5)

First Year: AST110H5; MAT102H5, (MAT135H5, MAT136H5)/MAT135Y5/ MAT137Y5/ MAT157Y5, MAT223H5/ MAT240H5; (PHY136H5,PHY137H5)/(PHY146H5,PHY147H5)

Second Year: AST221H1(St. George Campus), AST222H1(St. George Campus), MAT244H5, MAT232H5/ MAT233H5, MAT236H5, PHY241H5, PHY242H5/ JCP221H5, PHY245H5

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

PHY136H5/PHY137H5 will no longer be accepted for admission into the program after the 2017/18 academic year.

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: AST101H1 or AST121H1 or AST221H1 or ASTA01H3 or 0.5 credit in any 100 or higher level course in Chemistry or Physics with the exception of CHM110H5 or CHM135H1 or PHY100H5 or PHY100H1 or PHY202H1 or PHY205H1.
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. [36L] Exclusion: AST326Y1
Recommended Preparation: SPH4U and MHF4U and 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: AST121H1 or AST201H1 or AST210H1 or AST221H1 or AST222H1 or ASTA02H3 or ASTB23H3 and 0.5 credit in any 100 or higher level course in Chemistry or Physics with the exception of CHM110H5 or CHM135H1 or PHY100H5 or PHY100H1 or PHY202H1 or PHY205H1.

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. [36L] Exclusion: AST101H1 or AST101H5 or AST121H1 or AST201H1 or AST201H5 or AST210H1 or ASTB03H3
Prerequisite: 4.0 full course credits

AST252H5 Cosmic Evolution (SCI)
This course addresses the question of life beyond Earth. Starting with our current understanding of how life began and evolved on Earth, the course explores possibility that life might have developed elsewhere in the Universe. It summarizes the evidence that the conditions necessary for life might exist today or existed in the past on other planets in our solar system. This search for evidence of life is then extended to the thousands of planets that have been discovered orbiting other stars. [36L] Exclusion: AST221H1 or AST222H1 or AST251H1
Prerequisite: (CHM110H5 and CHM120H5) or (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5)

AST299Y5 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 and International Opportunities (Page 23) for more details.

AST399Y5 Research Opportunity Program (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 (ROP) (Page 24) (299Y, 399Y, and 499Y) for more details.
Bioinformatics (HBSc)

Offered through the Department of Mathematical and Computational Sciences

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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 16) section prior to selecting courses.

For courses in this area see:
- BIO Biology (page 84)
- CBJ Computer Science (page 162)
- CHM Chemistry (page 113)
- CSC Computer Science (page 162)
- JCP Chemistry (page 113)
- MAT Mathematics (page 372)
- STA Statistics (page 445)

Bioinformatics (Science)

Specialist Program ERSPE1868

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, CHM120H5; CSC108H5, CSC148H5; MAT102H5, (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5) / MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5

Second Year (3.50 credits): BIO206H5, BIO207H5; CHM242H5; CSC207H5, CSC236H5, CSC263H5; MAT223H5/ MAT240H5

Third Year (2.0 credits): MAT212H5/ MAT244H5, MAT232H5; STA256H5, STA258H5.

Upper Years (4.5 credits): BIO314H5, BIO372H5, BIO477H5; CSC413H5/ CSC321H5/ CSC411H5/ CSC311H5, CSC343H5, CSC373H5; 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, BIO341H5, BIO370Y5, BIO371H5, BIO380H5, BIO443H5, BIO481Y5; CBJ481Y5; CHM361H5; CSC310H5, CSC338H5, CSC363H5, JCP410H5; STA302H5/ STA331H5,STA348H5, STA442H5

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/ MAT135Y5/ MAT137Y5/MAT157Y5 and MAT232H5) may be replaced by the combination of (MAT133Y5 and MAT233H5).

**Biological Chemistry (HBSc)**

For information on Biological Chemistry, please refer to the Chemistry (HBSc) (Page 111) program.
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 16) section prior to selecting courses.
For courses in this area see:
ANT Anthropology (page 50)
BIO Biology (page 94)
CHM Chemistry (page 113)
CLA Classical Civilization (page 126)
ENV Environment (page 232)
ERS Earth Science (page 179)
GGR Geography (page 274)
JBC Biology (page 94)
JBH Biology (page 94)
JCB Chemistry (page 113)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
MGM Management (page 361)
PHY Physics (page 394)
PSY Psychology (page 412)
STA Statistics (page 445)
WRI Communication, Culture, Information and Technology (page 138)

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 in this program is limited. Students wishing to enrol at the end of the first year (4.0 credits) must obtain a grade of at least 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 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 both BIO202H5 and BIO203H5 and a cumulative grade point average of at least 2.50. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in 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).

**First Year:**
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5;
   (MAT132H5, MAT134H5) / MAT134Y5 / (MAT135H5,
   MAT136Y5) / MAT135H5 / MAT135Y5 / MAT137Y5
2. 1.0 credit from the following: CLA201H5; ENV100Y5;
   ERS101H5; PHY136H5, PHY137H5, PSY100Y5;
   WRI203H5, WRI307H5
Note *(MAT132H5,MAT134H5) - Calculus for Life Sciences is highly recommended.

**Second Year:** BIO202H5, BIO203H5, BIO205H5,
BIO206H5, BIO207H5, (BIO208H5, BIO209H5); STA215H5

**Third and Fourth Years:**
1. BIO313H5 and BIO342H5 and BIO443H5
2. STA215H5 and BIO360H5

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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in 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).

**First Year:**
1. BIO152H5, BIO153H5; CHM110H5, CHM120H5;
   (MAT132H5, MAT134H5) / MAT134Y5 / (MAT135H5,
   MAT136Y5) / MAT135H5 / MAT135Y5 / MAT137Y5
2. 1.0 credit from the following: CLA201H5; ENV100Y5;
   ERS101H5; PHY136H5, PHY137H5, PSY100Y5;
   WRI203H5, WRI307H5
Note *(MAT132H5,MAT134H5) - Calculus for Life Sciences is highly recommended.

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

**Third and Fourth Years:**
1. BIO313H5 and BIO342H5 and BIO443H5
2. STA215H5 and BIO360H5
3. 1.0 credit from courses in organismal biology:
   BIO325H5, BIO326H5, BIO335H5, BIO338H5, BIO339H5, BIO354H5, BIO356H5, BIO370Y5, BIO371H5
4. 0.5 credit from field courses: BIO416H5, other 2-week OUPFB** Field Courses
5. 2.0 credits from core ecology/evolutionary biology courses: BIO311H5, BIO330H5, BIO331H5, BIO333H5, BIO341H5, BIO361H5, BIO373H5, BIO376H5, BIO378H5, BIO406H5, BIO445H5, BIO464H5; GGR312H5, JHB471H5
6. 1.0 credits from other UTM 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

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.

**First Year:** BIO152H5, BIO153H5; CHM110H5, CHM111H5, CHM115H5, CHM120H5; (MAT132H5, MAT134H5)/MAT134Y5/MAT135Y5/MAT137Y5; MGMT101H5**, MGMT102H5**

Note*(MAT132H5, MAT134H5) - Calculus for Life Sciences is highly recommended.

**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, BIO342H5, BIO347H5, BIO362H5, BIO375H5, BIO380H5, BIO409H5; CHM333H5
   (note: CHM231H5 is prerequisite for this course), CHM341H5, CHM345H5, CHM347H5, CHM362H5, CHM372H5, CHM373H5
3. 1.0 credit from UTM CHM/BIO courses at the 400 level.

**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

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.

**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.

All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in this program is calculated on a minimum of 4.0 credits completed at UTM with final percentage grades (i.e. CR/ NCR courses are not applicable).
Specialist Program ERSPE1237 Molecular Biology (Science)

15.0 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 and 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.

All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in 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).

**First Year:** BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5)* / MAT134Y5/ (MAT135H5, MAT136H5)/ MAT135Y5/ MAT137Y5; plus 1.0 of CLA201H5; ENV100Y5; ERS101H5/ ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

**Second Year:** BIO206H5, BIO207H5; CM242H5, CM243H5; STA215H5; plus 1.0 credit from BIO202H5, BIO203H5, BIO205H5

**Third Year:** BIO314H5, BIO315H5, BIO342H5, BIO360H5, BIO370Y5, BIO372H5; CHM361H5, CHM362H5, CHM372H5, CHM373H5; plus 0.5 of BIO304H5, BIO310H5, BIO341H5, BIO347H5, BIO362H5, BIO368H5, BIO374H5, BIO375H5, BIO380H5; CM347H5; PHY332H5, PHY333H5; BCH335H1, BCH340H1

**Fourth Year:** BIO477H5 or BIO419H5** plus 1.0 additional credit from: BIO403H5, BIO407H5, BIO408H5, BIO411H5, BIO417H5, BIO419H5, BIO422H5, BIO443H5, BIO458H5, BIO476H5, BIO477H5, BIO481Y5; BCH441H1; CHM444H5, CHM462H5, CHM489Y5; JBC472H5; JCB487Y5; JCP463H5; C543H1, CSB450H1, CSB459H1, CSB472H1, CSB473H1, CSB474H1, CSB475H1; MGY425H1, MGY428H1, MGY440H1, MGY445H1, MGY451H1, MGY452H1, MGY470H1; MU485H1

**Please note that both BIO477H5 and BIO419H5 can be taken, but each will be counted only once in the total 1.5 credits required in this section.**

**Notes:**

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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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in 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).

**First Year:** 1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5)/ MAT134Y5/ (MAT135H5, MAT136H5)/ MAT135Y5/ MAT137Y5; plus 1.0 of CLA201H5; ENV100Y5; ERS101H5/ ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

2. 1.0 from the following: CLA201H5; ENV100Y5; ERS101H5/ ERS120H5; PHY136H5, PHY137H5; PSY100Y5; WRI203H5, WRI307H5

**Second Year:** BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5; STA215H5; plus 0.5 of BIO304H5, BIO310H5, BIO341H5, BIO347H5, BIO362H5, BIO368H5, BIO374H5, BIO375H5, BIO380H5; CM347H5; PHY332H5, PHY333H5; BCH335H1, BCH340H1

**Third and Fourth Years:** BIO313H5/ BIO314H5/ BIO409H5, plus BIO360H5

5.5 additional UTM 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 four of the following groups:
• **Ecology and Field Biology**: BIO311H5, BIO312H5, BIO313H5, BIO373H5, BIO376H5, BIO378H5, BIO412H5, BIO464H5

• **Biology of Whole Organisms**: BIO325H5, BIO326H5, BIO335H5, BIO338H5, BIO354H5, BIO356H5, BIO376H5, BIO378H5

• **Genetics and Evolution**: BIO341H5, BIO342H5, BIO347H5, BIO407H5, BIO422H5, BIO443H5, BIO445H5, BIO464H5

• **Cell, Molecular and Developmental Biology**: BIO314H5, BIO315H5, BIO324H5, BIO362H5, BIO370Y5 / BIO371H5, BIO372H5, BIO374H5, BIO375H5, BIO380H5, BIO404H5, BIO407H5, BIO408H5, BIO417H5, BIO419H5, BIO422H5, BIO456H5, BIO475H5, BIO476H5, BIO477H5

• **Physiology and Behaviour**: (BIO208H5, BIO209H5), BIO304H5, BIO310H5, BIO312H5, BIO318Y5 / BIO328H5, BIO320H5, BIO368H5, BIO405H5, BIO408H5, BIO409H5, BIO410H5, BIO411H5, BIO414H5, BIO434H5

Up to 1.0 credit may be taken from the following biology-related courses: GGR227H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR312H5; CHM347H5, CHM361H5, CHM362H5, CHM372H5, CHM373H5; PHY332H5, PHY333H5; PSY290H5, PSY355H5, PSY357H5, PSY392H5, PSY395H5, PSY397H5; ANT334H5, ANT336H5, ANT340H5.

Additional courses: BIO361H5, BIO400Y5, BIO481Y5; JCB487Y5

**Notes**:

1. Students wishing to emphasize cell biology, molecular biology, microbiology, physiology or genetics, should take CHM242H5 and CHM243H5 in second year. Such students should take (MAT132H5, MAT134H5) / MAT134Y5 / (MAT135H5, MAT136H5) / 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 any 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.

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**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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note**: CGPA for enrolment in 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).

**First Year**: BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5) / MAT134Y5 / (MAT135H5, MAT136H5) / MAT135Y5 / MAT137Y5; Note*(MAT132H5, MAT134H5) - Calculus for Life Sciences is highly recommended.

**Second Year**: (BIO208H5, BIO209H5), ERS201H5, ERS202H5, ERS203H5; ESS261H1; STA215H5

**Third Year and Fourth Year**: ERS325H5; BIO354H5, BIO356H5, ESS331H1

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**Major Program ERMAJ1149 Biology for Health Sciences (Science)**

8.5 credits are required including at least 2.0 at the 300/400 level.

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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note**: CGPA for enrolment in 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).

**Program Requirements**:

1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5) / MAT134Y5 / (MAT135H5, MAT136H5) / MAT135Y5 / MAT137Y5
Note*(MAT132H5, MAT134H5) - for Life Sciences is highly recommended.

2. BIO202H5, BIO206H5, BIO207H5, (BIO208H5, BIO209H5), BIO304H5, BIO310H5, BIO380H5; STA215H5**/PSY201H5

3. 1.0 credits from one of the following lists:
   - **Cell, Molecular, and Biotechnology Stream**: BIO200H5, BIO314H5, BIO315H5, BIO324H5, BIO360H5, BIO370Y5/BIO371H5, BIO372H5, BIO374H5, BIO375H5, BIO404H5, BIO417H5, BIO419H5, BIO422H5, BIO475H5, BIO476H5, BIO477H5; JBC472H5
   - **Neuroscience Stream**: BIO320H5, BIO360H5, BIO403H5, BIO408H5, BIO409H5, BIO451H5
   - **Genes and Behaviour Stream**: BIO315H5, BIO318Y5/BIO328H5, BIO341H5, BIO342H5, BIO347H5, BIO361H5, BIO368H5, BIO405H5, BIO407H5, BIO414H5, BIO422H5, BIO443H5

**Students who plan to take BIO360 or who plan to transfer to a Biology Specialist program should enrol in STA215H5.

NOTES

- Students must 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 Biology Major or Biology Minor 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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

Note: CGPA for enrolment in 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).

**Program Requirements**:

1. BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5)/MAT134Y5*/(MAT135H5, MAT136H5)/MAT135Y5/MAT137Y5

2. BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5; STA215H5*/PSY201H5

3. 2.0 in UTM Biology courses at the 300 or 400 level.

**Students who plan to take BIO360H5 or who plan to transfer to a Biology Specialist program should enrol in STA215H5.

NOTES

- Students must 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 Biology Major or Biology Minor will not satisfy the min. 12.0 distinct credit requirement for a degree. Please choose programs and courses accordingly.
- 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 ERMAJ2364 Biology (Science)

8.0 credits are required including at least 2.0 at the 300/400 level.

**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. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

Note: CGPA for enrolment in 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).

**Program Requirements**:

1. BIO152H5, BIO153H5

2. Two courses from BIO202H5, BIO203H5, BIO205H5, BIO206H5, BIO207H5, (BIO208H5, BIO209H5)

3. 2.0 additional Biology credits, at least 1.0 at the 300/400 level.

**Notes**

- 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 Biology Major or Biology Minor 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.
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 or 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 and CHM120H5 and (MAT134Y5 or MAT135Y5 or 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 or 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 or JBC201H5
Corequisite: (Recommended): BIO206H5
Recommended Preparation: CHM211H5 and CHM242H5 and JCP221H5

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 or (BIO270H1 or BIO271H1) or (BIOB32H3 or BIOB34H3)
Prerequisite: BIO152H5 and BIO153H5 and CHM110H5 and 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 or BIO251H1
Prerequisite: BIO152H5 and BIO153H5 and CHM110H5 and 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, 18P]
Exclusion: BIOB50H3
Prerequisite: (BIO152H5 and BIO153H5) or (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 or BIO255H1 or BIOB10Y3 or BIOB11H3 or BIOB12H3
Prerequisite: BIO152H5 and CHM110H5 and 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 or HMB265H1 or BIOC15H3
Prerequisite: BIO152H5 and BIO206H5
Corequisite: BIO153H5

BIO208H5 Fundamentals of Human Anatomy and Physiology I (SCI)
The integration of the major organ systems involved in human biomechanics. A comparative approach is taken, placing the structure and function of the skeletal, muscular and nervous systems in an evolutionary context.
Exclusion: BIO210H5 or BIO210Y5 or BIOB33H3 or BIOB35H5
Prerequisite: BIO152H5 and BIO153H5
Recommended Preparation: None

BIO209H5 Fundamentals of Human Anatomy and Physiology II (SCI,EXP,INTLO)
The structure and function of the human body. Topics include integrating different organ systems, such as endocrine, cardiovascular, respiratory, and urogenital systems. An emphasis is placed on integration of structure and function of the major organ systems. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process.
Exclusion: BIO210H5 or BIO210Y5 or BIOB33H3 or BIOB35H5
Prerequisite: BIO208H5

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 and International Opportunities (Page 23) for more details.

BIO304H5 Physiology of Neurons and Muscle (SCI)
The course will provide students with knowledge of the physiology of neurons, muscle and sensory systems by demonstrating the biophysical, ionic, and molecular bases of cellular excitability. Topics include the forces that govern ion movement through solution, the electrical properties of the cell membrane, the molecular properties of ion channels, and the molecular physiology of neuronal excitability, synaptic transmission, neuromodulation, and muscle contraction. [36L]
Exclusion: CJH332H1 or CSB332H1
Prerequisite: BIO202H5 or BIO204H5 or BIO206H5 or (BIO208H5 and BIO209H5) or BIO210Y5
Recommended Preparation: PHY100H5
NOTE: BIO210H5 (half-course) is not an acceptable pre-requisite for this course.

BIO310H5 Physiology of Regulatory Systems (SCI)
Principles of cardiovascular, renal, respiratory and digestive physiology of animals and their control by the neural and endocrine systems. [36L]
Exclusion: PSL300H1
Prerequisite: BIO202H5 / BIO204H5 / (BIO208H5 & BIO209H5) / 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 permission of instructor
Corequisite: BIO360H5 or STA215H5 or 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 focuses on the principal physiological processes in plants and the regulation of these processes in response to environmental factors with an emphasis on the relationship between structure and function from the molecular to the whole-plant level. The course will provide the basis to understand how plants sense and respond to changing environmental conditions. This will enable students to understand how rising atmospheric carbon dioxide and global climate warming impact photosynthesis, plant metabolism and ultimately whole plant and ecosystem performance. Concepts discussed during lectures will be demonstrated in a series of practical labs. [36L, 15P]
Prerequisite: BIO203H5 or BIO204H5

BIO313H5 Field Methods and Experimental Design 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. [36L]
Prerequisite: BIO205H5
Corequisite: (STA215H5 or PSY201H5) or 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]
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 experimentation 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 (SCIEXP)
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 or PSY252H5 or PSY352H5
Prerequisite: BIO152H5 and BIO153H5

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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 or BIO204H5

BIO324H5 Plant Biochemistry (SCI)
This course examines plants as the biochemical motors and sustainers of life on earth. The major pathways of plant metabolism are surveyed to provide students with an integrated model of plant cells as autonomous biochemical networks. This course further emphasizes the specialized metabolism of economically significant plant species, the biosynthesis of pharmacologically and agriculturally important metabolites, and the role of biotechnology in engineering exotic plant metabolism in industrial settings. [36L]
Exclusion: CSB475H1
Prerequisite: BIO203H5 and BIO206H5 and CHM120H5 or permission of instructor
Corequisite: None
Recommended Preparation: BIO312H5 and CHM242H5 and CHM352H5

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. [48L]
Prerequisite: BIO152H5 and BIO153H5
Recommended Preparation: BIO202H5 or 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 and BIO153H5 and BIO205H5
Recommended Preparation: BIO202H5

BIO327H5 Biomechanics (SCI)
This course examines plants as the biochemical motors and sustainers of life on earth. The major pathways of plant metabolism are surveyed to provide students with an integrated model of plant cells as autonomous biochemical networks. This course further emphasizes the specialized metabolism of economically significant plant species, the biosynthesis of pharmacologically and agriculturally important metabolites, and the role of biotechnology in engineering exotic plant metabolism in industrial settings. [36L]
Exclusion: CSB475H1
Prerequisite: BIO203H5 and BIO206H5 and CHM120H5 or permission of instructor
Corequisite: None
Recommended Preparation: BIO312H5 and CHM242H5 and CHM352H5

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 or PSY252H5 or PSY352H5
Prerequisite: BIO152H5 and 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 or BIO204H5) and 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 and (BIO360H5 or 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, 32P]
Exclusion: BIO332Y5 or BIO337H5
Prerequisite: BIO152H5 and BIO153H5
Corequisite: BIO205H5 and BIO120H5

BIO334H5 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 and (BIO360H5 or STA215H5)
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 and BIO153H5) or any 200 level course in BIO.

BIO339H5 Plant Identification and Systematics (SCI)
Lectures provide an introduction to principles and underlying philosophy of plant classification, phylogenetic reconstructions, flowering plant, evolution, phylology, 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 or BIO204H5) plus 0.5 credit from BIO205H5 and BIO206H5 and 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. [36L, 12T]
Prerequisite: BIO207H5
Recommended Preparation: (BIO360H5 or STA215H5) (strongly recommended)

BIO347H5 Epigenetics (SCI)
Epigenetic phenomena play key roles in environmental interactions, development, and in disease. Underlying molecular mechanisms that regulate chromatin structure and gene expression are explored, including DNA methylation, histone modifications, or non-coding RNAs. Examples focus predominantly on eukaryotes (e.g. plants, insects, humans) and highlight how epigenetic marks are set, maintained, and involved in shaping phenotypic outcomes. The course will also enable students to apply knowledge and basic principles to recent scientific literature in this dynamic field. [24L, 12T]
Exclusion: BIOD19H3 or CSB458H1
Prerequisite: BIO206H5 and BIO207H5
Corequisite: None
Recommended Preparation: BIO202H5 and BIO203H5

BIO353H5 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: CSB340H51
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 and BIO153H5 and ((BIO208H5 and BIO209H5) or 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: (BIO208H5 and BIO209H5) or BIO210Y5
Recommended Preparation: BIO360H5 or 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 or PSY202H5 or STA221H5
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 software. [24L, 24T]
Exclusion: ECO220Y5
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 be introduced to basic computer programming - no previous experience is required. [12L, 36P]
Exclusion: None
Prerequisite: BIO206H5 and BIO207H5
Corequisite: None

BIO368H5 Medicinal Plants and Human Health (SCI)
This botanical survey of medicinal plants integrates phytochemistry, ethnobotany, herbalism, pharmacology, and the molecular basis of human disease. It examines traditional herbal medicine and modern phytochemical research as sources of plant-based drugs used in the treatment of disease. The biosynthesis of therapeutic plant compounds and their mechanisms of action in the human body are emphasized. Students will critically examine and debate claims made in the health, herbal, and supplement literature. [36L, 12T]
Exclusion: NFS400H1
Prerequisite: BIO203H5 and BIO206H5
Corequisite: None
Recommended Preparation: CHM242H5

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 and BIO207H5 and 2013-14 and prior: BIO206H5 and BIO207H5 and 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 and BIO207H5
This is a half-credit (0.5) course that is offered over the full academic year.

BIO372H5 Molecular Biology (SCI)
Exclusion: JBC372H5 or CHM360Y5 or JLM349H1 or MGB311Y1
Prerequisite: BIO206H5 and CHM242H5
Corequisite: BIO207H5
Recommended Preparation: CHM361H5

BIO373H5 Environmental Microbiology (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 and 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]
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 or STA215H5 or STA220H5 or PSY201H5)

BIO376H5 Marine Ecology (SCI)
This course addresses the diversity of marine life, and the physical, chemical, and biological processes occurring in marine ecosystems. Students will explore current methods and theories in marine ecology and consider the societal importance of marine resources with a special emphasis on Canada’s coasts. [36L]
Exclusion: None
Prerequisite: BIO152H5 and BIO153H5 and BIO205H5
Corequisite: None
Recommended Preparation: None

BIO378H5 The Biology of Marine Mammals: evolution, physiology, ecology and conservation (SCI)
This course provides an introduction to the biological study of marine mammals and their populations. It explores the evolution of marine mammals, their adaptations to aquatic environments, as well as their population and behavioural ecology. The course also investigates threats to marine mammal populations and their national and global conservation. [24L, 24T]
Exclusion: None
Prerequisite: BIO152 and BIO153 and BIO202 and BIO205
Corequisite: None
Recommended Preparation: None

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 and BIO207H5
Recommended Preparation: BIO202H5 or BIO204H5 or 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 will 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 and International Opportunities (Page 23) 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 or JEG401Y5 or BIO481Y5 or JCB487Y5
Prerequisite: Fourth year standing in Biology Specialist or Major Program, 3.0 CGPA and permission of instructor

BIO403H5 Developmental 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: BIO304H5 and (BIO320H5 or BIO318Y5 or BIO330H5 or BIO331H5 or BIO333H5)

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 and (STA215H5 or BIO360H5 or BIO318Y5 or BIO330H5)
Recommended Preparation: BIO313H5

BIO407H5 Behaviour Genetics (SCI)
State of the art techniques used in the genetic, molecular, statistical and neurobiological analysis of behaviour are discussed. We focus on behaviour-genetic analysis of olfaction, foraging, rhythms and sex in three model systems (the worm C. elegans, the fruit fly D. melanogaster and the mouse). We discuss how information from these model organisms can be used to shed light on behaviour genetics of non-model organisms including humans. [24L]
Prerequisite: BIO207H5 and (BIO360H5 or STA215H5)
Corequisite: BIO318Y5 or PSY252H5
Recommended Preparation: BIO206H5 and BIO215H5 and BIO304H5

BIO408H5 Neural Circuit Structure and Function (SCI)
This course covers contemporary topics in systems neuroscience, focusing on the relationship between the circuit structure and function of mammalian brains. We review the current understanding of topics concerning signal transduction and the peripheral circuits, information processing in the central nerve system, neuronal cell types and connectivity, development and critical period plasticity of sensory cortices, and motor control. Students present and critique the latest research progress on these issues. [36L]
Exclusion: BIO483H5 Winter 2019
Prerequisite: BIO304H5 or permission of instructor

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 and (BIO202H5 or BIO204H5 or 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 or 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, criticize 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 and BIO203H5) or (BIO204H5 and BIO205H5) and at least one of (GGR377H5 or BIO312H5 or BIO330H5 or BIO331H5 or BIO333H5)
Recommended Preparation: BIO313H5
BIO414H5 Advanced Integrative Physiology (SCI,EXP)
The integration of cardiovascular, renal, respiratory and muscle physiology will be examined with a problem-based approach. The response of these systems to challenges such as altitude, depth under water, and exercise will be examined. Laboratory activities will give students hands on experience measuring physiological variables of these systems with primarily human subjects, while other examples will be used to examine the diversity of response to environmental challenges throughout the animal kingdom. [24L, 15T, 15P]
Exclusion: HMB472H1 or KPE360H1 or KPE462H1
Prerequisite: BIO304H5 and BIO310H5
Corequisite: None
Recommended Preparation: None

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/undergrad/courses/field.htm Please check this list early for balloting dates.

BIO417H5 Molecular and Structural Genomics (SCI)
Genetic information shapes almost all aspects of life. How is this information organized and inherited? How does it influence individuals and how does help to understand disease? The course explores the structure and function of chromatin i.e. the management of biological information. We will explore how the genome is packaged, expressed, replicated and repaired. We will look into chromosome sets and inheritance, accessibility of the genome to the molecular machinery, DNA repair, and modern techniques in research and diagnostics.
Exclusion: BIO484H5 Winter 2020
Prerequisite: BIO206H5 and BIO207H5
Recommended Preparation: BIO347H5

BIO419H5 Mammalian Gene Regulation (SCI)
The study of gene regulation is tightly linked to our understanding of cell types and functions in developmental biology. This course provides an overview of the field of mammalian gene regulation, including transcription, regulatory RNAs, chromatin regulation, and genomics. Students will read, critique, and present recently published research articles on gene regulation in mammalian development. [24L, 12S]
Exclusion: BIO484H5 Fall 2018 or MGY420H1
Prerequisite: BIO207H5 and BIO372H5 or permission of instructor
Corequisite: None
Recommended Preparation: None

BIO422H5 Environmental Epigenetics (SCI)
Organisms show a remarkable plasticity that allows them to grow and survive in an ever-changing environment. Epigenetic mechanisms provide a fascinating layer of regulation that integrates the genome and environment. In addition, epigenetic marks can contribute to lasting effects across generations without changes in the underlying DNA sequence. This course explores how plant and animal epigenomes respond to change such as stresses or developmental transitions. Influences on genome function, phenotype, and how epigenetic marks are transmitted will be discussed interactively drawing on recent primary literature and modern technological advances. [12L, 24S]
Exclusion: BIOD19H3
Prerequisite: BIO312H5 and BIO347H5
Corequisite: None
Recommended Preparation: BIO341H5 and BIO372H5

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: permission of instructor
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]
Exclusion: EEB462H1
Prerequisite: BIO206H5 and BIO207H5
Recommended Preparation: STA215H5 or PSY201H5 or BIO314H5 or BIO360H5

BIO444H5 Winter 2020
Prerequisite: BIO206H5 and BIO207H5
Recommended Preparation: None
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:* BIO342H5
*Corequisite:* None
*Recommended Preparation:* None

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 application, 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 and BIO207H5 and (BIO362H5 or CSC108H5) and permission of instructor
*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 and BIO153H5 and BIO205H5 and permission of instructor
*Note:* Students from a wide range of programs are encouraged to enrol.

JBH471H5 Worlds Colliding: The History and Ecology of Exploration, Contact, and Exchange (HUM,SCI,EXP,INTLO)
An examination of contact in world history through both an ecological and a historical lens. Precise topics will depend on the year, but the focus will be on the creation of global systems and ecological challenges that continue to shape our world. In some years, students may have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. Students interested in this course will need to be approved for enrollment by the department and course instructors. [24S]
*Exclusion:* UTM290H5 Winter 2018 or Winter 2019
*Prerequisite:* 2.0 HIS credits or 1.0 BIO credit at the 300 level and permission of instructor.
*Recommended Preparation:* None

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 and CHM361H5 and (CHM362H5 or 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:* permission of instructor and (BIO370Y5 or BIO371H5 or 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:* BIO310H5 and BIO315H5
*Recommended Preparation:* BIO341H5 and BIO372H5
BIO477H5 The Human Genome and Cancer Biology (SCI)
The first part of the course examines the structure and molecular biology of the human genome. Topics will include: the sequencing of the human genome; variation between genomes; and various aspects of functional genomics such as a brief overview of how gene expression is regulated and how genomics is being utilized in health and medicine. Techniques such as high throughput sequencing will be covered. 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 presentations and discussion of recently published research articles. [36L, 12S]
Exclusion: MGY470H1
Prerequisite: (BIO370Y5 or BIO372H5) and permission of instructor
Recommended Preparation: BIO314H5 and 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 or JCB487Y5
Prerequisite: permission of instructor

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: permission of instructor
Corequisite: BIO477H5
Recommended Preparation: CSC343H5 and 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
**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.
- D. Ng, B.Sc., M.Sc.B.M.C., Ph.D.

**Undergraduate Advisor**
Diane Matias
Room 3057, William G. Davis Bldg.
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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 15) section prior to selecting courses.**

For courses in this area see:
- BIO Biology (page 54)
- HSC Biomedical Communications (page 106)

**Minor Program ERMIN0840 Biomedical Communications (Science)**

Biomedical Communications (Science) is offered through the Biology Department.

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**Limited Enrolment** – Enrolment in this program requires the student meet one of the following two conditions: 1) concurrent enrolment in a science major and any minor; or 2) enrolment in a science specialist program. A minimum CGPA of 2.20 is required. All students (including transfer students) must complete 4.0 UTM credits before requesting this program.

**Note:** CGPA for enrolment in 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).

**Program Requirements:**
1. BIO152H5, BIO153H5, HSC200H5

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**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](http://uoft.me/cpsforms). Application should be submitted to the CPS Undergraduate Assistant.

Registration on ACORN is also required. [240P]

**Exclusion:** BIO400Y5 or BIO481Y5 or CBJ481Y5 or CHM489Y5 or ERS470Y5 or ERS471H5 or ERS472H5 or PHY489Y5 or BHC472Y1 or BHC473Y1 or CHM499Y1 or CSB497H1 or CSB498Y1 or CSB499Y1 or ESS491H1 or ESS492Y1 or MGY480Y1 or PHY478H1 or PHY479Y1 or BIOD98Y3 or CHMD90Y3 or CHMD91H3 or ESSD09H3 or ESSD10H3 or PSCD10H3

**Prerequisite:** 2.0 credits 300 level from BIO/CHM/JBC/JCP/ERS/EPS/G/PHY and 1.0 credit from BIO206H5 and BIO314H5 and CHM372H5 and CHM373H5 and CHM394H5 and CHM395H5 and CHM396H5 and CHM397H5 and ERS201H5 and ERS202H5 and PHY324H5 and PHY347H5. Normally taken in 4th year. 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)

2. 1.0 credit from the following: HSC300H5/ HSC301H5/ HSC302H5/ HSC307H5


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, 24P]
Exclusion: HSC302H5
Prerequisite: BIO152H5 and BIO153H5

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: the clear, concise and truthful presentation of data in static and interactive graphics. Visualization is used to explore data, reveal patterns, and to communicate to different audiences. Topics range from human visual perception and cognition, to the critical interpretation of design and accuracy in information graphics. Practical application of course material will require students to develop information graphics 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. [12L, 24P]
Exclusion: HMB304H1
Prerequisite: HSC200H5

HSC307H5 Visual Presentation Design for Life Sciences (SCI)
This course teaches students basic graphic and multimedia design theory, and skills required to create effective scientific posters and oral-visual presentations. Topics include the communication objectives of different presentation types; human visual perception and design; and theories of multimedia learning. Students will create media using evidence-based design principles. [18L, 18P]
Exclusion: None
Prerequisite: BIO152H5 and BIO153H5 and HSC200H5
Corequisite: None
Recommended Preparation: None

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 Digital Learning Environments in Biology and Health Science (SCI)
This course focuses on the design, development and evaluation of digital learning environments for biology and health sciences education. An overview of learning management systems, knowledge object design, collaborative knowledge building environments, simulations, tutorials, and games will be presented. Emerging communications technologies will be discussed in theory, explored through examples, and applied through prototype design. [12L, 24P]
Exclusion: None
Prerequisite: (ANT101H5 or BIO152H5 or CCT260H5) and 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 or BIO210H5 or BIO210Y5 or ANT205H5 or 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. [12L, 24P]
Prerequisite: HSC200H5 and (ANT200H5 and ANT201H5) or (ANT202H5 and ANT203H5) or 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 (ANT202H5 or ANT205H5 or 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. [24L, 12P]
Prerequisite: HSC300H5

Biomedical Physics (HBSc)

For information on Biomedical Physics, please refer to the Physics (HBSc) (Page 392) program.

Biotechnology

For information on Biotechnology, please refer to the Biology (HBSc) (Page 88) program.
**Business, Science and Entrepreneurship**

Administrator  
Patrice Lee  
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Program Director  
Leigh Revers  
Kanef Building, Room KN2256  
905-569-4323  
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The Minor in Business, Science and Entrepreneurship (ERMIN2017) is aimed at providing UTM science students who are an Honours Bachelor of Science degree at UTM with fundamental business knowledge that will complement their science education and support their future professional success.

Students who are accepted into the minor will be exposed to multiple area of business, namely, Accounting, Human Resources, Marketing, Finance, Operations and Business Plan and Strategy. Students will be able to apply management theories to the analysis of issues encountered in real world organization as well as produce a range of effective business communications, in both oral and written form, for an audience of business professionals.

**Students should also review the Degree Requirements (Page 16) section prior to selecting courses.**

For courses in this area see:  
ECO Economics (page 188)  
IMI Institute for Management and Innovation (page 314)

**Minor Program ERMIN2017 Business, Science and Entrepreneurship (Science)**

4.0 credits are required for program completion.

**Limited Enrolment** – Enrolment in this program is limited to students who meet the following criteria:

1. Enrolled in a UTM Science Specialist or Major Subject Post.
2. Completion of 4.0 credits.
3. Cumulative Grade Point Average (CGPA): Determined annually by the Institute for Management & Innovation (IMI) to ensure a balance between enrolment and teaching resources.

**NOTE:** Completion of ECO100Y5 in the first year of study before enrolment in the program is strongly recommended.

**Program Requirements:** ECO100Y5, IMI201H5, IMI202H5, IMI203H5, IMI301H5, IMI302H5, IMI303H5.
Canadian Studies (HBA)

Program Director
Professor Colin Hill
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Undergraduate Advisor
Megan Janssen
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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, Sociology, 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 16) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 50)
CIN Cinema Studies (page 121)
DRE Drama (page 451)
ECO Economics (page 188)
ENG English (page 205)
FAH Fine Art History (FAH) (page 65)
FRE French (page 258)
GGR Geography (page 274)
HIS History (page 289)
ITA Italian (page 323)
JPE Political Science (page 401)
LIN Linguistics (page 349)
MGT Management (page 361)
POL Political Science (page 401)
SOC Sociology (page 424)
WGS Women and Gender Studies (page 463)

Major Program ERMAJ0728 Canadian Studies (Arts)

Program Requirements: 7.0 credits are required, fulfilling the following requirements:

1. HIS262H5 (What is Canada?);
2. POL214Y5 (Canadian Government and Politics);
3. 1.0 credit from the following ENG courses:
   ENG215H5 (The Canadian Short Story), ENG252Y5 (Canadian Literature), ENG255H5 (Introduction to Canadian Literature), ENG274H5 (Indigenous Literatures), ENG352H5 (Canadian Drama), ENG353Y5 (Canadian Prose Fiction), ENG354Y5 (Canadian Poetry), ENG361H5 (Canadian Literature, Beginnings to 1920), ENG362H5 (Canadian Literature, 1920 to the Present), ENG392H5 (Canadian Fiction), ENG393H5 (Canadian Poetry in Context);
4. GGR202H5 (Geography of Canada) and
5. 4.0 additional credits (at least 2.0 of which must be at the 300/400 level) from courses listed below that have not already been applied towards the requirements for the Major Program in Canadian Studies.

The following U of T Mississauga courses can be taken to complete the requirements for a Major in Canadian Studies.

- ANT241H5 Anthropology and the Indigenous Peoples of Turtle Island
- CCT219H5 Introduction to Communication Policy
- CIN205H5 Canadian Auteurs
- DRE200H5 Canadian Theatre History
- DRE405H5 Topics in Indigenous Performance
- ECO323Y5 Canadian Economic History
- ENG271H5 Toronto’s Multicultural Literatures
- ENG357H5 New Writing in Canada
- ENG358H5 Special Topics in Canadian Literature
- ENG424H5 Advanced Studies: Seminar: Canadian Literature
- ENG425H5 Advanced Studies: Seminar: Canadian Literature
- FAH292H5 Canadian Art
- FRE312H5 From the Gothic and Fantastic Novels to Realism in Quebec
- FRE316H5 Urban Attraction and the Quebec Contemporary Novel
- FRE417H5 Comedy and Tragedy in Quebec Theatre
- FRE454H5 Teaching and Learning Varieties of Canadian French
- GGR348H5 The Great Lakes – A Sustainable Natural Resource?
- GGR384H5 Climatology of Canadian Landscapes
- GGR415H5 Geographies of Indigenous Health
- HIS261H5 (Introduction to Canadian History)
- HIS311H5 Introduction to Canadian International Relations
- HIS312H5 Canadian Communities 1600-2000
• HIS313H5 Canadian Working-Class History to 1919
• HIS314H5 20th Century Canadian Working-Class History
• HIS315H5 Indigenous Peoples and Immigrants in Canada
• HIS318H5 Canadian Environmental History: Contact to Conservation
• HIS318H5 Canadian Environmental History: Conservation to the Modern Environmental Movement
• HIS326Y5 History of Women in Canada, 1600-2000
• HIS342H5 History of Quebec and French Canada
• HIS358H5S (Canada Since World War Two)
• HIS367H5 Diasporic Canada
• HIS368H5 Canada in the First World War
• HIS369H5 Great Lakes Aboriginal History
• HIS402H5 Topics in the History of French Canada
• HIS416HS Canada and the Second World War
• HIS452H5 The Great Depression in Canada
• HIS461H5 History of Upper Canada
• HIS462H5 Indigenous North Americas
• HIS487H5 Canadian Social History
• ITA255Y5 The Italian Canadian Experience
• JPE250Y5 Environmental Politics in Canada
• JPE251H5 Introduction to Canadian Environmental Law and Policy I
• JPE252H5 Introduction to Canadian Environmental Law and Policy II
• LIN454H5 Teaching and Learning Varieties of Canadian French
• MGT423H5 Canadian Income Taxation I
• MGT429H5 Canadian Income Taxation
• MGT429H5 Canadian Income Taxation
• POL111H5 Canada in Comparative Perspective
• POL316Y5 Contemporary Canadian Federalism
• POL336Y5 Ontario Politics
• POL353Y5 Canadian Public Policy: From the Golden Age to the Era of Globalization
• POL490H5 Topics in Canadian Politics
• POL494Y5 Topics in Canadian Politics
• SOC301H5 Canadian Prisons
• SOC302H5 Indigenous-Canada Relations
• SOC332H5 Race and Ethnicity in Canada
• SOC353Y5 Social Policies, Politics, and Gender
• SOC415H5 Senior Seminar in Indigenous Studies
• WGS210H5 Women, Gender, and Labour
• WGS215H5 Introduction to Women, Public Policy, and the Law
• WGS335H5 Women, Migration, and Diaspora
• WGS343H5 The Montreal Experience: Sex and Gender in la Cité
• WGS347H5 Indigenous Feminisms and Decolonization

Minor Program ERMIN0728 Canadian Studies (Arts)

Program Requirements: 4.0 credits are required, fulfilling the following requirements:

1. 2.0 credits in at least two different disciplines from the following list: HIS261H5 (Introduction to Canadian History) and HIS358H5 (Canada Since World War Two); HIS262H5 (What is Canada?); POL214Y5 (Canadian Government and Politics); ENG252Y5 (Canadian Literature); ENG255H5 (Introduction to Canadian Literature); ENG274H5 (Indigenous Literatures); ENG352H5 (Canadian Drama); ENG353Y5 (Canadian Prose Fiction); ENG354Y5 (Canadian Poetry); ENG361H5 (Canadian Literature, Beginnings to 1920); ENG362H5 (Canadian Literature, 1920 to Present); ENG392H5 (Canadian Fiction); ENG393H5 (Canadian Poetry in Context); GGR202H5 (Geography of Canada) and

2. 2.0 additional credits (at least 1.0 of which must be at the 300/400 level) from courses listed above that have not already been applied towards the requirements for the Minor Program in Canadian Studies or approved by the program advisor.

Note: Not all courses are offered every year.

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

Professors
A. Beharry, B.Sc., Ph.D.
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., FCIC
D.R. McMillen, 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.
J.A. Shin, A.B., Ph.D.

Chair
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Faculty Program Advisor
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Academic Counsellor/Undergrad Program Administrator
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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 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 16) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 94)
CHM Chemistry (page 113)
CPS Chemistry (page 113)
FSC Forensic Science (page 248)
JBC Biology (page 94)
JCB Chemistry (page 113)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
PHY Physics (page 394)

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 (CHM110H5, CHM120H5) (minimum grade of 65% in CHM120H5); (MAT132H5, MAT134H5) (minimum grade of 65% in MAT134H5)/ (MAT135H5, MAT136H5) (minimum grade of 65% in MAT136H5)/ (MAT134Y5, MAT135Y5)/ MAT137Y5 (minimum grade of 65%); and a minimum CGPA of 2.5. Completion of BIO152H5 is recommended.

Year 1: BIO152H5; CHM110H5; CHM120H5; (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5/ (PHY136H5, PHY137H5)/ (PHY146H5, PHY147H5)

Year 2: CHM211H5, CHM231H5, CHM242H5, CHM243H5; JCP221H5; BIO206H5, BIO207H5; 0.5 MAT/CSC/STA credit (at any level)
Year 3: CHM333H5, CHM341H5/CHM345H5, CHM347H5, CHM361H5, CHM362H5, CHM372H5, CHM373H5; BIO372H5

Year 4: CHM399Y5/ CHM489Y5/ CPS400Y5/ 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: BIO324H5; CHM412H5, CHM444H5, CHM462H5; JPC410H5, JCP422H5, JCP463H5; JBC472H5, CHM447H1(G), CHM479H1(G), or any 400 level BCH(G) lecture course.

Notes:
1. Enrolment in certain BCH(G) courses is limited.
2. MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT134Y5, MAT135Y5, MAT137Y5, MAT157Y5 prerequisite is required for all 200-level CHM courses. For MAT157H5 P.I. required from CHM Program Advisor.
3. Students can not count more than 2.0 credits total in ROP, Internship or Research Project/Thesis courses at the 300-/400-level for credit toward their Chemistry program.
4. Students are strongly advised to consult the program advisor 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 (CHM110H5, CHM120H5) (minimum grade of 65% in CHM120H5); (MAT132H5, MAT134H5, MAT135H5, MAT136H5) (minimum grade of 65% in MAT134H5)/ (MAT135H5, MAT136H5) (minimum grade of 65% in MAT136H5)/ (MAT134Y5, MAT135Y5, MAT136Y5, MAT137Y5, MAT157Y5) (minimum grade of 65%); and a minimum CGPA of 2.5.

Year 1: CHM110H5, CHM120H5; (MAT132H5, MAT134H5, MAT135H5, MAT136H5) (MAT134Y5, MAT135Y5, MAT136Y5, MAT157Y5); (PHY136H5, PHY137H5) (PHY146H5, PHY147H5)

Year 2: CHM211H5, CHM231H5, CHM242H5, CHM243H5; JCP221H5; MAT212H5, MAT232H5

Year 3: CHM311H5, CHM331H5, CHM341H5/CHM345H5, CHM361H5, CHM394H5, CHM396H5; JCP321H5

Year 4: (CHM395H5, CHM397H5); CHM399Y5/CHM489Y5/ CPS400Y5/ CPS401Y5/JCB487Y5; 1.5 level CHM/JCP lecture courses, 1.0 credits from 300/400 level CHM/JBC/JCP or CPS398H5 (with the permission of the Department of Chemical and Physical Sciences).

Notes:
1. Enrolment in certain BCH(G) courses is limited.
2. MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT134Y5, MAT135Y5, MAT137Y5, MAT157Y5 prerequisite is required for all 200-level CHM courses. For MAT157H5 P.I. required from CHM Program Advisor.
3. Students can not count more than 2.0 credits total in ROP, Internship or Research Project/Thesis courses at the 300-/400-level for credit toward their Chemistry program.
4. Students are strongly advised to consult the program advisor regarding their course of study.
5. Students can not take more than 2.0 credits total in ROP, Internship or Research Project/Thesis courses at the 300-/400-level for credit toward this Chemistry program. Further, these credits may not be taken simultaneously.

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 (CHM110H5, CHM120H5) (minimum grade of 60% in CHM120H5); (MAT132H5, MAT134H5, MAT135H5, MAT136H5) (minimum grade of 65% in MAT134H5)/ (MAT135H5, MAT136H5) (minimum grade of 65% in MAT136H5)/ (MAT134Y5, MAT135Y5, MAT136Y5, MAT137Y5, MAT157Y5) (minimum grade of 65%); and a minimum CGPA of 2.5.

Year 1: (CHM110H5, CHM120H5); (MAT132H5, MAT134H5, MAT135H5, MAT136H5) (MAT134Y5, MAT135Y5, MAT136Y5, MAT137Y5, MAT157Y5)

Year 2: CHM211H5, CHM231H5, CHM242H5, CHM243H5; JCP221H5

Years 3 & 4: 1.0 credits from (CHM372H5, CHM373H5)/ (CHM394H5, CHM395H5) / (CHM396H5, CHM397H5); 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, CPS398H5 (with the permission of the Department of Chemical and Physical Sciences), CPS400Y5, FSC311H5, JBC472H5 and JCB487Y5 may be used to fulfill 300/400 level program requirements.
2. (MAT132H5, MAT134H5)/(MAT135H5, MAT136H5)/(MAT134Y5, MAT135Y5)/MAT137Y5 prerequisite is required for all 200-level CHM/JCP courses.

3. For a balanced training in Chemistry, students should take CHM311H5, CHM331H5/CHM333H5, CHM341H5/CHM345H5, JCP321H5.

4. Students are strongly advised to consult the Program Advisor regarding their course of study.

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 (CHM110H5,CHM120H5)(minimum grade of 60% in CHM120H5): (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5.

Year 1: CHM110H5, CHM120H5

Years 2, 3 & 4: 3.0 CHM/JCP credits, at least 1.0 of which must be at the 300/400 level.

Notes:

1. (MAT132H5, MAT134H5)/(MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5 prerequisite is required for all 200-level CHM/JCP courses.

2. CHM299Y5 does not count towards the completion of this program. FSC311H5 may be used to fulfill the program requirements.

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: CHM135H1 or CHM139H1 or CHM151Y1 or CHM140Y5 or CHMA11H3
Prerequisite: Grade 12 Chemistry (SCH4U) (minimum grade of 70) and Grade 12 Advanced Functions (MHF4U0) (minimum grade of 70) and Grade 12 Calculus and Vectors (MCV4U) highly recommended Corequisite: Recommended Corequisite: (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5); this recommended corequisite 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: CHM136H1 or CHM138H1 or CHM151Y1 or CHM140Y5 or CHMA10H3
Prerequisite: CHM110H5
Corequisite: Recommended Corequisite: (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5); this recommended corequisite is a prerequisite for all 200 level CHM courses.

CHM201H5 The Science of Human Health (SCI)
This course is intended for humanities and social science students who wish to gain knowledge of the science behind our well-being that may help them to make personal, social and political decisions in their future. Chemistry will be taught on a need-to-know basis in order to consider some contemporary applications. The course will focus on three themes in the realm of human health: nutrition for the prevention of disease, diagnostic tests for the detection of disease and drug discovery for the treatment of disease. Among the questions that may be addressed are “What is the nutritional difference between vitamins from foods and those from supplements?”, “Should ketchup be considered a vegetable?”, “How do diagnostic strips work?”, “What advances in microfluidics have provided inexpensive diagnostics for use in remote areas?”, “How are drug targets identified?”, and “What is the path from drug discovery to bringing a drug to market?”. The roles of nutritional, analytical and medicinal chemistry in these processes will be studied. [24L, 12T]
Exclusion: Any CHM/JCP course taken previously or concurrently
Recommended Preparation: 2.5 credits.

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 or CHMB16H3
Prerequisite: CHM110H5 and a minimum grade of 60% in CHM120H5 and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5).
JCP211H5 Thermodynamics (SCI)
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, 12T]
Exclusion: CHM220H1 or CHM221H1 or CHM225Y1 or CHM220H3, B23H3
Prerequisite: (CHM110H5 and CHM120H5 with a minimum grade of 60% in CHM120H5)/ (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5 with a minimum 60% in PHY147H5) and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5)
Recommended Preparation: (MAT212H5 or MAT223H5 or MAT242H5) or MAT232H5 or MAT233H5 or MAT236H5 or MAT240H5 or MAT242H5 or MAT244H5.

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 or CHMB31H3
Prerequisite: (CHM110H5 and a minimum grade of 60% in CHM120H5) and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5).

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 or CHMB41H3 or CHMB43Y
Prerequisite: (CHM110H5 and a minimum grade of 60% in CHM120H5) and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5).

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 amines 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 or CHM249H1 or CHMB42H3
Prerequisite: CHM242H5

JCP265H5 Introduction to Scientific Computing (SCI)
This course is an introduction to computing in the physical sciences. Students will gain experience utilizing numerical software tools used in both academic and industrial settings. A variety of numerical techniques will be covered, with topics to include: curve fitting, numerical approximations of derivatives and integrals, root finding, solutions of differential equations, Fourier series, Monte Carlo methods, and more. Students will also acquire skills in data analysis and visualization. No prior experience in computer programming is required. [24L, 24P]
Exclusion: CSC108H5 or CSC108H1 or CSC120H1 or CSC148H1 or CSCA08H3
Prerequisite: (PHY146H5 and PHY147H5) and (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

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 and International Opportunities (Page 23) for more details.
Prerequisite: Completion of at least 4.0 credits and no more than 10.0 credits, which must include CHM110H5 and CHM120H5 with a minimum grade of 60% and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5).

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: CHM211H5 and (CHM110H5 and CHM120H5) or CHM140Y5
Recommended Preparation: FSC239Y5 and 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 or CHMC16H3 and CHMC11H3
Prerequisite: CHM211H5
Recommended Preparation: JCP221H5

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 or CHMD69H3
Prerequisite: CHM231H5 and CHM242H5
Corequisite: CHM243H5

CHM341H5 Organic Chemistry: Mechanism and Structure (SCI)
Stereochemistry and conformational analysis; mechanisms of important types of organic reaction; pericyclic reactions; reactive intermediates. [36L]
Exclusion: CHM348H1 or CHMC41H3
Prerequisite: CHM243H5
CHM341H5 is offered in alternate years, alternating with CHM345H5.

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 or CHMC42H3
Prerequisite: CHM243H5
CHM345H5 is offered in alternate years, alternating with CHM341H5.

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 or 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 or BCH242Y1 or BCH311H1 or BIOC12H3 or CHMB62H3
Prerequisite: CHM243H5
Recommended Preparation: BIO206H5 and JCP221H5
CHM362H5 Metabolism and Bioenergetics (SCI)
Exclusion: BCH210H1 or BCH242Y1 or BIOC13H3 or CHMB62H3
Prerequisite: CHM361H5
Recommended Preparation: BIO206H5 and JCP221H5

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 or BCH370H1 or BCH371H1
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 or BCH370H1 or BCH371H1
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 and 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 or CHM333H5) and (CHM341H5 or CHM345H5)

CHM396H5 Analytical and Physical Chemistry Instrumentation Laboratory I (SCI,EXP)
This analytical and physical chemistry 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 or CHM317H1 or CHM410Y1 or CHMC16H3
Prerequisite: CHM211H5 and JCP221H5
Recommended Preparation: CHM311H5

CHM397H5 Analytical and Physical Chemistry Instrumentation Laboratory II (SCI,EXP)
This analytical and physical chemistry laboratory course carries on from CHM396 to introduce more advanced topics in instrumental methods of analysis and physical chemistry concepts. The course will include experimental modules focused on instrument design and computer interfacing, molecular spectroscopy (e.g. fluorescence, infrared and Raman, and NMR), plasmon resonance methods for biomolecule determinations and kinetic analysis, 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 and physical chemistry. [48P]
Prerequisite: CHM396H5
Corequisite: CHM311H5
CPS398H5 Teaching Opportunity Program in Sciences (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 Summer, 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. [30L]
Prerequisite: This course is "by Instructor Approval". At least 10.0 courses completed and enrolment in a life, mathematical, or physical science major or specialist program; an average of B-(CGPA 2.7) or higher.

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 and International Opportunities (Page 23) for more details.
Prerequisite: completion of at least 8.0 credits which must include CHM110H5 and CHM120H5 with a minimum grade of 60% and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5), 2.0 200 level CHM/JCP courses.

CPS400Y5 Chemical and Physical Sciences Internship (SCI,EXP)
This internship opportunity will allow students to apply theoretical and practical skills acquired during their undergraduate education in order to gain vital industry experience. Students will be trained in effective job searching skills (writing a CV and a Cover Letter, participating in job interviews) and will gain valuable experiences that are sought after by employers in both public and private sectors. Students will be placed with various employers in the GTA based on their interest and skill set, and on the employer needs and availability. The placement is a 200 h unpaid internship. The Course Coordinator/Instructor(s) will schedule biweekly meetings to discuss the setup and progress of the student projects. Student attendance is mandatory. At the end of the term, students must submit a written report and prepare an oral presentation about the outcomes of their work experience. In order to be considered for the internship, students must apply for the course. The Course Coordinator will approve enrolment in the course based on the number of internship opportunities available, which will vary from year-to-year, and student qualifications (e.g. GPA, experience, qualifications related to the requirements of the available placement(s), and interview performance).
Exclusion: none
Prerequisite: For Chemistry Internships (CHM372H5 or CHM394H5 or CHM396H5) and an additional 1.0 credit from any 300/400 level CHM/JCP/JBC/BCH/FSC courses. For Earth Science/Geology Internships: (ERS301H5 and ERS303H5) and an additional 1.0 credit from any 300/400 level courses. For Physics Internships: (PHY324H5 and PHY347H5) and an additional 1.0 credit from any 300 or 400 level PHY/JCP courses.
Corequisite: Students must be in their fourth year of study and registered in one of following Programs: Chemistry Major, Chemistry Specialist, Biological Chemistry Specialist, Earth Science Major, Earth Science Specialist, Geology Specialist, Physics Major, Biomedical Physics Specialist.
Recommended Preparation: For Chemistry Internships: (CHM373H5 or CHM395H5 or CHM397H5) For Earth Science & Geology Internships: ERS302H5 and ERS311H5 and ERS401H5 For Physics Internships PHY325H5 and PHY332H5 and PHY333H5
CPS401Y5 Research and Development in Science Education (SCI, EXP)
This course is intended for students in a CPS Major or Specialist program. It provides an experiential learning opportunity with secondary school students and teachers. Students will research the literature of science pedagogy and acquire pedagogical content knowledge, particularly that of problem-based learning and the use of case studies. Then, through the creation of original, problem-based learning materials for Grades 11 and 12 classes and the preparation of teachers' notes for these materials, they will enhance their subject specialization knowledge. They will then assist a teacher in implementing their materials in a school or, where the materials involve experiments, in the field or in the UTM teaching laboratories. The course is normally taken in the student's fourth year. Enrolment 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
www.utm.utoronto.ca/cps/undergraduate/independent-studies-application-forms Applications should be submitted to the CPS Undergraduate Assistant. Registration on ACORN is also required. [240P]
Prerequisite: Enrollment in a CPS Major or Specialist program; 9.0 credits including at least 2.0 FCE from 200 level CHM/ERS/PHY; minimum CGPA of 2.7

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

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]
Prerequisite: (JCP221H5 or PHY241H5) and PHY245H5 and (MAT212H5 or MAT223H5 or MAT232H5 or MAT242H5 or MAT244H5)
Recommended Preparation: JCP321H5
JCP410H5 is offered in alternate years, alternating with JCP422H5.

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 II: Applications (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. [24L, 12T]
Exclusion: PHYC563H3 or PHY456H1
Prerequisite: JCP321H5 and 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 or PHY241H5) and PHY245H5 and (MAT212H5 or MAT223H5 or MAT232H5 or MAT242H5 or MAT244H5)
Recommended Preparation: JCP321H5 and CHM361H5
JCP422H5 is offered in alternate years, alternating with JCP410H5.

CHM442H5 Developments in Organic Chemistry (SCI)
Applications of advanced fundamentals to, and recent developments in, multi-step organic synthesis. [24L]
Prerequisite: CHM341H5 or CHM345H5
Recommended Preparation: CHM394H5 and CHM395H5

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 Chemical Biology (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 and CHM371H5

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 or (PHY332H5 or PHY333H5)
Recommended Preparation: CHM362H5 and 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 and CHM361H5 and (CHM362H5 or 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 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. Applications should be submitted to the CPS Undergraduate Assistant. Registration on ACORN is also required. Students are encouraged to consult with, and obtain the consent of, prospective supervisors before applying for enrolment. [24L]
Prerequisite: 2.5 CHM/JCP credits 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](http://uoft.me/cpsforms). Application should be submitted to the CPS Undergraduate Assistant. Registration on ACORN is also required. [240P]

Exclusion: BIO400Y5 or BIO481Y5 or CBJ481Y5 or CHM489Y5 or ERS470Y5 or ERS471H5 or ERS472H5 or PHY489Y5 or BCH472Y1 or BCH473Y1 or CHM499Y1 or CSB497H1 or CSB498Y1 or CSB499Y1 or ESS491H1 or ESS492Y1 or PH480Y1 or PHY478H1 or PHY479Y1 or BIOD98Y3 or CHMD90Y3 or CHMD91H3 or ESSD09H3 or ESSD10H3 or PSCD10H3

Prerequisite: 2.0 credits 300 level from BIO/CHM/JBC/JCP/ERS/ESS(G)/PHY and 1.0 credit from BIO206H5 and BIO314H5 and CHM372H5 and CHM373H5 and CHM394H5 and CHM395H5 and CHM396H5 and CHM397H5 and ERS201H5 and ERS202H5 and PHY324H5 and PHY347H5. Normally taken in 4th year. 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](http://uoft.me/cpsforms). Applications should be submitted to the CPS Undergraduate Assistant. Registration on 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. This course is restricted to students in the Chemistry Majors, Biological Chemistry Specialist, and Chemistry Specialist Programs [240P]

Exclusion: CHM499Y1 or JCB487Y5 or CHMD90Y3

Prerequisite: 2.0 300 level credits in CHM/JCP and 1.0 credit from BIO206H5 and BIO314H5 and CHM372H5 and CHM373H5 and CHM394H5 and CHM395H5 and CHM396H5 and ERS201H5 and ERS202H5 and PHY324H5 and PHY347H5. Normally taken in 4th year. Students must obtain approval from the faculty member(s) who will serve as the supervisor(s) in advance of the start of the course.

The courses described in this section are offered by the Department of Chemistry and are designed to provide students with a comprehensive understanding of various aspects of chemistry. The prerequisites for these courses are outlined to ensure that students have the necessary background knowledge to succeed in the courses. The courses are structured to enhance students' research skills, teamwork abilities, and presentation skills, preparing them for future academic or professional endeavors.
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 16) section prior to selecting courses.

For courses in this area see:

- **CIN** Cinema Studies (page 121)
- **DRE** Drama (page 451)
- **FRE** French (page 258)
- **GER** Language Studies (page 344)
- **ITA** Italian (page 323)
- **PHL** Philosophy (page 383)
- **RLG** History of Religions (page 304)
- **SPA** Language Studies (page 344)
- **VCC** Visual Culture and Communication (page 458)
- **VST** Fine Art History (FAH) (page 65)

**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 any remaining CIN 200 level courses, CIN 300 or 400 level courses, VCC205H5, VCC334H5, VCC427H5, VST410H5, GER354H5, PHL221H5

A maximum of 1.0 credit may be taken from: DRE350H5/ DRE352H5, FRE393H5, FRE397H5, ITA242H5, ITA243H5, ITA246H5, ITA247H5, ITA307H5, ITA309H5, ITA313H5, ITA342H5, ITA343H5, RLG331H5, 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 or NEW115Y1 or VIC115Y1 or ER1201H5 or ER1202H5 or CIN202H5 or CIN205Y5 or CIN105H1 or ENGB70H3

**CIN102H5 Modernity and the Moving Image (HUM)**
Looking at a few periods of intense technological change-for example, with the invention of photography, and the introduction of sound, of colour, of television-we will consider the ways in which artists, filmmakers, studios, and media conglomerates have responded to such changes and to accompanying ideas about the role that moving technology plays in our conception of history and the future. [24L, 12T, 36P]

*Prerequisite:* CIN101H5

**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 or 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 or 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 or CIN202H5

CIN206H5 Auteurs (HUM)
This course will look closely at the work of a single director. Emphasis will be given to the aesthetic, historical, cultural, and philosophical contexts that inform the director's work. We will also tend closely to the style and central preoccupations of the director under examination. [24L, 12T, 36P]
Recommended Preparation: CIN101H5

CIN207H5 East Asian Cinema (HUM)
This course is an introduction to East Asian cinema from the 1960s to the present, including films from Hong Kong, Taiwan, China, Japan, and Korea. With an emphasis on formal aesthetic analysis of short and feature-length films, we will examine film waves, genres, film festivals, and interconnected film industries. Throughout the course, we will consider not only the production, exhibition, and reception spaces of East Asian cinema but also critically examine its definitions and borders. [24L, 12T, 36P]
Recommended Preparation: CIN101H5

CIN208H5 The Films of Abbas Kiarostami: Being and Movement (HUM)
This course will survey the work of the Iranian filmmaker, Abbas Kiarostami, and will do so with an especial interest in the way that Kiarostami's films raise important questions about tradition, judgment, and the fluidity of self and world. [24L, 12T, 36P]
Recommended Preparation: CIN101H5

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 or CIN202H5) and (VCC101H5 or VCC201H5)

CIN250H5 Introduction to the Fundamentals of Cinematic Language (HUM,EXP)
This hands-on studio-based course will examine fundamentals of cinematic language and production. Students will work individually and in teams to create a series of works that focus on aesthetics and skill development. 24L, 12T, 24P

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 or CIN202H5) or at least 1.0 credits in courses that count towards Cinema Studies programs.

CIN302H5 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 or CIN202H5) or at least 1.0 credits in courses that count towards Cinema Studies programs.

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 or CIN202H5) or (VCC101H5 or 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 or CIN202H5 or CIN205Y5) or at least 1.0 credit in courses that count towards Cinema Studies programs.
CIN305H5 Taiwan New Wave in Our Time (HUM)
The film In Our Time (1982), which combined short works by four directors (Edward Yang, Jim Tao, Ke Yizheng, and Zhang Yi), is regarded as the beginning of Taiwan New Cinema, generally considered to have ended in the late 1980s. Figures such as Hou Hsiao Hsien, Wang Tung, Chu Tien-wen, Wu Nien-Jen, Hung Hung, Hsiao Yeh, Tsai Chin, and Sylvia Chang played key roles, as directors, screenwriters, producers, and/or actors. From examining films within the era to their impact on contemporary global cinema, this course asks: how may a film be transnationally and transgenerationally re-animated for shifting eras and constellations of viewers? This course speculates that the time of the Taiwan New Wave is still beckoning, even from beyond the contested shores of Taiwan. 24L, 24P

Recommended Preparation: CIN101H5 or at least 1.0 credit in courses that count towards Cinema Studies programs.

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 or 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 or CIN202H5) or (VCC101H5 or VCC201H5)

CIN308H5 East and Southeast Asian Cinemas of Migration (HUM)
Migration, voluntary and involuntary, has intensified in an unprecedented manner in recent history. More than ever, it is critical to examine forms of proximity, hospitality, and regionality. Including films by migrants, films about the migrant experience, and the migratory routes of cinema itself, this course addresses the ethics, politics, and praxis of mobility and displacement. How, through East and Southeast Asian cinemas, could we envision counter-bodies and counter-strategies with which we may collectively imagine and inhabit the world? 24L, 24P

Recommended Preparation: CIN101H5 or at least 1.0 credit in courses that count towards Cinema Studies programs.

CIN309H5 Colour and the Moving image (HUM)
Considering philosophical, scientific, and historical discourses about colour, this course explores a variety of ways of analyzing colour style in film and video art. As we begin to come to terms with the perceptual instability of colour as a positive phenomenon, we will consider how and why dominant histories of film style have been written, especially as the taming of colour has been central to an ongoing categorical distinction between narrative cinema and the avant-garde, morality and hedonism. [24L, 24P]

Exclusion: CIN301H5 topics course “Colour”.

Recommended Preparation: CIN101H5 and at least 1.0 credit in courses that count towards Cinema Studies programs.

CIN310H5 Melodrama (HUM)
Film and Televisual melodramas regularly enact a conflict between personal desire and social expectation. This course will cover a range of films and television melodramas and consider the social contexts in which these works emerge, and often as critiques of the very cultures to which they belong or reject. [24L, 36P]

Exclusion: CIN301H5 Topics course Melodrama.

Recommended Preparation: CIN101H5 and at least 1.0 credit in courses that count towards Cinema Studies programs.

CIN350H5 Storytelling through Genre (HUM,EXP)
This course is a continuation of skills and knowledge developed in Video 1 with a focus on genre-based narrative story telling. As part of this course students will be asked to create a series of short fiction based works using mise-en-scene, character, the edit and narrative devices. [24L, 24P]

Prerequisite: CIN250H5

CIN399Y5 Research Opportunity Program (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 Cinema Studies 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.

CIN400H5 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. [24S, 36P]

Prerequisite: CIN101H5 or at least 2.0 credits in courses that count towards Cinema Studies programs.
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. [24S, 36P]
Prerequisite: CIN101H5 or at least 2.0 credits in courses that count towards Cinema Studies programs.

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. [24S, 36P]
Prerequisite: (CIN101H5 or CIN202H5) and 1.0 credits at the 300 level in CIN or permission of instructor

CIN403H5 Queerscapes, Screenscapes, Escapes: Gender and Sexuality Across East and Southeast Asian Cinemas (HUM)
"Queerness is not yet here." José Esteban Muñoz begins Cruising Utopia with the provocation that queerness is a mode of desire that allows for an escape from the conditions of the present. How does queer studies contribute to the building of and the continued hope for a more just world? Through cinema, theory, and philosophy, this course makes the claim that investigating queerness in the world marks a critical move away from restrictive modes of identification and holds open life's horizons of possibility. Course texts emphasize queer cinemas of Asia and their transnational connections. [24S, 24P]
Prerequisite: CIN101H5 or at least 2.0 credits in courses that count towards Cinema Studies programs.

CIN404H5 Film Noir and the Problem of Style (HUM)
By way of an introduction to some of the key instances of film noir, this course is concerned with what we will call the paradox of style; namely, that style can indicate both what is specific and also what is general, what is unique and what is repeatable. We will look at the way in which this paradox is amplified by issues of gender, genre, fashion, and power that seem to concern so many films in this tradition. [24S, 30P]
Exclusion: CIN401H5 topics course "Film Noir and the Problem of Style".
Prerequisite: CIN101H5 or at least 2.0 credits in courses that count towards Cinema Studies programs.

CIN405H5 Cinema and Emotion (HUM)
This interdisciplinary course looks at such difficult emotions as shame, jealousy, forgiveness, and love, and how film complicates our understanding of them. [24S, 30P]
Exclusion: CIN401H5 topic: Difficult Emotions, Moving Images
Prerequisite: CIN101H5 or at least 2.0 credits in courses that count towards Cinema Studies programs.

CIN450H5 Advanced Video Production (HUM,EXP)
This course focuses on advanced practical aspects of pre-production, production and post-production practices involved in narrative based film-making. Over the course of the term students will work in teams to plan, direct, film and edit video using digital technologies to create a short video. [24S, 24P]
Prerequisite: CIN250H5 and CIN350H5

CIN451H5 Experimental Practices (HUM,EXP)
This advanced level course focuses on alternative screen practices, styles and formats. Students will make a series of individual projects that play with and subvert conventional content, structures, movement, sound, time and image.
Prerequisite: CIN250H5 and CIN350H5
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.
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Classical Civilization or Classics is the study of the cultures of the Ancient Mediterranean, and in particular the cultures of the Greek and Roman worlds. The study of literatures, classical languages, art, philosophy, political thought and history, as well as its receptions in later periods, offers an ideal insight into the development of many societies of the modern world, providing an indispensable access to many Humanities subjects. Beyond being a cornerstone for the Humanities, the ancient Mediterranean world can in itself offer students the opportunity for a deep engagement with cross-cultural exchange, social structures, global markets and geopolitics in a well-attested, ancient world. Doing Classics in the Department of Historical Studies means studying fascinating material in its historical contexts, and asking broader social and political questions that can give an insight into the challenges of our current society. Additionally, it provides training in core skills, such as close reading, analytical thinking, and the formulation of strong arguments. All of this makes learning about the ancient world not only fun, but also offers a crucial foundation for the study of any other subject, and for any professional career.

The program provides a broad survey of Greek and Roman culture not only for students with a commitment to intensive study in this area but also for students in other programs seeking a further grounding for their particular interests (whether literary, historical, philosophical, or linguistic).

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 (LAT) and Greek (GRK) are offered at U of T Mississauga by the Department of Language Studies (see Language Courses section of this calendar).

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.

Students should also review the Degree Requirements (Page 15) section prior to selecting courses.

For courses in this area see:
CLA Classical Civilization (page 126)
DRE Drama (page 451)
FAH Fine Art History (FAH) (page 65)
PHL Philosophy (page 383)

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, DRE358H5, DRE420H5 and DRE422H5 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. FAH205H5) or ancient Philosophy (e.g. PHL300H5) may be substituted for CLA courses. Courses in Latin (LAT) and Greek (GRK), offered at U of T Mississauga by the Department of Language Studies (see p.219) may be substituted for 200-level CLA courses. Students are invited to contact instructors for further information.
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, CLA230H5, CLA231H5, CLA233H5, CLA237H5.

Higher Years: 3.0 additional CLA courses at the 200+ level, including at least 1.0 at the 300/400 level.

Up to 1.0 credit in the following areas may be substituted for CLA courses. DRE356H5, DRE358H5, DRE420H5 and DRE422H5 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. FAH205H5) or ancient Philosophy (e.g. PHL300H5) may be substituted for CLA courses. Courses in Latin (LAT) and Greek (GRK), offered at U of T Mississauga by the Department of Language Studies (see p. 219) may be substituted for 200 level CLA courses. Students are invited to contact instructors for further information.

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. [24L, 12T]
Exclusion: CLA160H1 or 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. [24L, 12T]
Exclusion: CLA204H1 or CLAB05H3

CLA230H5 Introduction to Greek History (HUM)
An introduction to the diverse history of the Greek world, tracing mainly political but also social developments from the Bronze Age of the mid-second millennium BCE to the first century CE. [24L, 12T]
Exclusion: CLA230H1 or CLAB05H3
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, 12T]
Exclusion: CLA231H1 or CLAB06H3
Recommended Preparation: CLA101H5

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. [24L, 12T]
Exclusion: CLA233H1 or 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,12T]
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, 12T]
Exclusion: CLA232H1 or CLAB05H3
Recommended Preparation: CLA101H5 or 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 and International Opportunities (Page 23) 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 or CLA383H1 or CLAC01H3
Recommended Preparation: CLA204H5 or CLA237H5

CLA301H5 Greek Epic (HUM)
The Iliad and the Odyssey, with comparative study of related texts. [24L]
Exclusion: CLA236H1 or CLAC11H3
Prerequisite: CLA204H5 or CLA230H5 or CLA237H5

CLA302H5 Roman Epic (HUM)
The Aeneid of Virgil and/or other Roman epics with comparative study of related texts. [24L]
Exclusion: CLA236H1 or CLAC11H3
Prerequisite: CLA204H5 or CLA231H5 or 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 Satyricon, and Apuleius, The Golden Ass). [24L]
Exclusion: CLA303H1 or CLAC12H3
Prerequisite: CLA204H5 or CLA230H5 or CLA231H5 or CLA233H5 or 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 or CLA230H5 or CLA237H5) and 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 or CLA233H5) and for RLG students: any pertinent RLG course at the 200+ level.

CLA319H5 Women and Gender in Antiquity (HUM)
A study of gender in the ancient Mediterranean, with a focus on female and male sexuality and socialization; their economic, religious, and political roles; and aspects of daily life. [24L]
Exclusion: CLA319H1
Prerequisite: Prerequisite: CLA204H5 or CLA230H5 or CLA231H5 or CLA233H5 or 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: CLA220H5 or CLA231H5 or CLA233H5 or 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: CLAC05H3
Prerequisite: CLA230H5 or CLA231H5 or CLA233H5 or CLA237H5

CLA359H5 The Persian Empire: 559-331 BCE (HUM)
This course offers an examination of the history and culture of the first multicultural superstate of the ancient world, the Achaemenid Empire. Through a close analysis of ancient sources, this course not only investigates governmental structures but also the daily life in the Eastern Mediterranean from the sixth to the fourth centuries BCE. [24L]
Exclusion: NMC349H1
Prerequisite: CLA230H5 or CLA231H5 or CLA233H5 or 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 or CLA363H1
Prerequisite: CLA230H5 or 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 or CLA363H1
Prerequisite: CLA230H5 or 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 or CLA237H5

CLA365H5 Trade in the Ancient Mediterranean (HUM)
This course explores questions of trade and exchange in the ancient Mediterranean. A close study of ancient primary material examines aspects of the ancient economy, trade goods, ships and shipwrecks, ports and harbours, and cross-cultural interaction. [24L]
Exclusion: CLA372H1
Prerequisite: CLA230H5 or CLA231H5 or CLA233H5 or 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 or 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 or 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 or 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 or 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. See Department of Historical Studies web site at https://www.utm.utoronto.ca/historical-studies/students/courses/topic-courses for more details. [24L]
Prerequisite: At least 1.5 credits in Classics, including (CLA230H5 or 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. See Department of Historical Studies web site at https://www.utm.utoronto.ca/historical-studies/students/courses/topic-courses for more details. [24L]
Prerequisite: At least 1.5 credits in Classics, including (CLA231H5 or 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 at https://www.utm.utoronto.ca/historical-studies/students/courses/topic-courses 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 and International Opportunities (Page 23) 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 CLA204H5 and 1.5 credits at the 300 level.

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.

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 and International Opportunities (Page 23) 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. The BCom has also been approved to participate in the CFA Institute’s University Affiliation Program. There is also a Specialist Program in Marketing and Commerce.

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:

1. Enhance their professional skills.
2. Develop a network of contacts.
3. Gain experience in a professional setting.
4. Improve their employability.

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• 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 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 16)) in First Year.
4. During the Fall-Winter session, Commerce students must take ECO204Y5 and ECO209Y5. They will not have access to ECO200Y5 or ECO202Y5.
5. Students without pre- and co-requisites can be de-registered from courses at any time.

Certificate Program Requirements:
Second Year: MGT231H5, MGT262H5; 15 Professional Skills Development Program points (must include Career Investment Planning Session, Momentum: Excel Workshop, Resume Critique, and Mock Interview)
Third Year: MGT200H5; Workplace Preparation Workshop; Work-Integrated Learning Experience (4-month placement in Summer term)
Fourth Year: 0.5 credit from 400-level course list; MGT010H5 (NOTE: This is a zero-credit course).

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 50)
CCT Communication, Culture, Information and Technology (page 138)
CLA Classical Civilization (page 126)
ECO Economics (page 188)
GGR Geography (page 274)
MAT Mathematics (page 372)
MGM Management (page 361)
MGT Management (page 361)
PHL Philosophy (page 383)
STA Statistics (page 445)
Specialist Program ERSPE2273 Commerce (BCom)

This program leads to the Bachelor of Commerce degree. This program has a total of 13.0 credits.

Limited Enrolment – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGT120H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGT120H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

Other
- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POS1 request periods for all students.

Enrolment in 200+ level MGT courses is restricted to students enrolled in the Commerce Programs.

First year (3.0 credits): MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

Higher Years: Management (5.0 credits):
1. MGM220H5, MGM223H5, MGM231H5, MGM232H5
2. 1.0 credit from: MGM200H5, MGM201H5, MGM252H5, MGM260H5, MGM262H5, MGM270H5, MGM353H5, MGM363H5, MGM371H5/ MGM422H5, MGM374H5, MGM393H5
3. Additional 1.0 credit in MGT at 400 level
4. Additional 1.0 credit in MGT at 200/300/400 level Economics (5.0 credits):
3. 2.0 credits in ECO at 300/400 level, no more than 1.0 of which may be a course in Economic History

Specialist Program ERSPE1704 Commerce: Accounting (BCom)

This program leads to the Bachelor of Commerce degree. This program has a total of 16.5 credits.

Limited Enrolment – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGT120H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGT120H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

Other
- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POS1 request periods for all students.

Economics requirements: (4.5 credits)
3. 1.5 credits in ECO at 300/400 level
   No more than 1.0 Economic History credit
Specialist Program ERSPE2034 Commerce: Finance (BCom)

This program leads to the Bachelor of Commerce degree. This program has a total of 15.5 credits.

Limited Enrolment – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGT120H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGT120H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program's annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

Other
- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POSI request periods for all students.

First Year: (3 credits): MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

Higher Years: Management (7.5 credits):
1. MGT220H5, MGT252H5, MGT262H5
2. 1.5 credits from: MGT200H5, MGT201H5, MGT223H5, MGT270H5, MGT353H5, MGT363H5, MGT371H5, MGT374H5, MGT393H5
3. MGT231H5, MGT232H5, MGT330H5
4. 2.0 credits from: MGT430H5, MGT431H5, MGT433H5, MGT434H5, MGT435H5, MGT438H5, MGT439H5, MGT440H5, MGT441H5
5. Additional 0.5 credit in MGT at 200/300/400 level (cannot double count courses)
6. Additional 0.5 credit in MGT at 400 level (cannot double count courses)

Economics (5.0 credits):
2. ECO220Y5 (70%)/ECO227Y5, ECO375H5
3. Additional 1.5 credits in ECO at 300/400 level (cannot double count courses), at least one credit must be from: ECO348H5, ECO349H5, ECO352H5, ECO365H5, ECO460H5, ECO461H5, ECO463H5, ECO475H5

The prerequisite for ECO375H5 is a minimum of 70% obtained within ECO220Y5.

Specialist Program ERSPE1815 Commerce: Human Resource Management (BCom)

Admissions to the Human Resource Management Program (ERSPE1815) were administratively suspended as of July 1, 2014. Students currently in the program will be able to complete it.

This program leads to the Bachelor of Commerce degree.

Enrolment in 200+ level MGT courses is restricted to students enrolled in the Commerce Programs.

First Year (3 credits): MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

Higher Years: Management: 7 credits
1. MGT220H5, MGT223H5, MGT260H5, MGT262H5
2. MGT231H5, MGT232H5, MGT363H5, MGT461H5, MGT463H5
3. 1.0 credit from: MGT252H5, MGT353H5, MGT371H5, MGT374H5, MGT393H5
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/ ECO227Y5/ STA250H1, STA256H5/ STA258H5, STA256H5, STA265H5, STA260H5
3. ECO244Y5
4. 1.0 credits in ECO at 300/400 level


Writing credits must be in the English language.
Specialist Program ERSPE2380 Commerce: Marketing (BCom)

This program leads to the Bachelor of Commerce degree. This program has a total of 15.5 credits.

**Limited Enrolment** – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGT120H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGT120H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program's annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

**Other**

- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POS1 request periods for all students.

**First Year (3 credits):** MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

**Higher Years: Management** (7.5 credits)

1. MGT220H5, MGT223H5, MGT252H5
2. MGT231H5, MGT232H5, MGT353H5, MGT452H5, MGT453H5, MGT455H5
3. 1.0 credit from: MGT262H5, MGT363H5, MGT371H5, MGT374H5, MGT393H5
4. 2.0 credits from: MGT354H5, MGT355H5, MGT456H5, MGT457H5, MGT458H5, CCT260H5*, CCT302H5*, CCT356H5*, CCT456H5*, GGR252H5*  
   
   *Note: It is recommended that students interested in pursuing the marketing stream consider completing CCT109H5 and CCT110H5 to ensure access to some upper year CCT courses. Students have the option to select some CCT courses to fulfill elective requirements in which prerequisites are strictly enforced.

**Economics** (5.0 credits)

3. 2.0 credits in ECO at 300/400 level
   No more than 1.0 Economic History credit

**Major Program ERMAJ1111 Commerce (Arts)**

This program has a total of 7.5 credits.

**Limited Enrolment** – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGT120H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGT120H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

**Other**

- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program for all students is made during the Subject POS1 request periods.

**First Year (3 credits):** MGM101H5, MGT120H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

**Higher Years (4.5 credits):**

1. ECO220Y5/ ECO227Y5/ STA250H1, STA256H5/STA256H5, STA258H5/STA256H5, STA260H5
2. MGT220H5, MGT223H5, MGT252H5, MGT231H5, MGT232H5
3. 1.0 credit from MGT330H5, MGT363H5, MGT371H5, MGT374H5, MGT393H5, or any 400 level MGT course.
Communication, Culture, Information and Technology (HBA)

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- M.P. Boucher, B.Sc., M.Sc., Ph.D.
- O. Bountali, B.Sc., M.Sc., Ph.D.
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- N. Dayha, B.A., M.Ed., Ph.D.
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- R. Price, B.A., M.A., Ph.D.
- L. Radovac, B.A., M.A., Ph.D.
- S. Sharma, B.A., M.A., Ph.D.
- S. Szigeti, B.A., M.A., M.i.S.T., Ph.D.
- L. Topouzova, B.A., M.A., Ph.D.
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The Institute of Communication, Culture, Information & Technology (ICCIT) offers interdisciplinary programs at the University of Toronto:

- CCIT Major
- Digital Enterprise Management (DEM) Specialist
- Professional Writing and Communication Major and Minor

Upon completion of the first year of studies at U of T Mississauga, ICCIT students take courses at U of T Mississauga and Sheridan College. 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. CCIT students must take a total of 3.0 credits (2 half credits at the 200 level and 4 half credits at the 300/400 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.
The Professional Experience Certificate in Digital Media, Communication and Technology program provides eligible students the opportunity to integrate two paid work placements into their ICCIT program of study. The certificate offers students authentic learning experiences outside the classroom that involve the application of skills and concepts learned in the classroom through two 4-month non-credit paid work terms. This certificate program must be taken in addition to any of the current ICCIT programs.

Students enrolled in the certificate program also complete two professional practice courses in class (1.0 credit), CCT273H5 Professional Practice and Communication, and CCT373H5 Career Planning and Development, and a 400 level capstone thesis course, CCT475H5 Integrated Learning in Digital Media, Communication, and Technology (0.5 credit) that count toward their program requirements.

Students will be eligible to apply for this certificate program at the end of their second year of study. Requests to enrol in this certificate program subject post will be assessed through the same process and timelines used for all other UTM subject post requests (i.e. requests for subject posts are made in the Spring and Summer terms via Acorn with notification of acceptance/invitations made available in the late Summer and/ or early Fall).

Limited Enrolment: Enrolment in the Certificate Program in ICCIT is limited to students who have met the following criteria:

1. Concurrently enrolled in one of the following ICCIT programs:
   - Communication, Culture, Information and Technology (CCIT) Major;
   - Professional Writing & Communication (PWC) Major;
   - Digital Enterprise Management (DEM) Specialist.

2. Have completed CCT110H5 Rhetoric and Media or WRI203H5 Expressive Writing or WRI173H5 Creative Non-Fiction.

3. Have completed CCT273H5 Professional Practice and Communication with a minimum course grade of 70%.

4. Have achieved an overall minimum CGPA of 2.4. The CGPA requirement for entry will be set each year in relation to the number of applicants, with the minimum being 2.4.

Students will be awarded the certificate via a transcript notation upon successful completion of the four required courses and a minimum of two 4-month work placements.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

**For courses in this area see:**
- CCT Communication, Culture, Information and Technology (page 138)
- MGM Management (page 361)
- WRI Communication, Culture, Information and Technology (page 138)

**Specialist Program ERSPE1307 Digital Enterprise Management (Arts)**

Digital Enterprise Management (DEM) is a specialist program, providing students with the skills and knowledge for utilizing digital technologies to solve business management and organizational problems in creative and innovative ways. Students study, build, and critically analyze enterprise-grade emerging technologies in addition to studying the traditional managerial fields such as finance, law, economics, organizational studies, risk management, design, and project management. Understanding the challenges and demands of managing organizations that use and/or develop digital technologies will prepare students for both traditional and digital enterprises.

14.5 credits are required.

**Limited Enrolment** – Enrolment in this program is highly competitive and will be limited as follows (meeting the minimum requirements does not guarantee admission):

1. Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of CCT109H5, CCT110H5; MGM101H5, MGM102H5.

   **All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.** ICCIT sets a minimum required CGPA to be determined annually.

   **Tuition fees for students enrolling in the DEM Specialist program will be higher than for other Arts and Science programs.**

**First Year:** CCT109H5 and CCT110H5 and MGM101H5 and MGM102H5

**Second Year:**

1. CCT203H5 and CCT206H5 and CCT221H5 and CCT224H5 and CCT225H5 and CCT226H5 and CCT261H5

**Third and Higher Years:**
1. CCT319H5 and CCT321H5 and CCT324H5 and CCT354H5 and CCT355H5 and CCT361H5

2. CCT404H5 and CCT424H5 and CCT461H5 and MGD421H5 and MGD426H5 and MGD428H5

3. 1.0 credit from CCT401H5 OR CCT410H5 OR CCT474H5 OR CCT476H5 OR MGD415H5 OR MGD422H5 OR MGD423H5 OR MGD425H5 OR MGD427H5 OR MGD429H5 OR MGD430H5.

4. In addition, 2.0 credits from any 300 or 400 CCT or MGD courses. Cannot include any courses already used above.

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 recommended that students take CCT204H5 and/or CCT210H5 in order to meet the prerequisite needs of most CCT 300 and 400 level elective courses.

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.

Major Program ERMAJ1034 CCIT (Arts)

Communication, Culture Information & Technology (CCIT) is an undergraduate interdisciplinary major program, the curriculum for which provides students with a foundation in the analysis, evaluation and interpretation of communication and digital media using appropriate methodologies. CCIT provides students the opportunity to design a range of communication media and digital artifacts suitable for collaboration, communication, learning, and exploration. 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 a minimum grade of 65% in each of CCT109H5 and CCT110H5. Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand. All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry. Tuition fees for students enrolling in the CCIT Major program will be higher than for other Arts and Science programs.

First Year: (1.0 credit required) CCT109H5 and CCT110H5

Second Year: (3.0 credits required)

1. CCT204H5 and CCT208H5 and CCT218H5

2. 0.5 credit from CCT200H5 or CCT206H5 or CCT210H5 or CCT222H5

3. 0.5 credit from CCT205H5 or CCT207H5 or CCT212H5 or CCT250H5 (Students who do not choose CCT250H5 will need to take an additional 0.5 credits to complete the Sheridan Certificate in Digital Communication requirements)

4. 0.5 credit from any 200-level CCT course

Third and Higher Years: (4.0 credits required)

Minimum of 4 half credit courses taught at UTM from any 300/400 level CCT/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.

Major Program ERMAJ1302 Professional Writing and Communication (Arts)

The Major Program requires 8.0 credits.

Limited Enrolment – Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of CCT109H5 and CCT110H5 and WRI173H5. Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand. All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

First Year or 2nd: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5) (a prerequisite for all other WRI courses)
Upper Years: 2.5 WRI credits at the 300 or 400 level.

List of Courses

First Year: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5)
Second Year: WRI292H5 OR WRI273H5 plus 0.5 credits from any 200 level WRI courses.
Third and Fourth Year: 5.5 credits from any 300 or 400 level WRI courses with a minimum 0.5 credit at the 400 level.

Minor Program ERMIN1302 Professional Writing and Communication (Arts)

4.0 credits are required including at least 1.0 at the 300/400 level:

Limited Enrolment – Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of CCT109H5 and CCT110H5 and WRI173H5. Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand. All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

First Year or 2nd: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5) (a prerequisite for all other WRI courses)
Upper Years: 2.5 WRI credits at the 300 or 400 level.

List of Courses

First Year: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5)
Second Year: WRI292H5 OR WRI273H5 plus 0.5 credits from any 200 level WRI courses.
Third and Fourth Year: 5.5 credits from any 300 or 400 level WRI courses with a minimum 0.5 credit at the 400 level.

Minor Program ERMIN1302 Professional Writing and Communication (Arts)

4.0 credits are required including at least 1.0 at the 300/400 level:

Limited Enrolment – Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of CCT109H5 and CCT110H5 and WRI173H5. Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand. All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

First Year or 2nd: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5) (a prerequisite for all other WRI courses)
Upper Years: 2.5 WRI credits at the 300 or 400 level.

List of Courses

First Year: CCT109H5 and CCT110H5 and (WR173H5 or WR1203H5)
Second Year: WRI292H5 OR WRI273H5 plus 0.5 credits from any 200 level WRI courses.
Third and Fourth Year: 5.5 credits from any 300 or 400 level WRI courses with a minimum 0.5 credit at the 400 level.

Minor Program ERMIN1302 Professional Writing and Communication (Arts)

4.0 credits are required including at least 1.0 at the 300/400 level:

Limited Enrolment – Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of CCT109H5 and CCT110H5 and WRI173H5. Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand. All students (including transfer students) must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.
CCT200H5 Race, Media and Culture (SSc)
This course provides an introduction to the intersecting fields of critical race, media, and cultural studies. We will pay particular attention to dynamics of social difference and power and the communication strategies and technologies through which these are navigated, reproduced and interrupted. Students will be introduced to critical and analytical tools for understanding the cultural and media circulation, regulation and reimagining of things like race, sexuality, time, gender, class, indigeneity, space, ethnicity, ability and nationality. These critical tools equip students with the skills to write, design and build ethical innovations in new media and culture. [24L, 11T]
Prerequisite: CCT109H5 and CCT110H5

CCT202H5 Human-Machine Communication (SSc)
From voice responsive cars and virtual assistants to social robots and smart toys, people are increasingly interacting with communicative technologies in their daily lives. In this course students will consider the implications of this evolution in communication practice - informing design, ethics, efficacy, privacy, and other implications. Human-machine communication is a specific area of study within communication encompassing human-computer interaction, human-robot interaction, and human-agent interaction. [24L]
Prerequisite: CCT109H5 and CCT110H5

CCT203H5 Business Research Methods (DEM) (SSc)
This course provides an introduction to research design, conduct, and analysis for making informed business decisions. The course will focus on basic methodologies, qualitative and quantitative methods, data sources, reliability, validity, and other measurement issues, data collection and research design, ethics in research, and report writing and presentation. [24L, 12T]
Exclusion: CCT208H5
Prerequisite: CCT109H5 and 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, 12P]
Prerequisite: CCT109H5 and 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 and 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, 11T]
Prerequisite: CCT109H5 and CCT110H5

CCT207H5 Introduction to Infrastructure (SSc)
This course explores how society, culture, and understanding of the human condition influence, and are influenced by, technological development. It focuses on the study of interdependent and institutionalized systems of law, economics, culture and technology, exploring the conditions of stability and instability in these systems. We will survey the available theories and methods for understanding large scale socio-technological systems, including the social construction of technology, technological determinism, and feminist technology studies. [24L, 12P]
Prerequisite: CCT109H5 and CCT110H5

CCT208H5 Communications Research Methods (SSc)
This course is a critical survey of research methodologies in the field of communication and media. A central goal of the course is to train students to collect, manage, analyze and interpret social science research data. Each week students are required to attend a one hour in-class lecture and view a one hour online lecture. The online lectures will be posted at least one week before the week in which they are assigned. [24L, 8T]
Exclusion: CCT203H5
Prerequisite: CCT109H5 and CCT110H5

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, 11T]
Exclusion: CCT213H5 or VIC223Y1
Prerequisite: CCT109H5 and CCT110H5
CCT211H5 Fundamentals of User Interface Programming (SSc, EXP)
This experiential learning course introduces students to the practice and theory of coding, programming, and development of user interfaces. The lectures illustrate an advanced range of software development concepts needed for the practical coding of user interfaces across a variety of devices. The practicals are lab-based and focus on applying these theoretical skills to design, implementation, and testing of user interface software components. Students will have the opportunity to acquire project management and software engineering skills (Scrum, Agile), programming languages (Java, Javascript, Objective C, Swift, and other mobile and web programming languages), and evaluation methodologies (unit testing, bug tracking). [24L, 12P]
Prerequisite: CCT109H5 and CCT110H5 and CCT111H5

CCT212H5 Hacker Culture (SSc)
By subverting and re-appropriating technologies, hackers influence both the evolution of computing and the politics of digital media. Hacking contributes to shaping the future of entrepreneurship, free speech, surveillance, and intellectual property. The course will examine the cultural, social, and legal facets of hacking in fields ranging from software production to political activism and the hacker underground. It will be based on social science research on hackers as well as concrete examples of data re-appropriation and technology modification. [24L]
Prerequisite: CCT109H5 and CCT110H5

CCT218H5 Foundations of Media and Technology Studies (SSc)
An introduction to foundational theories for studying the relationship between media, technology and society. The course presents technology as a social practice and considers a wide variety of concepts and methods for studying its cultural and political significance. [24L, 11T]
Prerequisite: CCT109H5 and CCT110H5

CCT221H5 Digital Marketing I (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: MGT252H5 or MGT352H5
Prerequisite: CCT109H5 and CCT110H5

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 and CCT110H5

CCT224H5 Organizational Studies I (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 and CCT110H5

WRI225H5 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, Bakhtin. Students will design and carry out primary research that explores the social character of communication. [24L]
Exclusion: WRI325H5
Prerequisite: CCT109H5 and CCT110H5 and (WRI173H5 or WRI203H5)

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 or MGM371H5 or MGT371H5 or RSM327H1 or 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, 12P]
*Prerequisite:* CCT109H5 and CCT110H5 and MGM101H5 and MGM102H5

CCT261H5 Speculative Design I (DEM) (SSc,EXP)
This introductory course in information architecture is a foundation of user interface design. Information architects work in organizations to design interfaces that enable users to find and navigate complex data via technology. Using architectural and design concepts to create and organize user-friendly information structures, this course includes exploring theories and hands-on practice with information organization, structure, categorization, representation, navigation and modeling. [24L, 12P]
*Prerequisite:* CCT109H5 and CCT110H5

WRI227H5 Social Media and Content Creation (SSc)
Examines theory and offers practice in creating content for Social Media. The course explores the growth of the Web, 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. Students will create and maintain individual blogs. The course draws on a range of theorists and social media and web experts, including Marshall McLuhan, Tim Berners-Lee, Darren Barefoot and Julie Szabo, Seth Godin, Guy Kawasaki, Chris Brogan and Julien Smith. [24L]
*Exclusion:* WRI327H5
*Prerequisite:* CCT109H5 and CCT110H5 and (WRI173H5 or WRI203H5)

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. [36L]
*Prerequisite:* CCT109H5 and CCT110H5

CCT273H5 Professional Practice and Communication (SSc)
This professional practice course provides students with basic skills in professional communication, acumen, and problem solving that will help them develop personally and professionally. [24L]
*Prerequisite:* 70% in CCT110H5 or WRI203H5, departmental approval.

WRI273H5 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]
*Exclusion:* WRI303H5
*Prerequisite:* CCT109H5 and CCT110H5 and (WRI173H5 or WRI203H5)

CCT285H5 Immersive Environment Design (SSc)
Students will develop skills in the areas of bitmap/vector graphics, audio/visual production and editing, 2D/3D modeling and animation, and video game design. Students will produce immersive environments while addressing and engaging issues of remix culture and intellectual property. [24L, 12P]
*Prerequisite:* CCT109H5 and CCT110H5
CCT286H5 Interactive Media Design (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. [36P]
Prerequisite: CCT109H5 and CCT110H5 and CCT285H5

WRI292H5 Narrative Inquiry (SSc)
In this course, students design and carry out writing through a series of research techniques. Students learn to select and evaluate expert and scientific information from primary sources and produce content for an array of different media. A critical reading program exposes students to research-based writing. Assignments are aimed at developing professional skills across different forms and topics. [24L]
Exclusion: WRI392H5
Prerequisite: CCT109H5 and CCT110H5 and (WRI173H5 or WRI203H5)

CCT295H5 Topics in Communication, Culture, Information and 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: CCT109H5 and CCT110H5

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 and International Opportunities (Page 23) for more details.

CCT300H5 Critical Analysis of Media (SSc)
This course offers an overview of critical theoretical concepts and applies them to contemporary media. Students will use concepts from social theory, media studies and technology studies to critically analyze the many facets of the evolution and pervasiveness of digital media. [24L]
Prerequisite: CCT210H5 or CCT218H5

CCT301H5 Design for Online Cultures (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: A minimum of 8.0 university 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 or CCT218H5

CCT304H5 Visual Communication and Digital Environments (SSc,EXP)
This is a project-based course that focuses on analyzing and evaluating the persuasive impact of the images we use every day to make decisions about our social networks, what we buy, how we live, what we care about, and who we are. Students will learn about rhetorical devices used in visual communications and then work in teams to create a persuasive awareness campaign for an NGO, Government Agency, Healthcare organization or other social interest group as the final project. [24L, 8T]
Prerequisite: CCT210H5
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, 12P]
Prerequisite: CCT204H5 or CCT250H5

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]
Prerequisite: WRI173H5 or WRI203H5

CCT308H5 Advanced Research Methodologies (SSc,EXP)
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. [24L]
Prerequisite: CCT208H5

CCT310H5 Popular Culture and Society (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]
Prerequisite: CCT210H5

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]
Prerequisite: WRI292H5 or WRI273H5

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. [36L]
Prerequisite: CCT270H5

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: CCT270H5

CCT314H5 Mind, Media and Representation (HUM,SSc)
This course applies a variety of theoretical and practical approaches to consider the multiple and often conflicting ways representations in media are produced and consumed. The study of representations is approached from the perspective that they are best understood as both discursive and ideological. Questions to be examined include: What does it mean for historical and contemporary representations to carry economic, ideological and discursive power? To what extent do audiences hold power to resist or negotiate with representations? How might we interrogate the notion that we live in a post-feminist, post-racialized society in which older ideas about gender, race and power no longer apply or need re-thinking? [24L, 5T]
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5.

CCT315H5 Theory of Linguistic Communication (HUM)
This course examines 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? [24L]
Prerequisite: Minimum of 8.0 university 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 Media Economics I (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-competition 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 and CCT225H5 and MGM101H5 and MGM102H5

CCT320H5 Communication, Technology, and Social Change (SSc)
This course explores how media and media technology have shifted the nature of the existing political and social orders. We will focus on how social movements and political challengers have used media to disrupt and, in many cases, overthrow leaders, corporations, and governments. This will bring us in contact with theories of social movement mobilization, political communication, and digital media. We will also explore the ways that legacy and digital media have changed to be in service of misinformation and state repression. [24L]
Prerequisite: CCT218H5 or CCT222H5

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]
Prerequisite: WRI292H5 or WRI273H5

CCT321H5 Introduction to Finance (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. [36P]
Exclusion: MGM230H5 or MGT230H5 or MGT331Y1 or MGT337Y5
Prerequisite: CCT224H5 and MGM101H5 and MGM102H5

CCT324H5 Organizational Studies II (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]
Prerequisite: CCT224H5 and MGM101H5 and MGM102H5

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. [24L]
Prerequisite: PSY100Y and CCT204H5 and CCT210H5

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]
Prerequisite: WRI292H5 or WRI273H5

CCT331H5 Social Media and Society (SSc)
This course introduces students to critical approaches to social media drawing from theories and fields including software studies, platform studies, critical theory and political economy. The course provides students with tools and theories to analyze and understand current social media connectivity, and how social media platforms function as socio-cultural systems. [24L]
Prerequisite: CCT218H5 or CCT222H5

CCT332H5 Canadian Communication Policy (SSc)
This course examines the policy and regulatory frameworks that shape media, culture, and technology in Canada. The course surveys the historical development of communication policy in Canada, broadly understood, and introduces students to issues and debates in the development of communication policy for specific sectors such as broadcasting, creative industries, platforms, and the internet. [24L, 12T]
Prerequisite: CCT109H5 and CCT110H5
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. [36L]
Prerequisite: CCT250H5

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. [36L]
Prerequisite: CCT109H5 and CCT110H5

CCT335H5 Technology and the City (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, 11T]
Prerequisite: CCT109H5 and CCT110H5

CCT336H5 Comics and Digital Culture (SH) (SSc)
Examining 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. [36L]
Prerequisite: CCT109H5 and CCT110H5

CCT337H5 Comics and Digital Culture (SH) (SSc)
This course explores the creation and distribution of comics and graphic novels in the digital age. Students will learn the terminology and history of the medium, as well as the various formats in which comics are produced and consumed today. By the end of the course, students will have created and disseminated their own comics project through digital platforms. [36L]
Prerequisite: CCT109H5 and CCT110H5

CCT338H5 Comics and Digital Culture (SH) (SSc)
This course examines the role of comics and graphic novels in contemporary culture. Students will analyze the ways in which comics have been used to explore a range of social and political issues, as well as their importance in the development of digital storytelling. By the end of the course, students will be able to critically engage with comics as both a medium and a cultural practice. [36L]
Prerequisite: CCT109H5 and CCT110H5

CCT339H5 Comics and Digital Culture (SH) (SSc)
This course examines the ways in which comics have been used to deconstruct and subvert mainstream narratives. Students will explore works that challenge conventional representations of gender, sexuality, and identity, and analyze the strategies used by creators to disrupt dominant tropes and norms. By the end of the course, students will be able to critically engage with comics as a form of subversive expression. [36L]
Prerequisite: CCT109H5 and 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 and CCT110H5 and (CCT200H5 or CCT210H5 or CCT222 or WRI203H5)

CCT341H5 Introduction to IT Consulting (SSc, EXP)
Information Technology (IT) Consulting is a growing profession that embodies the use of computer-supported collaborative tools in the execution of business functions. In this course students engage with the principles of Computer Supported Co-operative Work (CSCW) through an experiential opportunity to work with a real client. Students create an IT Consulting company and take on the role of consultants, learning core skills (soft and hard) necessary for this profession, including client management, communication, ideation, analysis and solution development, project management, presentation skills, and web design. Using case studies we discuss consulting lessons learned and problems to avoid within the context of industry best practices. [24P]
Prerequisite: Minimum of 8.0 university credits.

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. [36L]
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5.
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. [36L]
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. [48P]
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5.

CCT354H5 Digital Marketing II (DEM) (SSc)
This course examines digital marketing strategies and the role of online and mobile advertising platforms. Students will explore how emerging technologies are used to facilitate B2B and B2C transactions. A number of domains will be covered (search, display, programmatic trading, mobile, social, etc.) to give students a comprehensive understanding of both existing marketing strategies and emerging trends. This class will emphasize the strengths and weaknesses of various approaches to digital marketing while helping students develop a greater understanding of the different elements of marketing campaigns from formulation and implementation to integration and assessment. [24L]
Exclusion: CCT356H5
Prerequisite: CCT221H5 or CCT322H5

CCT355H5 Trends in Digital Innovation (DEM) (SSc)
This course focuses on the foundational and emergent information technology systems used in organizations and the roles people, processes, and technology play in information ecologies. Managers of 21st century organizations must familiarize themselves with a variety of software and hardware systems that continually reshape business practices, organizational structures, and social relations. This course allows students to develop a greater understanding of the significance of these technologies in contemporary institutional contexts. [24L, 12T]
Prerequisite: CCT224H5

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. [36L]
Exclusion: CCT354H5
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. [48P]
Prerequisite: CCT109H5 and CCT110H5

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]
Prerequisite: WRI292H5 or WRI273H5

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. [36P]
Prerequisite: CCT260H5

CCT361H5 Speculative Design II (DEM) (SSc,EXP)
In this course students are introduced to programming languages regularly used in management operations. Students will learn what these languages are, when and why they are applied, and how to read and write basic scripting code. The goal of this course is to familiarize students with scripting so that they can communicate more effectively with programmers in business settings. [24L, 12P]
Prerequisite: CCT261H5

WRI363H5 Communicating in a World of 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 in all its forms. Students will learn to interpret data to tell a story through 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 data experts including Arvind Sathi, Kenneth Cukier, Viktor Mayer-Schonberger, and Eric Siegel. [24L]
Prerequisite: WRI292H5 or WRI273H5
CCT365H5 Surveillance (SSc)
From the Orwellian Big Brother to Foucault’s panopticon, surveillance has become an everyday facet of modern life. From a surveillance studies perspective surveillance can be applied as a framework for understanding social, political, and technological interrelationships. This framework can help us study more effectively power, identity, persuasion, and control associated with the spread of Information Communication Technologies (ICT’s). This course will introduce students to viewpoints, vision and visibility in surveillance studies. The class will look at a range of topics from information politics, identification, privacy, security, suspicion, social sorting, bodies, borders and biometrics to explore a range of perspectives under the surveillance studies umbrella. It will introduce students to key issues surrounding data, discrimination, and visibility in a global context to undercover the watched world. [24L]
Prerequisite: CCT109H5 and CCT110H5 and CCT206H5
Exclusion: CCT365H5

WRI365Y5 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. [48L]
Exclusion: WRI365H5
Prerequisite: WRI292H5 or WRI273H5

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]
Prerequisite: WRI292H5 or WRI273H5

CCT371H5 Sound as Media (SSc)
Sound as Media will provide students with an immersive introduction to the field of sound studies. The course offers a counterpoint to surveys of visual media by exploring acoustic technologies in historical, cultural and spatial context. By considering examples such as the gramophone, public address system, boombox, and MP3 player as well as the theories that account for them, students will develop an understanding of media forms that engage the ear as well as the eye. They will in turn, have the opportunity to apply this understanding to the final project which will give them hands-on experience with creating a sound-based documentary. [24L]
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5 and CCT111H5.

CCT372H5 Knowledge Media Design: Contexts and Practices (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]
Prerequisite: CCT210H5

CCT373H5 Career Planning and Development (SSc)
In this course, students will learn about various challenges that new graduates, future managers, and future executives will face in the workplace. Students will use past workplace experiences to reflect on, and critically examine the theoretical and practical strategies that will help them develop as autonomous decision makers, and learn to evaluate and articulate their strengths in preparation for post-graduation careers. [24L]
Exclusion: CCT473H5
Prerequisite: CCT273H5

CCT374H5 Critical Histories of Information Technologies (SSc)
The course approaches current information and communication technologies from critical and historical perspectives. It investigates the interests, motives and tactics of news media, pop culture producers, amateurs, universities, corporations, and governments in promoting, sustaining, and interpreting information and communication systems. It also asks how the focus will be on media and information technologies, more theoretical or methodological readings will necessarily cover other systems. Case studies may include investigations of orality, writing, the printing press, industrialized printing, and electronic media from the telegraph and the telephone to broadcasting and the internet. [24L, 12T]

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: WRI292H5 or WRI273H5
CCT376H5 Introduction to Modelling Information (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: A minimum of 8.0 university credits.

WRI378H5 Introduction to Journalism (SSc)
This course provides an introduction to journalism and examines journalism’s role in a democratic society. Students learn the fundamentals of journalistic writing, with a focus on news and reporting. The course examines news formats and styles, sources, interviews, research, structure, and other fundamentals. The course functions as a newsroom, with students producing several reported articles throughout the term, and includes guest talks and workshops with practicing journalists. [24L] 
Prerequisite: 1.0 WRI credit

CCT380H5 Human-Computer Interaction and Communication (SSc,EXP)
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. [36P] 
Prerequisite: CCT109H5 and CCT110H5

WRI380H5 Podcasting (SSc)
This course offers the skills and techniques needed to script, record and publish podcasts to the Web. Students will design and carry out original primary research to script, edit and produce independent podcasts. The course also explores the growing popularity of podcasts, and modern societies’ shift into a secondary orality. The course draws on a range of researchers and theorists; including Aristotle, Walter, Wells, Lindstrom, McLuhan, Kawasaki. [24L] 
Prerequisite: 2.0 WRI credits

CCT381H5 Media Audiences (SSc)
Audiences are social constructions which must be imagined to be actualized. Beginning with an exploration of the nature and role of audiences from early 20th century media, students explore how audiences make meaning of popular media platforms today. How are audiences situated within media texts, what role does this play in how media is generated and circulated, and how do audiences both enact and resist media influence? Broadcast models, interactive models, audience reading, gender, culture, race, and audience feedback are investigated. [24L] 
Prerequisite: CCT210H5

CCT382H5 Prototyping Digital Games (SSc)
This course explores the fundamentals of the process of game design through prototyping. It focuses on the contexts and components of game design, such as design iteration and user testing along relevant dimensions such as art style, narrative, and game balance. Students will be introduced to design across different genres and types of digital games, including games for education, serious games, indie, and AAA games. Working in collaborative groups, students will learn and practice the appropriate methodology to design game mechanics, characters, art assets and other appropriate deliverables in order to create a game or high-fidelity prototype. [24L] 
Prerequisite: CCT218H5

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. [36P] 
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5.

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. [36L] 
Prerequisite: CCT204H5
CCT385H5 Conceptualizing Media Environments (SSc)
Marshall McLuhan was one of the first theorists to conceptualize media as environments. Media were no longer conceptualized as instruments or tools but as systems that would capture their audience within. This course investigates the role of media in structuring and conditioning how we inhabit environments. From geology to ecology, from the umwelt to ecosystems, from urban to outer space, from bodies to biospheres, this class looks at media as modes of inhabitation. The intersections of media and environments will thus be problematized in their social, cultural, and political dimensions. Students will be introduced to these systems from a conceptual and a practical perspective through the study of scientific, artistic and design projects. [24L]
Prerequisite: CCT218H5

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. [24L, 12T]
Prerequisite: A minimum of 8.0 university credits including CCT109H5 and CCT110H5.

CCT390H5 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. Students may not take WRI390H5 and WRI391H5 in the same term.
Prerequisite: 8.0 university credits including 3.0 WRI credits with a mark of 77% or higher in each and permission of course instructor or the PWC Director.

CCT391H5 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 university credits including 3.0 WRI credits with a mark of 77% or higher in each and permission of instructor or the PWC Director.

CCT395H5 Topics in Communication, Culture, Information and Technology (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. [24L]
Prerequisite: Minimum of 8.0 university 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 university credits.
WRI399Y5 Research Opportunity Program (SSc,EXP)
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 and International Opportunities for more details.
Prerequisite: A minimum of 10.0 university credits.
Corequisite: None
Recommended Preparation: None

CCT399Y5 Research Opportunity Program (ROP) (HUM,SSc,SCI,EXP)
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 and International Opportunities (Page 23) for more details.
Exclusion: CCT299Y5 or VCC399Y5
Prerequisite: A minimum of 10.0 university 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 university credits

CCT401H5 Advanced Thesis Course (DEM) (SSc)
Students will carry out a research project on a topic of their choosing which is related to their specific program focus in Digital Enterprise Management. Students will meet as a group for selected seminars emphasizing advanced research skills and thesis writing. Students will develop a research proposal, conduct research, and produce a research paper. [24S]
Prerequisite: A minimum of 13.0 university credits and a CGPA 2.5.

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. [24L]
Prerequisite: A minimum of 13.0 university credits including CCT206H5.

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 university credits

CCT404H5 Integrative Design Project (SSc,EXP)
This project-based course aims to demonstrate how collaboration is a critical capability often overlooked. During the course students will integrate their learning and experience and first hand see how, in combination with collaboration it can lead to creatively solving problems in areas as varied as business, health care delivery, urban planning and development. In addition to lectures, students will have the benefit of a series of guest lecturers. A large, group based project will serve to integrate learning and allow students the benefit of experiential learning. [36L]
Prerequisite: A minimum of 13.0 credits.
Recommended Preparation: CCT2044H5

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 university 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. [36P]
Prerequisite: A minimum of 13.0 university credits including CCT204H5 or CCT260H5.

CCT407Y5 Advanced Field Experiences in CCIT (SSc,EXP)
This course provides students the opportunity to test their skills, immerse themselves within a different cultural or social context and explore communication and technology issues through an intense field experience either in Canada or abroad. The type of field experience varies from year to year and some experiences may evolve through collaborations with other disciplines or through special industry projects. The advanced field experience may involve travel and participation in international conferences or other relevant activities. Students are responsible for travel expenses.
Exclusion: CCT409H5
Prerequisite: Permission of the ICCIT Director.

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: CCT410H5
Prerequisite: A minimum 13.0 university credits and 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 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 determine the course mark. [12S]
Prerequisite: Completion of 13.0 university credits including CCT410H5 and a CGPA of 2.5 and permission of the 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 determine the course mark. Exclusion: CCT410H5 or CCT411H5
Prerequisite: WRI410H5 and completion of 13 university credits and minimum CGPA of 2.5 and permission of internship coordinator.

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 or CCT411H5
Prerequisite: Completion of 13 university credits and a CGPA of 2.5 and permission of 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 and presentation will be required at the end of the placement. These, along with the employer's assessment, will determine the course mark.
Exclusion: CCT410H5 or CCT411H5
Prerequisite: WRI410H5 and completion of 13 university credits and minimum CGPA 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 or CCT351H5 or CCT353H5 or CCT357H5 or CCT360H5.
CCT414H5 Special Topics in Knowledge, Media and Design (SSc,EXP)
An in-depth examination of selected topics in interactive digital media with emphasis on knowledge, media and design. [24L]
Prerequisite: A minimum 13.0 university 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]
Exclusion: MGT415H5 or MGT471H5
Prerequisite: CCT355H5 and MGM101H5 (or equivalent)

CCT416H5 Social Data Analytics (SSc)
This course highlights the research in analysis for social data and builds skills to undertake those analysis. It is a lab-intensive course intended to build up data analytic skills for novice and intermediate researchers. Students look at recent studies using "big data" which are primarily theoretical, including critiques of data analytics and concerns surrounding data ethics. Students learn a programming language – Python – and how to scrape social data, store and collect it, run basic statistics, generate visuals, and create a report based on a project of interest. [24P]
Prerequisite: CCT208H5

CCT417H5 Alternative Media (SSc)
This course examines the history, politics and aesthetics of a range of alternative, underground and radical media, as well as their relation to mainstream media. Students will study and experiment with a range of alternative media, including zines, graffiti, hacking, and culture jamming, for example. Students will gain hands-on experience in the creation of alternative media. [24S]
Prerequisite: Minimum of university 13.0 credits.

CCT418H5 Work, Media and Technology (SSc)
The course analyses the political, historical, and technical relationships between media, technology, and work in contemporary capitalism. The course will examine the power and social relationships that structure work in contexts such as media, creative industries, and the platform or "gig" economy. The course will focus on critical theories of work and will engage with case studies of the intersection of work, media and technology. The aim of the course is to build a tool kit for encountering an increasingly casualized and digitally-mediated labour market. [24S]
Prerequisite: CCT222H5 or CCT319H5

CCT419H5 User Experience Design - UXD and Board Games (SSc)
This course allows students to explore issues related to user interface, user experience, materiality, gamification and game theory. Board games represent a space to consider social interaction, the use of materials, the role of emotion in design (UX), knowledge sharing and the role gamification plays in influencing behaviour. Students will be exposed to professional and research publications related to design, game theory, user experience and game mechanics. [36S]
Prerequisite: A minimum of 8.0 university credits including CCT210H5 or CCT218H5 or CCT380H5 or CCT382H5.

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: MGM101H5 and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5).

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. [24L]
Prerequisite: A minimum of 13.0 university credits including CCT109H5 and CCT110H5.

WRI420H5 Making a Book (SSc,EXP)
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]
Prerequisite: A minimum of 3.0 WRI credits and permission of instructor
MGD421H5 Technological Entrepreneurship (SSc)
This course explores the methods and frameworks of entrepreneurship through an experiential learning model (learning by doing). Students will begin the process of developing a new business venture, exploring their own business ideas and developing a business plan and pitch while working in teams. Topics include the business model, customers and markets, financial models, competition, intellectual property, funding and investment and characteristics of entrepreneurial teams. [36L]
Prerequisite: MGM101H5 and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5).

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]
Prerequisite: MGM101H5 and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5).

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. [36P]
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]
Prerequisite: MGM101H5 and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5) and (CCT225H5 or MGT371H5)

CCT424H5 Organizational Studies III (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]
Exclusion: MGT400H5 or MGM400H5
Prerequisite: MGM101H5 and MGM102H5 and (CCT319H5 or CCT321H5) and (CCT221H5 or CCT322H5) and (CCT324H5 or CCT322H5) and (CCT324H5 or CCT322H5).

MGD425H5 Media Economics II (SSc)
This course explores macroeconomics through the analysis of national and international crises. The course begins with a discussion of the nature of economics, a brief examination of markets, and a discussion of crisis and growth. We survey the institutions and dynamics of growth in the post WWII period, their breakdown in the 1960s and the spread of international crisis in the 1970s, and the crises of various economic policy responses from the 1980s to the present. After this historical overview, we explore macroeconomic theory and its development over the last 50 years. We study the Keynesian model and its emphasis on employment and output, its crisis in the late 1960s and early 1970s, the rise of monetarist alternatives, the elaboration of aggregate supply and demand models highlighting prices instead of employment, the surge of supply-side and rational expectations economics during the Reagan administration and the continuing debates among economists over the merits and problems of the various theoretical approaches. The course closes with an examination the various forms of crises tied to the emergence of information and communications technologies and the knowledge economy. [24L]
Prerequisite: (CCT319H5 or ECO100Y5) and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5).

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]
Prerequisite: MGM101H5 and (CCT319H5 or ECO100Y5) and (CCT321H5 or MGM230H5) and (CCT221H5 or CCT322H5 or MGT252H5) and (CCT324H5 or MGT262H5).

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]
Exclusion: JMG291H5 or MGM390H5 or MGM393H5 or MGM394H5 or MGMT237H5 or MGMT237H5
Prerequisite: CCT206H5 and MGM101H5
MGD428H5 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]
*Prerequisite:* MGM101H5 and (CCT324H5 or MGT262H5) and (CCT225H5 or MGT371H5)

MGD429H5 Data Analysis II (DEM) (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 and CCT221H5 or CCT322H5

WRI430H5 Journalistic Investigation (SSc)
This course examines principles and practices in journalistic investigation and writing, and provides an introduction to the main socio-political issues related to contemporary journalism. The course will consider various models and formats of journalistic writing. Students will design and carry out investigative projects that culminate in a series of journalistic articles. The course will also analyze the Canadian media industry and its evolving labour market.
[24L]
*Prerequisite:* A minimum of 1.5 WRI credits and WRI378H5

MGD430H5 Knowledge Management and Strategy (DEM) (SSc)
Increasingly knowledge is becoming one of the key resources managed by firms and organizations. This course explores the management of knowledge with particular emphasis on the use of digital technologies in capturing, storing and disseminating knowledge, knowledge sharing, and the overall development of knowledge management strategies. [24L]
*Prerequisite:* CCT324H5

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

CCT431H5 Drones, Robots, Artificial Intelligence (SSc)
Drones, robots, and artificial intelligence are three interrelated technologies that are changing the most fundamental considerations of how society and sociality should operate. Work, war, consumption, and even love are being reconfigured. This course will address debates concerning the cultural, political, economic, military, and economic considerations surrounding the growing use of these technologies. [24L]
*Prerequisite:* A minimum of 13.0 university credits.

CCT432H5 Ethics and Code (SSc)
A self-driving car should always protect pedestrians, even if that implies serious threat for the vehicle's passengers. Current ethical challenges within our computational cultures has brought forward dilemmas involving code such as designing killer robots, the use of technology to predict and prevent crimes before they happen, and platform surveillance in social media. Students in this course will use theories and case based examples to examine questions such as what is meant with ethics in new media and critical computing, can we program computational systems according to ethical models, and does digital culture force us to rethink what ethics are? [24L]
*Prerequisite:* A minimum of 13.0 university credits.
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. [36L] 
Prerequisite: A minimum of 13.0 university credits including (CCT204H5 or CCT250H5)

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. [36L] 
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: A minimum 13.0 university credits and CGPA of 2.5.

CCT448H5 Game Design as Problem Solving (SH) (SSc)
In this course, learners will identify and analyze the problems associated with game design such as The Door Problem and The Stamp Collecting Dilemma. Applying their own creativity and various schools of game theory such as Player-Centric Design, learners will prepare game mechanics that address and attempt to solve these problems. [36P] 
Prerequisite: CCT311H5

CCT449H5 Immersive VR Journalism (SH) (SSc)
This course focuses on creating digitally produced stories designed to provide a first-person, interactive experience with news events, animation and documentary film. 3D gaming, 3D drawing tools, and immersive technologies will be used to engage the audience member, creating a sense of ‘presence’. Four theoretical domains will be discussed as part of a new narrative design framework foundational to Immersive VR Journalism: VR presence, narrative, cognition and journalistic ethics. [36P] 
Prerequisite: CCT312H5 or CCT351H5 or CCT353H5 or CCT357H5

CCT450H5 Designing Interactive Books (SH) (SSc)
This advanced self-directed project-based course allows students who are already familiar with the principles of page layout and interactive multimedia to design and publish in iBooks. The principles and practice of creative concept development and art direction are actively applied. Students will develop original content in text, digital media, and engage in the creative application of iBooks Author's widgets as a writer, editor, illustrator, and designer. Balancing an industry-ready mindset with an avant-garde spirit, students are also encouraged to investigate this medium as an art form in alternative, experimental directions. [36P] 
Prerequisite: CCT204H5 and CCT305H5

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. [36P] 
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. [36L] 
Prerequisite: CCT204H5 and CCT352H5
CCT 453H5 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. [48P]
Prerequisite: CCT 353H5

CCT 454H5 Documentary Practices (HUM)
This course explores the form and practice of documentary. Objectivity, ethics, censorship, representation, reflexivity, responsibility to the audience and authorial voice will be examined. Students will engage in practical engagement with documentary forms including the expanded field of documentary using tools such as photography, audio, video, 360 video, VR and new technologies. [36P]
Prerequisite: A minimum of 13.0 university credits.

CCT 456H5 Analysis and Visualization of Open Data (SH) (SSc)
This course explores the open data/open government movement with the goal of understanding the promises and perils of the open data movement, better understanding what conclusions can and cannot be extrapolated from open data standards, using common visualization tools to make better sense of large open data sets, and concluding with a design competition where students build a prototype application that leverages open data sources to develop new services. [36L]
Prerequisite: CCT 356H5

CCT 457H5 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. [48P]
Prerequisite: CCT 357H5

CCT 460H5 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. [36P]
Prerequisite: CCT 260H5 and CCT 360H5
Recommended Preparation: Solid experience with static HTML is mandatory. Previous exposure to the logic of a programming language is advised.

CCT 461H5 Speculative Design III (DEM) (SSc, EXP)
Emerging technologies have the potential to transform business models and architectures. In this course students learn the functional and technical underpinnings of selected emerging technologies and critically analyse how these technologies are impacting business functions. Students also gain hands-on experience with emerging technologies and consider how they may be applied or adapted to solve management issues. [24L, 12P]
Prerequisite: CCT 361H5

CCT 470H5 Information Visualization (SSc)
Visual literacy and the visualization of information are increasingly important competencies in a growing number of fields. This course will explore the history of visually representing information, consider issues related to data visualization and approaches to visually representing data. In addition, students will develop a better understanding of what visualization works best for various types of data, what makes for a strong visualization and the importance of narrative in the construction of graphic data representation. [24P]
Prerequisite: CCT 210H5 and (CCT 226H5 or CCT 286H5 or CCT 304H5)

CCT 471H5 Knowledge Representation and Reasoning (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: CCT 372H5
CCT472H5 Media Archaeology (SSc)
This course examines media as technical objects with specific histories and a contemporary presence. Through historical texts, archival research and hands-on experimentation, old media will be brought to life. Phonographic records players, cassette tape machines, portable radios, and 16-bit video-game consoles are examples of the kinds of media examined in this course. [24L,12T]
Prerequisite: A minimum of 13.0 university credits.

CCT473H5 Career Strategies (SSc)
In this course students will learn about various challenges that new graduates, future managers, and future executives will face in the workplace. Students will learn the theoretical as well as practical techniques that will help them succeed after graduating from their undergraduate programs. [24L]
Prerequisite: Minimum of 13.0 credits.

CCT474H5 Organizational Innovation and Digital Leadership (DEM) (SSc)
This course investigates innovation strategies in organizations, including characteristics of knowledge intensive firms, open innovation, leading in digital age, design thinking in innovation process with a special emphasis on how they apply to dispersed teams. In addition, other organization in digital age issues will be discussed such as multicultural work place and cohesion, cross-cultural competencies both from a diversity and globalization standpoint. [24L]
Prerequisite: CCT324H5

CCT475H5 Integrated Learning in Digital Media, Communication, and Technology (SSc)
This capstone project course requires students to reflect on the experiences they gained during their two work placements connected with the Professional Experience Certificate in Digital Media, Communication, and Technology, and develop a comprehensive case study that integrates theories learning within their ICCIT studies with workplace applications. [24L]
Prerequisite: CCT273H5 and CCT373H5

CCT476H5 Foundations of Operations Management (SSc)
Operations Management deals with the functions of an enterprise that create value for the customers. The scope of study covers all processes involved in the design, production and physical distribution of goods and services. With global competition continuously increasing, a firm’s survival depends upon how well it integrates the operations function into the enterprise’s general planning and strategy. It is thus essential for business managers to acquire an understanding and appreciation of operations. [24L]
Prerequisite: A minimum of 13.0 university credits including CCT224H5.

CCT480H5 User Experience Analysis - UXA (SSc,EXP)
The course investigates how people interact with interactive digital systems from an evaluation and formal testing perspective, and introduces students to the methods of User Experience Assessment and User Experience Analysis (UXA). This studio-based experiential course examines how interactive systems are implemented and deployed to meet users’ needs, with a focus on formal Human Computer Interaction (HCI) evaluation methods. Students will acquire the capacity to evaluate systems and to critically assess different HCI and UX validation methods which are based on industry approaches carried out by User Research Analysis. [36P]
Prerequisite: A minimum of 13.0 university credits including CCT380H5.

CCT481H5 Augmented Places and Social Media Spaces (SSc)
Increasingly we are seeing a hybridization of information and location, where media provide a framework or environment for users (participants) to construct reality and relationships. The course explores emergence of new ubiquitous communication practices and the increasingly pervasive use of technology for the augmentation of people, places, and objects. In this course, students will explore various approaches to context-based information systems, and the shaping of social media spaces. [24L]
Prerequisite: A minimum of 13.0 university credits.

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. [36P]
Prerequisite: Minimum of 13.0 university credits.
WR1483H5 Character, Narrator and Psychic Space (SSc)
This course examines the central role of characterization and character development in nonfiction prose. Students explore the theory of psychic space, working to understand how the creation of that space operates to advance audience engagement. Classwork explores the furnishing and unfurnishing of psychic space in relation to meaning and characterization. Students focus on a small set of characters they develop over time via a writing portfolio. The course considers the impacts of place, incident, narrative arc, and complication-resolution models, with reference to theories by Gerke, French, Wolfe, and Van Manen. Weekly exercises and assignments focus on developing believable, memorable characters. Readings include a mix of student-authored and contemporary professional works.
Prerequisite: 2.0 WRI 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. [24L]
Prerequisite: A minimum of 13.0 university credits.

CCT485H5 User Experience Design - UXD (SSc,EXP)
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. [36P]
Prerequisite: A minimum of 13.0 university credits including CCT380H5.

CCT487H5 Advanced Communication Policy in a Global Context (SSc)
This course provides students with a theoretical and practical understanding of media, technology, and cultural policy in a global context. The course focuses on issues such as national identity and globalization, media convergence, intellectual property, global media regulation, security and privacy by examining how media, communication, and cultural policy is created, influenced, and contested by a range of actors. [24L, 12T]
Prerequisite: CCT206H5 and CCT332H5

WR1488H5 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 WR1490H5
Prerequisite: 2.0 WRI credits
Corequisite: None

WR1490H5 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: 2.5 WRI credits and permission of instructor

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: A minimum of 13.0 university 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. [36P]
Prerequisite: A minimum of 13.0 university credits including CCT109H5 and CCT110H5 and approval by instructor

CCT495H5 Topics in Communication, Culture, Information Technology (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: A minimum of 13.0 university credits.

CCT499Y5 Research Opportunity (SSc,EXP)
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 university credits.

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: 2.5 WRI credits and permission of instructor

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: A minimum of 13.0 university 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. [36P]
Prerequisite: A minimum of 13.0 university credits including CCT109H5 and CCT110H5 and approval by instructor

CCT495H5 Topics in Communication, Culture, Information Technology (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: A minimum of 13.0 university credits.

CCT499Y5 Research Opportunity (SSc,EXP)
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 university credits.
WRI499Y5 Research Opportunity Program (SSc,EXP)
This course provides a richly rewarding opportunity for students in their fourth year to work in the research project of a professor in return for 499Y 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 and International Opportunities for more details.

Prerequisite: A minimum of 13.0 university credits
Corequisite: None
Recommended Preparation: None

Comparative Physiology (HBSc)
This program is offered through the Biology Department.
Computer Science (HBSc)

Emeritus Senior Lecturer

Professor Emeritus
C. Rackoff, B.S., M.Sc., Ph.D.

Professors and Lecturers
F. Alaca, B.Eng, M.A.Sc., Ph.D
A.J. Bonner, B.Sc., M.S., Ph.D.
J. Burgner Kahrs, B.Sc., M.Sc., Ph.D.
S. Fidler, B.Sc., Ph.D.
A. Garg, B.E., M.S., Ph.D.
A. Petersen, B.Sc., M.Sc.
A. Rosenbloom, B.Sc., M.Sc.
S. Sachdeva, B.Tech., M.A., Ph.D.
F. Shkurti, B.Sc., M.Sc., Ph.D.
B. Simion, B.Eng, M.A.Sc., Ph.D
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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 (MAT132H5,MAT134H5)/ (MAT135H5,MAT136H5)/MAT137Y5/ MAT157Y5 are the standard first year courses for students who plan to continue in a Computer Science program.

Notes:
1. All CSC programs require MAT102H5, (MAT132H5,MAT134H5)/(MAT135H5,MAT136H5)/MAT137Y5/ MAT157Y5, 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, ENG110Y5; HSC200H5, HSC300H5; 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 University of Toronto Engineering Career Center (ECC).
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.
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](http://www.utm.utoronto.ca/mcs)

Students should also review the Degree Requirements (Page 15) section prior to selecting courses.

For courses in this area see:
- CCT Communication, Culture, Information and Technology (page 138)
- CSC Computer Science (page 162)
- ENG English (page 205)
- GGR Geography (page 274)
- HSC Biomedical Communications (page 106)
- LIN Linguistics (page 349)
- MAT Mathematics (page 372)
- STA Statistics (page 445)

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; MAT102H5; and one of (MAT134H5/ MAT136H5/ MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5/ MAT233H5).

2. **Required Course Marks in CSC148H5 and MAT102H5**
   - The minimum course mark in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65.

3. **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](http://www.fees.utoronto.ca) for more information on the fee structures.

**First Year**: CSC108H5, CSC148H5; MAT102H5, (MAT132H5,MAT134H5) / (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5, MAT223H5/ MAT240H5

**Second Year**: CSC207H5, CSC209H5, CSC236H5, CSC258H5, CSC263H5, CSC290H5; MAT224H5/ MAT240H5, MAT232H5/ MAT257Y5; STA256H5

**Third Year**: CSC343H5, CSC347H5, CSC363H5, CSC369H5, CSC373H5; MAT301H5, MAT302H5

**Third and Fourth Years**: CSC358H5/ CSC458H5; two of (CSC422H5, CSC423H5, CSC427H5, CSC490H5)

**Notes**: In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by participating in the PEY (Professional Experience Year) program. It can also be met by taking at least one of the following half-courses: CSC318H5, CSC367H5, CSC375H5, CSC409H5, CSC420H5, CSC427H5, CSC477H5, CSC490H5

Specialist Program ERSPE1688 Computer Science (Science)

12.0 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; MAT102H5; and one of (MAT134H5/ MAT136H5/ MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5/ MAT233H5).

2. **Required Course Marks in CSC148H5 and MAT102H5**
   - The minimum course mark in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65.

3. **Cumulative Grade Point Average (CGPA)**
   - The minimum CGPA is determined annually. It is never lower than 2.0.

The Computer Science 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](http://www.fees.utoronto.ca) for more information on the fee structures.

**First Year**: CSC108H5, CSC148H5; MAT102H5, (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5, MAT223H5/ MAT240H5

**Second Year**: CSC207H5, CSC209H5, CSC236H5, CSC258H5, CSC263H5, CSC290H5; MAT223H5/ MAT240H5, MAT232H5/ MAT257Y5; STA256H5

**Third and Fourth Year**: CSC343H5, CSC358H5/ CSC458H5, CSC363H5, CSC369H5, CSC373H5; Five half courses from any 300/400 level U of T Mississauga CSC courses or from GGR335H5, GGR337H5 or GGR437H5. At least 1.0 credit must come from 400-level courses, and no more than 1.0 credit of GGR courses may count to this requirement.

**Notes**: In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by participating in the PEY (Professional Experience Year) program. It can also be met by taking at least one of the following half-courses: CSC318H5, CSC367H5, CSC375H5, CSC409H5, CSC420H5, CSC427H5, CSC477H5, CSC490H5
1. In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by participating in the PEY (Professional Experience Year) program. It can also be met by taking at least one of the following half-courses: CSC318H5, CSC367H5, CSC375H5, CSC409H5, CSC420H5, CSC427H5, CSC477H5, CSC490H5

2. 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. Third and Fourth Year CSC343H5, CSC358H5/CSC458H5, CSC363H5, CSC369H5, CSC373H5; Five half courses from any 300/400 level U of T Mississauga CSC courses or from GGR335H5, GGR337H5 or GGR437H5. At least 0.5 credit must come from 400-level courses, and no more than 0.5 credit of GGR courses may count to this requirement.

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; MAT102H5; and one of (MAT134H5/MAT136H5/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5/MAT233H5).

2. Prerequisite courses The minimum course mark in CSC148H5 and MAT102H5 is determined annually. It is never lower than 60.

3. Cumulative Grade Point Average (CGPA) The minimum CGPA is determined annually. It is never lower than 2.0.

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 on a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

First Year: CSC108H5, CSC148H5; MAT102H5, (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5

Second Year: CSC207H5, CSC236H5; one of (CSC209H5, CSC258H5, CSC263H5)

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. Students without pre- and co-requisites or departmental approval can be de-registered from courses at any time.

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

GGR335H5, GGR337H5 or GGR437H5. At least 0.5 credit must come from 400-level courses, and no more than 0.5 credit of GGR courses may count to this requirement

Notes:

1. In addition to the course requirements above, students must complete an integrative learning experience. This requirement may be met by participating in the PEY (Professional Experience Year) program. It can also be met by taking at least one of the following half-courses: CSC318H5, CSC367H5, CSC375H5, CSC409H5, CSC420H5, CSC427H5, CSC477H5, CSC490H5

2. Third and Fourth Years Four half courses from any 300/400 level U of T Mississauga CSC courses or from GGR335H5, GGR337H5 or GGR437H5. At least 0.5 credit must come from 400-level courses, and no more than 0.5 credit of GGR courses may count to this requirement

Minor Program ERMIN1688 Computer Science (Science)

4.0 credits are required.

First Year: CSC108H5, CSC148H5; MAT102H5

Second Year: CSC207H5, CSC236H5; one of (CSC209H5, CSC258H5, CSC263H5)

Third and Fourth Years: Four half courses from any 300/400 level U of T Mississauga CSC courses or from GGR335H5, GGR337H5 or GGR437H5. At least 0.5 credit must come from 400-level courses, and no more than 0.5 credit of GGR courses may count to this requirement

Students without pre- and co-requisites or departmental approval can be de-registered from courses at any time.
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 or CSC120H1 or CSC148H5 or CSC148H1 or CSC150H1 or CSCA08H3 or 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 or CSC150H1 or CSCA48H3
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: permission of instructor

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, 12P]
Exclusion: CSC207H1 or CSCB07H3
Prerequisite: 60% in 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, 12P]
Exclusion: CSC209H1 or 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 or CSC240H1 or CSCB36H3
Prerequisite: CSC148H5 and 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 or CSCB58H3
Prerequisite: CSC148H5 and 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 or CSC265H1 or CSCB63H3
Prerequisite: CSC207H5 and CSC236H5 and (STA107H5 or STA256H5)

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 in early March. See Experiential and International Opportunities (Page 23) 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 or CSCD03H3
Prerequisite: Any CSC half-course and 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 or CSCC01H3
Prerequisite: CSC209H5 and CSC290H5
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, 12P]
Exclusion: CSC309H1 or CSCC09H3
Prerequisite: CSC209H5 and CSC290H5
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 and CSC290H5 and STA256H5 and (MAT223H5 or MAT240H5)
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC311H5 Introduction to Machine Learning (SCI)
Exclusion: CSC411H5
Prerequisite: CSC207H5 and MAT223H5 and MAT232H5
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 and (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 and CSC290H5 and (MAT223H5 or MAT240H5)
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 or MATC16H3
Prerequisite: (MAT224H5 or MAT240H5) and MAT301H5
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, 12P]
Exclusion: CSC324H1 or CSCC24H3
Prerequisite: CSC207H5 and CSC236H5 and CSC290H5
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, 12P]
Exclusion: CSC209H5 and CSC290H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
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, 12P]
Exclusion: CSC368H1 or CSC370H5 or CSC351H1 or CSC357H3
Prerequisite: CSC148H5 and (CSC290H5 or MAT202H5)
and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5) and
(MAT223H5 or MAT240H5) and (CSC263H5 or 1.0 MAT credit at the 200+ level).
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, 12P]
Exclusion: CSC343H1 or CSC343H3
Prerequisite: CSC263H5 and CSC290H5
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, 12P]
Prerequisite: CSC209H5 and CSC236H5 and CSC290H5
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 or CSC458H1
Prerequisite: CSC209H5 and CSC258H5 and CSC263H5 and CSC290H5
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: CSC63H3 or CSC463H1
Prerequisite: (CSC290H5 and (CSC236H5 or CSC238H5)) or MAT202H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC367H5 Parallel Programming (SCI)
Introduction to aspects of parallel programming. Topics include computer instruction execution, instruction-level parallelism, memory system performance, task and data parallelism, parallel models (shared memory, message passing), synchronization, scalability and Amdahl’s law, Flynn taxonomy, vector processing and parallel computing architectures. [24L, 12P]
Exclusion: CSC367H1
Prerequisite: CSC209H5 and CSC258H5 and CSC290H5
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, 12P]
Exclusion: CSC369H1 or CSC69H3
Prerequisite: CSC258H5 and CSC290H5
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, randomization, network flows, approximation algorithms and others (if time permits). Students will be expected to show good design principles and adequate skills at reasoning about the correctness and complexity of algorithms. [24L, 12T]

**Exclusion:** CSC373H1 or CSC375H1 or CSCC73H3

**Prerequisite:** CSC263H5 and CSC290H5

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**CSC375H5 Programming Mechatronic Systems (SCI)**
Programming of mechatronic systems. Students will build a mobile robot from provided components as well as control software for it. Topics include real-time constraints, sensor data, memory management, and concurrency; analysis of mechatronics problems; and structured presentation of software projects using UML. [24L, 24P]

**Prerequisite:** CSC209H5 and CSC258H5

Recommended Preparation: CSC301H5

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**CSC376H5 Fundamentals of Robotics (SCI)**
An introduction to designing robot systems. Topics include sensors, actuators, and manipulators; kinematics and dynamics; motion planning; modeling; and intelligent control. Topics covered in lecture will be implemented and explored in a practical environment using robots from different application domains. [24L, 24P]

**Prerequisite:** CSC209H5 and CSC258H5 and CSC338H5

Recommended Preparation: CSC375H5

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**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 or CSC484H1 or CSCD84H3

**Prerequisite:** CSC290H5 and CSC324H5 and STA256H5

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**CSC392H5 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.

**Prerequisite:** A minimum of 8.0 credits and P.I.

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**CSC393h5 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.

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**CSC398H5 Topics in Computer Science (SCI)**
Introduction to a topic of current interest in computer science intended for CSC majors and specialists. Content will vary from year to year. This course may include a practical or tutorial component, depending on the topic chosen for the year. [24L]

**Prerequisite:** A minimum of 8.0 credits and permission of instructor

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

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**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 and International Opportunities 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 and CSC318H5 and CSC384H5 and CSC418H1)
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC409H5 Scalable Computing (SCI)
We investigate computation in the large – utilizing many CPUs with large amounts of memory, large storage and massive connectivity – to solve computationally complex problems involving big data, serving large collections of users, in high availability, global settings. Our investigation covers both theoretical techniques and current, applied tools used to scale applications on the desktop and in the cloud. Topics include caching, load balancing, parallel computing and models of computation, redundancy, failover strategies, use of GPUs, and noSQL databases. [24L, 12P]
Prerequisite: CSC290H5 and CSC369H5 and CSC373H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC413H5 Neural Networks and Deep Learning (SCI)
Exclusion: CSC321H5
Prerequisite: CSC311H5 or CSC411H5
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: CSC263H5 and CSC338H5
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 and CSC363H5
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)
Investigation of digital devices that contain evidence, including mobile and handheld devices. Topics include the analysis of memory dumps, event logs, and application caches using existing digital forensic tools as well as the development of new tools to uncover evidence and to work around the use of anti-forensics. Tools and investigations must be clearly documented, so this course contains a significant writing component. [24L, 12P]
Prerequisite: CSC333H5 and CSC369H5
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, 12P]
Prerequisite: CSC290H5 and CSC347H5 and CSC369H5
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 and STA256H5 and (CSC207H5 or proficiency in Java) and CGPA 3.0 or enrolment in a CSC subject POSt.
Recommended Preparation: A course in PSY and CSC209H5.
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC429H5 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 and CSC369H5
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 and CSC290H5 and CSC363H5
Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.
CSC477H5 Introduction to Mobile Robotics (SCI)
An introduction to mobile robotic systems from a computational, as opposed to an electromechanical, perspective. Definitional problems in robotics and their solutions both in practice and by the research community. Topics include algorithms, probabilistic reasoning and modeling, optimization, inference mechanisms, and behavior strategies. [24L, 12P]
Prerequisite: CSC209H5 and MAT223H5 and MAT232H5 and STA256
Recommended Preparation: CSC384H5 and CSC311H5 and CSC376H5 and MAT224H5
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: permission of instructor
Corequisite: BIO477H5
Recommended Preparation: CSC343H5 and 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 and CSC263H5 and CSC290H5 and CSC324H5
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, 12P]
Exclusion: CSC490H1 or CSC491H1
Prerequisite: Permission of the instructor and CGPA 3.0/enrolment in a CSC Subject POSI, 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 or CSC495H1 or CSCD94H3 or CSCD95H3
Prerequisite: CSC290H5 and 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 or CSC495H1 or CSCD94H3 or CSCD95H3
Prerequisite: CSC290H5 and 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.
CSC497H5 Topics in Computer Science (SCI)
Introduction to a topic of current interest in computer science intended for CSC majors and specialists. Content will vary from year to year. This course may include a practical or tutorial component, depending on the topic chosen for the year. [24L,12P/T]

Prerequisite: A minimum of 8.0 credits and permission of instructor

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC498H5 Topics in Computer Science (SCI)
Introduction to a topic of current interest in computer science intended for CSC majors and specialists. Content will vary from year to year. This course may include a practical or tutorial component, depending on the topic chosen for the year. [24L]

Prerequisite: A minimum of 8.0 credits and permission of instructor

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

CSC499Y5 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 499Y 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 and International Opportunities (Page 23) for more details.

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major programs.

Criminology, Law and Society (HBA)

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J. Flores, B.A., M.A., Ph.D.
P. Goodman, B.A., M.A., Ph.D.
J. Haag, B.A. (Hons), M.A.
N. Innocente, B.A., M.A., Ph.D.
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.
D. Pettinicchio, B.A., M.A., Ph.D.
Z. Richer, B.A., M.A., Ph.D.
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The Criminology, Law and Society 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 and might include:

- students who at a later stage may wish to pursue more advanced work in areas related to, for example, criminology, law or social work;
- students wanting to know more about the topics of the sociology of crime, particularly as these become issues of public policy.
Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- FSC Forensic Science (page 248)
- PHL Philosophy (page 363)
- POL Political Science (page 401)
- PSY Psychology (page 412)
- SOC Sociology (page 424)
- WGS Women and Gender Studies (page 463)

Specialist Program ERSPE0727 Criminology, Law and Society (Arts)

10.0 credits are required.

Limited Enrolment – Space in the Specialist Program in Criminology, Law and Society is limited. To be considered for admission, students must meet the following minimum criteria:

1. Eligibility: Students registered in the Criminology, Law & Society Major program may apply to the Criminology, Law & Society Specialist program towards the end of Year 2.
2. Credits: Students must have a minimum of 8.0 credits.
3. Prerequisite Course(s): Students must have an average final mark of at least 73% in UTM SOC109H5, SOC205H5, SOC221H5, SOC222H5 and SOC231H5.
4. Cumulative Grade Point Average (CGPA): The Department of Sociology determines the CGPA requirement each admission period in relation to the number of applicants and it is never below 2.00.

Note: Meeting the minimum requirements does not guarantee admission.

First Year:
- SOC100H5
- SOC109H5

Second Year:
- SOC205H5
- SOC221H5
- SOC222H5
- SOC231H5

Higher Years:
- SOC350H5
- SOC387H5

- SOC440Y5
- 2.5 credits from Group A below
- 1.5 credits from Group B below or any SOC course not listed above
- 1.0 credit from Group C below (in addition to SOC440Y5)

Group A - Criminology, Law & Society Courses:

Group B - Interdisciplinary Elective Courses:

Group C - Enrichment Courses:
SOC230H5, SOC299H5, SOC299Y5, SOC382H5, SOC399H5, SOC399Y5, SOC401H5, SOC403H5, SOC406H5, SOC406H5, SOC410H5, SOC411H5, SOC412H5, SOC413H5, SOC414H5, SOC415H5, SOC416H5, SOC417H5, SOC418H5, SOC419H5, SOC420H5, SOC421H5, SOC423H5, SOC439Y5, SOC440Y5, SOC450H5, SOC452H5, SOC456H5, SOC467H5, SOC480Y5, SOC485H5, SOC499H5, SOC499Y5

NOTES:

- Please note upper-year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enrol in 300- and 400-level courses.
- A minimum 3.0 credits at the 300/400 level are required from Groups A, B, or C.
Major Program ERMAJ0727 Criminology, Law and Society (Arts)

7.0 credits are required.

Limited Enrolment – Space in the Major Program in Criminology, Law and Society is limited. To be considered for admission, students must meet the following minimum criteria:

Credits: Students must have a minimum of 4.0 credits.

Prerequisite Course(s): Students must have a final mark of at least 67% in their first successful attempt at UTM SOC100H5 or a final mark of at least 70% in each of SOC109H5 and 0.5 UTM SOC credit at the 200-level or above.

Cumulative Grade Point Average (CGPA): The Department of Sociology determines the CGPA requirement each admission period in relation to the number of applicants and it is never below 2.00. Note: Meeting the minimum requirements does not guarantee admission.

First Year:
- SOC100H5
- SOC109H5

Second Year:
- SOC205H5
- SOC221H5
- SOC222H5

Higher Years:
- 1.0 Group A, B or C credit at the 300 level
- 1.0 Group A, B or C credit at the 400 level
- 1.0 Group A, B or C credit at the 300/400 level
- 1.5 additional credits from Group B or any SOC course not listed above

Group A - Criminology, Law & Society Courses:
SOC206H5, SOC208H5, SOC211H5, SOC216H5, SOC219H5, SOC301H5, SOC303H5, SOC306H5, SOC310H5, SOC311H5, SOC312H5, SOC316H5, SOC320H5, SOC321H5, SOC322H5, SOC323H5, SOC324H5, SOC325H5, SOC326H5, SOC327H5, SOC328H5, SOC329H5, SOC330H5, SOC331H5, SOC333H5, SOC337H5, SOC338H5, SOC346H5, SOC351H5, SOC357H5, SOC358H5, SOC363H5, SOC365H5, SOC366H5, SOC371H5, SOC378H5, SOC379H5, SOC382H5, SOC393H5, SOC394H5, SOC401H5, SOC403H5, SOC405H5, SOC406H5, SOC420H5, SOC421H5, SOC423H5, SOC424H5, SOC429H5, SOC432H5, SOC446H5, SOC447H5, SOC448H5, SOC450H5, SOC456H5, SOC475H5, SOC493H5, SOC494H5

Group B - Interdisciplinary Elective Courses:

Group C - Enrichment Courses:
SOC230H5, SOC299H5, SOC299Y5, SOC382H5, SOC399H5, SOC399Y5, SOC401H5, SOC403H5, SOC406H5, SOC410H5, SOC411H5, SOC412H5, SOC413H5, SOC414H5, SOC415H5, SOC416H5, SOC417H5, SOC418H5, SOC419H5, SOC420H5, SOC421H5, SOC423H5, SOC439Y5, SOC440Y5, SOC450H5, SOC452H5, SOC456H5, SOC467H5, SOC480Y5, SOC485H5, SOC499H5, SOC499Y5

NOTES:
- Please note upper-year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enrol in 300- and 400-level courses.
- Students must have at least 3.0 credits from Course Group A.

Important Information

1. Students can choose to pursue a Criminology, Law & Society Specialist or a Criminology, Law & Society Major; these programs cannot be combined. Please note it is not possible to combine a Criminology, Law & Society Specialist with a Sociology Specialist.

2. Students must check with the Sociology Academic Counsellor before enrolling in a course at another U of T campus in order to determine whether the course may be applied towards Criminology, Law and Society program requirements.

3. Students are not permitted to take any of the following courses elsewhere:
   (a) SOC100H5
   (b) SOC109H5
   (c) SOC205H5
   (d) SOC221H5
   (e) SOC222H5
   (f) SOC231H5
If students do take any of the above noted courses elsewhere, it will not apply to their Criminology, Law and Society program. Such students can still take the course with the UTM Department of Sociology in order to satisfy our program requirements; however, this "extra course" will appear on official transcripts with the notation "EXT".

Special consideration may be given to new students assessed for transfer credit at UTM.

4. Students without prerequisites will be removed at any time; no waivers will be granted.

5. Courses may be restricted to students in particular programs and/or enrollment priority may be given to particular categories of students.

6. Students entering the program after their second year should plan sufficient time for its completion; program/course requirements will not be waived.

For more information about Criminology, Law & Society programs and the Department of Sociology, please visit https://www.utm.utoronto.ca/sociology/.

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 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- CCT Communication, Culture, Information and Technology (page 138)
- CIN Cinema Studies (page 121)
- DTS Diaspora and Transnational Studies (page 175)
- ENG English (page 205)
- FRE French (page 258)
- GGR Geography (page 274)
- HIS History (page 289)
- ITA Italian (page 323)
- POL Political Science (page 401)
- RLG History of Religions (page 304)
- SOC Sociology (page 424)
- WGS Women and Gender Studies (page 463)

**Major Program ERMAJ1407 Diaspora and Transnational Studies (Arts)**

**Program Requirements:** 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)

Program Requirements: 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)

U of T Mississauga Courses

Anthropology: ANT209H5/ ANT350H5/ ANT352H5

Cinema Studies: CIN303H5


Arts & Science courses that can be applied to the program:

Please refer to https://cdts.utoronto.ca/index.php/courses/

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 or 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 or 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 for details. [24L]
Recommended Preparation: DTS201H5 or DTS202H5
Earth Science (HBSc)

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 for details.

Earth Science (HBSc)

Professors Emeriti
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Professors
- P. Ashwell, Ph.D
- J. Halfar, Diplom, Ph.D., Habilitation
- M. Laflamme, Ph.D., B.Sc.(Agr.)
- S.K.Y. Lui, B.Sc., M.Sc., 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 219), 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 16) section prior to selecting courses.

For courses in this area see:
BIO  Biology (page 94)
CHM  Chemistry (page 113)
CPS  Chemistry (page 113)
ENV  Environment (page 232)
ERS  Earth Science (page 179)
GGR  Geography (page 274)
ISP  Institute for the Study of University Pedagogy (ISUP) (page 316)
JCB  Chemistry (page 113)
JGE  Geography (page 274)
MAT  Mathematics (page 372)
PHY  Physics (page 394)
STA  Statistics (page 445)

Specialist Program ERSPE1465 Earth Science (Science)

14.0-15.0 credits are required, including at least 5.0 at the 300/400 level, of which 1.0 credit must be at the 400 level.

Limited Enrolment – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits, including either (ERS101H5 and ERS111H5) or ENV100Y5 with a minimum grade of 60% in each course is required.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits, including ISP100H5 and one of the following courses with a minimum grade of 60% is required: ERS101H5 or ERS111H5 or ENV100Y5.

First Year:
• CHM110H5 and CHM120H5
• (MAT132H5 and MAT134H5) or (MAT135H5 and MAT137Y5)
• (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5)
• BIO152H5 and BIO153H5
• For students entering the program in 2020-2021: (ERS101H5 and ERS111H5) or ENV100Y5
• For students entering the program in 2021-2022 (and beyond): (ERS101H5 or ERS111H5 or ENV100Y5) and ISP100H5

Second Year:
• ERS201H5 and ERS202H5 and ERS203H5 and ERS211H5 and ERS225H5 and STA220H5

Third and Fourth Year:
• ERS301H5 and ERS303H5 and ERS311H5 and ERSE315H5 and ERS325H5
• For students entering the program in 2020-2021: 3.5 additional credits from GGR201H5 or GGR217H5 or JGE378H5 or JCB487Y5 or any ERS course at the 300/400 level. Of these 3.5 credits, 1.0 credit must be at the 400 level.
• For students entering the program in 2021-2022 (and beyond): 4.0 additional credits from GGR201H5 or GGR217H5 or JGE378H5 or PHY351H5 or JCB487Y5 or any ERS course at the 300/400 level. Of these 4.0 credits, 1.0 credit must be at the 400 level.

Notes
1. No more than 1.0 credit from ERS399Y5 or ERS499Y5 or ERS470Y5 or ERS471H5 or JCB487Y5 can be counted toward the Earth Science Specialist program.

2. Students interested in future certification by the Association of Professional Geologists of Ontario in their Geology and Environmental Geoscience oriented streams may benefit from taking courses in one of the following two pathways:

**Resources, Hazards & Tectonics Pathway:**

**Earth, Climate & Life Pathway:**
ERS304H5, ERS312H5, ERS411H5, ERS412H5, ERS425H5, GGR201H5, GGR217H5, and 0.5 credit from ERS399Y5/ ERS470Y5/ ERS471H5/ ERS472H5/ JCB487Y5.

**Major Program ERMAJ1465 Earth Science (Science)**
7.5-8.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits, including either (ERS101H5 and ERS111H5) or ENV100Y5 with a minimum grade of 60% in each course is required.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits, including ISP100H5 and one of the following courses with a minimum grade of 60% is required: ERS101H5 or ERS111H5 or ENV100Y5.

**First Year:**
- (MAT132H5 and MAT134H5) or (MAT135H5 or MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5
- (CHM110H5 and CHM120H5) or (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5)
- For students entering the program in 2020-2021: (ERS101H5 and ERS111H5) or ENV100Y5
- For students entering the program in 2021-2022 (and beyond): (ERS101H5 or ERS111H5 or ENV100Y5) and ISP100H5

**Second Year:**
- ERS201H5 and ERS202H5 and ERS203H5
- 0.5 credit from ERS211H5 or ERS225H5 or GGR214H5 or GGR217H5 or GGR227H5 or GGR272H5 or GGR276H5 or GGR278H5

**Higher Years:**
- For students entering the program in 2020-2021: 2.5 additional credits at the 300/400 level from ERS301H5 or ERS302H5 or ERS303H5 or ERS304H5 or ERS311H5 or ERS312H5 or ERS315H5 or ERS325H5 or ERS381H5 or ERS401H5 or ERS402H5 or ERS403H5 or ERS404H5 or ERS411H5 or ERS412H5 or ERS425H5 or JGE378H5 or CPS400Y5.

- For students entering the program in 2021-2022 (and beyond): 3.0 additional credits at the 300/400 level from ERS301H5 or ERS302H5 or ERS303H5 or ERS304H5 or ERS311H5 or ERS312H5 or ERS315H5 or ERS325H5 or ERS381H5 or ERS401H5 or ERS402H5 or ERS403H5 or ERS404H5 or ERS411H5 or ERS412H5 or ERS425H5 or PHY351H5 or JGE378H5 or CPS400Y5.

**Notes:** GGR272H5 is a prerequisite for GGR278H5.

**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 ERS101H5 or ERS111H5 or ENV100Y5 (minimum grade of 60%).

**First Year:**
- ERS101H5/ ERS111H5/ ENV100Y5

**Second, Third and Fourth Year:**
- 1.5 credits from ERS201H5/ ERS202H5/ ERS203H5/ ERS211H5/ ERS225H5
- 2.0 Earth Science credits at the 300/400 level including PHY351H5/ JGE378H5

**Notes:** See also the Environmental Geosciences 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.**
List of Courses

ERS101H5 Planet Earth (SCI)
We discuss the age and origin of the Earth, the nature of its deep interior, the origin of mountains, oceans, earthquakes and volcanoes, and show how these features are related in a unifying theory known as Plate Tectonics, that explains how the evolution of the Earth's surface is driven by internal processes. Practicals will include laboratory exercises devoted to the understanding and recognition of minerals, rocks and geological structures. [24L, 24P]
Exclusion: ESS102H1 or ESS105H1 or EESA07H3 or EEB15H3 or ERS120H5
Recommended Preparation: Review of Grade 9/10 Physical Science.

ERS111H5 Earth, Climate & Life (SCI)
Life as we know it is completely dependent on our planet. The Earth is an integrated system, where the ocean, atmosphere, life and planet interact with and affect one another. The evolution of the smallest organisms has drastically changed Earth's climate, and small changes in Earth's climate have a profound effect on the distribution of life. Understanding how organisms feed, breath, grow, and reproduce are integral to mitigating large-scale climate changes and organic cycles, and how this will affect the Earth as a system. Processes such as plate tectonics produces an ever changing surface, and has been a major control on how and when life evolved and flourished. After introducing how the Earth works, topics discussed will include how life on Earth has evolved, how large-scale geological processes affect climate and life and how ecosystems have changed in response to weather and climate change. We will also discuss the effect that our species has had on this planet; from the sudden shifts in stability of Earth's systems, to feedback cycles, to use of resources and sustainability. [24L]
Exclusion: ERS103H5 or ESS103H1 or ESS102H1 or EESA07H3, A06H3, B15H3

ERS201H5 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS202H5 Dynamic Earth (SCI)
An introduction to geological time and the dynamic evolution of the surface of the Earth. Lectures discuss the processes involved in the deformation of Earth's crust including mechanical principals, stress, and strain. Particular focus on the structure of rocks. Practical exercises focus on the geometry of rock units and determining the geological history of an area from information presented in geological maps, cross sections, and stereographic projections. [24L, 36P]
Exclusion: ESS241H1
Prerequisite: ERS201H5 or permission of instructor

ERS203H5 Magmatic Systems and Igneous Petrology (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS211H5 Sedimentology and Stratigraphy (SCI)
Sedimentology and stratigraphy concerns the origin, formation, accumulation, alteration, and preservation of sediments in the geological record. This course will focus on the reconstruction, correlation, and interpretation of ancient carbonate and siliciclastic paleoenvironments and facies 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, the importance of resource management and sustainability. This course will include a laboratory component with hand samples, thin sections, and physical models, in addition to a field trip, allowing for first-hand experience with describing and interpreting sedimentological units. [36L, 24P]
Exclusion: ESS331H1 or ESS332H1 or ERS313H5
Prerequisite: ERS101H5 or ERS120H5 or ERS111H5 or ERS103H5 or ENV100H5

ERS215H0 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS215H1 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS215H2 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS215H3 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5

ERS215H4 Earth Materials (SCI)
To truly understand the Earth, and the rocks that form it, we must study their basic building blocks - minerals. Minerals are all around us; in rocks and sediments, in soils, in our bones and teeth, and in building materials. This course will examine the complex nature of minerals and crystals from a geological, physical and chemical perspective and will introduce the petrology of volcanic rocks, intrusive plutonic rocks, metamorphic rocks formed in the depths of mountain ranges and sedimentary rocks deposited through time. The course will train students in observations and interpretations of minerals in hand samples and in the use of optical mineralogy (rock slices under a microscope). These are key analytical methods in petrology and by doing so aims to provide students with detailed knowledge and skills inherent to all geologists, and to give a unique perspective of the Earth from the study of the small scale minerals and rocks. [24L, 36P]
Exclusion: ESS22H1
Prerequisite: ERS201H5
ERS225H5 Field Methods (SCI,EXP)
Fieldwork is at the heart of being a geologist. Skills gained during fieldwork are key as part of a Geologist's toolbox, and are highly regarded in a career. This course introduces fieldwork to students during a week-long fieldtrip in late August looking at outcrops of igneous, metamorphic and sedimentary rocks around Ontario. Skills taught will include basic geological observation, description and interpretation, the collection of field notes, geological measurements and presentation of the data. Enrolment approval into the course is by application only; Registration in ACORN is required; priority will be given to Earth Science Specialists, or Environmental Geoscience Specialists. Please see the UTM CPS Earth Science Fieldtrip page for more information. [66P]
Exclusion: ERS325H5 or ERS425H5 or ESS234H1 or ESS324H1
Prerequisite: ERS101H5 or ERS120H5 or ERS111H5 or ERS103H5 or ENV100H5
Corequisite: 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 and International Opportunities (Page 23) for more details.
ERS301H5 Geochemistry (SCI)
Since the creation of the Solar System and Earth 4.5 billion years ago, Earth's natural processes have differentiated the chemical elements, generating distinct differences in composition between the oceans and the atmosphere, and Earth's crust, mantle and core. These differences allow Earth Scientists to understand and quantify these processes, as well as track the rocks and deposits formed out of these processes. This course will focus on the application of geochemistry to understand Earth processes, such as the generation of magma and volcanic eruptions, the formation of ore bodies and Earth surface processes. We will utilize the state-of-the-art equipment available at UTM, including Scanning Electron Microscopy and ICP-OES, to analyze rock samples to determine their origin based on their chemistry, giving students valuable skills in sample preparation and experimental practices. [36L]
Exclusion: ENV233H1 or ESS311H1
Prerequisite: 1.5 credits from (ERS201H5 or ERS202H5 or ERS203H5 or ERS211H5 or ERS225H5)
ERS301H5 is offered in alternate years, alternating with ERS303H5.
ERS302H5 Tectonics (SCI)
This course will focus on how the plate tectonic system works, from the composition and structure of the earth, to the evolution of plate tectonics through Earth history, to modern tectonic hazards including earthquakes and volcanoes. A major portion of the course will focus on the analysis and interpretation of major structural provinces as they relate to Earth's plate boundary interactions including convergent, divergent, and transform settings. [36P]
Exclusion: ESS445H1
Prerequisite: ERS202H5 and 1.0 credits from (ERS201H5 or ERS203H5 or ERS211H5 or ERS225H5)
ERS302H5 is offered in alternate years, alternating with ERS402H5.
ERS303H5 Geophysics (SCI)
This course will explore the physics of the Earth, including both its structure and the processes that have shaped its evolution through geologic history. Concepts such as Earth's magnetic and gravitational fields, isostasy, mantle convection, and plate tectonics will be explored through seismology, seismic refraction and ground-penetrating radar, gravimetric and electrical methods, and geodesy. [36L, 24T]
Exclusion: JPE395H1
Prerequisite: ((MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or MAT137Y5) and ((PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5)) and ERS202H5 and 1.0 credits from (ERS201H5 or ERS203H5 or ERS211H5 or ERS225H5).
Note: ERS303H5 is offered in alternate years, alternating with ERS301H5.
ERS304H5 Geological Remote Sensing (SCI,EXP)
This course is an introduction to remote sensing technologies and geological applications. Students will learn about imaging of the Earth by electromagnetic waves and the state-of-the-art remote sensing systems and technologies for geological mapping and exploration. Topics may include remote sensing fundamentals and physical principles, remote sensing systems for geological applications, geological mapping and resource exploration. Students will also acquire skills in image processing, data integration, information extraction, and validation for geological applications. [36L, 24P]
Exclusion: GGR337H1
Prerequisite: 1.5 credits from any 200 level ERS course
ERS311H5 Sedimentology and Basin Analysis (SCI)
This course will focus on principles of correlation, facies concepts, dynamic processes, and their geologic records in modern and ancient sedimentary environments, with focus on basins. Factors that influence sedimentary formation and evolution will be investigated, including sea level and sediment supply. Emphasis will be placed on sequence stratigraphic approaches to the evaluation of sedimentary systems. Sustainable management of oil, water, and gas resources within sedimentary basins will be covered. [36L, 24P]
Exclusion: ESS331H1
Prerequisite: ERS211H5 and 1.0 credits from (ERS201H5 or ERS202H5 or ERS203H5 or ERS225H5)
ERS311H5 is offered in alternate years, alternating with ERS411H5.

ERS312H5 Oceanography (SCI)
The world's oceans cover approximately 70% of the Earth Surface and Canada has extensive coastlines along three major ocean basins. This course will provide an understanding of chemical, biological, physical and geologic aspects of the oceans. Emphasis will be placed on the geological and geophysical processes that form and shape the ocean basins and continental margins. In addition, this course will offer an insight into the paleoceanographic evolution of our planet and present day environmental threats such as pollution, habitat destruction, acidification and ocean warming. Even though this course does not include specific lab or tutorial sessions, three relevant exercises will be included. [36L]
Prerequisite: One of: ERS201H5 or ERS202H5 or ERS203H5 or ERS211H5 or GGR214H5 or GGR217H5 or GGR227H5
ERS312H5 is offered in alternate years, alternating with ERS412H5.

ERS315H5 Environmental Geology (SCI)
This course will focus on Earth processes as they relate to human activities. Topics include sustainability 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 or JEE337H1 or EESA05H3
Prerequisite: Two of: ERS201H5 or ERS202H5 or ERS203H5 or ERS211H5

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) or ESSC16H3, D07H3
Prerequisite: ERS202H5 and ERS203H5

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 or ERS317H5
Prerequisite: 9.0 credits
Recommended Preparation: ENV100Y5 and ERS103H5 and ERS120H5 and GGR112H5

ERS381H5 Special Topics in Earth Sciences (SCI)
A survey of current thinking in Earth science. Topics may include obtaining data in the field or lab and analysing it, an interdisciplinary research project, and supervised readings.
Exclusion: ESS381H1
Prerequisite: Enrolment in ERS Major or ERS Specialist or Environmental Geosciences Specialist or Geology Specialist Program, 1.0 credits at ERS or ESS 300 level
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 and International Opportunities (Page 23) for more details.

CPS400Y5 Chemical and Physical Sciences Internship (SCI,EXP)
This internship opportunity will allow students to apply theoretical and practical skills acquired during their undergraduate education in order to gain vital industry experience. Students will be trained in effective job searching skills (writing a CV and a Cover Letter, participating in job interviews) and will gain valuable experiences that are sought after by employers in both public and private sectors. Students will be placed with various employers in the GTA based on their interest and skill set, and on the employer needs and availability. The placement is a 200 h unpaid internship. The Course Coordinator/Instructor(s) will schedule biweekly meetings to discuss the setup and progress of the student projects. Student attendance is mandatory. At the end of the term, students must submit a written report and prepare an oral presentation about the outcomes of their work experience. In order to be considered for the internship, students must apply for the course. The Course Coordinator will approve enrolment in the course based on the number of internship opportunities available, which will vary from year-to-year, and student qualifications (e.g. GPA, experience, qualifications related to the requirements of the available placement(s), and interview performance).
Exclusion: none
Prerequisite: For Chemistry Internships (CHM372H5 or CHM394H5 or CHM396H5) and an additional 1.0 credit from any 300/400 level CHM/JCP/JBC/BCH/FSC courses. For Earth Science/Geology Internships: (ERS301H5 and ERS303H5) and an additional 1.0 credit from any 300/400 level courses. For Physics Internships: (PHY324H5 and ERS303H5) and an additional 1.0 credit from any 300/400 level CHM/JCP/JBC/BCH/FSC courses.
Corequisite: Students must be in their fourth year of study and registered in one of following Programs: Chemistry Major, Chemistry Specialist, Biological Chemistry Specialist, Earth Science Major, Earth Science Specialist, Geology Specialist, Physics Major, Biomedical Physics Specialist. Recommended Preparation: For Chemistry Internships: (CHM373H5 or CHM395H5 or CHM397H5) For Earth Science & Geology Internships: ERS302H5 and ERS311H5 and ERS401H5 For Physics Internships PHY325H5 and PHY332H5 and PHY333H5

ERS401H5 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]
Exclusion: ERS419H5
Prerequisite: ERS201H5 and ERS202H5 and ERS203H5

ERS402H5 Advanced Structural Geology (SCI)
This course will cover stress, strain and rheology, the analysis and interpretation of structural features in complexly folded and faulted strata and in plutonic and metamorphic rocks, and basic rock mechanics. Methods include strain analysis, stereographic projection, construction of balanced cross-sections, and geomorphometry. [24L, 36P]
Exclusion: ESS441H1
Prerequisite: ERS202H5 and 1.0 credits from (ERS201H5 or ERS203H5 or ERS211H5 or ERS225H5)
ERS402H5 is offered in alternate years, alternating with ERS302H5.

ERS403H5 Earthquake Seismology (SCI,EXP)
Why do earthquakes occur and how do they cause damage? What is a seismogram and what can it tell us about earthquakes and the Earth's structure? Earthquakes tend to strike suddenly and without warning. Because of their destructive power, tremendous efforts and monetary resources are dedicated to advancing earthquake science and designing effective hazard mitigation controls. This course will provide an overview of the physics of earthquakes and seismic wave propagation, and current seismic hazard mitigation plans and policies. Concepts covered in this course include stress and strain relations, elastic wave equation, body and surface waves, seismic instrumentation and data, global earth structure, earthquake location, seismic source theory, earthquake mechanics, ground motion, the seismic cycle and earthquake recurrence models, seismic hazard analysis, and human-induced earthquakes. [36L, 24P]
Exclusion: JPE493H1 or PHY493H1
Prerequisite: (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5) and (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5) and 1.0 credit from: ERS201H5 or ERS202H5 or ERS203H5
ERS403H5 is offered in alternate years, alternating with ERS303H5
ERS404H5 Volcanology and Geothermal Systems (SCI,EXP)
Volcanic eruptions are one of the most dangerous and volatile geological hazard. In the 20th Century, almost 100,000 people are believed to have been killed in volcanic eruptions, with another 4.7 million directly affected by them, but, at the end of the 20th century, over 500 million people lived within the hazard zone of a volcano worldwide; cities such as Tokyo, Mexico City, Naples and Seattle are besiegied by the threat of nearby volcanoes. Volcanoes also provide fertile soils, near-unlimited geothermal power generation potential and are an intricate part of the Earth system. This course aims to study the mechanism through which volcanoes form, erupt and evolve, their impact on our society and the benefits they provide in the form of geothermal energy. His will be accomplished through discussion, lab and scenario based learning exercises that will take place over one weekend (approx. 16 hours). [48P]
Prerequisite: ERS203H5 and 1.0 credits from any other ERS200/300 level courses.
ERS404H5 is offered in alternate years, alternating with ERS301H5

ERS411H5 Paleobiology (SCI)
This course will focus on the evolving history of organisms and their ecosystems on Earth, including aspects of geochemistry and taphonomy. This course will investigate the interactions between Earth and Life over the past 3.5 billion years, emphasizing how the paleontological record is used to understand the complex nature of our evolving Earth. [36L]
Prerequisite: 1.5 credits from (ERS201H5 or ERS202H5 or ERS203H5 or ERS211H5 or ERS225H5)
ERS411H5 offered in alternate years, alternating with ERS311H5.

ERS412H5 Climate Through Time (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. This will be put into perspective with modern day and future global change [36L]
Exclusion: ESS205H1 or ESS461H1 or EESB03H3 or ERS321H5
Prerequisite: Two of: ERS201H5 and ERS202H5 and ERS203H5
ERS412H5 is offered in alternate years, alternating with ERS312H5.

ERS425H5 Geology of North America (SCI,EXP)
This course will provide students with a first-hand exposure to geologic outcrops in North America, where knowledge gained during classroom instruction throughout their studies can be applied to textbook examples of a variety of geologic features. The course is structured around one major field trip during fall break, plus preparatory work. There is a nonrefundable fee associated with this course beyond tuition. Students must register on ROSI, 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 by March of the academic year preceding the course to find out more details about the specific field trip plans.
Exclusion: ESS420H1
Prerequisite: Enrollment in ERS Major or ERS Specialist or Geology Specialist Program, 1.5 credits at ERS or ESS 300 level

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 thesis must be submitted one week prior to the end of term classes. A component of the mark will be based on an oral presentation made at the end of the course.
Exclusion: ERS471H5 or ERS472H5 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 or ESS300(G) level, plus a 75% average in the last 5 courses.

ERS471H5 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 or ERS471H5 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 or ESS300(G) level, plus a 75% average in the last 5 courses.

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 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 or ESS300 (St. George Campus) level courses, plus a 75% average in the last 5 courses
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).

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 and International Opportunities (Page 23) for more details. Exclusion: ERS471H5 or ERS472H5 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 level or ESS300 (G) level and a 75% average in the last five courses taken.
Recommended Preparation: Completed prog. requirements for entry into fourth year level Earth Science courses.

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 ACORN is also required. [240P]
Exclusion: BIO400Y5 or BIO481Y5 or CBJ481Y5 or CHM489Y5 or ERS470Y5 or ERS471H5 or ERS472H5 or PHY489Y5 or BCH472Y1 or BCH473Y1 or CHM499Y1 or CSB497H1 or CSB498Y1 or CSB499Y1 or ESS491H1 or ESS492Y1 or ESSD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 level or ESS300 (G) level and a 75% average in the last five courses taken.

JCB487Y5 Advanced Interdisciplinary Research Laboratory (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 and International Opportunities (Page 23) for more details. Exclusion: ERS471H5 or ERS472H5 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 level or ESS300 (G) level and a 75% average in the last five courses taken.
Recommended Preparation: Completed prog. requirements for entry into fourth year level Earth Science courses.

JCB487Y5 Advanced Interdisciplinary Research Laboratory (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 and International Opportunities (Page 23) for more details. Exclusion: ERS471H5 or ERS472H5 or ESS491H1 or ESS492Y1 or EESD09H3, D10Y3
Prerequisite: Any 2.0 credits from the ERS300 level or ESS300 (G) level and a 75% average in the last five courses taken.
Recommended Preparation: Completed prog. requirements for entry into fourth year level Earth Science courses.
Ecology and Evolution (HBSc)

This program is offered through the Biology Department.

Economics (HBA, BCom)

Professors Emeriti
G.J. Anderson, B.A., M.Sc., Ph.D.
S.M. Eddie, B.Sc., Ph.D.
M. Faig, Licenciatura, M.A., Ph.D.
J.E. Floyd, B.Com., M.A., Ph.D.
M.J. Hare, B.Com.
J.A. Hynes, A.B.
F. Reid, B.A., M.Sc., Ph.D.

Professors
V. Aivazian, B.S., M.A., Ph.D.
C. Arteaga, B.A., M.A., Ph.D.
L. Bailey, B.A., M.A.
M. Chan, B.A., M.A., Ph.D.
R. Deb, B.Tech., M.Phil., M.A., Ph.D.
M. Duarte, B.A., M.A., Ph.D.
S. Dyrd, M.A., Ph.D.
J. Goldman, B.S., M.Sc., Ph.D.
J. Gu, M.A., Ph.D.
G. Hamilton, B.Sc., M.A., Ph.D.
G. Kambouro, B.A., M.A., Ph.D.
N. Li, B.A., M.A., Ph.D.
R. McMillan, B.A., M.A.
A. Melino, B.A., Ph.D.
P. Oreopoulos, B.A., M.A., Ph.D.
C. Pitchik, B.A., M.Sc., Ph.D.
D. Price, B.S., M.A., Ph.D.
X. Shi, B.Sc., M.A., Ph.D.
X. Tian, B.A., M.A., Ph.D.
R. Wolthoff, B.Sc., M.Sc., Ph.D.
T. Yindok, B.A., M.A., Ph.D.
K. Yu, B.A., M.A., Ph.D.
N. Zammit, B.A., M.A., Ph.D.
R. Zarate, B.A., M.A., Ph.D.
Y. Zhao, B.Sc., M.Sc., Ph.D.
X. Zhu, B.S., M.S., Ph.D.

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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 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5.

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 MAT134Y5 (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5. ECO200Y5 or ECO204Y5 or ECO206Y5 and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)), 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 Undergraduate Advisor 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 Undergraduate Advisor 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 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5.

Certificate in Advanced Economics

The Certificate in Advanced Economics is open to students who seek a more formal and deeper analysis of economic models and their application. The requirements include core advanced courses in the three main fields of economics: microeconomics, macroeconomics, and econometrics that will help prepare students for graduate and professional studies as well as provide valuable applicable skills for future careers.

Completion of 2.0 credits with average grade of 65% or higher from the following list of courses: ECO325H5, ECO326H5, ECO375H5, ECO475H5.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (Page 50)
ECO Economics (Page 188)
MAT Mathematics (Page 372)
MGM Management (Page 361)
MGT Management (Page 361)
PHL Philosophy (Page 383)
STA Statistics (Page 445)
Specialist Program ERSPE0137 Economics (BCom)

This program can only be taken jointly with a Commerce Specialist program. Students must be actively enrolled in a Commerce (BCom) Specialist Program in order to be admitted to this Economics program. Students must complete one of the following Commerce programs in order to complete this program: ERSPE1704, ERSPE2034, ERSPE2273.

Within a BCom degree, 15.0 credits are required.

Limited Enrolment – This program may only be taken jointly with a Specialist program in Commerce which leads to a BCom degree. Students must be actively enrolled in one of these Commerce Specialist (BCom) Programs in order to qualify for this Economics Specialist program: ERSPE1704, ERSPE2034, ERSPE2273. Enrolment in this program is limited to students with 70% in ECO100Y5 and 80% in MAT133Y5 or 63% in MAT134Y5/135Y5 or (MAT132H5 (63%), MAT134H5 (63%)) or (MAT135H5 (63%), MAT136H5 (63%)) or (60% in MAT137Y5) and 63% in MGT120H5 and a minimum CGPA which is determined annually.

First Year:
ECO100Y5 and (MAT133Y5 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5)
and MGT120H5 and MGM101H5

Higher Years:
1. Additional MGT Requirements (5.0 credits)
   (a) MGT220H5 and MGT223H5 and MGT231H5 and MGT232H5
   (b) 1.0 credit from: MGT252H5, MGT262H5, MGT353H5, MGT363H5, MGT371H5/ MGT422H5, MGT374H5, MGT393H5;
   (c) 1.0 credit in MGT at 200+ level
   (d) 1.0 credit in MGT at 400 level
2. Additional ECO Requirements (6.0 credits):
   (a) ECO206Y5 and ECO208Y5 and (ECO227Y5 or STA258H5 and STA260H5)
   (b) ECO375H5
   (c) 1.0 credit in Economic History from: ECO302H5, ECO303H5, ECO322Y5, ECO323Y5
   (d) ECO325H5 and ECO326H5,
   (e) an additional 0.5 ECO credit at the 300+ level
3. Writing Component (1.0 credit):

Specialist Program ERSPE1478 Economics (Arts)

13.0 credits are required.

Limited Enrolment – Enrolment in this program is limited to students with ECO100Y5 (70%); (MAT135Y5 (63%) and MAT223H5 (63%)) or ((MAT135H5 (63%) and MAT136H5 (63%)) and MAT223H5 (63%)) or (MAT133Y5 (80%) and MAT233H5 (63%)) or (MAT134Y5 (63%) and MAT223H5 (63%)) or (MAT132H5 (63%) and MAT134H5 (63%)) and MAT223H5 (63%)) or (MAT137Y5 (60%) and MAT223H5 (63%)); ECO206Y5 (60%); ECO208Y5 (60%); ECO227Y5 (60%) or (STA258H5 (60%) and STA260H5 (60%)).

First Year:
1. ECO100Y5;
2. MAT133Y5 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5;
3. MAT223H5 or MAT233H5

Higher Years:
1. ECO206Y5 and ECO208Y5 and ECO227Y5 or STA258H5 and STA260H5)
2. ECO325H5 and ECO326H5 and ECO375H5
3. 1.0 credit in Economic History from: (ECO302H5 and ECO303H5) or ECO322Y5 or ECO323Y5
4. 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 thus leads to a BCom degree.

3. Enrolment in Economics (Commerce) 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)
7.0 credits are required.

**Limited Enrolment** – Enrolment in the Major program is limited to students with 63% in ECO100Y5, and MAT133Y5 (63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5, and a CGPA of 2.0.

**First Year**: ECO100Y5 (63%); MAT133Y5 (63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5.

**Second Year**: ECO200Y5 or ECO204Y5 or ECO206Y5
- ECO202Y5 or ECO208Y5 or ECO209Y5
- ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)

**Higher Years**: 2.0 additional 300/400 level ECO credits, 1.0 of which must include as prerequisites two of (ECO200Y5 or ECO204Y5 or ECO206Y5), (ECO202Y5 or ECO208Y5 or ECO209Y5), (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5))

**NOTE**:  
- ECO205Y5, ECO244Y5, 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)
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 a 63% in ECO100Y5, and MAT133Y5 (63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5.

**First Year**: ECO100Y5(63%) and (MAT133Y5(63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5.

**Second Year**: ECO200Y5 or ECO204Y5 or ECO206Y5

**Higher Years**: One additional ECO credit at the 300/400 level.

**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]

**Exclusion**: ECO101H1 or ECO102H1 or ECO100Y1

**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] *ECO200Y5 is not open to Commerce students during Fall/Winter

**Exclusion**: ECO204Y5 or ECO205Y5 or ECO206Y5

**Prerequisite**: ECO100Y5 (63%) and a CGPA of 2.0

**Corequisite**: MAT133Y5 or (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5

**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] *ECO202Y5 is not open to Commerce students in Fall/Winter

**Exclusion**: ECO204Y5 or ECO205Y5 or ECO206Y5

**Prerequisite**: ECO100Y5 (63%) and a CGPA of 2.0

**Corequisite**: MAT133Y5 or (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5

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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 or ECO205Y5 or ECO206Y5
*Prerequisite:* ECO100Y5 (63%) and a CGPA of 2.0
*Corequisite:* MAT133Y5 or (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5

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 or ECO204Y5 or ECO206Y5
*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, externalities, 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 or ECO204Y5 or ECO205Y5
*Prerequisite:* ECO100Y5(70%) and MAT133Y5(63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5(63%) or (MAT135H5(63%) and MAT136H5(63%)) or MAT137Y5(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 strongly recommended for students contemplating graduate school. [48L, 24T]
*Exclusion:* ECO202Y5 or ECO209Y5
*Prerequisite:* ECO100Y5(70%) and MAT133Y5(80%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5(63%) or (MAT135H5(63%) and MAT136H5(63%)) or MAT137Y5(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 or ECO208Y5
*Prerequisite:* ECO100Y5 (63%) and a CGPA of 2.0.
*Corequisite:* MAT133Y5 or (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5

ECO220Y5 Introduction to Data Analysis and Applied Econometrics (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, 24P]
*Exclusion:* BIO360H5 or BIO361H5 or (MAT123H1 and MAT124H1) or (PSY201H5 and PSY202H5) or (1.0 credit from: STA218H5, STA220H5, STA221H5, STA256H5, STA257H5, STA258H5, STA260H5, STA255H1, STA261H5).
*Prerequisite:* ECO100Y5 (63%) and MAT133Y5(63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5 and and a CGPA 2.0.2020-2021 Calendar 189
ECO227Y5 Foundations of Econometrics (SSc,SCI)
This course provides students with a rigorous introduction to statistical analysis such as probability models, random variables, point and interval estimation, hypothesis testing, probability theory, estimation theory, sampling distributions, hypothesis testing, and simple regression analysis. By the end of the course, students should be familiar with the basic tools used to model uncertainty in economics and finance, to test hypotheses, and to estimate model parameters. This course focuses on both the theory and application of these statistical methods. It provides a solid foundation for subsequent courses in econometrics. This course is recommended for students planning graduate studies in Economics. [48L, 24T]
Exclusion: BIO360H5 or BIO361H5 or (PSY201H5 and PSY202H5) or SOC350H5 or SOC351H5 or (1.0 credit from STA218H5, STA220H5, STA221H5, STA256H5, STA257H5, STA258H5, STA260H5, STA255H1, STA261H5).
Prerequisite: ECO100Y5(70%) and MAT133Y5(80%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5(63%) or (MAT135H5(63%) and MAT136H5(63%)) or MAT137Y5(60%)

ECO302H5 World Economic History Prior to 1870 (SSc)
This course will focus on the economic success and failure of several key countries and regions from the start of the second millennium up to the early twentieth century. Topics include: pre-modern growth in China & India vs. Europe, the first industrial revolution, exploitation and international trade in the British Empire, the standards-of-living debate, the second industrial revolution. [24L, 12T] This course is part of the Certificate in Global Perspectives.
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5)
Recommended Preparation: ECO220Y5 or ECO227Y5

ECO303H5 World Economic History After 1870 (SSc)
This course will focus on the economic success and failure of several key countries and regions during the twentieth century. Topics include: globalization, causes and consequences of interwar instability, a history of modern development (Japan, the Asian Tigers, India & China vs. Latin America), new institutional economics & new economic geography: African atrophy. [24L, 12T] This course is part of the Certificate in Global Perspectives.
Exclusion: ECO341H5 (20149) Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5)
Recommended Preparation: ECO220Y5 or ECO227Y5 and ECO302H5

ECO311H5 Pricing Strategies (SSc)
The course studies firms’ pricing decisions drawing on tools from economic theory. Some examples of the questions that are addressed are: How does a firm determine the price for a new product? How should it optimally price to different market segments? What form do these prices take? When and how should a firm change prices over time? When should an auction be used to sell a product? What type of auction yields greater profits? The analysis is supplemented by real world examples and case studies from the business world. [24L]
Exclusion: ECO310Y5 or ECO380H5
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO312H5 Firms and Markets (SSc)
This course studies firms’ strategies and the role of government regulators in different markets. Specifically, it studies strategic decisions that firms make when they interact with other firms. These include how to price in the face of competition, how much to invest in R&D or advertising, and whether to buy a rival (by merging, integrating). The course also analyzes the conditions under which firm’s choices require intervention by market regulators due to a tension between firms’ profits and consumer welfare. The course draws on tools from microeconomics and game theory, and the analysis is supplemented by real world examples and case studies from the business world. [24L]
Exclusion: ECO310Y5 or ECO380H5
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

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 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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]
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5)
Recommended Preparation: ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5).
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 or ECO221Y1
Prerequisite: ECO200Y5 or ECO204Y5 or ECO206Y5
Limited Enrolment

ECO324H5 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. [24L]
Exclusion: ECO324Y5 or ECO324Y1 or ECO324H1 or ECO352H5S: Special Topics Economics of Poverty (20161)
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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. This course is recommended for students contemplating graduate studies. [24L] This course is part of the Certificate in Advanced Economics.
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5)
Recommended Preparation: ECO202Y5 or ECO208Y5 or ECO209Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Limited Enrolment

ECO326H5 Advanced Economic Theory - Micro (SSc)
This course is an advanced analysis of macroeconomic theory, including the behaviour of consumers under uncertainty; issues in poverty, inequality and social welfare; game theory and its applications to economics and political economy. This course is recommended for students contemplating graduate studies. [24L, 12T] This course is part of the Certificate in Advanced Economics.
Exclusion: ECO372Y5
Prerequisite: (ECO200Y5(70%) or ECO204Y5(70%) or ECO206Y5(70%)) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Limited Enrolment

ECO333H5 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. [24L]
Exclusion: ECO333Y5
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Limited Enrolment

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ECO335H5 Public Economics I: Global Warming, Biodiversity Loss and Inequality (SSc)
Public Economics I focuses on contemporary public policy questions. The goal of the course is to help students develop and apply analytical tools, such as cost-benefit analysis, to examine pressing policy issues of our time. Issues include responses to global warming, preserving biodiversity, combating growing inequality, and the regulation of addictive substances. Students will learn how to use empirical evidence to examine these issues. The course places a strong emphasis on discussion, debate, and effective writing about policy issues from an economics perspective. [24L]
Exclusion: ECO336Y5 or ECO336H1 or ECO337H1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO336H5 Public Economics II: Advanced Policy Analysis (SSc)
Public Economics II builds on Public Economics I (although the latter is not a prerequisite). The course focuses on externalities and market failure, and the appropriate role of government in response. Students will study the actual role of government in a variety of settings, with a view to identifying ways of improving economic efficiency and the quality of the environment (among other desirable ends) through different types of policy reform. The course should appeal to students who would like to learn more about applied microeconomic analysis and/or who are interested in public policy issues. The course will provide students with a useful set of microeconomic tools for analyzing public policy questions. Students will also learn basic empirical methods, develop effective writing skills, and apply the techniques learned to examine a variety of interesting current policy issues. [24L]
Exclusion: ECO336Y5 or ECO336H1 or ECO337H1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

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. [24L]
Exclusion: ECO361Y5 or ECO239Y1 or ECO339Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

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. [24L]
Exclusion: ECO361Y5 or ECO239Y1 or ECO339Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO345H5 Macroeconomics and the Labour Market (SSc)
This course aims to provide students with an overview of recent macroeconomic research on the labour market. Discussion includes theoretical models as well as empirical evidence. Topics include: search frictions, labour market flows, sorting, inequality, occupational mobility, human capital accumulation, and intergenerational mobility. [24L]
Exclusion: Students who completed ECO352H5 Special Topics: Macroeconomics & the Labour Market are not eligible.
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO209Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO348H5 Foundations of Money and Banking (SSc)
The strategy of the course is to develop a series of models to examine the importance of money and banks. The topics examined in this framework include: the role of money and the financial system, effects of inflation, public pensions and national debt, and the role and importance of banks. [24L]
Exclusion: Students who have taken ECO352H5 Special Topics: Macroeconomics & the Labour Market are not eligible.
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO209Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

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]
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO209Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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

ECO351H5 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 academic advisor or departmental website. [24L]  
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

ECO353H5 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. [24L]  
Limited Enrolment

ECO358H5 Financial Economics I (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: MGT231H5 or MGT232H5 or MGT331Y1 or MGT337Y5 or MGT338H5 or MGT339H5  
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).  
*ECO359H5 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: MGT231H5 or MGT232H5 or MGT331Y1 or MGT337Y5 or MGT338H5 or MGT339H5  
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).  
*ECO359H5 is not open to Commerce students.

ECO362H5 Economic Growth: Theory and Evidence (SSc)  
Differences in income per capita levels and growth rates across countries are large. Understanding the causes behind these differences is a fundamental question in economics. The main objective of this course is to apply economic theory to understand and interpret empirical observations on economic development and growth. By the end of this course students will have a basic knowledge of the main facts characterizing economic development and growth over time and across countries, as well as the ability of theoretical models to account for these facts. The topics that will be covered in the course include the role of physical and human capital accumulation in growth and income differences, the reallocation of factors across sectors (structural transformation) and aggregate productivity, the importance of the misallocation of resources across heterogeneous firms in aggregate productivity. Key empirical applications include the growth performance of industrialized countries since World War II and the productivity slowdown observed in recent decades, the stagnation of living standards in many developing countries, and the role of automation and artificial intelligence in growth and development. [24L]  
Exclusion: ECO451H1  
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)) and (MAT133Y5 or MAT134Y5 or MAT135H5 and MAT136H5) or (MAT135H5 or MAT136H5) or (MAT137Y5)

ECO364H5 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 or ECO320Y1  
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5)  
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 or ECO230Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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, 10T]
Exclusion: ECO381H5 or ECO426H1 or MGT310Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Limited Enrolment

ECO375H5 Microeconomics (SSc)
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Limited Enrolment

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 technologic 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 or ECO311H5 or ECO312H5 or MGT310Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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 or ECO426H1 or MGT310Y1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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 - this course 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. This course serves as a complement to and a foundation for ‘Applied Econometrics I’ (ECO375H5). [24L] Exclusion: ECO351H5(2007W) or ECO338H1
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)) and ((MAT133Y5 or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5)
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]
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO399H5 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 (www.utm.utoronto.ca/rop/research-opportunity-program) in mid-February and students are invited to apply at that time. See also Experiential and International Opportunities (Page 23). Prerequisite: Minimum of 10.0 credits completed.

ECO399Y5 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 (www.utm.utoronto.ca/rop/research-opportunity-program) in mid-February and students are invited to apply at that time. See also Experiential and International Opportunities (Page 23). Prerequisite: Minimum of 10.0 credits completed.

ECO400Y5 Economics Internship (SSc,EXP)
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. [48L]
Apply to Course Coordinator: Corrine Bent-Womack Room #KN 3246 Innovation Complex Email: corrine.bent.womack@utoronto.ca
Exclusion: BIO400Y5 or CCT409H5 or CTE388H5 or ENV400Y5 or FSC481Y5 or HIS498Y5 or ITA400Y5 or JEG400Y5 or JEG401Y5 or MGT480H5 or PSY442Y5 or SOC480Y5 or WGS435Y5
Prerequisite: Fourth year standing in an Economics Program and recommended CGPA to be determined annually. Acceptance will be based on a combination of CGPA, experience, qualifications and interview performance.

ECO401Y5 Special Topics in Economics (SSc,EXP)
This course covers special topics in Economics at an advanced level. 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

ECO402H5 Special Topics in Economics (SSc,EXP)
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
ECO406H5 Advanced Public Economics (SSc)
This course addresses empirical and theoretical issues in public economics. This course will be especially focused on issues related to poverty and inequality. Topics include minimum wage, social mobility, neighborhood effects, 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. [24L]
Exclusion: ECO412Y5
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO411H5 Human Capital and Education in the Economy (SSc)
(Formerly ECO412Y5) This course addresses empirical and theoretical issues in education economics. Topics will include the interaction of human capital with growth and inequality, teacher incentives and teacher quality, early childhood education, and the racial achievement gap. 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. [24L]
Exclusion: ECO412Y5
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO420Y5 Reading Course, Seminar or Workshop (SSc,EXP)
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 or ECO422H5

ECO421H5 Reading Course, Seminar or Workshop (SSc,EXP)
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 or ECO422H5.

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 or ECO421H5

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
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
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
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Recommended Preparation: MAT223H5 and ECO375H5
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. [24L] This course is part of the Certificate in Global Perspectives.
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO209Y5 or ECO208Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, 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. [24L] Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

ECO439H5 The Economics of Cities & Regions: Productivity, Technology & Jobs (SSc)
Where a person lives has an impact on many aspects of their life. This course examines the causes and consequences of differences in economic outcomes across localities within a country. This course will also explore the economic forces driving trends in wages, productivity and innovation across cities and regions. [24L] Exclusion: ECO439Y5 or ECO433H1 Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).

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. [24L] Prerequisite: ECO206Y5 (70%) and ECO208Y5 (70%) and ECO227Y5 (70%) and ECO358H5; or by permission of instructor.
Limited Enrolment. For further information please contact the Economics Undergraduate Advisor.

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 Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO209Y5 or ECO208Y5) and (ECO220Y5 or ECO375H5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)). Corequisite: ECO375H5 or ECO220Y5(70%)

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%) or ECO204Y5(70%) or ECO206Y5) and (ECO220Y5(70%) or ECO227Y5(70%) or (1.0 credit from STA256H5(70%), STA258H5(70%), STA260H5)). 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. [24L]
Prerequisite: (ECO200Y5 or ECO204Y5 or ECO206Y5) and (ECO202Y5 or ECO208Y5 or ECO209Y5) and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Recommended Preparation: ECO358H5 or ECO359H5 or ECO460H5 or MGT338H5 or MGT339H5

ECO466H5 Empirical Macroeconomics and Policy (SSc,EXP)
Students will increase their data literacy and learn how to apply techniques to address policy issues. The topics covered will include the practical design of monetary policy, the rationale of current monetary policy in Canada, and statistical methods for predicting key macroeconomic variables. As part of the course, students will follow current global issues and will forecast how the domestic and international events may alter the Bank of Canada's monetary policy in the short run. This course builds on material covered in ECO202Y5/ ECO208Y5/ ECO209Y5, ECO325H5 and ECO375H5.
Prerequisite: ECO325H5 and (ECO220Y5 or ECO227Y5 or (1.0 credit from STA256H5, STA258H5, STA260H5)).
Recommended Preparation: ECO375H5

ECO475H5 Applied Econometrics II (SSc,EXP)
(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, 24P]
Exclusion: ECO327Y5 or ECO327Y1 or ECO376H1
Prerequisite: ECO375H5
Economics and Political Science (HBA)

Program Advisor for Political Science Courses
Norma Dotto
905-828-3921

Undergraduate Advisor for Program
Admission/Completion and Economics Courses
Ferzeen Sammy
Innovation Complex, Room 3252
905-828-5404
ferzeen.sammy@utoronto.ca

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 188)
MAT Mathematics (page 372)
POL Political Science (page 401)
STA Statistics (page 445)

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 63% in ECO100Y5, and (MAT133Y5 (63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5), and a minimum Cumulative Grade Point Average of 2.00.

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 63% in ECO100Y5, and (MAT133Y5(63%) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT137Y5), and a minimum Cumulative Grade Point Average of 2.30

14.0 credits are required.

Within an honours degree, the following credits must be included in the program:

Economics 7.0 credits
1. ECO100Y5 and
2. (MAT133Y5 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT135Y5 or (MAT135H5 and MAT136H5)) and

Political Science 7.0 credits in POL, including at least 1.0 credit at the 400 level and no more than 1.0 at the 100 level.
1. POL200Y5 and POL215H5 and POL216H5 and POL309Y5
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.
**Education Studies**

**Department of Language Studies**

Professors  
E. Coulson, B.A.(Hons), M.Ed., M.Sc.(Ed), OCT, Ph.D.

Acting Chair, Department of Language Studies  
Professor Pascal Michelucci  
Maanjiwe nendamowinan, Room 4144  
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H. Zhou  
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Program Co-ordinator  
E. Coulson  
Maanjiwe nendamowinan, Room 4184  
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The Education Studies minor is for students interested in a variety of careers that involve educating and training others. Students will develop an understanding of the format and the rationale for particular instructional strategies, teaching methodologies, andragogy and pedagogy.

The minor will help students advance skills in teaching, corporate training, e-learning, second language instruction and other related areas. Students will immerse themselves in courses related to equity and diversity; communication and conflict resolution; child, adolescent, indigenous education, and adult development; learning design, and education within a global context.

Students will hone their leadership skills as they participate in field placements, community engagement activities, experiential learning, and apply training opportunities through real-world case studies. They will come to understand the importance of inclusivity/diversity both within an instructional framework and the community. 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. Over 150 hours of experiential learning is embedded within program courses. Those interested in pursuing a career in teaching may wish to apply to a consecutive initial teaching program, a Human Resources (HR) certification program, an ESL and or Adult Ed program or a Master's program in education upon completion of their undergraduate degree. Completion of the Education Studies minor does not qualify a graduate for teaching certification through the Ontario College of Teachers.

For more information regarding program requirements and admission, please contact the Undergraduate Co-ordinator.

It is strongly recommended that students interested in pursuing teacher training speak with the Undergraduate Co-ordinator before applying to the Education Studies minor. Such students should be aware of requirements related to teaching subjects. Further information regarding teaching subjects and specific requirements can be found through an accredited Faculty of Education.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

**For courses in this area see:**  
EDS Education Studies (page 201)  
FRE French (page 258)  
LIN Linguistics (page 349)  
LTL French (page 258)  
MAT Mathematics (page 372)  
PHL Philosophy (page 383)  
PSY Psychology (page 412)  
SOC Sociology (page 424)

**Minor Program ERMIN0605**

4.0 credits are required.

**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 (CGPA) of at least 2.30. **Meeting the minimum requirements does not guarantee enrolment into the program.**

**First Year:** EDS100H5 (Open to all students. Highly recommended but not required for those applying to the EDS minor.)

**Second Year:** EDS200H5, EDS210H5 and EDS220H5

**Third and Fourth Years:**

1. EDS300H5 and EDS310H5

2. 0.5 or 1.0 credits in experiential learning (for example, EDS325H5, 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: EDS250H5, EDS275H5, EDS345H5; EDS399H5; FRE225Y5, FRE325H5, FRE345H5, FRE352H5, FRE353H5, FRE355H5, FRE382H5, FRE383H5; LIN388H5, LIN487H5, LIN456H5; LTL227H5, LTL380H5, LTL487H5, LTL456H5, LTL486H5, LTL488H5; MAT382H5, MAT392H5; PSY301H5, PSY311H5, PSY312H5, PSY313H5,
PSY315H5, PSY341H5, PSY345H5, PSY410H5, PSY422Y5; SOC224H5, SOC480Y5; 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. [24L]

**EDS200H5 Child, Adolescent and Adult Development in Education (HUM,EXP)**
This course focuses on the physical skills, cognitive abilities, and socioemotional experiences that shape an individual's capacity to learn throughout the lifespan (i.e., infancy to late adulthood). It will address how learning is a lifelong process and how we are continually educating ourselves in different ways by incorporating strategies that best suit our lifespan stage. Critical research and theorists will be discussed to enhance the topics presented. Students are required to complete an 8-hour field experience, and obtain a valid vulnerable sector police check in advance of placement. [36L]

**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. [36L]

**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.[36L]

**Exclusion:** CTE200H5

**EDS250H5 Indigenous Education (HUM)**
This course is open to all students from any discipline. Designed to increase opportunities to learn about education through a First Nation, Métis and Inuit perspective, the course will increase knowledge and awareness about pedagogies, learning approaches and educational experiences related to indigenous people living in Canada. In line with indigenous ways of knowing, this course will be structured with learning that involves reflecting on personal actions by looking at ways that indigenous models of education support social and community well-being. [24L]

**EDS275H5 Mass Media and Debunking the Myths of Education (HUM)**
This course explores prevailing myths about education. It invites students to critically examine consensus and controversy in the media while unpacking some of the research underpinning commonly held beliefs about curriculum, students, teachers, and education systems. The ability to interpret and assess the merits of news, fake news, research, and social media content is an increasingly important skill in a data rich world. This course will have a strong emphasis on critical reading, analysis and evaluation. [24L]

**EDS285H5 The Future of Ed Tech: Active Learning Classrooms and Artificial Intelligence (HUM)**
This course will explore research on emerging digital models, platforms, apps and policies that seek to further customize, enhance and bring greater equity to education through technology. From the initiation of open courseware, to the inception of virtual reality, artificial intelligence, ALC classrooms, makerspaces and the "shared economy", this course will foster a culture of digital innovation to investigate, accelerate, test and study new possibilities and advancements in the field of educational technology. [24L]

**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 engaging educational experiences, i.e., lesson and unit planning, will be practiced through a range of pedagogical and practical applications. A case studies approach will be taken, incorporating a field experience where students will apply their learning. [24L]

**Exclusion:** EDU310H5

**Recommended Preparation:** EDS200H5 (minimum 70%) and EDS210H5 (minimum 70%) and 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. [24L]
*Exclusion: EDU320H5
Recommended Preparation: EDS300H5 (minimum 70%)*

**EDS325H5 Supplemental Instruction in Higher Education: The Impact of Peer-Facilitated Study Groups (FSG) (HUM,EXP)**
Looking for an opportunity to become a facilitator of small group learning in a subject discipline in which you have expertise? This course will introduce students to the theory and practice of Supplemental Instruction (SI) in higher education. Particular focus will be on the history and evolution of SI and the rationale for its use in different university contexts. EDS325H5 course participants will complete a mandatory internship that involves developing and delivering 8-10 peer led study sessions through the Facilitated Study Group (FSG) Program run by the Robert Gillespie Academic Skills Centre. Class work will embed relevant pedagogical tools, resources and research to support the development, delivery and success of FSG sessions. Current research investigating the impact of Supplemental Instruction on student success will also be explored. This is a closed course open only to those students who have successfully secured an FSG leader position with the Robert Gillespie Academic Skills Centre. [24L, 12S]
*Exclusion: Previous Peer Facilitated Study Group experience in courses like FRE491H5 or FRE492H5 or LIN495Y5.
Recommended Preparation: Open to all students, but the completion of EDS100H5 or other EDS courses or experience that has directly supported an understanding of teaching and learning are recommended but not required.*

**EDS345H5 Design Thinking Incubator: From Problem to Prototype (HUM)**
This course is open to all students on campus and provides an intellectual toolset for finding innovative solutions to complex problems. Students will learn to apply education theory to design thinking models in order to identify and solve real-world challenges facing their chosen discipline, whether in business, education, healthcare, etc. An iterative approach for testing, refining, and improving their idea will be used to create a working prototype of their proposed solution. This will demonstrate the idea’s sustainability, scalability and viability, while taking into account ethical and legal implications. [36L]

**EDS377H5 Why the First Year of University Matters: The Impact of Peer Mentoring (HUM,SSc,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, 12S]

**EDS388H5 Experiential Learning Opportunity within the Community (HUM,EXP,INTLO)**
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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process.
*Exclusion: CTE388H5 or CTE388Y5
Recommended Preparation: EDS200H5 and EDS210H5 and EDS220H5 and EDS300H5 (may be taken as a co-requisite).*

**EDS399H5 Research Opportunity Program (HUM)**
This ROP provides the opportunity for students to join a research team and assist on projects currently underway in Education Studies. The work will include preparing an impact study, conducting interviews and using a data-informed approach to investigate the impact of a range of programs and educational interventions. The work will involve conducting pre and post surveys, leading qualitative observational data collection, and producing an analysis. 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 and International Opportunities for more details.
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 an approach to literature; 300-level courses offer more detailed investigations of theories of literature and of texts written in particular historical moments or places, 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.

No more than 1.5 credits can be double counted towards two programs of study in English, Drama, or Creative Writing.

**Students should also review the Degree Requirements**

(Page 16) section prior to selecting courses.

**For courses in this area see:**

DRE Drama (page 451)
ENG English (page 205)
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.

**Program Requirements:** 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 credit at the 100 level may be counted towards program requirements, and no more than 1.0 credit may be counted towards program requirements from the following courses: ENG234H5, ENG235H5, ENG236H5, ENG237H5, ENG238H5, ENG239H5, ENG261H5, ENG276H5, ENG277H5, ENG279H5, ENG289H5, ENG291H5, ENG344H5, ENG345H5, ENG373H5, ENG374H5. ENG100H5 may not be counted towards program requirements.

The specialist also requires the following courses:

- ENG280H5 Critical Approaches to Literature
- ENG202H5 and ENG203H5, British Literature survey parts I and II
- 6 credits distributed among the following areas, as follows:
  - At least 1 credit in Literary Theory/Methods: ENG101H5, ENG201Y5, ENG205H5, ENG206H5, ENG259H5, ENG269H5, ENG275H5, ENG326H5, ENG382Y5, ENG384H5, ENG396H5, ENG414H5, ENG415H5, ENG416H5.
  - At least 1 credit in Race, Ethnicity, Diaspora, Indigeneity: ENG271H5, ENG272H5, ENG273H5, ENG274H5, ENG326H5, ENG343H5, ENG370H5, ENG371H5, ENG426H5, ENG434H5.

Major Program ERMAJ1645 English (Arts)

**Program Requirements:** At least 7.0 ENG credits, including at least 2.0 credits at the 300 or 400 level. Only 1.0 ENG course at the 100 level may be counted towards program requirements, and no more than 1.0 credit may be counted towards program requirements from the following courses: ENG234H5, ENG235H5, ENG236H5, ENG237H5, ENG238H5, ENG239H5, ENG261H5, ENG276H5, ENG277H5, ENG279H5, ENG289H5, ENG291H5, ENG344H5, ENG373H5, ENG374H5. ENG100H5 may not be counted towards program requirements.

The major also requires the following courses:

- ENG280H5 Critical Approaches to Literature
- ENG202H5 and ENG203H5, British Literature survey parts I and II
- 3 credits distributed among the following areas, as follows:
  - At least 0.5 credits in Literary Theory/Methods: ENG101H5, ENG201Y5, ENG205H5, ENG206H5, ENG259H5, ENG269H5, ENG275H5, ENG326H5, ENG382Y5, ENG384H5, ENG396H5, ENG414H5, ENG415H5, ENG416H5.
  - At least 0.5 credits in Race, Ethnicity, Diaspora, Indigeneity: ENG271H5, ENG272H5, ENG273H5, ENG274H5, ENG326H5, ENG343H5, ENG370H5, ENG371H5, ENG426H5, ENG434H5.
  - At least 0.5 credits in Literature pre-1700: ENG220Y5, ENG300Y5, ENG301H5, ENG303H5, ENG304H5, ENG307H5, ENG311H5, ENG312H5, ENG313H5, ENG320H5, ENG321H5, ENG326H5, ENG327H5, ENG330H5, ENG331H5, ENG335H5, ENG336H5, ENG460H5, ENG461H5, ENG462H5.
  - At least 0.5 credits in Literature pre-1700: ENG220Y5, ENG300Y5, ENG301H5, ENG303H5, ENG304H5, ENG307H5, ENG311H5, ENG312H5, ENG313H5, ENG320H5, ENG321H5, ENG326H5, ENG327H5, ENG330H5, ENG331H5, ENG335H5, ENG336H5, ENG460H5, ENG461H5, ENG462H5.
  - At least 0.5 credits in Literature 1700-1900: ENG305H5, ENG306Y5, ENG308Y5, ENG314H5, ENG315H5, ENG322Y5, ENG323H5, ENG324Y5, ENG325H5, ENG337H5, ENG345H5, ENG383H5, ENG385H5, ENG386H5, ENG387H5, ENG395H5, ENG463H5, ENG470H5, ENG471H5.
In order to complete the Program Requirements:

- At least 0.5 credits in Canadian Literature: ENG215H5, ENG252Y5, ENG255H5, ENG352H5, ENG353Y5, ENG354Y5, ENG357H5, ENG358H5, ENG361H5, ENG362H5, ENG392H5, ENG393H5, ENG424H5, ENG425H5.
- At least 0.5 credits in American Literature: ENG250Y5, ENG251H5, ENG360H5, ENG363Y5, ENG364Y5, ENG365H5, ENG366H5, ENG394H5, ENG395H5, ENG435H5, ENG436H5.

Minor Program ERMIN1497 Creative Writing

The Department of English and Drama's Minor in Creative Writing is designed to allow students to focus on either the literary or dramatic arts, or to integrate their work in both these areas of creative expression. In lectures and tutorials in two courses at the 200 level, they will learn about the artistic traditions that frame their own writing; and experiment with producing and sharing written work in a variety of genres, using a range of formal techniques. These introductory courses serve as a foundation for 300-level workshops, in which students develop a more specialised focus, e.g. playwriting, prose fiction, poetry, creative nonfiction, editing, or writing for interactive new media. Finally, all students in the Minor can apply for admittance to the department's selective, 400-level capstone Creative Writing Workshop, in which over the course of a year they will be encouraged to develop their portfolio of creative work towards publication.

When students graduate with a Minor in Creative Writing they will have learned to use language creatively to develop observations, insights, and complex ideas. They will be able to write imaginatively, compellingly, clearly, and effectively, and to produce creative work in a range of literary and dramatic modes, genres, and forms. Courses in the Minor emphasize the way that how writers learn their craft from other writers, and the ways in which new modes of written expression emerge in the context of artistic tradition and historical circumstances. The Minor will also introduce students to the processes involved in editing and publishing creative work in print and other media.

Program Requirements: In order to complete the proposed Minor in Creative Writing successfully, students will need a total of 4.0 credits, from the following courses: 0.5 credits in ENG289H5 Creative Writing; 0.5 credits in ENG291H5 Reading for Creative Writing; 1.0 credit in either ENG489Y5 Creative Writing Workshop; or in two of the following courses: ENG373H5 Creative Writing: Poetry; ENG374H5 Creative Writing: Prose; ENG375H5 Editing Literary Texts; ENG376H5 Creative Writing: Nonfiction; ENG377H5 Special Topic in Creative Writing; ENG378H5 Special Topic in Writing for Performance; DRE362H5 Playwriting; 1.0 credit in either ENG201Y5 Reading Poetry; or 0.5 credits from the following courses: ENG101H5 How to Read Critically; ENG280H5 Critical Approaches to Literature; DRE360H5 Developmental Dramaturgy; and 0.5 credits from the following courses: ENG/DRE121H5 Traditions of Theatre and Drama; ENG202H5 British Literature in the World I; ENG203H5 British Literature in the World II. 1.0 credit in other ENG or DRE courses. We strongly encourage students to take courses whose descriptions indicate that instructors set/allow assessed creative assignments. These are specially indicated on the departmental website each year.

No more than 1.5 credits can be double counted towards two programs of study in English, Drama, or Creative Writing.

Minor Program ERMIN1645 English (Arts)

Program Requirements: At least 4.0 ENG credits, including at least 1.0 credit at the 300 or 400 level. Only 1.0 ENG course at the 100 level may be counted towards program requirements. ENG100H5 may not be counted towards program requirements.

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.

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]

ENG101H5 How to Read Critically (HUM)
This foundational course serves as an introduction to a wide range and variety of methods for literary and textual analysis, giving students a set of interpretive tools they can use to analyze texts in English classes and beyond. Emphasis will be on developing close, attentive reading skills as ways of thinking not just about, but through texts, and on deploying these skills effectively in essays and discussions. The class will draw on literary works from a variety of countries, centuries, genres, and media. We recommend that students considering a Specialist, Major, or Minor in English take this course. [24L, 12T]
ENG102H5 How to Research Literature (HUM)
This foundational course serves as an introduction to conducting research for English courses at the university level. Skills taught will be: reading and engaging with arguments about literature; incorporating the arguments of others into your own; locating and evaluating secondary sources; and conducting primary research. The class will draw on literary works from a variety of countries, centuries, genres, and media. The class will normally culminate in a longer research paper, developed over the course of the semester. We recommend that students considering a Specialist, Major, or a Minor in English take this course. [24L, 12T]

ENG105H5 Introduction to World Literatures (HUM)
Students will learn about contemporary creative writing in English from around the world. The course will cover the work of some famous writers, such as Toni Morrison or J.M. Coetzee, and also new and emerging authors, from Canada to New Zealand to Nigeria. [24L, 12T]
Exclusion: ENG105H5

ENG110H5 Narrative (HUM)
This course gives students skills for analyzing the stories 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, and biographies. [24L, 12T]
Exclusion: ENG111Y5

ENG121H5 Traditions of Theatre and Drama (HUM,EXP)
An introductory survey of the forms and history of world drama in its performance context from the classical period to the nineteenth century. 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 DRE121H5. [24L, 12T]
Exclusion: ENG121Y5

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. [24L, 12T]
Exclusion: ENG122Y5

ENG140Y5 Contemporary World Literatures (HUM)
An exploration of how late twentieth and twenty-first century literature in English responds to our world. Includes poetry, prose, and drama by major writers, such as Morrison, Munro, Coetzee, and Rushdie, and emerging writers. [48L, 24T]
Exclusion: ENG105H5

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]
Exclusion: ENG204H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG202H5 British Literature in the World I: Medieval to Eighteenth-Century (HUM)
This course serves as an introduction to influential texts that have shaped British literary history from Beowulf and Chaucer to Shakespeare, from Milton and Behn to Burney. Students will focus on questions such as the range and evolution of poetic forms, the development of the theatre and the novel, and the emergence of women writers. The course will encourage students to think about the study of English literatures in relationship to history, including the history of world literatures. [24L, 12T]
Exclusion: ENG202Y5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
ENG203H5 **British Literature in the World II: Romantic to Contemporary (HUM)**

An introduction to influential texts that have shaped British literary history from the Romantic period to the present, covering developments in poetry, drama, and prose, from William Wordsworth to Zadie Smith and beyond. The course will address topics such as revolution and war; the increasing diversity of poetic forms; the cultural dominance of the novel; romanticism, Victorianism, modernism, and postmodernism; feminism; colonialism and decolonization; the ethnic and cultural diversity of Anglophone literature in the twentieth and twenty-first centuries; literature and sexual identity; the AIDS epidemic; and technology and the digital age. The course will encourage students to think about the study of English literatures in relationship to history, including the history of world literatures. [24L, 12T]

*Exclusion:* ENG203Y5

*Prerequisite:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG204H5 **How to Read Poetry (HUM)**

This course gives students the tools they need to appreciate and understand poetry's traditional and experimental forms, specialized techniques, and diverse ways of using language. The course asks a fundamental question for literary studies: why is poetry such an important mode of expression in so many different time periods, locations, and cultures? [36L]

*Exclusion:* ENG201Y5

*Prerequisite:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG206H5 **Rhetorical Criticism (HUM)**

This course will use the tools and perspectives of rhetoric, from the Sophists to the postmodern, to analyze and critique the texts and other cultural artifacts that surround us. Much of what we encounter in the cultural realm is an argument; the task in this course will be to understand and engage with those arguments. Students will analyze the rhetoric of poetry, fiction, and drama, as well as of news stories, speeches, video, images, and more. [36L]

*Prerequisite:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG211H5 **Introduction to the Novel (HUM)**

This course gives students a foundational understanding of the novel in English. It introduces them to the history of the novel, from medieval sagas and adventure stories to modern experiments with fragmentary narratives. The course covers novels from a range of geographical places; students will be asked to consider why the novel has been so successful in the past, and what its futures might be. Students will read at least one complete novel during the course and extracts from others. [36L]

*Exclusion:* ENG210Y

*Prerequisite:* Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG214H5 The Short Story Cycle (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, and the literary history of this genre, along with its narrative techniques and thematic concerns. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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: DRE221Y5 or ENG223H5 or DRE224H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG223H5 Introduction to Shakespeare (HUM)
This course introduces students to Shakespeare. Lectures equip them with historical knowledge about literature, politics, and the theatre in Shakespeare’s time. Tutorials help them to grapple with Shakespeare’s language, versification, and stagecraft. By the end of the course students will have a new framework within which to understand - and interrogate - the enduring power of Shakespeare’s work. [24L,12T]
Exclusion: ENG220Y5 or DRE221Y5 or DRE224H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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. The authors studied may include Bunyan, Stevenson, Carroll, Twain, Alcott, Nesbit, Montgomery, Milne, Norton, Fitzhugh, and Rowling. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
ENG235H5 Comics and the Graphic Novel (HUM)
An introduction to the writing and sequential art of comics and graphic novels, 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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG236H5 Detective Fiction (HUM)
At least 12 works by such authors as Poe, Dickens, Collins, Doyle, Chesterton, Christie, Sayers, Van Dine, Hammett, Chandler, Faulkner, P.D. James, Rendell. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG238H5 Fantasy Literature (HUM)
This course focuses on fantasy literature, film, and television, and draws on a wide range of critical, cultural, and theoretical approaches. As it explores the magical and supernatural, it may consider such genres as alternative histories, animal fantasy, epic, fairy tales, magic realism, and swords and sorcery. Authors and texts covered will survey the history of fantasy across American, British, and Canadian literature, and may include Beowulf, Butler, Carroll, Gaiman, Le Guin, Lewis, Martin, Ovid, Rowling, Shakespeare, Sir Gawain and the Green Knight, Swift, and Tolkien. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG239H5 Horror Literature (HUM)
A critical and historical critical introduction to gothic literature, film, and television covering such authors as Carter, King, Lovecraft, Matheson, Poe, Rice, Shelley, Stevenson, and Stoker. The course draws on diverse critical and theoretical approaches as it examines a wide range of national and cultural contexts. It focuses on the gothic in broad terms and such concepts and issues as fear, horror, terror, the monstrous, the mythological, and the supernatural. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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]
Exclusion: ENG251H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
ENG251H5 Introduction to American Literature (HUM)
This course introduces students to major works in American literature in a variety of genres, from poetry and fiction to essays and slave narratives. [36L]
Exclusion: ENG250Y5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG252Y5 Canadian Literature (HUM)
An introductory survey of major Canadian works in poetry, prose, and drama from early to recent times. [72L]
Exclusion: ENG255H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG255H5 Introduction to Canadian Literature (HUM)
This course introduces students to Canadian literatures, from the oral narratives of Canada’s early Indigenous communities to new writing in a digital age. [36L]
Exclusion: ENG252Y5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100 level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG259H5 Literature and Environmental Criticism (HUM)
This course is an introduction to the field of ecocriticism: the study of literary writing about nature and of literature's role in thinking about environment. Students will read work by prominent theorists of the field and by major literary writers such as Shakespeare, Marvell, Wordsworth, Coleridge, Thoreau, Emerson, Whitman, Dickens, Hardy, Pratt, Lawrence, Frost, and Atwood. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG261H5 Music and Literature (HUM)
This course introduces students to the intersection of music and literature. We will study how melody, rhythm and texture interact with language, story and performance using examples from folk ballads and blues, art-songs, popular songs, musical theatre, jazz and hiphop, as well as poems inspired by musical styles and performers. Works to be covered may include folksongs collected by Francis Child and Alan Lomax, Thomas Moore’s Irish Melodies, popular songs by Bob Dylan, Leonard Cohen and Joni Mitchell, theatrical works by Bertolt Brecht, Stephen Sondheim and Lin-Manuel Miranda, performances by The Last Poets, hiphop lyrics by Public Enemy, and poems by William Blake, William Wordsworth, Emily Dickinson, Langston Hughes and Don McKay. [36L]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG269H5 Queer Writing (HUM)
Introducing a lesbian, gay, bisexual, trans, and queer tradition in literature and theory, this course may explore texts from a variety of historical periods, from the classical to the contemporary. It will focus on a variety of genres, potentially including poetry, drama, fiction, criticism, and popular culture. [36L]
Exclusion: ENG273Y1
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG271H5 Toronto’s Multicultural Literatures (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 diasporas, 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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
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, Kundera, Skvorecky, Rushdie, Gallant, Sebald, Ondaatje, Danticat, Ali, Nafisi. [36L]  
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG273H5 Literatures of Immigration and Exile (HUM)
In this course we will study literary and non-literary texts in English from the nineteenth century to the present day that come from colonial and postcolonial contexts and that speak to the experience of those affected by colonization, immigration, exile, war, and globalization. Students will be introduced to postcolonial theory and questions about race, ethnicity, religious difference, and diasporas in Anglophone literary studies. They may study texts by Conrad, James, Beckett, Joyce, Rhys, Pound, Ionesco, Nabokov, Koestler, Brodsky, Naipaul, Achebe, Kundera, Skvorecky, Rushdie, Gallant, Sebald, Ondaatje, Danticat, Ali, and Nafisi. [36L]  
Exclusion: ENG253Y5 or ENG270Y1 or ENG270Y5 or ENG272H5  
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG274H5 Indigenous Literatures (HUM)
An introduction to Indigenous literature with emphasis on writers from Canada's First Nations. Readings will be considered in the context of global 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: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG275H5 Feminist Approaches to Literature (HUM)
This course will consider the implications, for literary studies and for literary writing, of modern traditions of feminist and gender theory. Students will encounter the work of major feminist thinkers - e.g., Mary Wollstonecraft, Simone de Beauvoir, Alice Walker, Julie Kristeva, and Judith Butler - and texts by major women writers. The course will explore feminist approaches to literature, including those that borrow from post-structural, psychoanalytic, and contemporary gender, race, and queer theories. [36L]  
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG276H5 Fanfiction (HUM)
This course investigates fanfiction from a variety of theoretical standpoints, including gender and sexuality studies, critical race studies, and affect theory. It considers the literary history of fanfiction- amateur, unauthorized stories about characters invented by canonical writers (e.g., Jane Austen and Arthur Conan Doyle); a wide selection of fanfiction stories; and the commercialization of the products of the modern fanfiction industry. [36L]  
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG277H5 Bad Romance (HUM)
This course covers romances of the eighteenth to the twenty-first century, ranging from the amatory (stories about love, longing, and desire) to the fantastic (the supernatural and fantasy). Students will consider issues of canonization, popularity, the text-author-reader relationship, definitions of high and low art, ideas about good and bad writing, and eroticism and desire. Texts may include Harlequin romances, paranormal romance, and works by Jane Austen, the Brontes, Daphne du Maurier, Stephenie Meyer, Nicholas Sparks, Sarah Waters, and E. L. James. [36L]  
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.

Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.
ENG279H5 Video Games (HUM,EXP)
What is the literary history of video games? This course considers how some novels and plays work like games; how games have evolved complex and often non-verbal means of conveying narratives; and whether narrative in fiction, theatre, and film can or should be a model for storytelling in the rule-bound, interactive worlds of video games. [24L, 12P]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.
Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG280H5 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. [24L, 12T]
Exclusion: ENG267H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.
Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG289H5 Creative Writing (HUM)
Students will engage in a variety of creative exercises, conducted across a range of different genres of literary writing. [24L, 12T]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.
Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

ENG291H5 Reading for Creative Writing (HUM)
This course will help students to see connections between their reading and their work as creative writers. They will read texts in a variety of literary and non-literary genres and consider the way that writers learn their craft from other writers. Practical assignments will encourage students to find creative ways to critique, imitate, speak to, and borrow responsibly from the work they read. [24L, 12T]
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.
Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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 creating 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 and International Opportunities (Page 23) for more details.
Prerequisite: Open to students who have successfully completed at least 4.0 full credits.
Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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.

ENG301H5 Making Love in the Sixteenth Century (HUM)
In this course, students will follow the changing constructions of love and love poetry in the sixteenth century, starting with Wyatt and Surrey, passing through Tottel, to the Elizabethan court, and ending with the erotic love poetry that served as a backlash against the Petrarchanism of the early sixteenth century. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG303H5 Milton (HUM)
Selections from Paradise Lost and other works. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.
ENG304H5 Seventeenth-Century Poetry (HUM)
Considering literature during the reign of the early Stuarts and the Civil War, this course includes such poets as Donne, Jonson, Lanyer, Wroth, Herbert, and Marvell, and such prose writers as Bacon, Clifford, Donne, Wroth, Burton, Cary, Browne, Hobbes, Milton, and Cavendish. [36L]
Exclusion: ENG304Y5
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 Literature of the Restoration and 18th Century (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: ENG305H5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG307H5 Women Writers before Austen (HUM)
A study of mystical writings, poems, plays, novels, letters, periodical essays, polemical works, and books for children by such writers as Julian of Norwich, Margery Kempe, Mary Sidney, Emilia Lanyer, Margaret Cavendish, Aphra Behn, Fanny Burney, and Mary Wollstonecraft. Topics may include patronage and publishing; nationality, class, and gender; and generic conventions. [36L]
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 from medieval Britain, excluding the works of Chaucer. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG312H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG313H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG314H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG315H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3 additional credits.

ENG316H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG320H5 Transforming Literature in the Sixteenth Century (HUM)
This course focuses on transformations of major literary forms during the sixteenth century, especially on how these transformations involve engagements with medieval and earlier materials. It covers such topics as Petrarchan poetry in translation by Wyatt and Surrey; John Fox's and John Bale's repackaging of Anne Askew's biography; and the work of Ovid and other classical authors in translation and adaptation, as in the Shakespeare's Venus and Adonis. [36L]
Exclusion: ENG302Y5
Prerequisite: 1.0 credit in English and 3.0 additional credits.
ENG321H5 Poetry and Prose 1600-1660 (HUM)
Considering literature during the reign of the early Stuarts and the Civil War, this course includes such poets as Donne, Jonson, Lanyer, Wroth, Herbert and Marvell, and such prose writers as Bacon, Clifford, Donne, Wroth, Burton, Cary, Browne, Milton, and Cavendish. [36L]
*Prerequisite:* 1.0 credit in English and 3.0 additional credits.

ENG322Y5 The Rise of the Novel in the Eighteenth Century (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, Wollstonecraft, 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 Victorian Fiction (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]
*Exclusion:* ENG325H5
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.

ENG325H5 The Victorian Novel (HUM)
This course surveys several major novels in order to understand the genre that came to dominate literary culture in the Victorian era. Topics may include realism, the marriage plot, the social-problem novel, feminism and sexual identity, novels of growing up, the city, and seriality. Authors may include Dickens, Thackeray, E. Bronte, C. Bronte, Gaskell, Trollope, Eliot, Collins, Hardy, Gissing, and Wilde, among others. [36L]
*Exclusion:* ENG324Y5
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.

ENG326H5 Premodern World Literatures (HUM)
This course approaches the premodern period by examining early British literatures alongside literary works of the period c.500-1650 from the continents of Asia, Africa, Europe, and the Americas. Texts may include Tang dynasty poetry, the *Tale of Genji*, the Persian epic *Shahnameh*, the Italian *Decameron*, *1001 Nights*, Old Norse sagas, Chaucer's *Canterbury Tales*, and Harriot's *Briefe and True Report of the New Found Land of Virginia*. Texts will be provided in translation where necessary. [36L]
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.

ENG327H5 Blame Chaucer (HUM)
This course takes a close look at some of the bawdy, irreverent, and even dangerous texts written in fourteenth-century England by Geoffrey Chaucer. As he recounts erotic dreams, tells the story of a faithless woman in *Troilus and Criseyde*, and narrates tales told on a riotous, drunken pilgrimage in *The Canterbury Tales*, Chaucer repeatedly tells his readers not to blame him for what he writes. Students in this course will ask: who is to blame, if not the author himself? [36L]
*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 Medieval 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 Elizabethan Drama (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.

ENG332H5 The Modernist Novel (HUM)
This course explores novels by such writers as James, Conrad, Cather, Forster, Joyce, Woolf, Lawrence, and Faulkner. [36L]
*Exclusion:* ENG333H5
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.

ENG333H5 The Jacobean Drama (HUM,INTLO)
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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [36L]
*Exclusion:* ENG332Y5
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.

ENG334H5 Special Topic 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]
*Prerequisite:* 1.0 credit in ENG and 3.0 additional credits.
ENG337H5 Restoration and Eighteenth-Century Drama (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 the connection between the plays and the theatres for which they were designed. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG340H5 The Rise of Modern Drama (HUM)
A study of plays in English by such dramatists as Wilde, Yeats, Shaw, Synge, Glaspell, Hughes, and O'Neill, as well as plays in translation by such dramatists as Ibsen, Chekhov, Strindberg, and Pirandello. [36L]
Exclusion: ENG338Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG341H5 Modern Drama: Late Twentieth-Century to Present Day (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: ENG339H5
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: ENG338Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG343H5 World Drama (HUM)
Students will read/watch screenings of drama in English and in translation from around the world, including Africa, East Asia, South Asia, the Middle East, the Caribbean, Latin America, and South America. Topics may include traditional forms (Kathakali dance, Noh and Kabuki, Beijing Opera, Nigerian masquerades) adapted for the modern stage; agit-prop and political drama; object performance; the place of drama within a global media ecology; and drama as a site of intercultural and transcultural appropriation, negotiation, and exchange. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG344H5 Spy Fiction (HUM)
This course examines the rise and popularization of spy fiction in the twentieth century. It focuses on authors such as Graham Greene and John le Carré within the context of the Cold War and the nuclear stand-off between the Soviet Union and the West. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG345H5 Victorian Poetry (HUM)
This course surveys the poetry of the Victorian era in Britain, with a focus on experiments in poetic genre and form, and on the social and political commitments of poetry in a period of colonialism, industrialization, and changing ideas about gender and sexuality. Topics may include lyric and the dramatic monologue, the poetry of political protest, love and sexuality, feminism and queerness, aestheticism and decadence, empire and the emergence of global poetry in English, and pastoral and the poetry of urban life. Poets may include Elizabeth Barrett Browning, Alfred Tennyson, Robert Browning, Matthew Arnold, Christina Rossetti, D. G. Rossetti, Gerard Manley Hopkins, A. C. Swinburne, Toru Dutt, George Meredith, Augusta Webster, Amy Levy, Oscar Wilde, Michael Field, Thomas Hardy, Sarojini Naidu, and many others. [36L]
Exclusion: ENG347Y5
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, Hughes, Larkin, Lowell, Plath, Warren. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG350H5 Poetry and Modernism (HUM)
Special study of Hopkins, Yeats, Pound, Eliot, Stevens; selections from other poets. [36L]
Exclusion: ENG348Y5
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.

ENG353H5 Canadian Prose Fiction (HUM)
A study of twelve or more Canadian works of fiction, primarily novels. [72L]
Exclusion: ENG392H5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG354H5 Canadian Poetry (HUM)
A study of major Canadian poets, modern and contemporary. [72L]
Exclusion: ENG393H5
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 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 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.

ENG361H5 Canadian Literature, Beginnings to 1920 (HUM)
This course explores the origins of Canadian literature, with an emphasis upon the post-Confederation period. Students will examine work in a range of genres, which may include novels, short stories, life writing and poetry, and will consider how the nation is being created and debated in print. Topics may include settler colonialism, nationalism, and representation. Attention may also be paid to Canadian book history and print culture in the period. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG362H5 Canadian Literature, 1920 to the Present (HUM)
This course explores Canadian literature from the 1920s to the contemporary period. Students will examine the work of major authors in their cultural, social, and historical contexts. Topics may include the development of literary modernism in Canada, regional literary geographies, postmodern innovations, multiculturalism and hybridity, and Indigenous literary and cultural production in the part of Turtle Island that is called Canada. [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]
Exclusion: ENG394H5
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]
Exclusion: ENG395H5
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]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG366H5 Special Topic 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]
Prerequisite: 1.0 credit in ENG and 3.0 other credits.

ENG369H5 Global Literatures in English (HUM)
This course involves in-depth study, within the framework of postcolonial and transnational studies, of literatures in English from around the world. It includes fictional and non-fictional texts and contemporary films and media representations. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG370H5 Special Topic in World Literatures (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]
Prerequisite: 1.0 credits in ENG and 3.0 additional credits.

ENG371H5 Special Topic in Literary Theory (HUM)
A concentrated study of one aspect of literary or critical theory, such as a particular school of theory, an important author, or a contemporary theoretical debate. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG372H5 Special Topic in Creative Writing (HUM)
A concentrated study of one aspect of postcolonial literature or literary culture, such as a particular subgenre, author, period, regional or national context, or theme, or the application of a particular critical approach. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG373H5 Creative Writing: Poetry (HUM)
This course will involve a wide variety of experiments with poetic expression and poetic forms. [24S]

ENG374H5 Creative Writing: Prose (HUM)
Students will experiment with fiction and non-fiction prose writing, including autobiography, biography, and narrative for new visual, digital, and interactive media. [24S]

ENG375H5 Editing Literary Texts (HUM)
Students will learn the basics of literary editing for different readerships: the course will cover such topics as the selection of a base text; treatment of variants; creation of paratext; design and layout; proofs and proofchecking; and the differences between print and digital media. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits; or ENG289H5/ ENG291H5

ENG376H5 Creative Writing: Nonfiction (HUM)
Students will experiment in a workshop environment with a variety of short, non-fictional forms, e.g. memoir, autobiography, true crime. [24S]

ENG377H5 Special Topic in Creative Writing (HUM)
A concentrated study of one aspect of creative writing practice, such as a particular genre or theme, or the application of a particular formal technique. [24S]
ENG381H5 Digital Texts (HUM)
This course considers the ways in which digital technologies are transforming texts, reading, readerships, and the idea of the literary. Students will study a wide variety of digital texts, e.g., fanfiction, webcomics, viral Tumblr posts and tweets, and video games. They will also learn about the use of digital tools to read, study, and preserve texts. The course may include a practical project, e.g., the design of a narrative game using Twine; the curation of a digital exhibit using Omeka; or an argument about some text/s using visualization software. [24L, 12P]
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.

ENG383H5 British Romanticism and Its Contexts (HUM)
This course gives students a new perspective on the cultural contexts for British Romanticism: students will learn about literature’s relationship to philosophy, politics, religion, science, and colonialism in the Romantic period, as they examine works by some major authors such as William Wordsworth, Walter Scott, and Mary Shelley. [36L]
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG384H5 Literature and Psychoanalysis (HUM)
An introduction to psychoanalysis for students of literature, this course considers major psycholanalytic 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: ENG384Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG385H5 British Romanticism, 1770-1800 (HUM)
This course covers the early Romantic period in British Literature. Students may read novels such as Frances Burney's *Evelina*; plays such as Richard Brinsley Sheridan's *School for Scandal*; writing on the French and American Revolutions; William Blake’s *Songs of Innocence and of Experience*; and ballads by William Wordsworth, Samuel Taylor Coleridge, Hannah More, and Mary Robinson. [36L]
Exclusion: ENG308Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG386H5 British Romanticism, 1800-1830 (HUM)
This course covers the later Romantic period in British Literature. Authors studied may include Walter Scott, Mary Shelley, Percy Shelley, Jane Austen, Lord Byron, and John Keats. [36L]
Exclusion: ENG308Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG387H5 Popular Novels in the Eighteenth Century (HUM)
This course offers students a chance to read some early novels in English - from the scandalous to the sentimental to the Gothic. They will consider what made novels best-sellers in eighteenth-century Britain and why the popularization of novel reading was such a source of controversy at the time. Authors may include: Daniel Defoe, Samuel Richardson, Henry Fielding, Laurence Sterne, Frances Burney, and Ann Radcliffe. [36L]
Exclusion: ENG322Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.

ENG389H5 Individual Studies (HUM,EXP)
A scholarly project 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, who can provide proposal forms. 
Exclusion: ENG490Y5
Prerequisite: 1.0 credits in English 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 who can provide proposal forms.
Prerequisite: 1.0 credits in English and 3.0 other credits.
ENG392H5 Canadian Fiction (HUM)
Students will read novels and/or short stories of importance for Canadian literary history; these may include, for example, L.M. Montgomery’s *Anne of Green Gables*, Hugh MacLennan’s *Two Solitudes*, Lawrence Hill’s *Book of Negroes*, and Alice Munro’s *Hateship, Friendship, Courtship, Loveship, Marriage*. [36L]
*Exclusion: ENG353Y
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG393H5 Canadian Poetry in Context (HUM)
This course gives students a chance to think about the social, historical, and personal circumstances that have produced the work of some major Canadian authors, from the poets of Canadian Confederation to contemporary Black and Indigenous writers such as M. NourbeSe Philip and Rita Joe. [36L]
*Exclusion: ENG354Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG394H5 American Literature from the Revolution to 1900 (HUM)
Students will read a selection of American writings from the late eighteenth and nineteenth centuries; these may include the stories of Edgar Allan Poe, the poetry of Walt Whitman and Emily Dickinson, Harriet Beecher Stowe’s novels, and slave narratives such as those of Frederick Douglass and Harriet Jacobs. [36L]
*Exclusion: ENG363Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG395H5 American Literature 1900 to the Present (HUM)
Students will read a selection of works by American authors as diverse as Edith Wharton, Ernest Hemingway, T.S. Eliot, Sylvia Plath, Harper Lee, Thomas Pynchon, and Jhumpa Lahiri. [36L]
*Exclusion: ENG364Y5
Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG396H5 Literary Theory Now (HUM)
This course will explore some of the most recent, provocative, and significant developments in literary theory, including work in such areas as eco-criticism, literary activism, critical race studies, Indigenous studies, queer and trans studies, and cognitive literary studies. [36L]
*Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG397H5 Individual Studies (HUM)
A scholarly project 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 who can provide the proposal form.
*Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*

ENG398H5 Research Opportunity Program (HUM)
This course provides a richly rewarding opportunity for upper-level students 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 creating 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 and International Opportunities for more details.
*Prerequisite: 1.0 credits in English and 3.0 additional credits.*

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 creating 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 and International Opportunities (Page 23) for more details
*Prerequisite: 1.0 credit in ENG and 3.0 additional credits.*
ENG435H5 Seminar: American Literature (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG436H5 Seminar: American Literature (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG460H5 Seminar: Literature Pre-1700 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG461H5 Seminar: Literature Pre-1700 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG462H5 Seminar: Literature Pre-1700 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG463H5 Seminar: Literature 1700-1900 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG470H5 Seminar: Literature 1700-1900 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG471H5 Seminar: Literature 1700-1900 (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG472H5 Seminar: Modern and Contemporary Literature (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG473H5 Seminar: Modern and Contemporary Literature (HUM)
See department for description. [24S]
Prerequisite: 5.0 credits in ENG and 4.0 additional credits

ENG489Y5 Creative Writing Workshop (HUM,EXP)
The course allows students to workshop their own creative project/s with the instructor and their peers. Restricted to students who in the opinion of the Department show special aptitude. Detail requirements will be posted in advance of this date. Students should contact the instructor or the Undergraduate Advisor for more information. [48S]
Exclusion: ENG389Y5
Prerequisite: Permission of instructor and portfolio must be submitted by 30 June and contact Undergraduate Advisor for more information.

Environmental Geosciences (HBSc)

Offered through the Department of Chemical & Physical Sciences and the Department of Geography, Geomatics and Environment.

Faculty Program Advisor - Chemical and Physical Sciences
Xiaoyong Xu
DV4006, William G. Davis Bldg
905-828-3973
xiaoyong.xu@utoronto.ca

Faculty Program Advisor - Geography
Professor Laura Brown
DV3279, William G. Davis Bldg.
905-569 4239
lc.brown@utoronto.ca

Academic Counsellor - Earth Science
Christina Fortes
Room 4061, William G. Davis Bldg.
905-828-5351
christina.fortes@utoronto.ca

Academic Counsellor - Geography
Sabrina Ferrari
Room 3282, Davis Bldg.
905-828-5465
sabrina.ferrari@utoronto.ca

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 84)
CHM Chemistry (page 113)
ENV Environment (page 232)
ERS Earth Science (page 179)
GGR Geography (page 274)
JGE Geography (page 274)
MAT Mathematics (page 372)
PHY Physics (page 394)
STA Statistics (page 445)
Specialist Program ERSPE1253
Environmental Geosciences

Completion of this program is intended to fulfill the knowledge 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)/ (PHY146H5, PHY147H5), (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5 and ERS101H5/ ERS111H5/ ENV100Y5 and a minimum CGPA of 2.5.

Within an Honours degree, 14.5 credits are required.

Year 1: BIO152H5, BIO153H5; CHM110H5, CHM120H5; ERS101H5/ ERS111H5/ ENV100Y5; (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5; (PHY136H5, PHY137H5)/ (PHY146H5, PHY147H5); STA107H5

Year 2: ERS201H5, ERS202H5, ERS203H5, ERS211H5; GGR201H5, GGR217H5, GGR278H5

Year 3 & 4: ERS312H5, ERS315H5, ERS325H5, ERS412H5, ERS471H5/ ERS472H5; GGR307H5, GGR315H5, GGR321H5, GGR337H5, GGR338H5; JGE378H5

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.
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 Professor Matthew Adams (md.adams@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 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- BIO Biology (page 94)
- ECO Economics (page 188)
- ENG English (page 205)
- ENV Environment (page 232)
- ERS Earth Science (page 179)
- GGR Geography (page 274)
- HIS History (page 289)
- JEP Environment (page 232)
- JGE Geography (page 274)
- JPE Political Science (page 401)
- PHL Philosophy (page 383)
- POL Political Science (page 401)
- SOC Sociology (page 424)
- STA Statistics (page 445)
- WRI Communication, Culture, Information and Technology (page 138)

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 2.0.

First Year: 3.0 credits:
1. Environment Foundation: ENV100Y5
2. Economics Foundations: ECO100Y5
3. Foundations in Related Disciplines: 1.0 credit chosen from this list: ANT102H5; GGR111H5; POL111H5, POL114H5; 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: 4.5 credits:
1. Environmental Management Core: ENV201H5
2. Environmental Policy Core: JPE251H5 + JPE252H5 (formerly JPE250Y5)
3. Social Science/Humanities Core: 1.0 credits chosen from this list: ANT241H5; ENG259H5; ENV205H5; GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5, GGR265H5, GGR288H5; PHL274H5, PHL284H5
Environmental Management (HBA) PROGRAMS

4. Science Core: 1.0 credit chosen from this list:
   ANT214H5; BIO201H5, BIO205H5, BIO211H5;
   ERS201H5, ERS202H5, ERS203H5; GGR201H5,
   GGR214H5, GGR217H5, GGR227H5;

5. Quantitative, Digital, and Analytical Methods Core: 1.0 credit chosen from this list:
   GGR276H5, GGR277H5, GGR278H5; STA215H5,
   STA220H5, STA221H5

**Upper Years: 4.5 credits:**

1. Environmental Management Perspectives: 2.0 credit chosen from this list:
   ENV310H5, ENV311H5, ENV320H5, ENV393H5,
   ENV425H5, ENV430H5, ENV435H5; JEP452H5

2. Social, Economic & Policy Perspectives: 1.0 credits chosen from this list:
   ANT357H5, ANT368H5, ANT370H5, ANT463H5,
   ANT464H5; ECO373Y5; ENV310H5, ENV311H5,
   ENV320H5, ENV425H5, ENV430H5, ENV435H5;
   GGR313H5, GGR318H5, GGR322H5, GGR325H5,
   GGR329H5, GGR333H5, GGR348H5, GGR349H5,
   GGR353H5, GGR361H5, GGR362H5, GGR365H5,
   GGR366H5, GGR370H5, GGR374H5, GGR375H5,
   GGR376H5, GGR377H5, GGR383H5, GGR384H5,
   GGR385H5, GGR415H5, GGR418H5, GGR419H5,
   GGR420H5, GGR426H5, GGR461H5; JEP351H5,
   JEP356H5, JEP452H5; JGE378H5;

3. Scientific Perspectives: 0.5 credit chosen from this list:
   ANT327H5; BIO311H5, BIO331H5, BIO333H5,
   BIO464H5; ENV490H5, ENV491H5, ENV495H5,
   ENV496H5, ENV497H5; GGR304H5, GGR305H5,
   GGR307H5, GGR309H5, GGR311H5, GGR315H5,
   GGR316H5, GGR317H5, GGR322H5, GGR337H5,
   GGR338H5, GGR374H5, GGR375H5, GGR376H5,
   GGR377H5, GGR383H5, GGR384H5, GGR404H5,
   GGR406H5, GGR407H5, GGR440H5, GGR484H5,
   GGR485H5, JEG401Y5, JEG417Y5 or another
   program-relevant Field, Experiential, or Research
   course, with permission of the Program Advisor

**Field, Project-based, Experiential, and Research Perspectives:** 1.0 credit chosen from this list:
   ENV299Y5, ENV330H5, ENV332H5, ENV399Y5,
   ENV496H5, ENV497H5; GGR335H5, GGR379H5,
   GGR389H5; JEG401Y5, JEG417Y5 or another program-relevant Field, Experiential, or Research course, with permission of the Program Advisor

Note: ENV490H5, ENV491H5 can substitute for #1, #2, #3, or #4 as course requirements, where appropriate, and with permission of the Program Advisor or Academic Counsellor.

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 + ANT + POL is acceptable, but a course list selected only from ENV + GGR + HIS is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

**Specialist Program GSCOBBASU1 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 lists:
   ANT102H5; GGR111H5; POL111H5, POL114H5;
   SOC100H5

**Second Year:**

1. Environmental Management Core: ENV201H5
2. Environmental Policy Core: JPE251H5 + JPE252H5 (formerly JPE250Y5)
3. Social Science/ Humanities Core: 1.0 credits chosen from this list:
   ANT241H5; ENG259H5; ENV205H5; GGR202H5,
   GGR207H5, GGR208H5, GGR209H5, GGR210H5,
   GGR252H5, GGR265H5, GGR288H5; PHL274H5,
   PHL284H5
4. Science Core: 1.0 credit chosen from this list:
   ANT214H5; BIO201H5, BIO205H5, BIO211H5;
   ERS201H5, ERS202H5, ERS203H5; GGR201H5,
   GGR214H5, GGR217H5, GGR227H5;
5. Quantitative, Digital, and Analytical Methods Core: 1.0 credit chosen from this list:
   GGR276H5, GGR277H5, GGR278H5; STA215H5,
   STA220H5, STA221H5

**Third & Fourth Years:**

1. Environmental Management Perspectives: 2.0 credit chosen from this list:
   ENV310H5, ENV311H5, ENV320H5, ENV393H5,
   ENV425H5, ENV430H5, ENV435H5; JEP452H5
2. Social Economic & Policy Perspectives: 1.0 credits chosen from this list: ANT357H5, ANT368H5, ANT370H5, ANT463H5, ANT464H5; ECO372Y5; ENV310H5, ENV311H5, ENV320H5, ENV425H5, ENV430H5, ENV435H5; GGR313H5, GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5; GGR362H5, GGR363H5, GGR365H5, GGR370H5; GGR385H5, GGR415H5, GGR418H5, GGR419H5; GGR420H5, GGR426H5, GGR461H5; JEP351H5, JEP356H5, JEP452H5; JGE378H5; POL343Y5, POL346Y5, POL475H5; SOC349H5, SOC356H5, WRI375H5

3. Scientific Perspectives: 0.5 credit chosen from this list: ANT327H5; BIO311H5, BIO331H5, BIO333H5, BIO464H5; ENV495H5, ENV496H5; ERS312H5, ERS313H5, ERS315H5, ERS321H5; GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR318H5, GGR319H5, GGR322H5, GGR337H5, GGR338H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR484H5; JGE378H5

4. Field, Project-Based & Research Perspectives: 1.0 credit chosen from this list: ENV299Y5, ENV330H5, ENV332H5, ENV399Y5, ENV496H5, ENV497H5; GGR335H5, GGR379H5, GGR389H5; JEG401Y5, JEG417Y5; 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; 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.

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.

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 63% or higher.

First Year: 2.0 credits:
1. Environment Foundation: ENV100Y5
2. Foundation in Related Disciplines: 1.0 credit chosen from this list: ANT102H5; ECO100Y5; GGR111H5; POL111H5, POL114H5; 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: 3.0 credits:
1. Environmental Management Core: ENV201H5
2. Environmental Policy Core: JPE251H5 + JPE252H5 (formerly JPE250Y5)
3. Social Science/Humanities Core: 0.5 credit chosen from this list: ANT241H5; ENG259H5; ENV205H5, GGR202H5, GGR207H5, GGR208H5, GGR209H5; GGR210H5, GGR252H5, GGR265H5, GGR288H5; PHL274H5, PHL284H5

Science Core: 0.5 credit chosen from this list: ANT241H5; BIO201H5, BIO205H5, BIO211H5; ERS201H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5;

4. Science Core: 0.5 credit chosen from this list: ANT241H5; BIO201H5, BIO205H5, BIO211H5; ERS201H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5;

5. Quantitative, Digital, and Analytical Methods Core: 0.5 credit chosen from this list: GGR276H5, GGR277H5, GGR278H5; STA215H5, STA220H5; or another program-relevant 200/300-level Research Methods course, with permission of the Program Advisor

Upper Years: 3.0 credits:
1. Environmental Management Perspectives: 1.0 credit chosen from this list: ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, ENV435H5; JEP452H5
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; POL111H5, POL114H5; SOC100H5

### Second Year:
1. **Environmental Management Core:** ENV201H5
2. **Environmental Policy Core:** JPE251H5 + JPE252H5 (formerly JPE250Y5)
3. **Social Science/ Humanities Core:** 0.5 credit chosen from this list: ANT241H5; ENG259H5; ENV205H5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5; PHL274H5, PHL284H5
4. **Science Core:** 0.5 credit chosen from this list: ANT214H5; BIO201H5, BIO205H5, BIO211H5; ERS201H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5;
5. **Quantitative, Digital, and Analytical Methods Core:** 0.5 credit chosen from this list: GGR276H5, GGR277H5, GGR278H5; STA215H5, STA220H5; or another program-relevant 200/300-level research methods course, with permission of the Program Advisor

### Third & Fourth Years:
1. **Environmental Management Perspectives:** 0.5 credit chosen from this list: ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, ENV435H5, ENV439H5; JEP452H5

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Note: ENV490H5, ENV491H5 can substitute for #1, #2, #3, or #4 as course requirements, where appropriate, and with permission of the Program Advisor or Academic Counsellor.

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 + ANT + POL is acceptable, but a course list selected only from ENV + GGR + ANT is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.
2. **Social, Economic & Policy Perspectives**: 1.5 credit chosen from this list: ANT357H5, ANT368H5, ANT463H5, ANT464H5; ECO373H5; ENV310H5, ENV311H5, ENV320H5, ENV425H5, ENV430H5, ENV435H5; GGR313H5, GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR375H5, GGR376H5, GGR377H5, GGR379H5, GGR415H5, GGR418H5, GGR419H5, GGR420H5, GGR426H5, GGR461H5; JEP351H5, JEP356H5, JEP452H5; JGE378H5; POL343Y5, POL346Y5, POL475H5; SOC349H5, SOC356H5, SOC465H5; WRI375H5

3. **Scientific Perspectives**: 0.5 credit chosen from this list: ANT327H5, BIO311H5, BIO333H5, BIO464H5; ENV495H5, ENV496H5; ERS312H5, ERS313H5, ERS315H5, ERS321H5; GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR322H5, GGR337H5, GGR338H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR484H5; JGE378H5

4. **Field, Project-Based, Experiential, and Research Perspectives**: 0.5 credit chosen from this list: ENV299Y5, ENV330H5, ENV332H5, ENV399Y5, ENV496H5; GGR335H5, GGR379H5, GGR389H5; JEG401Y5, JEG417Y5; 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, EES1126H; ENV1002H, ENV1707H; EES1124H; ECO2908H; GGR252H5, GGR287H5, GGR329H5, GGR419H5; JEP356H5, JEP357H5, JEP452H5, JEP454H5, JEP455H5; POL343Y5, POL344Y5, POL475H5; SOC349H5, SOC356H5, SOC465H5; WRI375H5

**Fifth & Sixth Years**

1. **Core Courses**: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM2010H, SSM2020H; ECO2908H; EES1107H, EES1124H; EES1125H, ENV1002H, ENV1707H; 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 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; ECO2908H; MGT2918H; RSM2216H; or another program-relevant course with permission of the MScSM Director and Chair of the host department.

**Minor Program ERMIN1287 Sustainability (Arts)**

**Limited Enrolment** – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 60% or higher.

4.0 credits are required, with at least 1.0 credit at the 300-400 level.

**First Year**: ENV100Y5

**Higher Years**: ENV201H5; ENV205H5; ENV310H5

1.5 additional credits from: ENV307H1, ENV311H5, ENV320H5, ENV332H5, ENV425H5, ENV461H1; GGR252H5, GGR287H5, GGR329H5, GGR419H5; JEP356H5, JEP357H5, JEP452H5, JEP454H5, JEP455H5; POL343Y5, POL475H5; SOC459H5, SOC465H5

**NOTE**: Be sure to look ahead and plan to complete the prerequisites for any upper-level elective courses that are of interest to you. The ENV upper-level course electives typically rely only on the program’s core courses as prerequisites, but upper-level electives from other departments could have different prerequisites, so be sure to check the Calendar listings for these courses and their prerequisites.

**Minor Program ERMIN1392 Environmental Law and Policy (Arts)**

**Limited Enrolment** – Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 60% or higher.

4.0 credits are required, with at least 1.0 credit at the 300-400 level.

**First Year**: ENV100Y5

**Higher Years**: ENV201H5; JPE251H5 and JPE252H5

1.5 additional credits from: ECO373H5; ENV310H5, ENV320H5; JEP356H5, JEP357H5, JEP452H5, JEP454H5, JEP455H5; POL343Y5, POL475H5; SOC459H5, SOC465H5
Environmental Management (HBA) PROGRAMS

ENV311H5, ENV393H5, ENV430H5; ENV422H1; GGR318H5; GGR329H5; GGR426H5; HIS318H5, HIS319H5; JEP351H5, JEP356H5, JEP452H5; PHL247H5, PHL271H5; POL346Y5

NOTE: Be sure to look ahead and plan to complete the prerequisites for any upper-level elective courses that are of interest to you. The ENV upper-level course electives typically rely only on the program’s core courses as prerequisites, but upper-level electives from other departments could have different prerequisites, so be sure to check the Calendar listings for these courses and their prerequisites.

Minor Program ERMIN1425 Environmental Management (Arts)

4.0 credits are required, of which at least 1.0 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 60% or higher.

First Year: 1.0 credit:

1. Environment Foundation: 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 Core: 0.5 credit chosen from this list: ENG259H5; ENV205H5; GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5, GGR265H5, GGR288H5; JPE251H5, JPE252H5;

3. Science Core: 0.5 credit chosen from this list: ANT214H5; BIO201H5, BIO205H5, BIO211H5; ERS201H5; GGR201H5, GGR214H5, GGR217H5, GGR227H5;

Third Year: 1.5 credits:

1. Environmental Management Perspectives: 1.0 additional credit chosen from this list: ANT357H5, ANT368H5, ANT370H5, ANT463H5, ANT464H5; ECO373Y5; ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5; GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR415H5, GGR418H5, GGR461H5; JEP351H5, JEP356H5, JEP452H5; JGE378H5; POL475H5; SOR465H5; WRI375H5

2. Field, Project-based, Experiential, and Research Perspectives: 0.5 credit chosen from this list: ENV299Y5, ENV330H5, ENV332H5, ENV399Y5, ENV496H5, ENV497H5; GGR335H5, GGR376H5, GGR379H5, GGR389H5, JEG401Y5, JEG417Y5; or another program-relevant Field, Project-Based, or Research course, with permission of the Program Advisor

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 + ANT is acceptable, but a course list selected only from ENV + GGR 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 227)
- Environmental Management (HBA) (Page 220)

These interdisciplinary programs are administered by the Department of Geography, Geomatics and Environment, 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, ENV100YS (The Environment). The programs offer students abundant opportunities to become involved in environmental practice, research and fieldwork (e.g., ENV299YS Research Opportunity Program, ENV232H5 Environmental Sustainability Practicum, ENV497H5, Environmental Research Project). Students may also have the opportunity to complete a practical work placement course related to their specific area of interest (JEG400/401YS Geography/Environment 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 Professor Matthew Adams (md.adams@utoronto.ca) for details on registering for this program.

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Program Advisor  
Chemical and Physical Sciences  

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 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (Page 50)
- BIO Biology (Page 94)
- CHM Chemistry (Page 113)
- CSC Computer Science (Page 162)
- ECO Economics (Page 188)
- ENV Environment (Page 232)
- ERS Earth Science (Page 179)
- GGR Geography (Page 274)
- JCP Chemistry (Page 113)
- JEG Geography (Page 274)
- JEP Environment (Page 232)
- JGE Geography (Page 274)
- JPE Political Science (Page 401)
- MAT Mathematics (Page 372)
- PHY Physics (Page 394)
- POL Political Science (Page 401)
- SOC Sociology (Page 424)
- STA Statistics (Page 445)
- WRI Communication, Culture, Information and Technology (Page 138)

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 2.0.

First Year: 4.0 credits:
1. Environment Foundation: ENV100Y5
2. Quantitative and Basic Scientific Foundation: 3.0 credits chosen from this list: ANT101H5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, CSC108H5, CSC148H5, ERS101H5, GGR112H5, MAT132H5, MAT134H5, MAT135H5, MAT136H5, PHY136H5, PHY137H5, PHY146H5, PHY147H5

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. Life Science Core: 1.0 credit chosen from this list: BIO201H5, BIO205H5, BIO211H5, GGR227H5

3. Physical Geographical and Earth Science Core: 1.5 credit from the following: CHM211H5, CHM231H5, CHM242H5, GGR201H5, GGR214H5, GGR217H5, ERS201H5, ERS202H5, ERS203H5, JCP221H5

4. Quantitative, Digital, and Analytical Methods Core: 1.0 credit: BIO360H5, BIO361H5, CHM211H5, GGR276H5, GGR278H5, STA215H5, STA220H5, STA221H5

Upper Years: 4.0 credits:
1. Environmental Science Perspective: ENV330H5
2. Field, Project-based, Experiential, and Research Perspectives: 1.5 credit chosen from this list: BIO416H5, ENV299Y5, ENV332H5, ENV399Y5, ENV496H5, ENV497H5, GGR335H5, GGR379H5, JEG400Y5, JEG417Y5

3. Biogeochemical Perspectives: 1.0 credits chosen from this list: BIO311H5, BIO313H5, BIO333H5, BIO373H5, BIO406H5, ENV495H5, ENV496H5, ERS312H5, ERS315H5, ERS412H5, GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR479H5, GGR484H5

4. Environmental Management Perspectives: 0.5 credit chosen from this list: BIO464H5, ENV205H5, ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, JEP452H5

5. Social, Economic and Policy Perspectives: 0.5 credit chosen from this list: ANT357H5, ANT368H5, ANT370H5, ECO373Y5, ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, ERS312H5, GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR479H5, GGR484H5

Note: ENV490H5, ENV491H5 can substitute for #1, #2, #3, or #4 as course requirements, where appropriate, and with permission of the Program Advisor or Academic Counsellor.

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 + ERS is acceptable, but a course list selected only from ENV + GGR + 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 GSCOBASU3 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. **Environment Foundation:** ENV100Y5
2. **Quantitative and Basic Scientific Foundation:** 3.0 credits chosen from this list: ANT101H5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, CSC108H5, CSC148H5, ERS101H5, GGR112H5, MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT137Y5, PHY136H5, PHY137H5, PHY146H5, PHY147H5

**Second Year:**

1. **Environmental Management Core:** ENV201H5
2. **Life Sciences Core:** 1.0 credit chosen from this list: BIO201H5, BIO205H5, BIO211H5, GGR227H5
3. **Physical Geographical and Earth Science Core:** 1.5 credit chosen from this list: CHM211H5, CHM231H5, CHM242H5, GGR201H5, GGR214H5, GGR217H5, ERS201H5, ERS202H5, ERS203H5, JCP221H5
4. **Quantitative, Digital, and Analytical Methods Core:** 1.0 credit: BIO360H5, BIO361H5, CHM211H5, GGR276H5, GGR278H5, STA215H5, STA220H5, STA221H5

**Third & Fourth Years:**

1. **Environmental Science Perspective:** ENV330H5
2. **Field, Project-based, Experiential, and Research Perspectives:** 1.5 credit chosen from this list: BIO416H5, ENV299Y5, ENV323H5, ENV399Y5, ENV496H5, ENV497H5, ERS325H5, GGR335H5, GGR379H5, JEG400Y5, JEG417Y5
3. **Biogeochemical Perspectives:** 1.0 credits chosen from this list: BIO311H5, BIO331H5, BIO333H5, BIO373H5, BIO406H5, ENV495H5, ENV496H5, ERS312H5, ERS315H5, ERS412H5, GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR479H5, GGR484H5
4. **Environmental Management Perspectives:** 0.5 credit chosen from this list: BIO464H5, ENV205H5, ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, JEP452H5
5. **Social, Economic & Policy Perspectives:** 0.5 credit chosen from this list: ANT357H5, ANT368H5, ANT370H5, ECO373Y5, ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR419H5, GGR420H5, JEP351H5, JEP356H5, JEP452H5, JGE378H5, JPE251H5, JPE252H5, POL343Y5, POL346Y5, POL475H5, SOC349H5, SOC356H5, SOC465H5, WRI375H5
6. **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, 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, 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 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 course with permission of the MScSM Director and Chair of the host department.

Major Program ERMAJ1061 Environmental Science (Science)

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 ENV100Y5 with a mark of 63% or higher.

First Year: 3.0 credits:
1. Environment Foundation: ENV100Y5
2. Quantitative and Basic Science Foundation: 2.0 credits chosen from this list: ANT101H5; BIO152H5, BIO153H5; CHM110H5, CHM120H5; ERS101H5; GGR112H5, MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT137Y5; PHY136H5, PHY137H5, PHY146H5, PHY147H5

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. Life Sciences Core: 0.5 credit chosen from this list: BIO201H5, BIO205H5, BIO211H5; GGR227H5
3. Physical Geographical and Earth Sciences Core: 1.0 credit chosen from this list: CHM211H5, CHM231H5, CHM242H5; ERS201H5, ERS202H5; ERS203H5; GGR201H5, GGR214H5, GGR217H5; JCP221H5
4. Quantitative, Digital, and Analytical Methods Core: 0.5 credit chosen from this list: BIO360H5, BIO361H5; CHM211H5; GGR276H5, GGR278H5; STA215H5, STA220H5, STA221H5

Upper Years: 2.5 credits:
1. Environmental Science Perspectives: ENV330H5
2. Field, Project-Based, Experiential, and Research Perspectives: 0.5 credit chosen from this list: BIO416H5; ENV299Y5, ENV322H5, ENV399Y5, ENV496H5, ENV497H5; ERS325H5; GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR479H5, GGR484H5
3. Biogeochemical Perspectives: 1.0 credit chosen from this list: BIO311H5, BIO331H5, BIO333H5; ENV495H5, ENV496H5; ERS312H5, ERS315H5, ERS412H5; GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR440H5, GGR479H5, GGR484H5
4. Social, Economic & Policy Perspectives: 0.5 credit chosen from this list: ANT357H5, ANT368H5, ANT370H5, BIO464H5; ECO373Y5; ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, ENV435H5; GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR415H5, GGR419H5, GGR420H5; JEP351H5, JEP356H5; JEP452H5; JGE378H5; JPE251H5, JPE252H5; POL343Y5, POL346Y5, POL475H5; SOC349H5, SOC356H5, SOC465H5; WRI375H5 Note: ENV490H5, 491H5 can substitute for #1, #2, #3, or #4 as course requirements, where appropriate, and with permission of the Program Advisor or Academic Counsellor.

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. 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. Environment Foundation: ENV100Y5
PROGRAMS

Environmental Science (HBSc)

2. **Quantitative and Basic Scientific Foundation:** 2.0 credits chosen from this list: ANT101H5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, ERS101H5, GGR112H5, MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT137H5, PHY136H5, PHY137H5, PHY146H5, PHY147H5

**Second Year:**

1. **Environmental Management Core:** ENV201H5

2. **Life Sciences Core:** 0.5 credit chosen from this list: BIO201H5, BIO205H5, BIO211H5, GGR227H5

3. **Physical Geographical and Earth Sciences Core:** 1.0 credit chosen from this list: CHM211H5, CHM242H5, ERS201H5, ERS202H5, ERS203H5, GGR201H5, GGR214H5, GGR217H5, JCP221H5

4. **Quantitative, Digital, and Analytical Methods Core:** 0.5 credit: BIO360H5, BIO361H5, CHM211H5, GGR276H5, GGR278H5, STA215H5, STA220H5, STA221H5

**Third & Fourth Years:**

1. **Environmental Science Perspective:** ENV330H5

2. **Field, Project-Based, Experiential, and Research Perspectives:** 0.5 credit chosen from this list: BIO416H5, ENV299Y5, ENV332H5, ENV399Y5, ENV497H5, ERS325H5, GGR335H5, GGR379H5, JEG400Y5, JEG417Y5

3. **Biogeochemical Perspectives:** 1.0 credit chosen from this list: BIO311H5, BIO331H5, BIO333H5, ENV496H5, ENV497H5, ERS325H5, GGR335H5, GGR379H5, JEG400Y5, JEG417Y5

4. **Social, Economic & Policy Perspectives:** 0.5 credit chosen from this list: ANT357H5, ANT368H5, ANT370H5, BIO464H5, ECO373Y5, ENV310H5, ENV311H5, ENV320H5, ENV393H5, ENV425H5, ENV430H5, ENV435H5, ENV436H5, ENV437H5, ENV438H5, ENV440H5, ENV446H5, ENV447H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR415H5, GGR419H5, GGR420H5, JEP351H5, JEP356H5, JEP452H5, JGE378H5, JPE251H5, JPE252H5, POL343Y5, POL346Y5, POL475H5, SOC349H5, SOC356H5, SOC465H5, WRI375H5

5. **MScSM Courses:** 1.0 credit chosen from this list: SSM1010Y, SSM1020H, SSM1030H, SSM1040H, SSM1050H, SSM1060H, SSM1070H, SSM1080H, SSM201H5, SSM2020H, ECO2908H, EES1107H, EES1124H, EES1125H, ENV1002H, ENV1704H, ENV1707H, 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, SSM1090H, SSM1100Y

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 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 300-400 level.

**Limited Enrolment** — Enrolment in this program is limited to student who have completed ENV100Y5 with a mark of 60% or higher.

**First Year:** 1.0 credit:

1. **Environment Foundation:** 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 Core:** ENV201H5

2. **Life Sciences Core:** 0.5 credit chosen from this list: BIO201H5, BIO205H5, BIO211H5, GGR227H5

3. **Physical Geographical and Earth Sciences Core:** 1.0 credit chosen from this list: CHM211H5, GGR201H5, GGR214H5, GGR217H5, JCP221H5

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Environmental Science (HBSc)  

**Upper Years: 1.0 credit:**

1. **Field, Project-based, Experiential, and Research Perspectives:** 0.5 credit chosen from this list:  
   - BIO416H5; ENV299Y5, ENV330H5, ENV332H5, ENV399Y5, ENV496H5; ENV497H5; ERS325H5;  
   - GGR335H5, GGR379H5; JEG400Y5  

2. **Biogeochemical Perspectives:** 0.5 credit chosen from this list:  
   - BIO311H5, BIO331H5, BIO333H5, BIO373H5; ENV495H5, ENV496H5; ERS312H5, ERS315H5, ERS412H5; GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR311H5, GGR315H5, GGR316H5, GGR317H5, GGR337H5, GGR338H5, GGR372H5, GGR374H5, GGR375H5, GGR376H5, GGR377H5, GGR383H5, GGR384H5, GGR404H5, GGR407H5, GGR440H5, GGR484H5, JGE378H5;  

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. 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)**  
(Fomerly 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, 9T]  
**Prerequisite:** GGR111H5 and GGR112H5 (formerly GGR117Y5) or ENV100Y5

**ENV205H5 Sustainable Tourism (SSc)**  
Tourism has long been an important industry around the world, but increasingly questions are being raised regarding the social and environmental sustainability of tourism. This course will look at the impacts (both negative and positive) that tourism has on the natural environment, society, and local economies. It will explore how tourism relates to mobility, globalization, recreation and outdoor activity, planning, the environment, cultural identities, protected areas, and wildlife conservation. This course begins with an introduction to tourism more generally and then focuses in on critical perspectives and the development of eco-tourism, cultural tourism, and volunteer tourism. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]  
**Exclusion:** GGR356H1  
**Recommended Preparation:** ENV100Y5 and ENV201H5

**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 and International Opportunities (Page 23) 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 sustainability and sustainable development in both the public and private spheres. Sustainability is an integrative concept that addresses social, cultural, political, and economic factors within the constraints of the biophysical environment. [24L, 12T]  
**Prerequisite:** 9 credits including ENV100Y5 and ENV201H5

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University of Toronto Mississauga
ENV311H5 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' and 'human well-being' 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: ENV345H5
Prerequisite: Any 9.0 credits.

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: 9.0 credits including ENV100Y5 or (GGR111H5 and 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. [12L, 24P]
Prerequisite: 9.0 credits, completion of a first-year foundation credit, completion of a second/third-year quantitative methods course and enrolment in an Environmental Science program.

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: 9.0 credits & completion of a Research Methods course (e.g., GGR277H5).

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: 9.0 credits
**ENV393H5 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; Phase I, II, III environmental site assessment; monitoring; mitigation; evaluation; and risk assessment. The types of impact assessment (IA) methods examined vary from year to year (e.g. economic IA, ecological IA, social 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 and International Opportunities (Page 23) for more details.

**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 online. Instructions for the application can be found on the Department of Geography, Geomatics and Environment website: [www.utm.utoronto.ca/geography/field-internship-and-thesis-courses](http://www.utm.utoronto.ca/geography/field-internship-and-thesis-courses)

*Exclusion:* ENV400Y5 or GGR410Y5

*Prerequisite:* Minimum 14 credits, Maximum 18 credits and permission of instructor

**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 non-governmental organizations. Admission for this course will be through an online application. Instructions for the application can be found on the Department of Geography, Geomatics and Environment website: [www.utm.utoronto.ca/geography/field-internship-and-thesis-courses](http://www.utm.utoronto.ca/geography/field-internship-and-thesis-courses)

*Exclusion:* ENV400Y5 or GGR410Y5

*Prerequisite:* Minimum 14 credits, Maximum 18 credits and permission of instructor

**ENV425H5 Managing Urban Ecosystems (SSc)**
This course examines the ways people interact with and manage urban ecosystems. Socio-ecological systems, green infrastructure, environmental justice, ecosystems services, climate change mitigation and adaptation, and sustainability will be discussed in the context of urban ecosystems. 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

**ENV430H5 Environmental Law and Policy (SSc)**
This course introduces students to the challenges and opportunities of environmental law and policy. Students will learn how legal systems can address increasingly complex environmental challenges. This course will include an in-depth look at the toolbox of legal and policy instruments that decision makers have at their disposal to tackle major environmental problems. The focus is primarily Canada though international examples will also be touched upon. Case studies and examples will be used to connect theoretical and legal principals to real world situations. [24L]

*Prerequisite:* 14 credits including (GGR111H5 and GGR112H5) or ENV100Y5 or permission of instructor

*Recommended Preparation:* ENV250Y5
ENV435H5 Resource Management, Circular Economy, and Sustainability (SSc)
This course is an in-depth analysis of resource management principals and practices. The course begins with critical examination of the standard resource management practices, specifically public and private decision-making, using the lens of sustainability which includes systems, integrative, and critical thinking and inter-disciplinary approaches. Next, the concepts of industrial ecology and circular economy are introduced, and resource management principals, models, and practices in circular economy are examined using the lens of sustainability. The course uses real-world examples of circularity to reinforce course concepts. Students' projects include the evaluation of the current state of circular economy in different sectors such as food and agriculture, forestry, manufacturing, and transportation. [24L]
*Prerequisite:* 14.0 credits

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:* 14.0 credits including ENV100Y5 and ENV251H5

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:* 14 credits including ENV100Y5

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. [36L]
*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. [12L, 24P]
*Prerequisite:* 14 credits including ENV495H5 or permission of instructor

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:* 14 credits towards an Environmental Specialist or Major program and permission of instructor
Exceptionality in Human Learning (HBSc)

Offered through the Department of Psychology

Program Director and Faculty Advisor
Professor 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 section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 50)
BIO Biology (page 94)
CHM Chemistry (page 113)
ECO Economics (page 188)
ENG English (page 205)
FRE French (page 258)
HIS History (page 289)
JAL Linguistics (page 349)
LIN Linguistics (page 349)
PHL Philosophy (page 383)
PSY Psychology (page 412)
RLG History of Religions (page 304)
SOC Sociology (page 424)
STA Statistics (page 445)

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), PSY210H5, PSY240H5 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.

Students who do not meet these requirements and/or students who apply in third or later years must have a psychology average of at least 75% (based on a minimum of PSY201H5 and 1.5 recent completed credits in psychology) as well as an AGPA of at least 2.7. These requirements are based on all courses taken during students’ most recent academic year (including Summer, when applicable).

First Year: PSY100Y5; (ANT101H5, ANT102H5)/ (BIO152H5, BIO153H5)/ 1.0 credit from BIO202H5, BIO205H5, BIO206H5, BIO207H5/ SOC100H5

Second Year:
2. PSY210H5, PSY240H5
3. 0.5 credit from the following: PSY202H5 (or equivalent), PSY270H5, PSY274H5, PSY280H5, PSY290H5

Second and Higher Years:
1. 3.0 credits from the following: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY319H5, PSY321H5, PSY325H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY346H5, PSY353H5, PSY374H5, PSY376H5, PSY384H5, PSY391H5, PSY392H5, PSY393H5
2. PSY442Y5 and at least 0.5 credit from the following: PSY400Y5, PSY403H5, PSY404H5, PSY405H5, PSY406H5, PSY410H5, PSY415H5, PSY440H5, PSY474H5, PSY495H5, PSY499H5
3. 2.0 credits from one of the following lists:
   (a) ANT202H5, ANT203H5, ANT204H5, ANT205H5, ANT206H5, ANT207H5, ANT211H5, ANT212H5, ANT214H5, ANT215H5, ANT220H5, ANT241Y5, ANT306H5, ANT322H5, ANT331H5,
ANT332H5, ANT333H5, ANT334H5, ANT335H5, ANT337H5, ANT338H5, ANT341H5, ANT403H5, ANT434H5, ANT437H5, ANT460H5, ANT461H5, ANT462H5

(b) SOC205H5, SOC209H5, SOC211H5, SOC216H5, SOC227H5, SOC240H5, SOC244H5, SOC263H5, SOC275H5, SOC304H5, SOC307H5, SOC310H5, SOC316H5, SOC332H5, SOC333H5, SOC341H5, SOC352H5, SOC356H5, SOC359H5, SOC371H5, SOC375H5, SOC380H5, SOC456H5, SOC457H5

(c) BIO202H5, BIO205H5, BIO206H5, BIO207H5, BIO210Y5, BIO315H5, BIO341H5, BIO371H5, BIO372H5, BIO375H5, BIO380H5, BIO403H5, BIO407H5, BIO434H5, BIO443H5, BIO476H5, BIO477H5, ANT202H5, ANT203H5, ANT331H5, ANT332H5, ANT333H5, ANT334H5

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, CHM243H5, CHM345H5, CHM347H5, CHM361H5, CHM362H5
   - ENG ENG234H5, ENG384H5
   - FRE FRE225Y5, FRE355H5
   - HIS HIS310H5, HIS326Y5, HIS338H5
   - LIN LIN101H5, LIN102H5, LIN200H5, LIN256H5, LIN258H5, LIN358H5, LIN380H5
   - JAL JAL253H5, JAL355H5
   - PHL PHL243H5, PHL244H5, PHL255H5, PHL267H5, PHL271H5, PHL272H5, PHL274H5, PHL277Y5, PHL282H5, PHL283H5, PHL290H5, PHL350H5, PHL355H5, PHL357H5, PHL358H5, PHL367H5, PHL370H5, PHL374H5, PHL376H5
   - RLG RLG314H5
   - WGS Any course

Specialist Program GSCOBSHLMA 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 full-course equivalents (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 full-course equivalents (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.

University of Toronto Mississauga
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 ERMAJ1883 Exceptionality in Human Learning (Science)

Admissions to the Exceptionality in Human Learning Major are administratively suspended as of 2019-2020. Students currently enrolled in the program will be allowed to continue. 7.0 credits are required; including at least 2.0 300/400 level courses

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 75% in PSY100Y5; and
4. successfully completed 1.0 credit from BIO152H5/ BIO153H5/ BIO202H5/ BIO205H5/ BIO206H5/ BIO207H5; and
5. a minimum CGPA of 2.7

First Year: PSY100Y5; 1.0 credit from BIO152H5, BIO153H5, BIO202H5, BIO205H5, BIO206H5, BIO207H5

Higher Years:
   STA215H5/ STA218H5/ STA220H5/
2. PSY210H5, PSY240H5
3. 2.5 credits from the following: PSY310H5,
   PSY311H5, PSY312H5, PSY313H5, PSY315H5,
   PSY316H5, PSY317H5, PSY318H5, PSY319H5,
   PSY321H5, PSY325H5, PSY331H5, PSY333H5,
   PSY340H5, PSY341H5, PSY343H5, PSY344H5,
   PSY345H5, PSY346H5, PSY353H5, PSY374H5,
   PSY376H5, PSY384H5, PSY391H5, PSY392H5,
   PSY393H5, PSY410H5, PSY440H5, PSY442Y5
4. 1.0 additional credit from the following: BIO202H5,
   BIO205H5, BOP206H5, BIO207H5, BIO210Y5,
   BIO315H5, BIO341H5, BIO370Y5, BIO371H5,
   BIO372H5, BIO375H5, BIO380H5, BIO403H5,
   BIO407H5, BIO434H5, BIO443H5, BIO476H5,
   BIO477H5, ANT202H5, ANT203H5, ANT331H5,
   ANT332H5, ANT333H5, ANT334H5

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. **Access to courses.** PSY309H5, PSY319H5, PSY329H5, PSY379H5, PSY369H5 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.

2. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).

3. **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)

Undergraduate Advisor
Ferzeen Sammy
Innovation Complex, KN 3252
905-828-5404
ferzeen.sammy@utoronto.ca

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 188)
MAT Mathematics (page 372)
STA Statistics (page 445)

Specialist Program ERSPE2722 Financial Economics (Science)

This program is intended for students planning careers in finance. It prepares students for jobs in banks, investment services, insurance companies, and finance departments of corporations and government agencies. This program will also prepare students for graduate studies in Economics or Financial Economics. Many courses in the program have a technical or analytical focus.

This program has a stronger focus on courses related to Financial Economics than the Economics Specialist program (ERSPE1478).

Limited Enrolment – Enrolment in this program is limited to students with 70% in ECO100Y5; (63% in MAT133Y5/MAT135H5(63%), MAT136H5(63%)) + 63% in MAT223H5 or (63% in MAT134Y5/(MAT132H5(63%),MAT134H5(63%)) + 63% in MAT223H5 or (60% in MAT137Y5/MAT157Y1) or (80% in MAT132Y5 and 63% in MAT233H5); 70% in ECO206Y5; 70% in ECO208Y5; 70% in ECO227Y5 or (STA256H5(70%),STA260H5(70%)) or (STA257H1(70%),STA261H1(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.

1. ECO100Y5
2. One of the following: i. MAT133Y5 and MAT233H5; or ii. MAT135H5 and MAT136H5 and MAT223H5 Note: (MAT135H5 and MAT136H5) can be replaced MAT135Y5 or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT137Y5 or MAT157Y1

Higher Years:
1. ECO206Y5
2. ECO208Y5
3. ECO227Y5 or (STA258H5 and STA260H5)
4. ECO325H5 and ECO326H5
5. ECO375H5
6. ECO358H5 and ECO359H5
7. 5.0 additional full 300+ ECO credits of which at least 1.5 credits must be chosen from ECO348H5, 349H5, ECO356H1, ECO434H5, ECO440H5, ECO456H5, ECO460H5, ECO461H5, ECO462H1, ECO463H5, ECO475H5. Not more than 1.0 credit in Economic History.

First Year:

13 full credits, including at least 1.0 credit at the 400 level.

University of Toronto Mississauga
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
A. Weir, B.Sc., M.Sc., Ph.D

Forensic Anthropology
T.L. Rogers, B.A., M.A., Ph.D.

Forensic Biology
N. Novroski, B.Sc., M.Sc., Ph.D.

Forensic Chemistry
V. Luk, BSc, MSc, PhD

Forensic Psychology
D. Urbszat, B.Sc., LL.B., M.A., Ph.D.

Forensic Toxicology
K. Woodall, B.Sc., Ph.D.

Adjunct Professors
R.R. Larsen, B.A., M.A., Ph.D.
E. Liscio, P.Eng.

Part-Time Faculty Lecturer - Forensic Identification Specialist
Wade Knaap
Detective Constable (Retired)

Program Administrator, Academic Advisor & Internship Placement Co-ordinator
Teresa Cabral
Room 402, Terrence Donnelly Health Sciences Complex
905-569-4423
teresa.cabral@utoronto.ca

Program Communications & Outreach Coordinator
Murray Clayton
Room 5204, North Establishment
416-705-5876
murray.clayton@utoronto.ca

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 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
- 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 16) section prior to selecting courses.

For courses in this area see:

- ANT Anthropology (page 50)
- BIO Biology (page 94)
- CHM Chemistry (page 113)
- FSC Forensic Science (page 248)
- JCP Chemistry (page 113)
- MAT Mathematics (page 372)
- PHY Physics (page 394)
- PSY Psychology (page 412)
- STA Statistics (page 445)

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 and FSC239Y5 with a 70% or better. (Students applying to enroll after second year must have completed 8.0 credits and achieved at least 75% in each of ANT200H5, ANT202H5, ANT203H5 and ANT205H5) and FSC239Y5 with a 70% or better.
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

**Third Year:** ANT306H5, ANT312H5, ANT317H5, ANT334H5, ANT340H5; (FSC300H5,FSC302H5)/(FSC210H5, FSC303H5), FSC316H5, FSC330H5, FSC340H5, FSC360H5

**Fourth Year:** ANT415H5, ANT436H5/FSC307H5; ANT439H5, ANT441H5; FSC401H5, FSC481Y5/(FSC482H5, FSC483H5)

**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.

**First Year:** ANT101H5, ANT102H5; BIO152H5, BIO153H5; FSC239Y5

**Second Year:** ANT200H5, ANT202H5, ANT203H5, ANT205H5; FSC271H5; STA215H5/ ANT407H5
Specialist Program ERSPE1410 Forensic Biology (Science)

A minimum of 15.5 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**
5. Completion of FSC239Y5 with **70% or better**
6. A minimum Cumulative Grade Point Average of at least **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; (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5) / MAT134Y5 / MAT135Y5 / MAT137Y5 / MAT157Y5; PHY136H5, PHY137H5

Second Year: BIO206H5, BIO207H5, (BIO208H5, BIO209H5)/FSC316H5; CHM242H5, CHM243H5; FSC271H5; STA215H5

Third and Fourth Years:
1. BIO362H5; CHM361H5; (FSC300H5, FSC302H5)/(FSC210H5,FSC303H5); FSC315H5, FSC330H5, FSC340H5, FSC360H5
2. BIO458H5; FSC415H5, FSC416H5, FSC481Y5/(FSC482H5,FSC483H5)
3. 0.5 additional credits from: BIO341H5, FSC350H5, FSC370H5, FSC371H5, FSC401H5, FSC402H5, FSC406H5, FSC407H5

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**
3. Completion of FSC239Y5 with **70% or better**
5. A minimum Cumulative Grade Point Average of at least **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: CHM110H5, CHM120H5; BIO152H5, FSC239Y5; (MAT132H5, MAT134H5) / (MAT135H5,
Forensic Science (HBSc)

Programs

MAT136H5 / MAT134Y5 / MAT135Y5 / MAT137Y5 / MAT157Y5; PHY136H5, PHY137H5

Higher Years:
1. BIO200H5, CHM211H5; JCP221H5, CHM231H5, CHM242H5, CHM243H5; FSC271H5
2. CHM311H5, CHM331H5/ CHM333H5, CHM361H5, CHM396H5, CHM397H5, STA220H5
3. (FSC300H5, FSC302H5) / (FSC210H5 / FSC370H5, FSC303H5), FSC311H5, FSC330H5, FSC340H5, FSC360H5, FSC402H5, FSC403H5
4. CHM414H5, CHM416H5
5. FSC481Y5/ (FSC482H5,FSC483H5) (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 Enrollment – Admission into the Forensic Psychology Specialist Program is limited 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 minimum program entry 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 4.0 credits, including 3.0 science credits
3. Completion of PSY100Y5 with a minimum average of 75% or better
4. Completion of FSC239Y5 with a minimum average of 70% or better
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.

Students applying to enroll after second year must also have:
1. Completed 8.0 credits.
2. Completed PSY201H5, PSY202H5 (or equivalent), FSC220H5, and at least an additional 1.0 credit in 200 series PSY courses with a minimum average of 77% for those five half courses.
3. 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: PSY100Y5; FSC239Y5; BIO152H5, BIO153H5

Second Year:
1. PSY201H5, PSY202H5/ equivalent
2. FSC271H5, FSC220H5

Third and Fourth Year:
2. One laboratory course from: PSY329H5, PSY369H5
3. 0.5 credits from the following: FSC350H5, FSC371H5, FSC401H5, FSC402H5, FSC403H5, FSC406H5, FSC407H5
4. 0.5 credit from PSY 400 level series courses
5. FSC420H5, FSC481Y5/ (FSC482H5, FSC483H5)

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 Science 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 Requirements listed below. 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 FSC239Y5 with 70% or better.
3. Completion of CHM110H5, CHM120H5 with 65% or better.
4. Completion of (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5) or MAT134Y5 or MAT135Y5 or MAT137Y5
5. 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.
6. 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: BIO152H5, BIO153H5; CHM110H5, CHM120H5; FSC239Y5; (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5) / MAT134Y5 / MAT135Y5 / MAT137Y5; PHY136H5, PHY137H5

Second Year: CHM242H5, CHM243H5; FSC271H5; STA215H5/ STA220H5

Third Year: FSC303H5/ FSC300H5; FSC330H5; FSC360H5;

Fourth Year: 0.5 credit from the following: FSC302H5, FSC307H5, FSC311H5, FSC314H5, FSC315H5, FSC316H5, FSC320H5, FSC340H5, FSC350H5, FSC351H5, FSC370H5, FSC401H5, FSC402H5, FSC403H5, FSC406H5, FSC407H5, FSC416H5, FSC430H5, FSC489H5
Minor 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: FSC303H5, FSC360H5 and 0.5 credit from FSC210H5, FSC220H5, FSC307H5, FSC311H5, FSC314H5, FSC315H5, FSC316H5, FSC320H5, FSC330H5, FSC350H5, FSC351H5, FSC370H5,

Fourth Year:
- FSC430H5
- 0.5 credit from FSC401H5, FSC402H5, FSC403H5, FSC406H5, FSC415H5, FSC416H5, FSC420H5

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 specialties. 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]
This is a general first year course open to everyone.
PLEASE NOTE: The required FSC Program 1st year introductory course is: FSC239Y5 Introduction to Forensic Science
FSC101H5 The Real Law & Order (SCI)
As a compliment to FSC100, this class transports students from the crime scene to the courtroom, to learn how forensic evidence and scientific methods hold up in court to become admissible. Students will discover the differences between approved and junk science, and see how emerging forensic sciences contribute to exonerations, addressing the impact of popular media portrayals on juror expectations, knowledge and misconceptions. [36L]
Exclusion: FSC239Y5
Prerequisite: FSC100H5
This is a general first year course open to everyone. PLEASE NOTE: The required FSC Program 1st year introductory course is: FSC239Y5 Introduction to Forensic Science

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 or BIO152H5

FSC210H5 Physical Evidence and Microscopy (SCI)
Forensic Science examines physical evidence in relation to the law. There are a number of scientific techniques used to characterize physical evidence, but perhaps the most utilized technique is microscopy. In this course, students will practice how to process and characterize trace evidence using a number of different microscopy techniques, such as stereomicroscope, polarized light microscope (PLM), comparison microscope, scanning electron microscope (SEM), and confocal microscope. The theory and operation behind each microscopy technique will be discussed during lecture, while students will have the opportunity to operate the different microscopes during laboratory sessions. [24L, 24P]
Prerequisite: FSC239Y5

FSC220H5 Introduction to Forensic Psychology (SCI)
This course provides an introductory overview of the many ways psychological research and theories (i.e. behavioural science) can deliver useful information in collecting and assessing evidence for criminal investigation, trial, and prevention. Topics may include: eyewitness testimony, deception, criminal profiling, false confession, mental illness, victim trauma, criminal responsibility, risk assessment, serial killing, hate crimes, sexual offending, prejudiced policing, and jury decision-making. The aim of this course is to give students general insight into the various applied specializations of forensic psychologists. [36L]
Prerequisite: PSY100Y5

FSC239Y5 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, 8T]
(_PRIORITY 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, 12S]
Prerequisite: FSC239Y5
(Priority 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 and FSC271H5
(Priority given first to Forensic Science Specialists and Majors)

FSC302H5 Advanced Forensic Identification (SCI,EXP)
Continuing from FSC300H5, this course focuses on advanced crime scene examination and the use of evidence detection techniques. Topics include: advanced fingerprint development techniques, footwear collection and identification, analysis report writing, bloodstain pattern interpretation and crime scene plan drawing. Additional topics discuss biometrics, examiner bias, the expert witness, crime scene examination protocols and courtroom testimony. [24L, 24P]
Prerequisite: FSC300H5
(Priority given first to Forensic Science Specialists and Majors.)
FSC303H5 Techniques of Crime Scene Investigation (SCI, EXP)
This course will provide students with an introduction to forensic photography, crime scene processing, and forensic identification. Topics include, but are not limited to: fingerprint identification, chance impression evidence, physical evidence, crime scene and victim photography, and proper documentation of a crime scene. Students will gain an understanding of the basic "toolkit" required for crime scene processing, and learn the fundamentals of proper collection and analysis of physical evidence. [12L, 24P]
Exclusion: FSC300H5 or FSC302H5
Prerequisite: FSC239Y and FSC271H5

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
Limited Enrolment and Application Process: see Anthropology department website for more details.

FSC307H5 Missing Persons DVI and Unidentified Human Remains (SCI)
The goal of this course is to gain a basic understanding of the case management involved in missing persons, disaster victim identification, and unidentified human remains cases. Topics covered will include the interdisciplinary interactions between anthropology, odontology, fingerprinting and forensic genetics in the identification and databasing of both missing persons and recovered unidentified human remains. [36L]
Prerequisite: (ANT202H5 or BIO207H5). Priority given first to students enrolled in the Forensic Specialist Program and Forensic Science Majors.

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: CHM211H5 and (CHM110H5 and CHM120H5) or CHM140Y5
Recommended Preparation: FSC239Y5 and CHM311H5

FSC314H5 Current Trends in Forensic Biology (SCI)
A lecture-based course examining contemporary topics in forensic biology. The course will emphasize group discussion where students will examine, review, criticize, and present on current trends and fundamental topics within forensic biology, which could include evidence screening and serology, DNA analysis methodology, forensic technological developments/enhancements as well as current ethical and/or political changes in the field. The implications and applications of forensic biology research advances will also be explored. The theme of the course is expected to be topical and current, and to vary from year to year to accommodate the interests of both the students enrolled in the course and the faculty member(s) teaching the course. [36L]
Prerequisite: BIO152H5, FSC239Y5, FSC271H5

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] (Priority given first to Forensic Science Specialists and Majors; then Minors.)
Prerequisite: BIO206H5 and BIO207H5

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 and FSC271H5
Corequisite: FSC360H5
Preference given to FSC Specialists and Majors.
FSC320H5 Forensic Psychopathology (SCI)
Pathology is the study of disease and psychopathology is the study of mental illness. In Forensic Psychopathology, then, we make inquiries about mental illness in the context of forensic practices. In this course, we will explore multiple topics in the field providing the student with a general insight into its history, scientific merits, and practical relevance. We will survey prevailing theories on mental health, illness, and treatment. Investigate psychiatric diagnoses such as (juvenile) Conduct Disorder, Antisocial Personality Disorder, and Psychopathy, hereunder their application and relevance in risk assessment, behavior prediction, and offender rehabilitation. We will also discuss methodological, ethical, and legal issues in the field, for example, the scientific validity of psychiatric diagnostics, the ethical implications of using psychiatric assessments in forensic institutions, and the legal responsibility of mentally ill offenders. [24L, 24P]

FSC330H5 Best Practices in Forensic Science (SCI)
This course will guide students through the common fundamentals of quality assurance, health & safety, resiliency and post-traumatic stress disorder (PTSD) training and report writing in forensic science professions. [24L, 12S]
Prerequisite: FSC271H5

FSC340H5 Research Design (SCI)
This course introduces students to common methods of research design and the nature of data collection. Students will learn how to pose a meaningful research question, to select appropriate data types, to define variables, examine bias, confounding factors, and select appropriate statistics that address their purpose. [24L, 12S]
Prerequisite: FSC271H5

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. [36L]
Prerequisite: FSC239Y or permission of instructor (Priority given to Forensic Science Specialists and Majors.)

FSC351H5 Advanced 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. [36L]
Prerequisite: FSC239Y/Permission of Instructor (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. [24L, 12S]
Prerequisite: FSC239Y5 and FSC271H5 (Priority given first to Forensic Science Specialists and Majors; then Minors.)

FSC370H5 Forensic Psychopharmacology (SCI)
This course introduces students to the area of psychopharmacology (drug induced changes in mood, thinking and behaviour). The mechanisms of action of drugs in the nervous system and their effects on the brain and on behaviour will be explored and the significance of psychopharmacology in criminal investigations and trials will be discussed. [24L, 12S]
Prerequisite: FSC239Y5 and FSC271H5 and BIO152H5

FSC371H5 The Science of Cannabis (SCI)
This course introduces students to the science of cannabis. Students will learn about the constituents of cannabis, methods of analysis and the pharmacology of cannabinoids. In addition, the role of cannabis in forensic case work will be explored. [24L; 12S]
Prerequisite: FSC370H5

FSC399Y5 Research Opportunity Program (SCI,EXP)
This course provides senior undergraduate students who have developed some knowledge of a discipline and its research methods an opportunity to work in a research project. 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. This course is aimed at facilitating International Research Opportunities offered at U of T’s partner institutions and coordinated through the Centre for International Experience. For details see Experiential and International Opportunities.
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 and (FSC316H5 or BIO210Y5)
Recommended Preparation: FSC271H5
(Priority given first to Forensic Science Specialists and Majors; then Minors.)

FSC402H5 Forensic Toxicology (SCI)
Forensic toxicology is the application of the principles and methods used in toxicology to matters related to the law. The fundamental foundation of forensic toxicology is pharmacology and analytical chemistry, thus lectures will focus on the review of pharmacokinetics, pharmacodynamics, 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. [36L]
Prerequisite: FSC239Y5 and (CHM110H5 and CHM120H5) or CHM140Y5
Recommended Preparation: FSC271H5
(Priority given first to Forensic Science Specialists and Majors; then Minors)

FSC403H5 Forensic Analytical Toxicology (SCI)
Analytical toxicology is the isolation, detection, identification, and quantitation of foreign compounds (xenobiotics) in biological and other specimens. This course integrates theoretical and practical aspects of analytical chemistry with forensic toxicology. General aspects of method development, implementation, validation, and laboratory operation will be explored. [24L, 15P]
Prerequisite: FSC239Y5 and CHM211H5
Recommended Preparation: CHM311H5 and FSC402H5

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 or BIO210H5 or BIO210Y5 or ANT205H5 or 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 (ANT202H5 or ANT205H5 or 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 and 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 and (FSC300H5, FSC FSC302H5) or Permission of Instructor
(Priority given first to Forensic Science Specialists and Majors; then Minors.) Limited Enrolment and Course Application required. Application Process see: https://www.utm.utoronto.ca/forensic/applications
FSC415H5 Advanced Methods in Forensic Biology (SCI)
This advanced course explores the methodologies and data interpretation of forensic DNA typing, and other forensic biology techniques. The course will cover the principles, protocols, and current practices in an effort to understand the "what", "how" and "why" of DNA analysis in a forensic context. Students will also learn about new and future trends in the field of forensic DNA typing, where discussion and evaluation of the primary literature is a key component of this course. Practical sessions will focus on the advanced techniques discussed in lecture. [36L, 36P]
Prerequisite: FSC315H5

FSC416H5 Population Genetics (SCI)
This course introduces students to the genetic variation between and within populations. The topics include evolutionary forces, quantitative genetics, and Bayesian statistics as it applies to forensic biology. [24L, 12S]
Exclusion: EEB459H1
Prerequisite: (ANT202H5 or BIO207H5) and STA215H5

FSC420H5 Field and Lab Methods in Forensic Psychology (SSc,EXP)
This course introduces students to field practices and research procedures in Forensic Psychology. The topics in field practice may include, but are not limited to: administrating risk assessment; conducting semi-structured patient interviews; fitness to stand trial assessment; mental health diagnostics; psychological profiling in criminal investigation; administering patient records; trial preparation. The tasks related to research procedures may include, but are not limited to: research literature searches and citation management; writing ethics proposals; data collection, annotation, analysis, and storage; writing abstracts, critical analysis, and methods; writing peer-review responses; formalizing and executing research theory, hypotheses and design. [12L, 36P]
Prerequisite: FSC220H5 and PSY344H5

FSC430H5 Seminar in Forensic Science (SSc,SCI)
Key themes in forensic science will be addressed, informed by the various interdisciplinary perspectives of students enrolled in the Forensic Science Minor. [36S]
Prerequisite: FSC360H5

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, 36P] ANT439H5 is offered in alternate years, alternating with ANT441H5.
Prerequisite: ANT205H5 and ANT334H5
Corequisite: ANT340H5
Recommended Preparation: ANT306H5

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. Students MUST apply for this course. Course Application, Information & Procedures: https://www.utm.utoronto.ca/forensic/applications
Exclusion: FSC482H5 or FSC483H5
Prerequisite: Enrolment in a Forensic Science Specialist Program and completion of the statistics course(s) requirement listed within the student’s Forensic Science Program (ie. STA215H5 and STA220H5 and STA221H5 and BIO360H5 and BIO361H5 and PSY201H5 and PSY202H5) and FSC300H5 and FSC302H5 and permission of instructor. (Restricted to Forensic Science Specialists)

Notes:
1. Internship Placements are arranged by the FSC Program.
2. Students MUST apply for this course and the Course Application is due in the February preceding the placement. Course Application, Information & Procedures: https://www.utm.utoronto.ca/forensic/applications
3. There will be an information session regarding Internship Placements, preceding the application period.
4. Students must have one free day (Monday - Friday) to work at their internship placement site and must be in the final year before graduation.
5. Students are expected to provide their own transportation to placement work site.
**FSC482H5 Professional Practice in Forensic Science (SCI)**
This course will address practical considerations of professional practice, including professional writing, ethics in research, interviews, mock trial, and journal publication. **Students MUST apply for this course.** Course Application & Procedures: [https://www.utm.utoronto.ca/forensic/applications](https://www.utm.utoronto.ca/forensic/applications)  
*Exclusion: FSC481Y5*  
*Prerequisite: Enrolment in a Forensic Science Specialist Program and completion of the statistics course(s) requirement listed within the student’s Forensic Science Program (i.e. STA215H5 and STA220H5 and STA221H5 and BIO360H5 and BIO361H5 and PSY201H5 and PSY202H5) and FSC300H5 and FSC302H5 and FSC340H5 and permission of instructor. (Restricted to Forensic Science Specialists)*  
*Corequisite: FSC483H5*

1. Students MUST apply for this course and the course application is due the February preceding the course. Course Application, Information & Procedures: [https://www.utm.utoronto.ca/forensic/applications](https://www.utm.utoronto.ca/forensic/applications)
2. There will be an information session regarding this course, preceding the application period.
3. Students must **must be in the final year before graduation.**
4. This course MUST be taken together with FSC483H5

**FSC483H5 Collaborative Research Internship (SCI,EXP)**
As the alternative capstone experience, this course provides students the opportunity to work in a cross-disciplinary collaborative environment to address case-based research questions. **Students MUST apply for this course,** and topics will be made available at the time of application. Course Application & Procedures: [https://www.utm.utoronto.ca/forensic/applications](https://www.utm.utoronto.ca/forensic/applications)  
*Exclusion: FSC481Y5 or FSC489Y5*  
*Prerequisite: Enrolment in a Forensic Science Specialist Program and completion of the statistics course(s) requirement listed within the student’s Forensic Science Program (STA215H5 and STA220H5 and STA221H5 and BIO360H5 and BIO361H5 and PSY201H5 and PSY202H5) and FSC300H5 and FSC302H5 and permission of instructor. (Restricted to Forensic Science Specialists)*  
*Corequisite: FSC482H5*

**Notes:**
- Topics will be made available at the time of application.
- Students MUST apply for this course and the course application is due in the February preceding the internship. Course Application & Procedures: [https://www.utm.utoronto.ca/forensic/applications](https://www.utm.utoronto.ca/forensic/applications)
- There will be an information session regarding this course, preceding the application period.
- Students must have one free day (Monday - Friday) to work on their collaborative research internship and **must be in the final year before graduation.**
- This course MUST be taken together with FSC482H5

**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

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R. Hong, B.A., M.A., 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 French language and culture in Canada and throughout the French-speaking world. For students wishing to pursue a program leading to a high level of competence in French, we offer two series of language courses: FSL105H5, FSL106H5, FSL205Y5, FSL305Y5, FSL405H5, FSL406H5 for minors; FRE180H5, FRE181H5, FRE280Y5, FRE382H5, FRE383H5, for majors and 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.

Native or native-like speakers of French for whom the FRE280Y5 prerequisite is waived are encouraged to take FRE 200-level courses in French Linguistics.

French Literary and Cultural Studies and Teaching and Learning (FRE225Y5, FRE240H4, FRE241H5, FRE272Y5). They may also take FRE382H5, FRE442H5 & FRE482H5.

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 Quebec 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 in another French university.

2. The series FSL105H5 to FSL405H5/ FSL406H5, 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 autonomous learning beyond 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 take FSL205Y5 or FSL305Y5 will be required to provide a high school record as evidence of their level in French. Particularly well-qualified students may, based on the results on the departmental French 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.

Please note that:

• Before enrolling in a French language course for the first time all students MUST complete the Placement Test (https://frenchpt.utm.utoronto.ca/).
• FSL courses are NOT OPEN TO NATIVE SPEAKERS OF FRENCH.

These are guidelines for first-year course selection:

• FSL105H5: No knowledge of French (no secondary school studies).
French (HBA)

Programs

- **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 (https://frenchpt.utm.utoronto.ca/).

- **Complete Placement Test (https://frenchpt.utm.utoronto.ca/)**: Extended French (12U - Extended).

- **FRE280Y5**: Immersion French (12U - Immersion).

- **Consult Department/as indicated by Placement Test (https://frenchpt.utm.utoronto.ca/) results**: French-language schooling.

- Students who have had French-language schooling and/or have passed the French or international baccalauréat MUST consult with the department PRIOR to enrolling in ANY FRE course and CANNOT enrol in any FSL series courses.

**Online Placement Test site is located at**

https://frenchpt.utm.utoronto.ca/

Courses offered every year: FSL105H5, FSL106H5, FSL205Y5, FSL305Y5, FSL405H5, FSL406H5; FRE180H5, FRE181H5, FRE225Y5, FRE240H5, FRE241H5, FRE272Y5, FRE280Y5, FRE382H5, FRE383H5

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:

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**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 in French and/or Italian, including at least 2.0 in French, 2.0 in Italian, and 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**

**Program Requirements**: 7.0 credits are required. **All written work will be done in Italian in all courses**.

1. ITA200Y5/ ITA201Y5 and ITA350H5

2. ITA351H5/ ITA352H5/ ITA450H5

3. ITA437Y5

4. 2.0 additional credits in Italian Language; Linguistics; Teaching and Learning.

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).

**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/ FRE380H5

2. 4.0 FRE credits to be completed within ONE area of concentration:

   - French Linguistics
   - French Literary and Cultural Studies

University of Toronto Mississauga
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: 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.

Third & Fourth Year:

- FRE382H5, FRE383H5/ FRE380H5
- 1.0 credit to be chosen among the FRE Language Teaching and Learning courses (FRE325H5, 345H5, 352H5, 353H5, 355H5, 454H5)
- 1.0 credit to be chosen among the LTL Language Teaching and Learning courses (LTL380H5, 487H5, 456H5, 466H5, 468H5)

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.

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/ FRE380H5/ FRE442H5
2. 3.0 credits to be completed in ONE area of concentration: (a) French Linguistics; (b) French Literary and Cultural Studies

Course Categories:

- Teaching & Learning: LTL380H5, LTL417H5, LTL456H5, LTL486H5, LTL488H5; JFL389H5; FRE325H5, FRE345H5, FRE352H5, FRE353H5, FRE355H5

NOTE: No more than 1.0 FRE credits taught in English (such as FRE342H5, FRE388H5, JFL389H5, FRE454H5) can be counted towards a Major or Specialist program in French.

Minor Program ERMIN1000 Functional French (Arts)

For students seeking a level of linguistic and cultural competence necessary for using the French language in professional Francophone environments.

Program Requirements: 4.0 credits in either FSL or FRE with at least 2.0 credits at the 300/400 level. The obligatory core series courses (FSL105H5, FSL106H5, FSL205Y5, FSL305Y5) must be included in the student’s program, unless exemptions are approved by the Department. 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-LTL) providing that the prerequisite requirements have been met.

Courses offered in English are excluded (LTL).

For any exemption received, the student must replace the course(s) in question with other suitable FSL/FRE courses in order to complete the required minimum 4.0 courses.

Minor Program ERMIN1054 Francophone Studies (Arts)

For students wishing to develop an understanding and appreciation of the mentality and diversity that Francophone cultures express.

Admissions to the Francophone Minor Program (ERMIN1054) are administratively suspended as of 2017-2018. Students currently enrolled in the program will be allowed to continue.

Program Requirements: 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.

Program Requirements: 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, Placement Test (https://frenchpt.utm.utoronto.ca/) results or written permission of the department 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. An awareness of various francophone cultures and communities will be developed. [36L, 12P] Exclusion: FSL100H1 or higher. Not open to students who have previously studied French. Not open to native speakers of French.

FSL106H5 Functional French-Advanced Beginner (HUM)
Through the use of teaching materials adapted to their level, students will continue to develop their linguistic abilities and to use them in specific situations. For instance, students 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. An awareness of various francophone cultures and communities will be developed. [36L, 12P] Exclusion: Grade 11 Core French or higher/FSL102H1/ All grade levels in French Immersion/Extended French/French Secondary Schools. Prerequisite: FSL105H5 or the equivalent as determined by the department’s Placement Test. Before enrolling in a French language course for the first time all students MUST complete the Placement Test (https://frenchpt.utm.utoronto.ca/).

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 or FSL221Y1 or 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 the equivalent as determined by the department’s Placement Test (https://frenchpt.utm.utoronto.ca/).

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 or FSL305Y5. Not open to native speakers of French and graduates of Extended French or French immersion programs. Prerequisite: FRE180H5 or the equivalent as determined by the department’s Placement Test (https://frenchpt.utm.utoronto.ca/).

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. An awareness of various francophone cultures and communities will be developed. [72L, 24P] Exclusion: Grade 12 Core French/FSL121Y1 or FSL205H5/ All grade levels in French Immersion/Extended French/French Secondary Schools. Prerequisite: FSL106H5 or the equivalent as determined by the department’s Placement Test. Before enrolling in a French language course for the first time all students MUST complete the Placement Test (https://frenchpt.utm.utoronto.ca/).
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 or LTL227H5.
Prerequisite: 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. [24L, 12T]
Exclusion: FRE240Y5
Prerequisite: FRE181H5

FRE241H5 Reading Modern French and Quebec 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. [24L, 12T]
Exclusion: FRE240Y5
Prerequisite: 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: FRE181H5 or permission of the department.

FRE280Y5 Language Practice: Written (HUM)
This course develops writing skills at an intermediate level in the areas of vocabulary, grammar and style. Emphasis will be put on practice and error correction. [48L, 24T]
Exclusion: FSL280Y5 or FSL331Y1 or FSL341Y1 or higher.
Prerequisite: FRE181H5 or equivalent/Grade 12 Immersion or Extended French or the equivalent as determined by the department's Placement Test (https://frenchpt.utm.utoronto.ca/).

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 in daily conversations and for an understanding of Francophone culture through exposure to songs, radio, interviews, storytelling, etc. Focus on spontaneous speech, formal and informal interactions, as well as presentation skills. [24L, 12T]
Exclusion: Native or near native speakers of French and FRE383H5.
Prerequisite: (FRE180H5 and FRE181H5) or FSL305Y5
Corequisite: FRE280Y5
Recommended Preparation: FRE1801H5 and FRE181H5.

FRE299Y5 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 and International Opportunities (Page 23) for more details.

FSL305Y5 Functional French-High Intermediate (HUM)
Course will focus on analyzing 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. An awareness of various francophone cultures and communities will be developed. Formerly FSL305H and FSL306H. [72L, 24P]
Exclusion: (FRE180H5 and FRE181H5) or FSL221Y1 or (FSL305H5 and FSL306H5). All grade levels in French Immersion/Extended French/French Secondary Schools.
Prerequisite: (FSL205Y5 or FSL206H5) or the equivalent as determined by the department's Placement Test (https://frenchpt.utm.utoronto.ca/).

FRE312H5 From the Gothic and Fantastic Novels to Realism in Quebec (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 or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5) or permission of the department.
FRE315Y5 French Theatre and Performance (HUM, EXP)
A study of French Theatre with a consideration of staging and acting techniques mainly through the production of a specific play. This course includes an experiential learning component. [24L, 48P, 24T]
Prerequisite: FRE280Y or permission of the instructor.

FRE316H5 Urban Attraction and the Quebec Contemporary Novel (HUM)
A Study of the new forms of literary expression that took place in Quebec after the Second World War to today. [24L]
Prerequisite: (FRE280Y5 or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5) or permission of the department.

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: (FRE225Y5 or FRE272Y5) and FRE240H5 and FRE241H5 (or FRE240Y5) or FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.

FRE340H5 Reading and Interpreting French Literature: An Introduction to Literary Criticism (HUM)
Techniques of literary criticism and analysis based on a detailed study of selected novels, drama and poetry in French literature. [24L]
Prerequisite: (FRE280Y5 or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5) or permission of the department.

FRE342H5 History of Quebec and French Canada (HUM)
This course examines the history of French Canada, focusing in particular on the period from the 1830s to the present. It explores questions of culture, political community, language, and geography, looking to these aspects of historical experience to situate Quebec and French Canada with respect to North America’s English-speaking majority as well as to the French-speaking nations of Europe, Africa, and elsewhere in the Americas. The course is taught in English but students will work with French-language material and will be required to write all tests and assignments in French. This course is taught in conjunction with HIS342H5.
Exclusion: HIS342H5
Prerequisite: FRE280Y5 or permission of the instructor.

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 or FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

FRE352H5 Teaching French Grammar (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 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: (FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

FRE353H5 Teaching French Culture (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: (FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

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: (FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).
FRE356H5 Versailles and the Classical Age (HUM)
A close survey of selected literary texts from 17th century France in their political, social and artistic context. A selection from French drama, poetry and prose of the French classical age will be presented and analyzed. A study of Versailles palace and gardens and of life at court during the reign of King Louis XIV, the 'Sun King', will be included. Recommended companion course for FRE373H5 The French Language through Space and Time II. [12L, 12T]

Prerequisite: FRE280Y or permission of the instructor.

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. [12L, 12T]

Prerequisite: (FRE280Y or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5)

Recommended Preparation: LAT100Y5 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: (FRE280Y or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5).

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]

Prerequisite: (FRE280Y or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5).

FRE365H5 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: (FRE280Y or a minimum grade of 77% in FSL406H5) and (FRE240H5 and FRE241H5 or FRE240Y5).

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: (FRE240H5 and FRE241H5 or FRE240Y5) and (FRE280Y or a minimum grade of 77% in FSL406H5).

FRE372H5 The French Language through Space and Time 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 9th to the 15th century will be included. The course touches upon history, historical linguistics, socio-linguistics and French literature. Recommended companion courses: LAT100Y5 or equivalent and FRE357H5. [12L, 12T]

Exclusion: FRE373Y5

Prerequisite: FRE280Y or a minimum grade of 77% in FSL406H5 or equivalent.

Recommended Preparation: Recommended companion courses are LAT100Y5 or equivalent and/ or FRE357H5.
FRE373H5 The French Language through Space and Time 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. [12L, 12T]
Exclusion: FRE373Y5.
Prerequisite: FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.
Recommended Preparation: Recommended companion course: FRE356H5.

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 and FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.

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 and FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.

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). [12L, 24T]
Prerequisite: FRE240H5 and FRE241H5 (or FRE240Y5) and FRE280Y5 (or a minimum grade of 77% in FSL406H5 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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN380H5
Prerequisite: FRE225Y5 and FRE280Y5

FRE382H5 Advanced Language Practice: Written French (HUM)
This course develops writing skills at an advanced level in the areas of vocabulary, grammar and style. Emphasis will be put on practice and error correction. [12L, 24P]
Exclusion: (FSL382H5 or FSL442H1). Not normally open to francophones and/or holders of the French baccalaureat but contingent on the results of the French language placement test.
Prerequisite: FRE280Y5 or a minimum grade of 77% in FSL406H5 or the equivalent as determined by the department's Placement Test.

FRE383H5 Advanced Language Practice: Oral (HUM, INTLO)
This course offers a consolidation of oral production, aural comprehension and mastery of topic-specific vocabulary that enhance communication skills in various academic contexts and authentic situations. Projects and activities are designed to enable students to develop various types of oral communication skills necessary in formal and academic settings such as professional interview and public speech. Students have the option of participating in local or out-of-the-province learning experience. When travel experience is offered, additional costs and application processes apply. [24L, 12P]
Exclusion: (FSL383H5 or FSL443H1) and not open to native speakers of French and holders of the French baccalaureat.
Prerequisite: FRE280Y5 or (FSL405H5 and FSL406H5).
Recommended Preparation: FRE283H5

FRE386H5 French Semantics (HUM)
Various approaches to the notion of meaning; its functioning at all levels of representation. [12L, 12T]
Exclusion: FRE386H1
Prerequisite: FRE272Y5, FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.
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 and FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.
Recommended Preparation: FRE283H5

FRE388H5 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 (for example French immersion programs), and various methods used in the study of bilingualism in individuals. Bilingual/multilingual corpora containing French as one of the languages will be examined. The language of instruction will be English. Students will have the option to write assignments in either English or French. Written work to be completed in French for credit towards a Specialist (French) or Major (French).
Suggested companion course FRE325H5. [24L, 12T]
Prerequisite: FRE225Y5 and FRE272Y5, plus a 0.5 credit at 300-level among French Linguistics courses or equivalent at the 300-level in PSY
Recommended Preparation: Suggested companion course FRE352H5.

JFL389H5 Second Language Assessment (HUM)
This course provides an introduction to the principles and frameworks of second language assessment as well as to the practices of standardized testing and classroom assessment. We begin by discussing models of linguistic competence and frameworks for second language assessment as well as test design including language benchmarking. In the second part of the course, the focus turns to best practices in the assessment of vocabulary, grammar, comprehension, production, and socio-pragmatic competence. [24L, 12T]
Prerequisite: FRE272Y5 or (LIN101H5 and LIN102H5)

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 or FRE390H5 or FRC391H5
Prerequisite: FRE280Y5 or (a minimum grade of 77% in FSL406H5) or equivalent.

FRE393H5 French Society through Film (HUM)
A historical perspective on French films with a focus on the specificity of French cinema from the Poetic Realism of the 1930s to the New Wave of the 1950s and 1960s, the ‘cinema du look’ of the 1980s and the various genres of contemporary French cinema: heritage film, film noir and comedies in particular. Special attention will be paid to issues in French society as depicted in films. Recommended foundation course for FRE397H5. [24L, 24T]
Exclusion: FRE394H5 or FRC393H5
Prerequisite: FRE280Y5 or (a minimum grade of 77% in FSL406H5) or equivalent.
Recommended Preparation: FRE283H5

FRE397H5 Colonialism and Post-colonialism in French Cinema (HUM)
Exclusion: FRE396H5 or FRE395H5 or FRC397H5
Prerequisite: FRE283H5 and FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.
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 and International Opportunities (Page for more details.
Prerequisite: FRE240H5 and FRE241H5 (or FRE240Y5) or 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 and 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. An awareness of various francophone cultures and communities will be developed. Formerly FSL385H5. [24L, 12P] **Exclusion:** FSL386H5 or FSL331Y1 or FRE180H5 or FRE181H5 or FRE280Y5 or FRE283H5 or FRE383H5. **Not open to francophones and/or holders of the French baccalauréat but contingent on the results of the Placement Test.** **Prerequisite:** FSL305Y5 or the equivalent as determined by the department’s Placement Test. Before enrolling in a French language course for the first time all students MUST complete the Placement Test (https://frenchpt.utm.utoronto.ca/).

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. An awareness of various francophone cultures and communities will be developed. Formerly FSL385H5. [24L, 12P] **Exclusion:** FSL385H5 or FSL386H5 or FSL331Y1 or FSL321Y1 or FRE180H5 or FRE181H5 or FRE280Y5 or FRE283H5 or FRE383H5. **Not open to francophones and/or holders of the French baccalauréat but contingent on the results of the Placement Test.** **Prerequisite:** FSL405H5 or the equivalent as determined by the department's Placement Test. Before enrolling in a French language course for the first time all students MUST complete the Placement Test (https://frenchpt.utm.utoronto.ca/).

FRE417H5 Comedy & Tragedy in Quebec 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) and (FRE240H5 and FRE241H5 or FRE240Y5)

FRE419H5 The Art of Short and Tall Story Telling in Quebec: A Study of Short Forms of Fiction and Modern Fantasy (HUM)
This course explores how short fiction has developed in Quebec through opposite aesthetics (realism, folktale, fantastic and magic realism). [24L] **Prerequisite:** FRE280Y5 (or equivalent) and (FRE240H5 and FRE241H5 or FRE240Y5)

FRE440H5 Francophone Periodical Studies (HUM)
A study of the interaction of literature and journalism, from the beginning of the 19th century to the present day. The course will examine a variety of French and Quebecois periodicals, journalists’ trajectories, and mediatic genres including the chronicle, reportage, interview, leading article (“Premier-Paris”), and anecdote. [24L] **Prerequisite:** FRE280Y5 or equivalent and 0.5 credit from any 300-level course from the French Literary and Cultural Studies category group.

FRE442H5 Advanced Language Practice IV: Written (HUM)
Consolidation of writing skills in the areas of vocabulary, grammar and style. This writing intensive course focuses on improving persuasiveness in writing, in part by reading and analyzing a variety of texts to learn to recognize strategies that work in written communications. [12L, 24T] **Prerequisite:** FRE382H5 or permission of the instructor. Also open to francophones and/or holders of the French or international baccalauréat but contingent on the results of the Online French Language Placement Test (https://frenchpt.utm.utoronto.ca/).

FRE445H5 Special Topics in Literature I (HUM)
A study of fiction, non-fiction or theoretical approaches in French literature. [24L] **Prerequisite:** FRE280Y5 (or equivalent) and (FRE240H5 and FRE241H5 or FRE240Y5)

FRE446H5 Special Topics in Literature II (HUM)
A study of fiction, non-fiction or theoretical approaches in French. [24L] **Prerequisite:** FRE280Y5 (or equivalent) and (FRE240H5 and FRE241H5 or FRE240Y5)
FRE454H5 Teaching and Learning Varieties of Canadian French (HUM)
(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. Written work to be completed in French for credit towards a Specialist (French) or Major (French). [12L, 12T]
Exclusion: LIN374H5 or FRE374H5
Prerequisite: FRE280Y5 or FRE272Y5

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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: FSL456H5
Prerequisite: FRE225Y5 and FRE280Y5

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 or 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: FRE280Y5 (or equivalent) and (FRE240H5 and FRE241H5 or FRE240Y5)

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: FRE280Y5 (or equivalent) and (FRE240H5 and FRE241H5 or FRE240Y5)

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: FRE382H5

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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN486H5
Prerequisite: FRE280Y5 and FRE225Y5 plus one additional course from Language Teaching and Learning Group.

FRE487H5 Advanced Topics in Experimental French Linguistics (HUM)
An advanced study (or in-depth examination) of a specific topic in experimental French linguistics. Content in any given year depends on the instructor. Contact the department for details. [24S]
Prerequisite: 0.5 credit from the French Linguistics category plus 0.5 FRE 300-level credit determined annually contingent on course content.

LTL487H5 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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN417H5
Prerequisite: FRE225Y5 and FRE280Y5
FRE488H5 Advanced Topics in Theoretical French Linguistics (HUM)
An advanced study (or in-depth examination) of a specific topic in theoretical French linguistics. Content in any given year depends on the instructor. Contact the department for details. [24S]
Prerequisite: 0.5 credit from the French Linguistics category plus 0.5 FRE 300-level credit determined annually contingent on course content.

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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Prerequisite: FRE225Y5 and FRE280Y5
Recommended Preparation: FRE225Y5 and 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 or 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: [FRE280Y5 (or equivalent) or FRE382H5] and (FRE240H5 and FRE241H5 or FRE240Y5) or (FRE272Y5 or 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: [FRE280Y5 (or equivalent) or FRE382H5] and (FRE240H5 and FRE241H5 or FRE240Y5) or (FRE272Y5 or FRE225Y5)
French and Italian (HBA)

Department of Language Studies

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Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
FRE French (page 258)
ITA Italian (page 323)
LTL French (page 258)

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).

Admissions to the French and Italian Specialist Program (ERSPE0815) are administratively suspended as of 2017-2018. Students currently enrolled in the program will be allowed to continue.

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.

Course Categories:

- French Literary and Cultural Studies: FRE312H5, 316H5, 317H5, FRE319H5, FRE320H5, FRE356H5, FRE357H5; FRE363H5, FRE364H5, FRE365H5, 367H5, 368H5, 369H5; FRE391H5, FRE393H5, FRE397H5; FRE445H5, FRE446H5, FRE474H5

Italian

Program Requirements: 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 department can be de-registered from courses at any time.
Geocomputational Science (HBSc)

Geocomputational Science is the theory and practice that provides the foundation for the development and application of many geospatial technologies. It is a combination of analytical geography and computing science. Students who have grounding in both the geographical and computational disciplines, and can integrate these areas, are much sought after in industry, government and research organizations. It is a major part of the geomatics industry that Industry Canada has identified as a major component of the information technology sector. Any organization with spatially extensive resources and operations requires geocomputational expertise to manage and analyze the spatial data essential to an enterprise’s decision making. Geography at U of T Mississauga has a long history of offering courses in the application of geographic information systems and spatial analysis; Computer Science offers many courses that are the foundation for much of information science in general. Combining these strengths in a recognized Geocomputational Science Program provides a formal venue for students who wish to enter the geomatics job market or pursue advanced degrees in fields related to Geocomputational Science.

Program Advisor
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Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
- **CSC** Computer Science (page 162)
- **ENV** Environment (page 232)
- **GGR** Geography (page 274)
- **MAT** Mathematics (page 372)
- **STA** Statistics (page 445)

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:
  - and 1.0 credit from list A

**Fourth Year:** 2.5 credits from:
- [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 Science (HBSc)

The Department of Geography, Geomatics and Environment 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 for each program 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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Program Advisor
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The Geography, Geomatics and Environment 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, Geomatics and Environment 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.

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 Professor Matthew Adams (md.adams@utoronto.ca) for details on registering for this program.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ERS Earth Science (page 179)
GGR Geography (page 274)
STA Statistics (page 445)

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: any 100-level
Second Year: 2.0 credits:
1.0 credits: GGR276H5/ STA256H5, GGR278H5
1.0 credits from any other 200-level GGR/ENV courses
Third/Fourth Year: 4.5 credits
1.5 credits: GGR311H5, GGR321H5, GGR322H5, GGR335H5, GGR370H5, GGR372H5, GGR376H5, GGR437H5, GGR440H5, GGR463H5, GGR494H5, ERS304H5, CSC311H5, CSC343H5, CSC413H5, CSC477H5
0.5 credit from any other 3/400-level GGR/ENV courses

Minor Program ERMIN0305 Geographical Information Systems (Science)
4.0 credits are required.

Second Year: 1.0 credits:
1.0 credits: GGR276H5, GGR278H5
Third/Fourth Year: 3.0 credits
0.5 credit: GGR382H5
2.5 credits from the following (limited to 0.5 credits from ERS/CSC courses):
GGR311H5, GGR321H5, GGR322H5, GGR335H5,
GGR337H5, GGR370H5, GGR372H5, GGR376H5, GGR437H5, GGR440H5, GGR463H5, GGR494H5; ERS304H5; CSC311H5, CSC343H5, CSC413H5, CSC477H5

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 GIS 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. No substitution is allowed for GGR276H5, GGR278H5, GGR321H5, GGR337H5, GGR382H5

Geography, Geomatics and Environment (HBA, HBSc)

Professors Emeriti
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T.F. McIlwraith, B.A., M.A., Ph.D.
D.S. Munro, B.Sc., M.Sc., Ph.D.

Professors
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L. Besco, B.E.S., M.A., Ph.D.
S. Brail, BA, 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.
S. Kant, B.E., M.A., Ph.D.
V. Kuuire, B.A., M.A., 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.
T. Vinodrai, B.A., M.A., Ph.D.
A. Walks, B.A., M.A., Ph.D.
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Faculty Advisor
Geography (Arts)
P. Desrochers

Geography (Science)
Laura Brown
The Department of Geography, Geomatics and Environment 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 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.

The 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.

The Geography, Geomatics and Environment has close links with other disciplines and interdisciplinary programs. Students in other fields will find many courses within the department 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.

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 Professor Matthew Adams (md.adams@utoronto.ca) for details on registering for this program.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:

- BIO Biology (page 94)
- CHM Chemistry (page 113)
- ENV Environment (page 232)
- ERS Earth Science (page 179)
- GGR Geography (page 274)
- JEG Geography (page 274)
- JGE Geography (page 274)
- MAT Mathematics (page 372)
- PHY Physics (page 394)

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 though 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 & GGR112H5 (formerly 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: 3.0 credits:
- 2.5 credits from GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5, GGR265H5, GGR276H5, GGR278H5, GGR288H5
- 0.5 credit: GGR277H5

Third Year: 4.5 credits from the following:
• ENV311H5; GGR313H5, GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR363H5, GGR365H5, GGR370H5, GGR382H5, GGR385H5, GGR389H5, JGE378H5

Fourth Year: 1.5 credits:

• 1.0 credit : GGR417Y5, JEG401Y5
• 0.5 credit from: GGR415H5, GGR418H5, GGR419H5, GGR420H5, GGR426H5, GGR461H5, GGR489H5

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 (formerly 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 credits from: MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT137Y5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, PHY100H5, PHY136H5, PHY137H5, ERS101H5

Second Year: 3.0 credits:

• 1.5 credit from GGR201H5, GGR214H5, GGR217H5, GGR227H5

• 0.5 credit: GGR276H5
• 0.5 credit: GGR272H5, GGR278H5
• 0.5 credit from GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR265H5, GGR288H5

Third Year: 4.5 credits:

• 3.5 credits from the following: GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR374H5, GGR377H5, GGR379H5, GGR383H5, GGR384H5, JGE378H5
• 1.0 credit from the list above or from the following: GGR311H5, GGR312H5, GGR321H5, GGR322H5, GGR335H5, GGR337H5, GGR372H5, GGR375H5, GGR376H5

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.

ROP/Project courses: Maximum 2.0 credits
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 a Geography Specialist program.

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: 2.5 credits as follows:

• 2.0 credits from GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5, GGR265H5, GGR276H5, GGR278H5, GGR288H5
• 0.5 credit from GGR277H5

Third/Fourth Year: 3.5 credits from the following:
ENV311H5; GGR313H5, GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR369H5, GGR370H5, GGR382H5, GGR385H5, GGR389H5, GGR415H5, GGR418H5, GGR420H5, GGR426H5, GGR461H5, GGR489H5; JEG401Y5, JEG417Y5; JGE378H5

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 credits from: MAT132H5, MAT134H5, MAT135H5, MAT136H5, MAT137Y5, BIO152H5, BIO153H5, CHM110H5, CHM120H5, PHY100H5, PHY136H5, PHY137H5, ERS101H5

Second Year: 2.5 credits:
- 1.5 credit from GGR201H5, GGR214H5, GGR217H5, GGR227H5
- 0.5 credit from GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR265H5
- 0.5 credit: GGR276H5

Third Year: 3.0 credits:
- 2.5 credits from the following: GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR374H5, GGR377H5, GGR379H5, GGR383H5, GGR384H5; JGE378H5
- 0.5 additional credit from the list above or from the following: GGR311H5, GGR312H5, GGR321H5, GGR322H5, GGR335H5, GGR337H5, GGR372H5, GGR375H5, GGR376H5

Fourth Year: 0.5 credit from:
- GGR404H5, GGR406H5, GGR407H5, GGR417H5, GGR479H5, GGR484H5; JEG400Y5

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.

ROP/Project courses: Maximum 2.0 credits:
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 a Geography Major program.

Minor Program ERMIN1666 Geography (Arts)

4.0 credits are required: At least 1.0 credit at the 300/400 level:
- GGR111H5, GGR202H5, GGR207H5, GGR208H5, GGR209H5, GGR210H5, GGR252H5, GGR265H5, GGR267H5, GGR287H5, GGR288H5; ENV311H5, GGR313H5, GGR318H5, GGR322H5, GGR325H5, GGR329H5, GGR333H5, GGR348H5, GGR349H5, GGR353H5, GGR361H5, GGR362H5, GGR365H5, GGR370H5, GGR382H5, GGR385H5, GGR389H5, GGR415H5, GGR416H5, GGR417Y5, GGR418H5, GGR419H5, GGR420H5, GGR426H5, GGR489H5, JEG401Y5, JEG417Y5; JGE378H5

Minor Program ERMIN2070 Geography (Science)

4.0 Credits are required:
- 1.0 credit from: GGR201H5, GGR214H5, GGR217H5, GGR227H5
- 3.0 credits from: GGR304H5, GGR305H5, GGR307H5, GGR309H5, GGR315H5, GGR316H5, GGR317H5, GGR338H5, GGR374H5, GGR376H5, GGR377H5, GGR379H5, GGR383H5, GGR384H5, GGR404H5, GGR406H5, GGR407H5, GGR417Y5, GGR479H5, GGR484H5; JEG400Y5; JGE378H5

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 a Geography Specialist or Major 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 provides a broad introduction to the Earth System, involving the atmosphere, lithosphere, hydrosphere, and biosphere and their interactions, at local to planetary spatial scales. It examines natural and anthropogenic origins of environmental change. Key methods and techniques used by physical geographers to study the Earth System are covered in lectures, readings, practical sessions and field work. Fieldwork is integral to all sub-disciplines of geography, and a major component of this course. There is no substitute for direct, hands-on exploration of the natural world. 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]
Prerequisite: ANT101H5 or ANT102H5 or SOC100H5 or GGR111H5 or 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: GGR112H5 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]
Exclusion: GGR228Y5 or GGR246H1
Prerequisite: 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 or a combination of any two of: GGRA03H3 or GGRB05H3 or GGRC10H3
Prerequisite: 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. This course fulfills 1 field day. [24L]
Exclusion: GGR255H5 or GGR323H1 or GGR320H1 or GGRC02H3
Prerequisite: 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 or GGR221H1 or GGRA02H3 or GGRC27H3
Prerequisite: 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]
Prerequisite: 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]
Prerequisite: 4.0 credits including GGR112H5 or ENV100Y5

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]
Prerequisite: 4.0 credits including GGR112H5 or ENV100Y5

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. 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: 4.0 credits including GGR112H5 or ENV100Y5

GGR252H5 Retail Geography (SSc, EXP)
Commercial activities are a significant and visible part of our social system. We are what we consume, and our consumption priorities describe our society. Consumption practices are mediated through the action of retailers and the preference of consumers. The course examines the organization of the retail economy and considers relationships between retail practices and environmental, ethical and social justice concerns. Likewise it explores how social, environmental and ethical beliefs of consumers influence their purchasing practices, the connections between consumer behaviour and the practices of retailers and the possibilities for developing a retail economy that better aligns with societal concerns for social justice, ethical production and environmental sustainability. [24L]
Exclusion: GGR252H1
Prerequisite: 4.0 credits

GGR265H5 (Under)development and Health in sub-Saharan Africa (SSc)
Sub-Saharan (SSA) is one of the most diverse and intriguing regions in the world. In this course students will be introduced to contemporary development and health issues by examining historical experiences, social, political, economic and environmental processes. This approach will help highlight the vast diversity and address some of the many questions about the region including: What processes underlie famine and food insecurity? What are the underlying causes of the conflict and genocide in some regions? What processes explain spatial disparities in health, or regional and gender differences in HIV rates and the outbreak of rare diseases like Ebola? The course will rely on case studies to provide an understanding of the complexity in each topic. [24L]
Prerequisite: 4.0 credits

GGR276H5 Spatial Data Science I (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: 4.0 credits
GGR277H5 Social Research Methods in Geography (SSc,EXP)
This course introduces students to the range of social research methods and approaches used in the field of human geography. The course will cover research design, research ethics, data collection methods including interviews, focus groups, surveys, etc., ethics in conducting research with human subjects, and data analysis and interpretation. This course fulfills 1 field day. [24L, 12T]
Exclusion: GGR271H1 or GGRC31H3
Prerequisite: 4.0 credits including GGR272H5

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: 4.0 credits including GGR272H5

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: GGR334H1
Prerequisite: 4.0 credits

GGR300H5 Special Topics in Human Geography (SSc)
This course explores a particular area within human geography. Topics will vary from year to year. See department website for details. [24L, 12T]
Prerequisite: 9.0 credits including GGR277H5 and permission of instructor

GGR304H5 Dendrochronology (SCI)
Tree rings are a powerful natural archive for addressing research questions across a range of spatial and temporal scales, owing to the fact that they are annually resolved, long-lived (e.g., multi-century) and cover a large portion of the Earth's surface. Tree-rings reflect changes in their local environment, and they are sensitive to factors that limit biological processes such as light, soil moisture, temperature and disturbance. Environment changes are "encoded" in the physical properties of tree-rings (e.g., ring-width, wood density or isotopes). This course will provide students with the theoretical background and technical skills needed to cross-date, measure, analyse and interpret tree-ring data, and use this information to address practical research questions. [12L, 24P]
Prerequisite: 9.0 credits including GGR276H5 and either GGR214H5 or GGR227H5 and permission of instructor

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: 9.0 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 palaeoecological 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: 9.0 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: 9.0 credits

GGR311H5 Landscape Biogeography (SCI,EXP)
A geographical, multi-scale perspective on the relationship between the physical landscape and the distribution, movement, dispersal, and abundance of select animal species. Landscape measures including (but not limited to) fragmentation indices, habitat metrics, and estimates of animal movement will be considered. Emphasis is placed on understanding the biology of the species being studied, the physical structure of the landscape, and the intricacies of various modeling software. Students should expect to develop a well-rounded set of skills in analyzing animal movement, and producing relevant and usable results towards the management of varied landscapes and the conservation of species. [24L, 12P]
Prerequisite: 9.0 credits
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]
Prerequisite: 9.0 credits
Recommended Preparation: GGR277H5 and 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: 9.0 credits including GGR214H5 or GGR217H5

GGR316H5 Landforms (SCI,EXP)
Systems approach to hillslope geomorphology studies; processes of erosion and deposition; mass wasting; slope forms of humid and arid regions; process-response models; applied aspects. [24L, 12P]
Prerequisite: 9.0 credits including GGR214H5 or GGR217H5

GGR317H5 The Cryosphere: Canada's Frozen Environments (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 includes an off campus field trip. This course fulfills 2 field days. [24L, 12P]
Prerequisite: 9.0 credits including GGR214H5 or GGR217H5

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: 9.0 credits

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. [24L, 24P]
Prerequisite: 9.0 credits including GGR278H5

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. [24L, 12P]
Prerequisite: 9.0 credits including GGR278H5 or permission of instructor

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 or GGR378H1
Prerequisite: 9.0 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]
Prerequisite: 9.0 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]
Prerequisite: 9.0 credits

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. A part of the course will be devoted to application projects employing remote sensing and/or GIS data analysis in natural resources and environmental assessments. [24L, 24P]
Prerequisite: 9.0 credits including GGR272H5 or GGR276H5 or 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: 9.0 credits

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]
Prerequisite: 9.0 credits including GGR276H5

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]
Prerequisite: 9.0 credits

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, 12T]
Exclusion: GGR339H1
Prerequisite: 9.0 credits
Recommended Preparation: GGR207H5 and GGR361H5

GGR353H5 Disease and Death (SSc)
This course will provide a geographical perspective on patterns of mortality, morbidity and access to health care among populations. It will outline current theoretical and empirical underpinnings in health geography and emphasize the links between health and place. The course covers some traditional themes in health geography including spatial dissuasion of diseases and access to health care. Using illustrations from evolving fields such as Global Health, Aboriginal Health, and Immigrant Health the course delves into the important theme of health inequalities. [24L, 12T]
Exclusion: GGR450H1 or GGR451H1
Prerequisite: 9.0 credits
Recommended Preparation: GGR111H5
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, 12T].
Exclusion: JGI346H1
Prerequisite: 9.0 credits
Recommended Preparation: GGR207H5 and GGR349H5

GGR362H5 Exploring Urban Neighbourhoods (SSc)
With a majority of the world's population living in urban areas, nearly all of the problems and possibilities of society and human-environment relations are becoming urban questions. The city is the setting in which broad social, cultural, political, and economic processes unfold, mediated and shaped by local context. Our focus in this course is the internal structure of the city. We examine the ways in which local experiences and conditions of urban life are shaped by social differentiation and processes of change. Our examination includes considerations of race, class, gender, and ethnicity in the context of urban life as a way of exploring how identity and place shape one another. We consider different theoretical frameworks that researchers utilize to make sense of both the persistence of old problems and the emergence of new ones. Instruction will adopt a blended approach in which students will connect the concepts covered in class discussion through field work based exploration of local urban neighbourhoods. This course fulfills 5 field days. [24P]
Prerequisite: 9.0 credits

GGR363H5 Global Migration and Health (SSc)
International migration is an important global issue. Hundreds of millions of individuals currently live outside their country of origin. Most migrants leave their country of origin in search of better economic and social opportunities while others are forced to flee crises including political unrest, violence, and natural disasters. Migration poses numerous challenges for individuals, families, communities and governments including those related to health and access to health care services. This course examines contemporary international migration from a geographic perspective with a specific focus on the complex relationships among global (im)migration, health, and broader social determinants of health. Topics covered may include: migration theories, immigration trends and policies, integration and citizenship, social determinants of health, and health care policy. [24L, 12T]
Prerequisite: 9.0 credits including GGR353H5
Recommended Preparation: GGR210H5

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: 9.0 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: 9.0 credits
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: 9.0 credits including GGR272H5 or GGR278H5 and 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: 9.0 credits including 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: 9.0 credits
Recommended Preparation: GGR214H5 or GGR217H5 or GGR272H5, GGR276H5 or GGR278H5

GGR376H5 Spatial Data Science II (SCI)
This course builds on quantitative methods introduced in GGR276, and aims to provide a broad study of advanced statistical methods and their use in a spatial context in physical, social, and environmental sciences. The course covers theories, methods, and applications geared towards helping students develop an understanding of the important theoretical concepts in spatial data analysis, and gain practical experience in application of statistical statistics to a variety of physical, social and environmental problems using advanced statistical software. [24L, 24P]

Prerequisite: 9.0 credits including GGR276H5 or permission of instructor

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: 9.0 credits including GGR112H5 or ENV100Y5

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 or GGR214H5 or GGR217H5 or GGR227H5) and 1.0 credits from any other GGR/ENV Sci course(s) and 2.0 credits from any science courses and permission of instructor

GGR382H5 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: GGR272H5, GGR272H1

Prerequisite: 9.0 credits including GGR278H5

Recommended Preparation: GGR276H5, STA256H5

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 or ERS317H5

Prerequisite: 9.0 credits
Recommended Preparation: ENV100Y5 and ERS103H5 and ERS120H5 and GGR112H5

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GGR383H5 Contaminants in the Environment (SCI)
This course discusses various types of contaminants (metal, organic pollutants, pesticides, pharmaceuticals, flame-retardants, micro-plastics, nano-materials) and their impact on the environment. Lectures will cover sources, transport and fate of these contaminants in various environmental media (air, water), degradation mechanisms, uptake into biological systems, and toxicity. Case studies such as pollutants in Arctic ecosystems and the potential risks they pose to the health of indigenous people will be examined. Class discussions of current scientific articles will complement lectures. [24L]
Prerequisite: 9.0 credits including 1.0 credit from GGR201H5 or GGR214H5 or GGR217H5 or GGR227H5 or permission of instructor

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 artic 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: 9.0 credits including GGR214H5 or GGR217H5

GGR385H5 Indigenizing Space and Place (SSc,EXP)
This course looks critically at how places and people are come to be labelled as indigenous and how this labelling is tied to political, social, economic, and environmental systems that shape the spaces in which we all live. Furthermore, this course asks how spaces and places can be indigenized and what this means for social relations. We will study these processes at multiple scales - from international solidarity networks to nationalist claims on territory to an individual's sense of belonging. We will examine a wide range of topics related to these processes such as the geographies of education, the Truth and Reconciliation Commission, resource conflicts, media representations, identity formation and well-being. While we will be focusing on indigenizing geographies within the context of Canada as a settler nation, we will also engage with how indigenous geographies shape and are shaped by nationalisms in other parts of the world. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. This course fulfills 6 field days. [24L, 12T]
Prerequisite: 9.0 credits
Recommended Preparation: GGR111H5 and GGR210H5

GGR387H5 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 or GGRC29H3
Prerequisite: 9.0 credits

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 and GGR207H5 and GGR210H5 and 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 work. 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: 9.0 credits
Recommended Preparation: GGR276H5 or GGR277H5 or GGR278H5

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 online application. Instructions for the application can be found on the Department of Geography, Geomatics and Environment website: www.utm.utoronto.ca/geography/field-internship-and-thesis-courses
Exclusion: ENV400Y5 or GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits and permission of instructor

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 for this course will be through an online application. Instructions for the application can be found on the Department of Geography, Geomatics and Environment website: www.utm.utoronto.ca/geography/field-internship-and-thesis-courses
Exclusion: ENV400Y5 or GGR410Y5
Prerequisite: Minimum 14 credits, Maximum 18 credits and permission of instructor

GGR404Y5 Paleoenvironmental Change (SCI)
Knowledge of paleo (past) climate and environmental change is crucial to understanding Earth System dynamics and predicting future change. Students will be exposed to a spectrum of traditional and frontier methods employed in past global change research, with a focus on the Cenozoic Era (~66 million years). This course will examine varied topics such as sea level rise; climate change over geologic and societal time; the Anthropocene, onset of Northern Hemisphere glaciations; radiometric dating. More broadly, this course aims to provide students with an understanding of how paleoenvironmental studies contribute to advancing knowledge of the Earth System.
Prerequisite: 14.0 credits including 0.5 credit from: GGR214H5 or GGR304H5 or GGR305H5 or GGR384H5 or ERS321H5 or permission of instructor

GGR406H5 Environmental Biogeochemistry (SCI)
Environmental biogeochemistry provides an introduction to the biological, chemical, and geological processes that regulate the flow of energy and matter in the environment. This seminar course explores the processes underlying biogeochemical cycles of major elements such as carbon and nutrients, and examines how these key cycles have been altered during the Anthropocene, an era of unprecedented human-induced environmental and climate change. Topics covered include biogeochemical processes in atmospheric, ocean, freshwater and terrestrial compartments; emerging techniques (eg., stable-isotopes and paleo-proxies) used in biogeochemistry; and how disruptions to biogeochemical processes are at the root of many environmental issues such as eutrophication, climate change, ozone depletion, ocean acidification and toxic metal contamination. [36L]
Prerequisite: 14.0 credits or permission of instructor

GGR407H5 Ecohydrology (SCI,EXP)
Ecohydrology explores the feedback between biological, hydro-logical 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 peat-lands in ameliorating climate change, hydro-logic controls on species diversity, and the role of the watershed in mitigating human pollutants. Students are expected to conduct independent and collaborative study. [24L]
Prerequisite: GGR315H5 or a combination of GGR217H5 plus one of (GGR305H5 or GGR307H5 or GGR309H5 or GGR374H5 or BIO311H5 or BIO330H5)
GGR415H5 Geographies of Indigenous Health (SSc)
Indigenous people of Canada - the First Nations, Metis and Inuit peoples - have very rich and diverse histories. However, common to most are large disparities in health compared to the non-Indigenous population. This seminar course will examine the health conditions of Indigenous peoples in Canada including a focus on the geographic, historic, and contemporary factors leading to health disparities and inequalities. The course will also examine health and well-being through an Indigenous worldview. [24L]
Prerequisite: 14.0 credits including GGR353H5

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
Recommended Preparation: GGR207H5 and GGR209H5 and GGR325H5 and GGR329H5 and GGR349H5 and GGR365H5 and GGR313H5

JEG417Y5 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 obtain approval from a supervisor, complete an application form and submit the form to the Department of Geography. Please refer to the Department of Geography website for details: https://utm.utoronto.ca/geography/field-internship-and-thesis-courses. This course may fulfill field day components. Please consult with your supervisor.
Prerequisite: 14.0 credits

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: 14.0 credits

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: 14.0 credits or permission of instructor
GGR437H5 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. [24L, 24P]
Prerequisite: 14.0 credits including GGR337H5 or permission of instructor

GGR440H5 Drone Remote Sensing (SCI)
Industries from agriculture through to defense and mining are investing in Unmanned Aerial Vehicles (UAV) technology to support operational and strategic objectives. This course will cover the adoption of UAV technologies as a remote sensing tool and the impact of logistical, regulatory, and technical hurdles on UAV technology now and in the future. Through the course, students will gain the knowledge requirements to operate a UAV following Transport Canada guidelines and develop skills in processing UAV imagery into information assets that support applications where high resolution, spatial accuracy, and high detail is required. [24L, 12P]
Prerequisite: 14.0 credits including GGR337H5

GGR461H5 Advanced Urban Planning (SSc)
This course will build on the material taught in GGR361H5, City Planning. This course will delve deeper into the scholarship related to urban planning and urban development more broadly such as planning for multicultural cities, ethics in planning and planning ethics, contemporary scholarly theories of planning (collaborative planning theory etc.), planning for more equal cities and planning for sustainability. [36L]
Prerequisite: 14.0 credits including any one of: GGR207H5 or GGR361H5 or GGR349H5
Recommended Preparation: GGR361H5

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: 14.0 credits including GGR321H5

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. [24S]
Prerequisite: 14.0 credits or Permission of instructor

GGR484H5 The Climate of the Arctic (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: 14.0 credits including GGR214H5 or GGR317H5 or permission of instructor

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. [24S]
Prerequisite: 14.0 credits or permission of instructor

GGR494H5 Special Topics in GIS (SCI)
(Formerly GGR394H5) Studies of selected topics in Geographic Information Systems not covered in regular courses. [36L]
Prerequisite: 14.0 credits or permission of instructor

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: 14.0 credits and permission of instructor
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: 14.0 credits and permission of instructor

Geology (HBSc)
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Academic Counsellor/Program Administrator
Christina Fortes
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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 (Page 16) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 94)
CHM Chemistry (page 113)
CPS Chemistry (page 113)
ENV Environment (page 232)
ERS Earth Science (page 179)
GGR Geography (page 274)
JCB Chemistry (page 113)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
PHY Physics (page 394)
STA Statistics (page 445)

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 (ERS101H5, ERS111H5) or ENV100Y5 (minimum grade of 60%).

First Year: (ERS101H5, ERS111H5)/ ENV100Y5; (CHM110H5,120H5); (MAT132H5,MAT134H5)/ (MATH135H5,MAT136H5); MAT134Y5/ MAT135Y5/ MAT137Y5; (PHY136H5,PHY137H5)/ (PHY146H5,PHY147H5)
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.

**Second Year:** ERS201H5, ERS202H5, ERS203H5, ERS211H5; 0.5 credit from ERS225H5/ GGR217H5/ GGR214H5/ BIO356H5/ ESS261H1(G); 0.5 credit from CHM211H5/ 231H5/ ESS211H1(G)/JCP221H5; 1.0 credit from MAT212H5/ MAT223H5; STA220H5/ STA221H5

**Third Year:** ERS325H5; 2.5 credits from: ERS301H5/ ERS302H5/ ERS303H5/ ERS304H5/ ERS311H5/ ERS312H5/ ERS315H5/ ESS312H1/ ESS322H1/ ESS345H1

**Fourth Year:** 1. ESS420H1(St. George Campus) 2. 2.5 credits from 400 level courses in ERS or ESS(St. George) OR JCB487Y5/ ERI398H5/ CPS400Y5

**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.
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.
- T. Lam, B.Sc., M.A., Ph.D.
- J. MacArthur, Hons. B.A., M.Phil., 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 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.

In the major and specialist programs, language courses offered by the Department of Language Studies at U of T Mississauga and by the various departments teaching languages on the St. George campus may be substituted for up to 1.0 History credits. These courses must be relevant for the student’s coursework in History, and will be substituted at the same level as they are offered (e.g., a language at the 200-level will be substituted for a History credit at the 200-level, and a language at the 300-level will be substituted for a History credit at the 300-level). Students are invited to contact the Academic Counsellor for further information.

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 16) section prior to selecting courses.

For courses in this area see:
HIS History (page 289)
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 1.0 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 from HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

**Higher Years:** At least 1.5 credits at the 200+ level. They must be chosen from at least three different geographical areas below:
1. Africa, Latin America, & the Caribbean
2. Asia and the Middle East
3. Canada & U.S.A.
4. Europe

At least 1.5 credits at the 200+ level. They must be chosen from at least three different topical areas below:
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 HIS credits
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.

In the specialist program, language courses offered by the Department of Language Studies at U of T Mississauga and by the various departments teaching languages on the St. George campus may be substituted for up to 1.0 History credits. These courses must be relevant for the student's coursework in History, and will be substituted at the same level as they are offered (e.g., a language at the 200-level will be substituted for a History credit at the 200-level, and a language at the 300-level will be substituted for a History credit at the 300-level). Students are invited to contact the Academic Counsellor for further information.

For a current list of the 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 from HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

**Higher Years:** At least 1.5 credits at the 200+ level. They must be chosen from at least three different geographical areas below:
1. Africa, Latin America, & the Caribbean
2. Asia and the Middle East
3. Canada & U.S.A.
4. Europe

At least 1.5 credits at the 200+ level. They must be chosen from at least three different topical areas below:
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.

In the major program, language courses offered by the Department of Language Studies at U of T Mississauga and by the various departments teaching languages on the St. George campus may be substituted for up to 1.0 History credits. These courses must be relevant for the student's coursework in History, and will be substituted at the same level as they are offered (e.g., a language at the 200-level will be substituted for a History credit at the 200-level, and a language at the 300-level will be substituted for a History credit at the 300-level). Students are invited to contact the Academic Counsellor for further information.

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 from HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

Higher years: At least 1.0 credits at the 200+ level. They must be chosen from at least two different geographical areas below:
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 History (HUM)
This writing-intensive course introduces students to world history as well as to the research and writing skills that are part of the historian's craft. [24L, 12T]
Exclusion: HIS102H5 and HIS103H5 and HIS104H5.

HIS102H5 A History of Discoveries and Inventions in the Ancient, Medieval, and Early Modern World. (HUM)
This course challenges us to reconsider what we think we know about discoveries and inventions, and to reassess how they have shaped our world. It outlines debates around theories of progress, significance, continuity and change, and cause and consequence; guides students through the interpretation of primary and secondary sources; and introduces the discipline of history while helping students develop the research and writing skills that are part of the historian's craft. (24L, 12T)
Exclusion: HIS101H5 and HIS103H5 and HIS104H5.

HIS103H5 Revolutions in History (HUM)
Revolutions are sudden, violent, and capable of changing the structure of societies and nations. They are some of the most dramatic events in history because they raise all kinds of questions about how society should be structured, maintained, and organized. Over the course of the term, students will learn about the principle theories of revolution, their impact, and they will reflect on the ways in which our own assumptions and ideologies have been influenced by them. (24L, 12T)
Exclusion: HIS101H5 and HIS102H5 and HIS104H5.

HIS104H5 A History of Here (HUM)
This course focuses on the University of Toronto, its region, and the land on which it operates. Paying particular attention to the University’s relationship with Indigenous peoples and with critical attention to both primary and secondary sources, it explores local and institutional archives, questioning and complicating narratives of institutional pride that tend to attach themselves to the University and its campuses. (24L, 12T)
Exclusion: HIS101H5 and HIS102H5 and HIS103H5.

HIS200H5 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 https://www.utm.utoronto.ca/historical-studies/students/courses/topic-courses for details. [24L,12T]

HIS201H5 Introduction to Middle Eastern History (HUM)
An introduction to the history of Islamic culture from its beginnings to modern times. [24L, 12T]

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, 12T]

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, 12T]

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, 24P]

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]

HIS214H5 Comparative Genocide (HUM)
What are the historical circumstances through which mass killings emerge? An introduction to the history of genocide in comparative perspective, with an emphasis on the 20th century case studies. Course themes include denial and forgetting; justice and truth; and public memory. [24L, 12T]

HIS215H5 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, 12T]
Exclusion: May not be taken with or after HIS220Y5.

HIS221H5 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, 12T]

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, 12T]

HIS236H5 Introduction to British History (HUM)
An introduction to some of the major themes in British history. Depending on the year, these might include examples from prehistoric, Roman, medieval, early modern, modern, and contemporary periods. Both developments within British itself, and connections between Britain and the wider world, are considered. [24L, 12T]

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, 12T]
Exclusion: 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, 12T]
Exclusion: 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, 12T]
Exclusion: HIS250Y1
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
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 and may not be taken with or after HIS263Y5.

HIS262H5 What is Canada? (HUM)
A broad survey of the history of Canada from the beginning to the present focused on changing notions of the country, its territory, and peoples. We will question widely held beliefs about Canada, both in the past and the present, through deep engagement with primary sources and historiography. [24L, 12T]
*Exclusion:* HIS263H5 and HIS263Y5

HIS263Y5 The History of Canada (HUM)
This survey of Canadian history examines Indigenous societies and their interactions with the Europeans who began visiting the region in the sixteenth century; European claims to sovereignty over First Nations lands; generations of migrants; and twentieth-century topics such as social movements, the nation at war, popular culture, and issues of Canadian identity. [48L, 24T]
*Exclusion:* HIS262H5
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, 12T]
*Exclusion:* HIS271Y1 or HIS272Y5
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, 12T]
*Exclusion:* HIS272Y5 and HIS271Y1
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, 12T]
*Exclusion:* HIS282Y1 and HIS257H3
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, 12T]
*Exclusion:* HIS107Y1
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS285H5 War and Memory in Modern East Asia (HUM)
This course examines how Japan, China, Taiwan, Korea and the US try to remember the Asian Pacific War. It focuses particularly on the bitterly contested representations of war atrocities such as the Nanjing Massacre, the comfort women system, and the bombings of Hiroshima and Nagasaki. [24L, 12T]
*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, 12T]
*Exclusion:* HIS291H1 and HIS292H1
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, 12T]
*Exclusion:* HIS295Y1
*Recommended Preparation:* HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
HIS299Y5 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 and International Opportunities (Page 23) 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 or HIS102H5 or HIS103H5 or HIS104H5.

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]
Exclusion: HIS401H1 and HIS401Y1
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS242H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5.

HIS308H5 Themes in the History of Women Before 1800 (HUM)
This course focuses on the history of women before the 19th century emphasizing select themes in ancient, medieval, and early modern history. [24L]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS309H5 Anglo-Saxon England (HUM)
Political, institutional and social history of England from the fifth to the eleventh centuries. [24L]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS221H5 or HIS327Y5) or another course in medieval history.

HIS310H5 The History of Women Since 1800 (HUM)
This course is a brief survey of the history of women in since 1800 emphasizing select themes in modern history. [24L]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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 and HIS3C46H3
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS3C45H3
Prerequisite: HIS262H5 or HIS263Y5
HIS13H5 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]
Prerequisite: 1.0 credit from: ECO244Y5 or HIS262H5 or HIS263Y5 or SOC227H5

HIS14H5 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 or HIS313Y1
Prerequisite: 1.0 credit from: ECO244Y5 or HIS262H5 or HIS263Y5 or SOC227H5.
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and HIS313H5.

HIS15H5 Indigenous Peoples and Immigrants in Canada (HUM)
This course examines the intertwined social, cultural, economic, and political histories of Indigenous peoples and immigrants in Canada. It explores the influence on lived experience of a wide variety of phenomena and ideas including community, place, indigeneity, ethnicity, gender, colonialism, empire, and mobility from the distant to the present. [24L]
Recommended Preparation: HIS262H5 or HIS263Y5

HIS18H5 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]
Prerequisite: 8.0 credits
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS261H5 or HIS262H5 or HIS263Y5)

HIS19H5 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]
Prerequisite: 8.0 credits
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS261H5 or HIS262H5 or HIS263Y5 or HIS318H5)

HIS21H5 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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS220Y5 or HIS221H5 or HIS230H5)

HIS23H5 The Rwandan Genocide: History, Violence, and Identity (HUM)
This course examines the 1994 Rwandan Genocide, situated within larger historical frameworks of the nature of precolonial polities, the impact of colonialism, and the crises of postcolonial state building. Through a close examination of primary sources and historical arguments, this course will explore history and memory, violence and trauma, identity and belonging, justice and reconciliation. [24L]

HIS25H5 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 patriotisms, racial ideologies and African nationalisms; the role of violence in colonial and postcolonial governance; and the contemporary in historical perspective. [24L]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
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 or HIS102H5 or HIS103H5 or HIS104H5.
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
Prerequisite: CLA101H5 or CLA231H5 or CLA310H5 or CLA367H5 or CLA368H5 or CLA369H5 or HIS221H5.
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS330H5 Politics and Political Change in Latin America (HUM)
Examines major movements and cultures in Latin America 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 or HIS102H5 or HIS103H5 or HIS104H5 and 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: HIS361H1 or HIS338H1
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS242H5 or 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 and HIS309H1
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS342H5 History of Quebec and French Canada (HUM)
This course examines the history of French Canada, focusing in particular on the period from the 1830s to the present. It explores questions of culture, political community, language, and geography, looking to these aspects of historical experience to situate Quebec and French Canada with respect to North America's English-speaking majority as well as to the French-speaking nations of Europe, Africa, and elsewhere in the Americas. Proficiency in French is not required for students enrolled in HIS342H5, though those with French-language skills will be given the opportunity to work with French-language material. This course is taught in conjunction with FRE342H5. [24L]
Exclusion: FRE342H5
Recommended Preparation: HIS262H5 or HIS263Y5

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 or HIS102H5 or HIS103H5 or HIS104H5 and 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]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
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: HISB41H3
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS262H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5.

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]
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS262H5 or HIS263Y5).

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 or HIS262H5 or HIS263Y5
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS271H5 or HIS272H5 or 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: HIS391Y1 and HISC70H3
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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 and HISD36H3
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS271H5 or HIS272H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5 or HIS272H5 or HIS272Y5 or 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 or HIS102H5 or HIS103H5 or HIS104H5 and 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, tribals, lower castes and women in the era of colonialism, the national-liberation movement and the postcolonial nation-state. [24L]
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS201H5 or HIS236H5 or HIS282H5 or HIS290H5 or HIS295H5 or HIS306H5)

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 or HIS102H5 or HIS103H5 or HIS104H5.

HIS386H5 Gender and History in 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]
Prerequisite: HIS282H5
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5 or 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 or RLG205H5
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and RLG308H5.

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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 http://www.utm.utoronto.ca/historical-studies for details. [24L]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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]
Prerequisite: HIS271H5 or HIS272H5 or HIS272Y5
Recommended Preparation: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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, geographical, 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 and International Opportunities (Page 23) for more details.
Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.

HIS402H5 Topics in the History of French Canada (HUM)
An in-depth examination of historical issues in French Canadian history. Content in any given year depends on the instructor. Details of each year’s offering will be on the Department web site. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS261H5 or HIS262H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5.

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]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
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 or HIS102H5 or HIS103H5 or HIS104H5 and 0.5 credit in medieval or early modern Europe.

HIS410H5 Doing Digital History (HUM)
How have Web 2.0 technologies changed the practice of history? Students learn by doing in this course: researching and writing for the digital medium; learning about the theory and practice of digital history; experimenting with new technologies; and creating a digital history project. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
Recommended Preparation: HIS210H5

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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS261H5 or HIS262H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5.
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 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5.

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 Pianist, Berlin Memorial and the US Holocaust Museum, and films such as The Pianist and Schindler's List. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS242H5 or HIS338H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5.
Recommended Preparation: 1.0 credit in American history or 1.0 credit in modern art history.

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 or HIS102H5 or HIS103H5 or HIS104H5.
Recommended Preparation: HIS382H5 or HIS386H5 or 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 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5 and (HIS261H5 or HIS262H5 or HIS263Y5).

HIS462H5 Indigenous North America (HUM)
This reading and research-based course focuses on the history of Indigenous peoples in Canada and the United States, while also considering Mexico and the Caribbean. It explores a wide variety of methodologies and topics, examining Indigenous social structures, cultures, and economies alongside the influence of colonialism, capitalism, and nation states. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
Recommended Preparation: HIS262H5 or HIS263Y5 or HIS271H5 or HIS272H5.
HIS463H5 Memory and Memorialization in South African History (HUM)
This course examines the histories of South Africa through the lens of memory and memorialization. Major themes include gender and sexuality, race and nationalisms, youth and resistance, violence and trauma, the intersections and disconnections between different forms of memory (historical, collective, social) and their relationship to historical methodology and practice. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5. 
Recommended Preparation: HIS295H5

JBH471H5 Worlds Colliding: The History and Ecology of Exploration, Contact, and Exchange (HUM,SCI,EXP,INTLO)
An examination of contact in world history through both an ecological and a historical lens. Precise topics will depend on the year, but the focus will be on the creation of global systems and ecological challenges that continue to shape our world. In some years, students may have the option of participating in an international learning experience during Reading Week that will have an additional cost and application process. Students interested in this course will need to be approved for enrollment by the department and course instructors. [24S]
Exclusion: UTM290H5 Winter 2018 or Winter 2019
Prerequisite: 2.0 HIS credits or 1.0 BIO credit at the 300 level and permission of instructor.
Recommended Preparation: None

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 or HIS102H5 or HIS103H5 or HIS104H5. 
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]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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 or HIS102H5 or HIS103H5 or HIS104H5. 
Recommended Preparation: HIS284H5

HIS484H5 Religion and Public Culture in South Asian History (HUM)
The course examines the role played by religion in shaping the public sphere, popular/public culture and the realm of everyday practice in South Asian history. It studies key themes on the subject against a longue-duree perspective. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and HIS282H5. 
Recommended Preparation: HIS382H5 or HIS386H5 or 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]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5 and 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 or HIS102H5 or HIS103H5 or HIS104H5. 
Recommended Preparation: HIS262H5 or HIS263Y5

HIS489Y5 History Honours Thesis (HUM)
Working closely with a faculty member, students choose a topic, develop a research question, conduct original and independent research using both primary and secondary sources, and write a thesis of approximately 60 pages. Prerequisite: Students must obtain a mark of 77% in each of 4.0 History credits and permission of the instructor.

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 or HIS102H5 or HIS103H5 or HIS104H5. 
Recommended Preparation: HIS290H5
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. [24S]
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.
Recommended Preparation: DTS201H5 or DTS202H5 or HIS282H5 or HIS284H5

HIS493H5 Advanced Topics in Global History (HUM)
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS494H5 Advanced Topics in the History of the Americas (HUM)
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

HIS495H5 Advanced Topics in European History (HUM)
Prerequisite: HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5.

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.

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 or HIS102H5 or HIS103H5 or HIS104H5 and 5.0 HIS credits and a CGPA of 3.0.

HIS499H5 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. 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 and International Opportunities (Page 23) for more details.
Prerequisite: Completion of a minimum of 8.0 to 10.0 credits.
History and Political Science (HBA)

Full listing of Political Science (Page 401) courses

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
- HIS History (Page 289)
- POL Political Science (Page 401)

Combined Specialist Program ERSPE1045
History and Political Science (Arts)

14.0 credits are required.

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 Cumulative Grade Point Average of 2.30.

History

7.0 credits are required.

First Year:

- 0.5 credit from HIS101H5 or HIS102H5 or HIS103H5 or HIS104H5
- an additional HIS credit at the 200 level may be taken.

Higher Years: At least 1.0 credits at the 200+ level. They must be chosen from at least two different geographical areas below:
- Africa, Latin America, & the Caribbean
- Asia and the Middle East
- Canada & U.S.A.
- Europe

2.0 credits at the 300+ level credits

- 1.0 HIS credit at the 400-level
- 2.5 additional HIS credits at any level

Note: 2.0 HIS credits must correspond in region or theme to 2.0 of the POL credits chosen.

Notes:
1. Specialists may substitute acceptable non-HIS courses taught elsewhere at U of T Mississauga for up to 1.0 of the HIS credits.
2. The Department of Historical Studies Handbook identifies substitutions, courses satisfying division requirements. It is available online at: www.utm.utoronto.ca/historicalstudies

Political Science

Program Requirements: 7.0 credits in POL are required, including at least 1.0 at the 300 level and 1.0 at the 400 level and no more than 1.0 at the 100 level.

1. POL 200Y5 and POL215H5 and POL216H5
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.

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.
S.K. Metso, B.A., M.Th., Th.D.
L. Obrock, B.A., M.A., Ph.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.
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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 multiconfessional 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 16) section prior to selecting courses.

For courses in this area see:
RLG History of Religions (page 304)

Specialist Program ERSPE0151 History of Religions (Arts)

10.0 RLG credits are required.

**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 1.0 RLG credits. Students applying to enroll after second year (8.0 credits) must have a CGPA of at least 2.00 and a mark of at least 70% in each of 2.0 RLG credits.

**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
- RLG312Y5 How to Study Religion
- 1.5 300+ level credits in a Concentration
- 2.0 additional credits at the 300+ level
- 1.0 400-level credits
- 0.5 RLG Independent Reading course
- 1.5 additional RLG credits at any level

Specialists 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.

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 corresponds to an RLG course of 1.0 credits at the 300 level only for a primary source language related to the Concentration (Arabic, Persian, Pahlavi, Latin, Greek, Hebrew, Avestan, Sanskrit, Pali, Hindi-Urdu, Chinese, etc.). Students are invited to contact the Academic Counsellor for further information.
Students intending to pursue graduate studies are strongly encouraged to complete at least 1.0 language courses in consultation with the Academic Counsellor.

Concentrations: Specialists in a History of Religions program must select a concentration in one of the following areas: Buddhism, Christianity, Islam, Judaism, South Asian Religions, or Zoroastrianism.

**Major Program ERMAJ0151 History of Religions (Arts)**

7.5 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
- RLG312Y5 *How to Study Religion*
- 1.5 300+ level credits in a Concentration
- 1.5 additional credits at the 300+ level
- 1.0 400-level credit
- 0.5 additional RLG credit at any level

Majors are permitted to substitute non-RLG course 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.

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 corresponds to an RLG course of 1.0 credits at the 300 level only for a primary source language related to the Concentration (Arabic, Persian, Latin, Greek, Hebrew, Avestan, Sanskrit, Hindi-Urdu, Chinese, etc.). Students are invited to contact the Academic Counsellor for further information.

Concentrations: Majors in a History of Religions program must select a concentration in one of the following areas: Buddhism, Christianity, Islam, Judaism, South Asian Religions or Zoroastrianism.

**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

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

**List of Courses**

RLG101H5 Introduction to the Study of Religion (HUM)
Theories 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. [24L, 12T]
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, 12T]

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. [24L, 12T]
Exclusion: RLG202Y1
Recommended Preparation: RLG101H5

RLG203H5 Introduction to Christianity (HUM)
An introduction to the diverse history of Christianity, ranging from the origins of the Jesus Movement in the Roman Empire to the development of the largest religious tradition in the world with over two billion adherents and thousands of denominations spread across the globe. [24L, 12T]
Exclusion: RLG203Y1
Recommended Preparation: RLG101H5

RLG204H5 Introduction to Islam and Muslim Civilizations (HUM)
What does it mean to be Muslim? What is the civilizational legacy of a faith practiced by one quarter of humanity? Addressing such questions, this course explores the rich and diverse traditions of Islam and Muslim Civilizations, ranging from history, law, and scripture through artistic expressions, mysticism, philosophy and beyond. [24L, 12T]
Exclusion: RLG204Y1
Recommended Preparation: RLG101H5

RLG205H5 Key Themes in South Asian Religions (HUM)
How do we approach the extraordinary diversity of South Asian religious history? Students will explore key terms cutting across religious traditions: sacrifice, worship, ritual, practice, duty, scripture, canon, and doctrine. This course is a general introduction and presupposes no prior knowledge about South Asia. [24L, 12T]

RLG206H5 Introduction to Buddhism (HUM)
Philosophy of peaceful meditation or ideology of late capitalism? Both or neither? In this course you will learn through texts, images, objects, voices, and events how Buddhists through history have expressed their aspirations and anxieties, their thoughts and devotion, to find out what this religion may mean to us. [24L, 12T]
Exclusion: RLG206Y1
Recommended Preparation: RLG101H5

RLG207H5 Introduction to Sikhism (HUM)
This course surveys the history of Sikhism from its beginnings as a devotional movement in late medieval Punjab to its transformation during the colonial period. Students will learn about the historical development of core Sikh doctrines, practices, and institutions. [24L, 12T]
Recommended Preparation: RLG101H5

RLG208H5 Introduction to Zoroastrianism (HUM)
This course studies the history of Zoroastrianism, a religion born in Iran over 3,000 years ago. It analyzes its main doctrines and practices, provides an overview of its sacred literature and arts, and explores its interactions with other religions of the eastern and of the western world through the millennia.[24L, 12T]
Recommended Preparation: RLG101H5

RLG209H5 Introduction to Indigenous Traditions (HUM)
Indigenous traditions constitute the majority of the world’s religions. They encompass the whole earth, and are incredibly diverse. So: where to begin? This course will introduce students to the vast array of global Indigenous traditions in both historic and contemporary contexts by looking comparatively at selected beliefs and practices. Attention will also be paid to Indigenous responses to colonialism and to the ways in which many communities are reviving their traditions. [24L, 12T]

RLG210H5 Introduction to Hinduism (HUM)
Hinduism is today the world’s third largest religion, with over one billion practitioners. In this course, students will learn about Hindu philosophy, literature, music, art, architecture, and ritual practices. A special focus will be on interactions between Hinduism and other South Asian religious traditions. [24L, 12T]
Exclusion: RLG205H1
Recommended Preparation: RLG101H5
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, 12T]

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 and International Opportunities (Page 23) for more details.

RLG301H5 Stranger Things: Religious Objects in Theory and Practice (HUM)
This course surveys major theories of religious objects and icons from the 18th through the 21st century in order to problematize the categories of fetish, totem, and idol. It presents the study of material religion as integral to the broader study of religion, media, and culture. [24L]

RLG302H5 Sufism (HUM)
This course focuses on the history, institutions, and practices of Sufism, popularly referred to as Islam's "mystical" dimension. This course will examine the origins of Sufism, the development of metaphysical and theoretical thought, poetry, the emergence of Sufi orders, and shrine-based practices from the Middle East, South Asia, Africa, China, and the West. [24L]
Recommended Preparation: RLG204H5

RLG303H5 Islam in South Asia (HUM)
This course focuses on the history of Islam in South Asia from the 8th century to the present with an emphasis on religio-politics, the role of Sufism, Shi'i, ritual, devotional and material practices, and questions of Islamic identity. Students will read primary sources in translation and examine art, architecture and material culture reflecting the historical depth and religious diversity of Muslims in South Asia. [24L]

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'i 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 RLG210H5

RLG308H5 Monuments, Inscriptions, and Narratives in South Asia (HUM)
How do we interpret traces from the past? In the study of South Asia, we have access to a range of material data, inscriptions, legendary accounts, and historiographic poetry. This course explores the use of these sources in different periods and regions. [24L]
Recommended Preparation: RLG205H5 or RLG210H5

RLG309H5 Muslim Lives, Ritual Practices (HUM)
This course will introduce students to topics including aspects of how Islam shapes life-cycle rituals, pilgrimage practices, cycles of fasting and feasting, healing practices, foodways, and votive offerings. Using primary sources, including ethnographic studies, documentaries, images, and food, we will examine case studies drawn from Sunni, Shi'i, and Sufi traditions in the Middle East, South Asia, North Africa, and beyond. [24L]
Exclusion: RLG205H5 and RLG303H5
Prerequisite: RLG204H5
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 RLG210H5

RLG311H5 Religion and Ecology (HUM)
This course explores how ecological concerns have influenced and challenged contemporary religious traditions and non-traditional forms of religious expression. We will also consider how religious traditions themselves have shaped or contributed to the environmental crisis. [24L]

RLG312Y5 How to Study Religion (HUM)
What is religion? How should we study it? This course gives students the opportunity to ask the big, messy questions about religion, and to see how scholars know what they know about it. Students will learn key theoretical ideas and research methods, and then apply them in their own projects. (Required of specialists and majors.) [24L]
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. [24L]

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]

RLG316H5 Religion and Violence (HUM)
Is violence inherent in religion? Most religious traditions include teachings that profess a love of peace, and yet these same traditions have motivated some of the most atrocious acts of violence in human history. This course will explore this issue through a critical and comparative examination of theories of different forms of religious violence (e.g., terrorism, sacrifice, patriarchy, colonialism). This examination will in turn involve considering violence in various historical and contemporary religious texts, practices, beliefs, and events. [24L]

RLG317H5 Religion and Science (HUM)
Are scientific and religious practices and ways of understanding unrelated? Contradictory? Complementary? What assumptions are made when we practice religion or science? And what do we assume when we attempt to interpret these practices? This course explores the relationships between religion, science, and academic interpretation in the contemporary world. [24L]

RLG318H5 Jainism (HUM)
This course offers students a historical glimpse at an ancient religion that has had a key influence on values that shape our world today: that not-harming should inform all our actions, that the truth consists in the awareness of contradictory views, or that the main quality of personality is self-improvement. [24L]
Recommended Preparation: RLG205H5 or RLG206H5 or RLG210H5

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
Recommended Preparation: 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
Recommended Preparation: 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]
Recommended Preparation: RLG202H5 or 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,
rules, moral guidelines, and spiritual ideals. [24L]
Recommended Preparation: RLG202H5 or RLG203H5

RLG330H5 Topics in Judaism (HUM)
A detailed study of selected aspects of Judaism. [24L]
Recommended Preparation: RLG202H5

RLG331H5 Religion on Screen (HUM)
How have screen-based media technologies (cinema,
television, computers, smart phones, video games, etc.)
shaped the practice and representation of religion from
1890s till today? What is the relationship between screen
cultures and visual religion? Topics may include: magic
shows and early cinema; religion in classical Hollywood;
devotional websites or zombies. [24L, 24P]
Recommended Preparation: RLG211H5 or RLG332H5

RLG332H5 Reel Religion (HUM)
This course uses theories and methods from the study of
religion to understand narrative and visual aspects of films
that are not explicitly religious. Genres of films may include
comedy, horror, action, drama, and sci-fi. Approaches may
include the study of rituals, symbols, myth, gender, politics,
sacred figures, and psychology. [24L, 24P]
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;
misisonizing and conversion; evil and “othering”; love and
forgiveness; guilt and sacrifice; and suffering and
transcendence. [24L]

RLG337H5 Christmas: A History (HUM)
A broad historical survey of Christmas ranging from the
earliest accounts of Jesus’ birth in the New Testament up to
contemporary debates about the place of Christmas and its
celebration in the public sphere. [24L]
Recommended Preparation: RLG203H5

RLG340H5 Topics in Christianity (HUM)
A detailed study of selected aspects of Christianity. [24L]
Recommended Preparation: RLG203H5

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
Recommended Preparation: 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]  
*Recommended Preparation:* RLG203H5

RLG350H5 Topics in Islam (HUM)  
A detailed study of selected aspects of Islam. [24L]  
*Recommended Preparation:* RLG204H5

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]  
*Recommended Preparation:* RLG202H5 or 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]  
*Recommended Preparation:* 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]  
*Recommended Preparation:* RLG203H5

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]  
*Recommended Preparation:* RLG101H5 or RLG205H5 or RLG210H5

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]  
*Recommended Preparation:* RLG204H5 or RLG205H5 or RLG210H5

RLG362H5 Hindu and Muslim Worlds in Modern South Asia (HUM)  
Using primary texts as well as films, art, and architecture, this course explores the interbraided cultures of Islam and Hinduism in South Asia from the early modern period through the present day. It examines colonialism and nationalism’s effect on Hinduism and Islam and religion’s role in modern South Asian culture. [24L]  
*Recommended Preparation:* RLG204H5 or RLG205H5 or RLG210H5

RLG365H5 Mediating Hinduism (HUM)  
How have mass media shaped modern Hinduism? How has Hindu devotional culture shaped mass-mediated visual culture in South Asia and beyond? This course pursues these questions through a series of case studies, including units on topics such as poster art, comic books, the film mythological, monumental statues, e-puja and virtual pilgrimage. [24L]  
*Recommended Preparation:* RLG205H5 or RLG211H5
RLG366H5 Icon and Iconoclasm in South Asia (HUM)
This course focuses on the history of the image in Hinduism, Buddhism, Christianity, Sikhism, and Islam in South Asia. What is an icon, an image, a representation, and what is the ritual function of each form? When is the destruction of an icon an act of “iconoclasm”? In this course we consider acts of political plunder, reuse and rebuilding (spolia), and the power of the visual in shaping South Asian religious lives. [24L]
Recommended Preparation: RLG205H5 or RLG206H5 or RLG207H5 or RLG210H5

RLG370H5 Topics in Buddhism (HUM)
A detailed study of selected aspects of Buddhism. [24L]
Recommended Preparation: RLG206H5

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
Recommended Preparation: RLG206H5

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]
Recommended Preparation: RLG206H5

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]
Recommended Preparation: RLG206H5

RLG378H5 Museums and Material Religion (HUM, EXP)
Museums have long collected and curated religious objects for public audiences, with missionaries as a primary collections source. Multiple visits to the Royal Ontario Museum and other museums will enable students to think critically about how museums received and presented these objects, while engaging with the challenges of museum curation. [24L]
Exclusion: RLG307H1
Recommended Preparation: RLG101H5

RLG380H5 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]
Recommended Preparation: 1.0 credit from (RLG202H5 or RLG203H5 or RLG204H5 or RLG205H5 or RLG206H5 or RLG208H5)

RLG381H5 Topics in Zoroastrianism (HUM)
A detailed study of selected aspects of Zoroastrianism. [24L]

RLG382H5 The Divine Comedy: A Spiritual Journey (HUM)
This course studies the "Divine Comedy" by Dante Alighieri (1265-1321), a poem describing the author's journey through the afterlife. It analyzes the religious themes of the text, highlighting how different traditions, such as Christianity, Judaism, Islam and Paganism, contributed to Dante's shaping of the imaginary structure of the otherworldly spaces. [24L]
Recommended Preparation: RLG325H5

RLG388H5 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 and International Opportunities (Page 23) 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 and 1.5 RLG credits
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: 2.0 RLG credits

RLG412H5 Theorizing Religion (HUM)
This course gives advanced students the opportunity to pursue in-depth study of major classic and contemporary texts in critical theory, cultural studies, and the philosophy of religion. Topics may include: religion and politics; crises of faith; psychology of religion. [24S]  
Prerequisite: RLG101H5 and 1.5 RLG credits.

RLG415H5 Advanced Topics in the Study of Religion (HUM,INTLR)
A critical exploration of selected topics in the study of religion. As part of this course, students are required to participate in an international learning experience that will have an additional cost and application process.[24S]  
Prerequisite: 2.0 RLG credits

RLG420H5 Women and Gender in Early and Medieval Christianity (HUM)
This course combines lecture and seminar approaches to understand how ideas about women, gender, and the body were constructed and naturalized in ancient and medieval Christianity. [24S]  
Prerequisite: RLG203H5 and 1.5 RLG credits

RLG421H5 South Asian Epics (HUM)
An exploration of South Asian literary and oral epics moving across boundaries of language and genre. Students will engage with a variety of performative and aesthetic traditions including the Ramayana and the Mahabharata, Buddhist narratives, Sufi poetry, and vernacular epics. We will situate heroic, sacrificial, and romance genres in their social and performative contexts. [24S]  
Prerequisite: (RLG205H5 or RLG210H5) and 1.5 RLG credits

RLG422H5 Religion and the Senses in South Asia (HUM)
This course focuses on Hindu, Muslim, Buddhist, and Sikh objects and rituals, and we will read primary sources and scholarship in religious studies, anthropology, and ritual theory. Topics may include the gaze in the formation of icons and images, votive offerings, feasts and fasts, smells (perfumery and corpse disposal), and the aesthetics of religious architecture. [24S]  
Prerequisite: (RLG204H5 or RLG205H5 or RLG207H5 or RLG210H5) and 1.5 RLG credits  
Recommended Preparation: RLG206H5 and RLG303H5

RLG430H5 Advanced Topics in Judaism (HUM)
A critical exploration of selected topics in the history of Judaism. [24S]  
Prerequisite: (RLG202H5 or RLG330H5) and 1.5 RLG credits

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 or RLG203H5) and 1.5 RLG credits

RLG440H5 Advanced Topics in Christianity (HUM)
A critical exploration of selected topics in the history of Christianity. [24S]  
Prerequisite: (RLG203H5 or RLG340H5) and 1.5 RLG credits

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. [24S]  
Prerequisite: 2.0 RLG credits

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: RLG204H5 and 1.5 RLG credits
RLG450H5 Advanced Topics in Islam (HUM)
A critical exploration of selected topics in the history of Islam. [24S]
Prerequisite: (RLG204H5 or RLG350H5) and 1.5 RLG credits

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]
Prerequisite: 2.0 RLG credits
Recommended Preparation: RLG204H5

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]
Prerequisite: RLG204H5 or RLG350H5 and 1.5 RLG credits.
Recommended Preparation: RLG204H5 or WGS301H5

RLG453H5 Researching Islam: Entering the World of Scholarly Investigation (HUM,EXP)
How do academics research Islam? Students in this course learn about and gain hands-on experience with essential scholarly tools for discovering and disseminating new knowledge in this field. Both individually and collaboratively, students will work on original projects concerning academic literature, scholarly communication, or primary sources. [24S]
Prerequisite: 2.0 RLG credits
Recommended Preparation: RLG204H5

RLG460H5 Advanced Topics in South Asian Religions (HUM)
A critical exploration of selected topics in the history of South Asian religions. [24S]
Prerequisite: (RLG205H5 or RLG210H5 or RLG360H5) and 1.5 RLG credits

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. [24S]
Prerequisite: (RLG205H5 or RLG210H5) and 1.5 RLG credits

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 or RLG205H5 or RLG210H5) and 1.5 RLG credits

RLG463H5 Genealogies of South Asian Religions (HUM)
This course looks at debates surrounding central concepts in the study of South Asian religions. We will look at theories of asceticism, devotion, renunciation, caste, kingship, ritual, and state that animate the discussion of Hinduism, Buddhism, and Islam. Students will learn to place their ideas in conversation with larger intellectual genealogies. [24S]
Prerequisite: (RLG204H5 or RLG350H5 or RLG206H5 or RLG210H5) and 1.5 RLG credits
Recommended Preparation: RLG101H5

RLG464H5 Saints, Royalty, and the State in South Asian Religions (HUM)
This course focuses on the relationship between religious ideologies, saints, and state power in ancient, medieval, and precolonial Hindu, Buddhist, Sikh, and Muslim states in South Asia. We will read primary sources in translation and examine art, architecture, and material culture to examine how kings and saints/ascetics negotiated politics and power. [24S]
Prerequisite: (RLG205H5 or RLG210H5) and 1.5 RLG credits.
Recommended Preparation: RLG206H5 or RLG207H5 or RLG303H5
RLG465H5 Sex and Renunciation in Sanskrit Poetry (HUM)
This course examines the paradoxical relationship of the erotic in Sanskrit poetry with its opposite-renunciation and the technologies of asceticism involving a rejection of sexuality. While the treatment of these themes reflects a deeper civilizational history emblematized by the figure of Śiva, the erotic ascetic, Sanskrit courtly poetry allows us to examine problems peculiar to courtly life and kingship. Did the aestheticization of power in Sanskrit poetry conflict with transcendental ideals? How was the legitimacy of pleasure seen as both autonomous from and concurrent with other legitimate human ends? We will read all works in translation, and no familiarity with Sanskrit is presumed.
Prerequisite: (RLG205H5 or RLG210H5) and 1.5 RLG credits

RLG466H5 The Sasanian Empire: Religions at the Crossroads in Ancient Iran (HUM)
This course studies the religious life of the Sasanian empire that ruled over Iran between 224 and 651 CE. It analyzes how different religions coexisted and interacted in the territory of the empire, including Zoroastrianism (the official religion of the empire), Manichaeism, Christianity, Judaism, and Mazdakism. [24S]
Prerequisite: (RLG202H5 or RLG203H5 or RLG208H5) and 1.5 RLG credits

RLG470H5 Advanced Topics in Buddhism (HUM)
A critical exploration of selected topics in the history of Buddhism. [24S]
Prerequisite: (RLG206H5 or RLG370H5) and 1.5 RLG credits

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.
Prerequisite: 2.0 RLG credits

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.
Prerequisite: 2.0 RLG credits

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 and International Opportunities (Page 23) 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
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Institute for Management and Innovation

The Institute for Management & Innovation (IMI) is the centre for trans-disciplinary education focused on innovation and innovation management at the University of Toronto Mississauga (UTM). The Institute’s mission is to develop innovation-focused leaders, from all academic backgrounds, with a strong link to the external community. IMI also serves as a platform for fostering inter- and trans-disciplinary research and scholarship in areas relevant to its associated programs.

As a collaborative institute, IMI provides students with access to professional masters programs in biotechnology, accounting, innovation and sustainability, and undergraduate courses in accounting, finance, marketing and human resource management.

The Minor in Business, Science and Entrepreneurship (ERMIN2017) is aimed at providing UTM science students with fundamental business knowledge that will complement their science education and support their future professional success.

Students who are accepted into the minor will be exposed to multiple areas of business and management, such as Accounting, Human Resources, Marketing, Finance, Operations and Business Plan and Strategy. Students will be able to apply management theories to the analysis of issues encountered in real organizations as well as produce a range of effective business communications, in both oral and written form, for an audience of business professionals.

Administrator
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List of Courses

IMI201H5 Fundamentals of Marketing (SSC)
An introduction to the fundamentals of market definition, consumer behaviour, and the principal marketing functions: product line development, pricing, distribution, promotion, salesforce management, advertising, research, and planning. [24L]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.
IMI202H5 Principles of Human Resource Management (SSc)
Human Resource Management involves everything related to the employer-employee relationship and is about supporting and managing the organisation's people and associated processes. [24L]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.

IMI203H5 Essentials of Accounting: Financial & Managerial (SSc)
Financial accounting revolves around the preparation and understanding of financial statements, including income statements, and balance sheets which help management and other stakeholders understand the state of affairs within an organization. Managerial accounting provides management with information, analysis and reports that support management's decision making. [24L, 12T]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.

IMI301H5 Essentials of Finance (SSc)
The two main fields of finance are investments and the financing of corporations. In the investments segment, students first learn how individual investors decide on their investments based on the time value of money and risk and return trade-offs. In the corporate finance segment students will build on the insights from the investments segment to understand the financing of firms within the context of capital markets. [24L]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.

IMI302H5 Managing Projects, Operations & Preparing a Business Plan (SSc)
Every business needs to formulate the strategies by which it will compete successfully in the market place, and plan for the implementation of these strategies, which may include joint ventures, strategic alliances, etc. This requires operational capabilities, the preparation of business plans and project management skills. [24L]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.

IMI303H5 Technology Strategy (SSc)
Businesses typically want to grow and compete. Science oriented businesses rely on innovation, protected by intellectual property rights and patents, to gain and sustain competitive advantage. Entrepreneurial science-based start-up ventures especially need a strong intellectual foundation, and they need to raise capital. [24L]
Prerequisite: ECO100Y5
Please note that this course is restricted to students enrolled in the Minor in Business, Science & Entrepreneurship.

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]
The course is open to 2nd-, 3rd- and 4th-year students in all programs and does not require any prerequisites.
Exclusion: MGT494H5
Institute for the Study of University Pedagogy (ISUP)

ISP: The first of the new ISP courses, ISP100H5 and ISP010H5, introduce the line of Foundation Skills courses planned for UTM as part of the 2017 Academic Plan, beginning with Writing Skills. These courses are designed to provide UTM students with strong backgrounds in general academic skills that will be further developed in program-specific ways as students move through their academic programs.

LAUNCH: These are engaging and interactive not-for-credit 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. These courses are a joint project between EDS & CSE.

utmONE: These interdisciplinary, theme-based courses (UTM111H5 - UTM119H5) 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 - UTM197H5) 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.

Students should also review the Degree Requirements section prior to selecting courses.

For courses in this area see:
ISP Institute for the Study of University Pedagogy (ISUP) (page 315)
UTM Institute for the Study of University Pedagogy (ISUP) (page 316)

List of Courses

ISP010H5 Basics of Writing in English (BoWiE)
This non-credit 9-week course, usually beginning in week 2 of the term, is specifically designed to help students build skills that will assist in the completion of their written academic course work. Students in the course will learn to communicate their ideas in written form, applying skills in English mechanics and usage through in-course practice. Students who wish to improve their basic English writing skills, or who do not reach the threshold score on the competency assessment delivered in the first week of ISP100H5 Writing for University and Beyond, should take this course to develop their skills for university work and ensure successful completion of ISP100H5. No credit is awarded for this course. [18S]

ISP100H5 Writing for University and Beyond: Writing About Writing
This course will focus on delivering transferable writing- and reading-related skills that are necessary for success in the transition to university work. Topics include understanding context and readers' expectations, thinking critically, and identifying and working within relevant conventions. The course will use a "Writing About Writing" approach within a small class size context to address fundamental aspects of the writing process and academic writing tasks. The emphasis will be on helping students develop skills that will enable them to work effectively in whatever contexts they may encounter, rather than on specific content or disciplinary requirements. The course will be delivered from the perspective that all writers can improve their writing, so that students with strong writing skills will benefit from this course as well as those with weaker backgrounds. There will be a required competency assessment in the first week of classes, and students must pass the threshold set to continue in the course. Those below the threshold will be automatically enrolled in ISP010H5, Basics of Writing in English. [36S]

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,EXP)
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. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

UTM112H5 utmONE: Power of Expression (HUM,SSc,EXP)
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. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

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. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

UTM116H5 utmONE: Happiness (HUM,SSc,EXP)
This course investigates the concept of happiness from its earliest articulations in the ancient world to today. Drawing on a wide array of sources in disciplines in the social sciences and humanities, we will investigate "happiness" across time and place. Throughout the semester students will reflect on the concept as it relates to their own lives as well as how it shapes society as a whole. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

UTM117H5 utmONE: Individualism, The Development Of An Idea (HUM,SSc,EXP)
Through an interdisciplinary lens, this course investigates the concept of individualism from its beginnings in antiquity through today. Students will explore the relationships as well as the tensions between the individual and society. As part of this course students will participate in a series of tutorials that will introduce them to essential elements of a holistic student experience (such as career exploration, health and wellness, and co-curricular engagement). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

UTM118H5 utmONE: Science of Learning (SSc,SCI,EXP)
This interdisciplinary course encourages students to take ownership of their education through a focus on the process of learning how to learn and by cultivating the habits of mind for lifelong achievement and success. Students will explore theories of learning and research on the strategies students should employ to reach deep understanding. "Science of Learning" is designed to help students develop their critical thinking, university-level oral and written communication, critical reading, and other foundational academic skills. As part of this course students will participate in a series of tutorials that will help them build foundations for academic success (such as understanding the value of higher education, developing a growth mindset, and finding passion). [24L, 12T]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

UTM119H5 utmONE: Lights, Camera, Culture: Exploration of Cinema (HUM,SSc,EXP)
This course will explore how cinematic movies represent time capsules. They tell stories that embody historical events, describe political ideas, represent race and gender roles, disseminate propaganda, display economic class difference, demonstrate the technological sophistication of its day, capture styles of fashion, music and art, and propagate culturally important ideas. As movies are watched by everyone across the whole socioeconomic spectrum (both historically and currently), students will have an opportunity to evaluate and discuss how this powerful form of media has had and will continue to play an important role in representing and shaping society. As part of this course students will participate in a series of tutorials that will introduce them to essential elements of a holistic student experience (such as career exploration, health and wellness, and co-curricular engagement). Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
*Exclusion:* UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
*Exclusion:* UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
*Exclusion:* UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
*Exclusion:* UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
*Exclusion:* UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5
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]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM196H5 or UTM197H5
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,EXP)
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]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM197H5
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

UTM197H5 utmONE Scholars: 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 walk in our campus environment. [24S]
Exclusion: UTM110H5 or UTM111H5 or UTM112H5 or UTM114H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5

International Affairs (HBA)

Faculty Advisor
Professor G. Anderson (Economics)

Undergraduate Advisor
Ferzeen Sammy
Innovation Complex, Room 3252
905-828-5404
ferzeen.sammy@utoronto.ca

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ECO Economics (page 188)
ENV Environment (page 232)
FRE French (page 258)
FSL French (page 258)
GGR Geography (page 274)
HIS History (page 289)
ITA Italian (page 323)
MAT Mathematics (page 372)
POL Political Science (page 401)
SPA Language Studies (page 344)

Specialist Program ERSPE1384 International Affairs (Arts)
This program provides background and training in the combination of analytical and language 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, 14.5 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 completed at least 4.0 credits with a CGPA of 2.00 including: ECO100Y5 (63%); MAT133Y5 (63%) or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT137Y5; and 1.0 introductory (100/200-level) language credit.

1. 7.0 credits are required from the following list:
   • ECO100Y5;
   • MAT133Y5 or MAT135Y5 or (MAT135H5 and MAT136H5) or MAT134Y5 or (MAT132H5 and MAT134H5) or MAT137Y5; and 1.0 introductory (100/200-level) language credit.
   • ECO200Y5 or ECO206Y5;
   • ECO202Y5 or ECO208Y5;
   • ECO220Y5 or ECO227Y5;
2. **3.5 language credits from one language discipline, with at least 1.0 credit at the 300/400 level:**

- **I. French:** FSL106H5, FSL205Y5, FSL305Y5, FSL405H5, FSL406H5, FSL466H5, FRE283H5, FRE382H5, FRE383H5.
- **II. Italian:** ITA100Y5, ITA200Y5, ITA231H5, ITA232H5, ITA315Y5, ITA350H5, ITA371Y5, ITA413Y5, ITA420Y5, ITA437Y5, ITA450H5.
- **III. Spanish:** SPA100Y5, SPA220Y5, SPA259H5, SPA320Y5, SPA323H5, SPA410H5, SPA420H5.

   **Note:** An alternate language option can be taken with the approval of the Department. Contact the Economics Academic Advisor for more information.

3. **3.0 credits from:** ENV311H5, GGR325H5, GGR333H5, GGR365H5, (HIS311H5 or ECO302H5 or ECO303H5), POL302Y5, POL327Y5, POL340Y5, POL343Y5, or an alternate 300/400-level course with approval of the Department.

4. **1.0 credit from:** ECO400Y5, ECO406H5, ECO411H5, ECO433H5, ECO435H5, ECO436H5, ECO439Y5, ECO456H5, ECO460H5, ECO461H5, ECO463H5, ECO419H1, ECO459H1, ECO459H5, or an alternate 400-level course with approval of the Department.

**Note:** Contact the Economics Academic Advisor to request course alternates for approval.

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

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**Italian (HBA)**

**Department of Language Studies**

**Professors**

- S. Bancheri, B.A., M.A., Ph.D
- S Casini, B.A, M.A., Ph.D
- M. Lettieri, B.A., M.A., Ph.D.
- T. Lobalsamo, B.A., M.A., Ph.D.

**Status Only Professor**

- C. Besnard (York University)

**Chair, Department of Language Studies**

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**Undergraduate Co-ordinator - Italian Studies**

Professor Teresa Lobalsamo
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**Undergraduate Counsellor, Department of Language Studies**

Rosa Ciantar
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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.

Enrolling in Italian courses outside of UTM Students MUST consult with the department Undergraduate Counselor or obtain approval from the Italian Studies Undergraduate Coordinator before enrolling in any course that they wish to use for credit toward any Italian Studies program at UTM. Requests must be made prior to the first day of classes. Students must provide descriptions or outlines of the courses in consideration.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
- FRE French (page 258)
- ITA Italian (page 323)
- LTL French (page 258)

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

Program Requirements: 7.0 credits are required. All written work will be done in Italian in all courses.

1. ITA200Y5/ ITA201Y5 and ITA350H5

2. ITA351H5/ ITA352H5/ ITA450H5

3. ITA437Y5

4. 2.0 additional credits in Italian Language; Linguistics; Teaching and Learning.

5. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).
Specialist Program ERSPE2524 Italian (Arts)

**Limited Enrolment** – Completion of 4.0 credits and ITA100Y5 is required.

**Program Requirements:** 10.0 credits are required including at least 3.0 300/400 level full courses and 1.0 400 level credit.

1. ITA100Y5/ ITA101Y5, ITA200Y5/ ITA201Y5, ITA350H5, ITA420Y5, ITA437Y5
2. ITA351H5 or ITA352H5 or ITA450H5
3. 1.5 credits in Italian Cinema.
4. 1.0 credit in Italian Culture; Literature (excluding those listed above).
5. 1.0 credit in Italian Experiential Learning; Directed Research.
6. 0.5 credit in Italian Language; Linguistics; Teaching and Learning (excluding those listed above).
7. 1.0 credit in any of the Italian course categories (excluding those listed above).

Major Program ERMAJ1249 Language Teaching and Learning: Italian (Arts)

**Program Requirements:** 8.0 credits are required including at least 2.0 credits at the 300/400 level. Some written work and readings will be done in Italian in all courses.

1. ITA100Y5/ ITA101Y5, ITA200Y5/ ITA201Y5, ITA350H5, and ITA437Y5
2. ITA351H5 or ITA352H5 or ITA450H5
3. 1.5 additional credits in Italian Language; Linguistics; Language Teaching.
4. 2.0 additional credits in any of the other Italian course categories (excluding those listed above).
5. 0.5 credit from LTL380H5, LTL456H5, LTL487H5, LTL488H5

Major Program ERMAJ2524 Italian (Arts)

**Program Requirements:** 8.0 credits are required including at least 2.0 300/400 level credits. Some written work and readings will be done in Italian in all courses.

1. ITA100Y5/ ITA101Y5, ITA200Y5/ ITA201Y5, ITA350H5, ITA420Y5, ITA437Y5
2. ITA351H5 or ITA352H5 or ITA450H5
3. 1.0 additional credit in Italian Cinema
4. 1.0 additional credit in Italian Culture; Literature (excluding those listed above).
5. 1.0 additional credit in any of the Italian course categories (excluding those listed above).

Minor Program ERMIN2524 Italian Language and Culture (Arts)

**Program Requirements:** 4.0 ITA credits are required including at least 1.0 300/400 level credit.

1. ITA100Y5/ ITA101Y5
2. ITA200Y5/ ITA201Y5
3. 2.0 additional credits in any of the Italian course categories.

**COURSE CATEGORIES:**

- **Italian Cinema** - ITA242H5; ITA246H5; ITA247H5; ITA307H5; ITA309H5; ITA311H5; ITA313H5; ITA342H5; ITA343H5
- **Italian Culture; Literature** - ITA103H5; ITA219Y5; ITA221H5; ITA222H5; ITA231H5; ITA232H5; ITA235H5; ITA255Y5; ITA237H5; ITA238H5; ITA307H5; ITA315Y5; ITA370Y5; ITA390H5; ITA391H5; ITA392H5; ITA413Y5; ITA420Y5; ITA436Y5
- **Italian Experiential Learning** - ITA388H5; ITA315Y5; ITA400Y5; ITA413Y5
- **Italian Language Practice** - ITA100Y; ITA101Y; ITA102H5; ITA200Y5; ITA201Y5; ITA350Y5; ITA351H5; ITA352H5; ITA450H5
- **Italian Linguistics; Teaching and Learning** - ITA227H5; ITA272H5; ITA373H5; ITA374H5; ITA375H5; ITA376H5; ITA451H5; ITA437Y5

Some written work will be done in Italian for students enrolled in any Italian Minor, Major or Specialist Program.

Any student exempted from a course should speak with the program coordinator about suitable substitutions.

Students without pre- and co-requisites or written permission of the department 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]
  Exclusion: Previous schooling in Italian and ITA100Y1 or (ITA101H5/ 102H5)
ITALIAN PROGRAMS

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: Grade 12 OAC Italian or (ITA100Y5 or ITA101H5 and ITA102H5 or higher) or ITA101Y1 or higher.

ITA102H5 Language Learning with Libretti: Italian for Musicians (HUM,EXP)
(Offered in Sulmona, Italy; Faculty of Music’s Centre for Opera Studies in Italy program) An introduction to the Italian language for students whose primary area of study is Music. Beginner language proficiency (grammar practice, oral communication, pronunciation, cultural fluency, etc.) will be acquired through close readings of select librettos, depending on the pieces pre-selected for performance. Students have the option of participating in local and international field trips (additional costs and application processes). [12L, 12P]
Exclusion: Prior knowledge of Italian.

ITA103H5 Made in Italy: Italian Fashion, from the Theatre to the Runway (HUM,INTLO)
(Offered in English) This course explores the transformation of Italian fashion, throughout the centuries. The course will examine the history of fashion in Italian theatre and literature, its presence in movies and television, and the impact it has had on the fashion industry, in Italy and abroad. Students have the option of participating in international field trips (to Italian fashion houses). When travel experiences are offered, additional costs and application processes apply. [24L]

ITA201Y5 Continuing Italian (Offered in Florence) (HUM,INTLO)
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. In this course students may have the option of participating in an international learning experience that will have an additional cost and application process. [48L, 24P]
Exclusion: ITA200Y5 or ITA251Y1 or higher.
Prerequisite: ITA100Y5 or ITA101Y5 or permission of the department.

ITA218H5 Love and Sex in the Italian Renaissance (HUM)
(Offered in English) The course is 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. [24L]
Exclusion: ITA219Y5
Prerequisite: Open to all students. ITA100Y5 is applicable as a prerequisite to students enrolled in an ITA Major, Minor or Specialist program as they will be expected to submit written work in Italian.

ITA219H5 Courtship and Lust in Early Modern Italy (HUM)
(Offered in English) The course is an exploration of literary representations of love and sex in Renaissance Italy and beyond. Primary texts include Baldassare Castiglione and Pietro Aretino. [24L]
Exclusion: ITA219Y5
Prerequisite: Open to all students. ITA100Y5 is applicable as a prerequisite to students enrolled in an ITA Major, Minor or Specialist program as they will be expected to submit written work in Italian.

ITA221H5 Modern Italian Literature 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. [24L]
Exclusion: ITA221Y5 or ITA220Y5.
Prerequisite: (ITA100Y5 or ITA101Y5) or Grade 12 OAC Italian or equivalent.

ITA222H5 Modern Italian Literature 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.[24L]
Exclusion: ITA220Y5 and ITA221Y5
Prerequisite: (ITA100Y5 or ITA101Y5) or Grade 12 OAC Italian (or equivalent).
ITAL227H5 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. Students enrolled in an Italian minor, major or specialist will be required to submit work in Italian. [24L]  
Exclusion: LTL225Y5 or FRE225Y5 or LTL227H5  
Recommended Preparation: ITA100Y5

ITAL231H5 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 or ITA230Y5  
Corequisite: ITA200Y5

ITAL232H5 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 or ITA230Y5  
Corequisite: ITA200Y5

ITAL235H5 Cucina Italiana: Italian History and Culture Through Food (HUM,EXP,INTLO)  
(Offered in English) This course charts the regional diversity of Italian food and examines various factors (early settlers, wars, migratory trends) that have shaped Italian culinary traditions. Students will also have the opportunity to explore their own culinary traditions. Students have the option of participating in local and international field trips (to restaurants, factories, farms). When travel experiences are offered, additional costs and application processes apply. [24L]

ITAL237H5 Topics in Italian Civilization I (HUM,INTLO)  
(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 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. When offered in Florence students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]  
Exclusion: ITA234Y5 or ITA235Y5 or ITA239H5  
Prerequisite: ITA100Y5 and ITA237H5 or permission of the department. Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program.

ITAL242H5 Classics of Italian Cinema (HUM,INTLO)  
(Offered in English) This course is a survey of the most critically acclaimed and/or financially successful films in Italian cinema, throughout the years. In addition to analyzing films internally and externally, students will also consider the differences and similarities in reception, depending on where (in Italy or abroad) audiences watched the releases. Students have the option of participating in local (film festivals) and international field trips (studios, on-site locations). When travel experiences are offered, additional costs and application processes apply. [24L, 24T]  
Exclusion: ITA241H5 or ITA242Y5 or ITA243Y5 or ITA240Y1 or ITA340H1 or ITA341H1 or ITA342H1 or ITA345H1 or ITA347H1 or ITA441H1  
Prerequisite: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA100Y5 is required.

ITAL246H5 Contemporary Italian Cinema I (HUM)  
(Offered in English) This course is a study of Italian cinema from the 1980s to the present. Dramas, documentaries, comedies, and short films, from various directors (Bernardo Bertolucci, Nanni Moretti, Giuseppe Tornatore, and others), will be analyzed. Prevalent themes include odes to Italian women's liberation and family issue in general. Please note that this course will be taught in Italian when offered in Florence, Italy. When offered in Florence students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]  
Exclusion: ITA234Y5 or ITA235Y5 or ITA236H5  
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program. Grade 12 Italian or equivalent/ITA100Y5.
ITALIAN (HBA)  

ITALA247H5 Contemporary Italian Cinema II (HUM)  
(Offered in English) This course is a study of Italian cinema from the 1980s to the present. Dramas, documentaries, comedies, and short films, from various directors (Gianni Amelio, Nanni Moretti, Gabriele Salvatores, Giuseppe Tornatore, and others), will be analyzed. Prevalent themes include the crisis of cinema and the cinema of the crisis, identity and immigration, religion, Italians in the Holocaust, the Second World War, violence, crime, politics. [24L, 24T]  
Exclusion: ITA248H5 or ITA246Y5 or ITA247Y5 or ITA240Y1 or ITA340H1 or ITA341H1 or ITA342H1 or ITA345H1 or ITA347H1 or ITA441H1  
Prerequisite: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA100Y5 is required.

ITALA255Y5 The Italian Canadian Experience (HUM)  
(Offered in English) A linguistically and historically defined portrait of Italian immigration through a study of significant writings by and about migrants in literature and theatre. [48L]  
Exclusion: ITA233H1 or ITA445H1  
Prerequisite: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA100Y5 is required.

ITALA272H5 Introduction to Italian Linguistics (HUM)  
(Offered in English/Italian) A study of modern Italian phonetics and phonology, morphology, syntax and semantics. Comparisons will be made between the Italian linguistic situation and the other languages with which students are familiar or are learning. [36L]  
Exclusion: ITA360H1 or ITA363H1  
Prerequisite: For students enrolled in an Italian Minor, Major or Specialist program ITA100Y5 is required.  
Corequisite: ITA200Y5 is recommended corequisite for students enrolled in an Italian Minor, Major or Specialist program.

ITALA299Y5 Research Opportunity Program (HUM)  
This course offers 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 and International Opportunities (Page 23) for more details.

ITALA307H5 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 or ITA201Y5 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.

ITALA309H5 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: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA100Y5 is required.  
Recommended Preparation: Minimum 0.5 credits in any ITA cinema course.

ITALA311H5 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: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA200Y5 or ITA201Y5 is required.  
Recommended Preparation: Minimum 0.5 credits in any ITA cinema course.
ITA313H5 Quentin Tarantino and the Spaghetti Western Effect (HUM)
(Offered in English) This course explores the cinema of director Quentin Tarantino and the influence that the Spaghetti Western and, in particular, the works of Sergio Leone (director of The Good, the Bad, the Ugly, and several others) had on the Italian-American auteur. Films screened and analyzed will include both those in the filmographies of Tarantino and Leone, and will be studied within a variety of frameworks (cinematographic, political, social, theoretical). [24L, 24T]
Exclusion: ITA240Y1 or ITA340H1 or ITA341H1 or ITA342H1 or ITA345H1 or ITA347H1 or ITA441H1.
Prerequisite: Open to all students, however, if enrolled in an Italian Minor, Major or Specialist program, ITA100Y5 is required.
Recommended Preparation: Minimum 0.5 credits in any ITA cinema course.

ITA315Y5 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, 48T].
Exclusion: ITA314Y5
Prerequisite: ITA200Y5 or ITA201Y5 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.

ITA339Y5 Exploring Italian Culture, Then and Now (HUM,INTLO)
(Offered in English) Through a selection of short stories, novels, movies, sociological and historical documents, scholarly and popular articles, students will learn about various aspects of Italian civilization, from Unification to modern-day Italy. Topics of study include political ideologies, industrialization, mass-media, immigration and emigration, organized crime, and gastronomy. Field trips and film screenings will be included when offered in Siena. Students enrolled in an Italian program submit written work/do readings in Italian. Please note that when this course is offered in Siena (Woodsworth Study Abroad), the international learning experience will have an additional cost and application process.[24L, 24T]
Exclusion: ITA245Y1 and (ITA247H1 or ITA248Y1) and ITA358Y0 and ITA359Y0

ITA342H5 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. [24L, 24T]
Exclusion: ITA342Y5 or ITA343Y5 or ITA341H5.
Prerequisite: ITA200Y5 or ITA201Y5 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.

ITA343H5 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. [24L, 24T]
Exclusion: ITA342Y5 or ITA343Y5 or ITA344H5
Prerequisite: ITA200Y5 or ITA201Y5 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.

ITA350H5 Intermediate Italian (HUM)
An intermediate-advanced level language course. To enrich their proficiency in Italian, students will learn new grammar and vocabulary which they will practice by, for example, interacting with guest speakers and writing articles for popular publication. [24L, 12P]
Prerequisite: ITA200Y5

ITA352H5 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. [24L, 12P]
Exclusion: ITA371Y5
Prerequisite: ITA200Y5 or permission of instructor
ITA354Y5 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: ITA200Y5 or permission of instructor

ITA370H5 Machiavelli’s The Prince (HUM)
(Offered in English) An in-depth analysis of Machiavelli’s The Prince, from historical, social, and political perspectives. [24L]
Exclusion: ITA400H1 and ITA370Y5

ITA371H5 Power and Success in the Renaissance (HUM)
(Offered in English/Italian) Concepts of Power and strategies for success in Baldassare Castiglione’s Libro del Cortegiano. Politics, art and the pen as instruments of distinction in Lorenzo de’ Medici, Michelangelo, and Pietro Aretino. [24L]
Exclusion: ITA370Y5 and ITA370H1
Prerequisite: ITA200Y5

ITA373H5 Italian Sociolinguistics (HUM)
(Offered in English/Italian) A study of the current sociolinguistic situation of Italian. This course explores Italian dialects, regional variants, and the effect that immigration and emigration have had on the language as we read, hear, and speak it today. [36L]
Exclusion: ITA363H5 or ITA360H1
Prerequisite: Prerequisite for students enrolled in an Italian Minor, Major or Specialist program: ITA200Y5 and all others (LIN101H5 or LIN102H5 or FRE272H5).

ITA374H5 Second Language Teaching Methodology I (HUM)
(Offered in Italian/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. [24L, 12T]
Exclusion: ITA375Y5
Prerequisite: ITA100Y5
Recommended Preparation: ITA227H5

ITA375H5 Second Language Teaching Methodology II (HUM)
(Offered in Italian/English) Continuation of ITA374H5. This course connects second language acquisition theory and research to teaching practice. [24L, 12T]
Exclusion: ITA374H5
Prerequisite: ITA374H5

ITA376H5 Best Practices in Italian Teaching and Learning (HUM)
(Offered in English/Italian) This course provides an overview of the development of different methodologies of L2 teaching, in Italy and in the world. Particular attention will be given to the teaching implications introduced by ACTFL and the CEFR, which harness students’ pragmatic, real-world language skills. Students will also explore the characteristics of various methodologies by creating their own teaching materials (curriculum, lesson plans, methods of assessment, etc.). [24L]
Prerequisite: ITA200Y5 or permission of the department.

ITA388H5 Italian Studies Education Internship (HUM,EXP)
(Offered in English/Italian) 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 enrolment, internship proposals must be approved by the program coordinator. Exclusion: CTE388H5 or CTE388Y5 or EDS388H5 or ITA400Y5
Prerequisite: ITA200Y5

ITA390H5 The New Self and Self-Expression: 19th Century Italian Literature (HUM)
(Offered in Italian) Amidst the emergence of new social consciences and technologies, fundamental notions of self, gender and society are reexamined in the poetry of the Romantics, especially Leopardi, and in the novels of Manzoni, Verga and the works of the first Italian woman recipient of the Nobel Prize for Literature, Grazia Deledda. [24L]
Exclusion: ITA395H5 or ITA397Y5 or ITA398Y5
Prerequisite: ITA200Y5
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ITA391H5 Anxiety and Identity: Modern Italian History Through Literature (HUM)
(Offered in English) Masterpieces of modern Italian fiction in English translation analyzed against the background of modern-day Italy, with a focus on issues of national and individual identity. Works to be read include novels by authors such as Svevo, Vittorini, Saba, Pasolini, Moravia, Pavese and Aleramo. Open to all students. Students enrolled in a ITA Specialist, Major or Minor program will submit written work to be completed in Italian for credit towards their ITA program. [24L].
Exclusion: ITA390Y5
Prerequisite: ITA200Y5 (applies only for students enrolled in an ITA Minor, Specialist or Major program).

ITA392H5 Queer Italy: Antinormative Desire in Theory, Literature, and Cinema (HUM)
(Offered in English) An exploration of expressions of sexual diversity in Italian culture through time. Particular attention will be paid to issues of persecution, social struggle and activism, censorship, and marginalization of LGBTQ+ individuals and works. Open to all students. Students enrolled in a ITA Specialist, Major or Minor program will submit written work to be completed in Italian for credit towards their ITA program. [24L]
Prerequisite: ITA200Y5 (applies only for students enrolled in an ITA Minor, Specialist or Major program).

ITA399Y5 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 and International Opportunities (Page 23) for more details.
Prerequisite: ITA200Y5 and ITA231H5 and ITA232H5.

ITA400Y5 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 and ITA200Y5 and 1.0 credit from ITA350Y5 or ITA371Y5

ITA413Y5 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, 48T].
Exclusion: ITA312Y5 or ITA313Y5 or ITA412Y5.
Prerequisite: Prerequisite only applicable to students enrolled in an Italian Minor, Major or Specialist program, ITA350Y5 or permission of the department.

ITA420H5 Dante's Inferno (HUM)
(Offered in English/Italian) An in-depth study Dante's Divina Commedia, with special emphasis on the Inferno. [24L]
Exclusion: ITA420Y5 and ITA320H1
Prerequisite: ITA200Y5

ITA421H5 Dante's Purgatory and Paradise (HUM)
(Offered in English/Italian) An in-depth study Dante's Divina Commedia, with special emphasis on Purgatory and Paradise. [24L]
Exclusion: ITA321H1 and ITA420Y5
Prerequisite: ITA200Y5

ITA436Y5 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

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.

ITA450H5 Advanced Italian (HUM)
(Offered in Italian) This course provides students with advanced language practice. Particular emphasis will be given to improving oral proficiency, including pronunciation. Students will acquire nuances and subtleties of the language that will allow them to express themselves more freely in Italian. By the end of the course, students will be able to engage with more facility in the country of study and with other speakers of the language. [24L, 12P]
Exclusion: ITA450H1
Prerequisite: ITA350Y5 or ITA354Y5 or ITA371Y5
ITA451H5 The Way We Are: The Italian Language Today (HUM)
(Offered in Italian) This course describes the current configuration of the Italian language, as spoken and written within and outside of national borders today. Changes in the language will be analyzed through syntactic, lexical, and morphological perspectives as well as by looking at factors which affect those adjustments (contact with other languages, media, etc.). [24L, 12P]
Prerequisite: ITA200Y5
Corequisite: ITA350Y5

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 and 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) and 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) and 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 and 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 and written permission of the undergraduate co-ordinator in Italian.

ITA496Y5 Independent Studies in Italian (Florence Program) (HUM)
(Offered in Florence) A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent

ITA497H5 Independent Studies in Italian (Florence Program) (HUM)
(Offered in Florence) A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent

ITA498H5 Independent Studies in Italian (Florence Program) (HUM)
(Offered in Florence) A project supervised by a member of the Italian Department on a topic of Italian language, literature or linguistics.
Prerequisite: ITA350Y5 or equivalent
ITAL499H5 Research Opportunity Program (HUM)
This course provides senior undergraduate students with advanced language proficiency. Students who excel in research used in the discipline of Italian studies will work on the research project of a U of T Mississauga faculty 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 and International Opportunities for more details.
Prerequisite: ITA350Y5 or ITA350H5 or ITA351H5 plus 0.5 ITA credit at the 300- or 400-level, in any category.

Language Studies

Department of Language Studies

Professors
C Chen, B.A., M.A., Ph.D.
P. Robles-Garcia, B.A., M.A., Ph.D.
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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 and International Opportunities (Page 23) 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 the department website 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

Certificate in Global Perspectives

The Certificate in Global Perspectives will provide students the opportunity to examine issues from different cultural, economic and socio-political perspectives, and provide an interdisciplinary or disciplinary global lens through which to interpret and evaluate our interconnected world.

Enrolment in the Certificate in Global Perspectives is open to all students completing programs at UTM. To complete the Certificate, a student must complete 2.0 credits, with 1.0 credit taken from a single region (the Americas, Asia, Africa & the Middle East, Europe) defined in the Area Studies group of courses and 1.0 credit from the Global Perspectives group of courses. Students will complete the certificate within their degree credit requirements. Upon completion "Certificate in Global Perspectives (U of T Global Scholar)" will be recorded on the academic transcript as a component of the undergraduate degree. Students who complete the requirements of the Certificate in Global Perspectives are considered University of Toronto Global Scholars. Students will not receive a separate parchment at Convocation.

2.0 credits are required


1.0 credit to be chosen from only ONE of the following Area Studies groups:


Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

**For courses in this area see:**

- ANT Anthropology (page 50)
- ARA Language Studies (page 344)
- CHI Language Studies (page 344)
- CIN Cinema Studies (page 121)
- CLA Classical Civilization (page 126)
- DRE Drama (page 451)
- DTS Diaspora and Transnational Studies (page 175)
- ECO Economics (page 188)
- EDS Education Studies (page 201)
- ENG English (page 205)
- ENV Environment (page 232)
- ERS Earth Science (page 179)
- FAH Fine Art History (FAH) (page 65)
- FRE French (page 258)
- GGR Geography (page 274)
- HIS History (page 289)
- ITA Italian (page 323)
- JAL Linguistics (page 349)
- JGE Geography (page 274)
- LIN Linguistics (page 349)
- POL Political Science (page 401)
- RLG History of Religions (page 304)
- SOC Sociology (page 424)
- SPA Language Studies (page 344)
- VCC Visual Culture and Communication (page 458)
- WGS Women and Gender Studies (page 463)

Students without pre- and co-requisites or written permission of the department, or those who misrepresent their knowledge of a language, can be de-registered from courses at any time.
List of Courses

GER100Y5 Introductory German (HUM)
An intensive language course for students with no previous knowledge of German. Practice in listening, reading, writing and speaking while cultivating an awareness of German culture. This is an interactive course with an emphasis on communicative expression and authentic materials. The Department reserves the right to place students in the appropriate course in the series (GER100Y5, 200Y5, 300Y5). [72L, 24P]
Exclusion: Exclusions: GER101H1 or equivalent

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]
Exclusion: SPA100Y1/ Grade 12 Spanish or equivalent knowledge of Spanish, LGGA30H3 or 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 or CHI101Y5 or EAS100Y1 or 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/chinese-language-course-questionnaire.

CHI104H5 Introductory Chinese II (HUM)
As the second half of Introductory Chinese, this course continues to expand students’ knowledge and develop their language skills of Mandarin. More topics of functional Chinese are covered in this course. [36L, 12P]
Exclusion: CHI100Y5 or EAS100Y1 or EAS101Y1 or LGGA60H3 or LGGA61H3
Prerequisite: CHI103H5 or appropriate language level as indicated in the language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire).

GER200Y5 Intermediate German (HUM)
Taught in German. This language course is a continuation of work done in GER100Y5. Expansion of grammar and vocabulary, practice in listening, reading, composition, and conversation while cultivating an awareness of German culture. This is an interactive course with an emphasis on communicative expression and authentic materials. The Department reserves the right to place students in the appropriate course in the series (GER100Y5, 200Y5, 300Y5). [96L]
Exclusion: GER200H1 or GER201H1
Prerequisite: GER100Y5/ 101H1 or permission of department.
This course is not open to fluent speakers of German.

CHI203H5 Intermediate Chinese I (HUM)
As a continuation of Introductory Chinese, this course aims at 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. The course content is focused on functional topics. [36L, 12P]
Exclusion: CHI200Y5 or CHI201H5 or CHI202H5 or EAS200Y1 or EAS201H1 or LGGB60H3 or LGGB61H3 or LGGB62H3 or LGGB63H3 or LGGB64H3 or LGGB65H3
Prerequisite: CHI104H5 or appropriate language level as indicated in the language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire).

CHI204H5 Intermediate Chinese II (HUM)
As the second half of Intermediate Chinese, this course continues to develop students’ language comprehension, expand their vocabulary and grammar, and improve their skills in listening, speaking, reading, writing and translation in Modern Standard Chinese (Mandarin) at the intermediate level. The course content is focused on functional topics. [36L, 12P]
Exclusion: CHI200Y5 or CHI201H5 or EAS200Y1 or EAS201H1 or LGGB60H3 or LGGB61H3 or LGGB62H3 or LGGB63H3 or LGGB64H3 or LGGB65H3
Prerequisite: CHI203H5 or appropriate language level as indicated in the language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire).
GER204H5 Masterpieces in German Literature in Translation (HUM)
Taught in English and open to all students. Readings offered in both English and, as a comparative option, German. A survey of selected themes and topics on masterpieces of German literature. Students should check with the department and/or instructor regarding the course focus in the term it is being offered. [24L]

GER205H5 Introduction to German Literature (HUM)
Taught in German. An introduction to the study of German literature and literary concepts using original German texts. [36L]
Exclusion: GER204H1
Prerequisite: GER100Y5 or GER101H1 or permission of department.

ARA210H5 Arab Culture I (HUM)
This course introduces the Arab culture in general terms and familiarizes students with some fundamental realities of the Arab world (e.g. family, gender roles, social etiquette, etc.) with a general introduction to values and religious practices. The course is taught in English. [36L]

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 write simple sentences to express basic information, and they should be able to conduct basic conversations in Persian. [24L, 24P]
Exclusion: PRS210Y5 or NML260Y1.

CHI211H5 Advanced Written and Oral I (HUM)
This course, designed for native or near-native speakers of Mandarin Chinese, develops rhetorical knowledge and critical thinking skills for effective academic reading and writing. Students will also receive training in conducting effective formal presentations with supporting media and public speaking skills. [36L, 12P]
Exclusion: CHI200Y5 or CHI201Y5 or CHI201H5 or CHI202H5 or EAS200Y1 or EAS201H1 or LGGB60H3 or LGGB61H3 or LGGB62H3 or LGGB63H3 or LGGB64H3 or LGGB65H3
Prerequisite: Appropriate language level as indicated in the language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire) or interview.

GRK211H5 Introductory Ancient Greek I (HUM)
An intensive introduction to Ancient Greek for students who have no knowledge of the language. This course also serves as a preparation for Intermediate Greek courses. [24L, 24P]
Exclusion: GRK100Y1 or GRK101H1

HIN211H5 Introductory Hindi I (HUM)
This course is for students with no prior knowledge of the Hindi language. Students will learn to read and write Hindi in Devanagari script with basic rules of Hindi grammar. Introduction to phonology, grammar, syntax of modern Hindi; emphasis on basic writing and reading. [24L, 24P]
Exclusion: HIN212Y5 or LGGA70H3 or LGGA71H3
Prerequisite: All students who are enrolling in an HIN language 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/hindiurdu-language-course-assessment-questionnaire.

LAT211H5 Introductory Latin I (HUM)
An intensive introduction to Latin for students who have no knowledge of the language. This course also serves as a preparation for Intermediate Language courses. [24L, 24T]
Exclusion: LAT100Y5 or LAT101H1

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. [24L, 24P]
Exclusion: PRS210Y5 or NML260Y1.
Prerequisite: PRS210H5.

CHI212H5 Advanced Written and Oral II (HUM)
This course, designed for native or near-native speakers of Mandarin Chinese, continues the study of rhetorical knowledge and critical thinking skills for effective academic reading and writing. It also prepares students for upper level courses which demand in-depth reading, writing, as well as professional presentation skills. [36L, 12P]
Exclusion: CHI200Y5 or CHI201Y5 CHI202H5 or EAS200Y1 or EAS201H1 or LGGB60H3 or LGGB61H3 or LGGB62H3 or LGGB63H3 or LGGB64H3 or LGGB65H3
Prerequisite: CHI211H5 or appropriate language level as indicated by the language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire).
URD212Y5 Introduction to Urdu (HUM)
This course is for students who have no background knowledge in Urdu. The course provides students with basic information about the Urdu language paying particular attention to literacy skills, i.e. reading and writing in Urdu. 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 Urdu 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 Urdu. [72L, 24P]
Prerequisite: All students who are enrolling in an URD 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/hindiurdu-language-course-assessment-questionnaire.

GRK212H5 Introductory Ancient Greek II (HUM)
An intensive introduction to Ancient Greek for students who have no knowledge of the language. This course also serves as a preparation for Intermediate Greek courses. [24L, 24P]
Exclusion: GRK100Y1 or GRK102H1
Prerequisite: GRG211H5 or GRK101H1

ARA212Y5 Introductory Arabic (HUM)
This introductory course is designed for beginners, i.e., students with NO prior knowledge of the Arabic language. The course provides a basic proficiency in Modern Standard Arabic. The students will have ample practice of reading and writing the Arabic alphabet and will master the Arabic sounds and their phono-syntactic features. A foundation of grammar will familiarize the students with word formation, word order, and sentence structures. By the end of the course, the students should be able to fully read Arabic, comprehend simple reading, produce complete sentences to express basic information orally and in writing, and to conduct basic conversations in Modern Standard Arabic. [72L, 24P]
Exclusion: (ARA210H5 and ARA211H5) or ARA211Y5 or (LGGA40H3 and LGGA41H3) or (NMC210Y1 or NML210Y1) or higher, native speakers.
NOTE: All students who are enrolling in an ARA language 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/ara-language-course-assessment-questionnaire.

HIN212H5 Introductory Hindi II (HUM)
This course focuses on further developing grammatical structures from HIN211H and continues to the next level of Hindi grammar. Students will be introduced to vocabulary to advance their speaking and writing skills with basic rules of Hindi grammar.[24L, 24P]
Exclusion: HIN212Y5 or LGGA70H3 or LGGA71H3
Prerequisite: HIN211H5 or appropriate language level as indicated by the language assessment questionnaire (www.utm.utoronto.ca/language-studies/hindiurdu-language-course-assessment-questionnaire).

LAT212H5 Introductory Latin II (HUM)
A continuation of the intensive introduction to Latin for students who have some training in the language, but have not completed a whole credit course at university or a final-year (Grade 12) course in secondary school. This course also serves as a preparation for Intermediate Language courses. [24L, 24T]
Exclusion: LAT100Y5 or LAT102H1
Prerequisite: LAT211H5 or LAT101H1

PUN212Y5 Introductory Punjabi (HUM)
An introduction to the Punjabi language and is designed for students with little or no prior knowledge of Punjabi. Basic grammatical structures and conversational skills will be introduced as well as the gurmukhi script in which Punjabi is most commonly written. Contextual background about the history of Punjabi and the various contexts in which it has been used will also be discussed in class. [72L, 24P]

GRK213H5 Introductory Ancient Greek III (HUM)
The final course of the intensive introduction to Ancient Greek for students who have some training in the language. This course also serves as a preparation for Intermediate Greek courses. [24L, 24P]
Exclusion: GRK200Y1 or GRK201H1
Prerequisite: GRK212H5 or GRK211H5

LAT213H5 Introductory Latin III (HUM)
The final course of the intensive introduction to Latin for students who have some training in the language. This course also serves as a preparation for Intermediate Latin courses. [24L, 24T]
Exclusion: LAT200Y5 or LAT201H1
Prerequisite: LAT212H5 or LAT102H1
SPA219Y5 Spanish for Students with Prior Background (HUM)
This course is designed for native and heritage speakers who have had exposure to spoken Spanish in an informal context (i.e., living in a Spanish-speaking country; or with a Spanish-speaking family), but little to no exposure to written Spanish. The students’ ability to speak and understand Spanish may range from basic to relatively high fluency, but they cannot write and/or read Spanish. The course provides students with the essential understanding of Spanish grammatical system; builds their vocabulary; and trains them to express themselves formally. [48L, 24P]
Exclusion: SPA100Y5 or SPA219Y1 or SPA220Y5 or SPA320Y5 or SPA319Y1
Prerequisite: Basic to relatively high native ability to speak and understand Spanish and limited or no formal education in Spanish.

SPA220Y5 Intermediate Spanish (HUM,INTLO)
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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [48L, 24P]
Exclusion: SPA220Y1 or SPA319Y1 or higher
Prerequisite: SPA100Y1 or SPA100Y5

GRK221H5 Intermediate Ancient Greek (HUM)
Reading of selections of Ancient Greek prose and verse with a systematic study of the Greek Language. [24T, 24P]
Exclusion: GRK200H1 or GRK202H1
Prerequisite: GRK213H5 or GRK201H1

LAT221H5 Intermediate Latin (HUM)
Reading of selections of Latin prose and verse with a systematic study of the Latin Language. [24L, 24T]
Exclusion: LAT200Y5 or LAT202H1
Prerequisite: LAT213H5 or LAT201H1 or Grade 12 Latin (with permission of instructor)

SPA235H5 Music and Dance in Hispanic Culture (HUM,INTLO)
This course will explore the heritage and the modern manifestations of some Latin American, Caribbean, and Spanish musical styles and their accompanied dance forms. This course highlights the historical evolution of several prominent genres of music and dance, the place of music and dance in modern culture and their contribution in national identity and shows how European colonization and the slave trade impact on indigenous sounds and rhythms. The course is organized thematically and geographically and will be taught in English. Students who take this course for Spanish Language Citation must complete written course work in Spanish. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L, 24P]
Prerequisite: Open to all students. Recommended Preparation: SPA100Y5 and SPA220Y5 or SPA259H5

GER250H5 Introduction to German Culture (HUM,EXP,INTLO)
Taught in English and open to all students. How can we define "Germany" both historically and in its modern and increasingly multicultural context? How did Germany become the political and economic powerhouse of the European Union? How can we reflect on the Holocaust using identity, nationality and memory? These and other broad questions are examined in their cultural, social and intellectual context from the Middle Ages to the present. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]

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 or SPA323H1
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. [24L, 24P]
Exclusion: SPA375H1
Recommended Preparation: SPA100Y5 and SPA220Y5 or SPA259H5.
**SAN291Y5 Introductory Sanskrit (HUM)**

This course introduces students to the basic grammar of the classical Sanskrit language. Students will engage with its phonology (including pronunciation, sandhi, and metrics) and morphology (including word formation, nominal declension, and verbal conjugation). Students will apply their grammatical knowledge and analytic skills to the reading of basic Sanskrit texts. By the end of the course, students will be able to read simple, narrative Sanskrit. [72L, 24P]

*Exclusion:* SAN390H5 or SAN391H5 or RLG260Y1 or RLG260H1 or RLG263H1

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**GER299Y5 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 and International Opportunities (Page 23) for more details.

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**ARA300Y5 Arabic Intermediate High (HUM)**

This is an Arabic language course for heritage students, i.e. of Arab origins, who have had passive exposure to Arabic but have never formally studied the reading and writing of Arabic. This course is also designed to help students with interest in Islamic studies who may have been exposed to elementary Qur'anic teaching but were never taught the alphabet, and who cannot communicate in spoken or written Arabic. In this course, students will begin by learning how to sound, read and write the Arabic alphabet. They will study Arabic grammar, develop reading comprehension, and practice writing skills that advance gradually throughout the course. Each unit of the course is fully supported by a range of comprehension, vocabulary-building, grammar reinforcement activities, and reading & writing exercises. Language analysis will be based on the reading of excerpts of authentic Arabic texts from contemporary literature, magazines and newspapers. By the end of this course, students will have completed the prerequisites to take Arabic reading, literature, and advanced language courses. [72L, 24P]

*Exclusion:* ARA211H5 and ARA311H5

*Prerequisite:* As determined by assessment questionnaire ([www.utm.utoronto.ca/language-studies/ara-language-course-assessment-questionnaire](http://www.utm.utoronto.ca/language-studies/ara-language-course-assessment-questionnaire)).

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**GER300Y5 Advanced German (HUM)**

Taught in German. Building on materials introduced in GER100Y5 and GER200Y5, this language course provides students with a deeper understanding of German by developing communicative proficiency in all four language skills, emphasizing effective oral and written expression, aural and reading comprehension, and in-depth reviews and expansion of grammatical structures. The Department reserves the right to place students in the appropriate course in the series (GER100Y5, GER200Y5, 300Y5). [72L]

*Exclusion:* GER301H1

*Prerequisite:* GER200Y5 or GER201H1

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**CHI303H5 Advanced Chinese I (HUM)**

This course is the first half of Advanced Chinese for second-language learners of Mandarin Chinese. It continues the study of formal written and spoken Chinese introduced in CHI203H5 Intermediate Chinese I and CHI204H5 Intermediate Chinese II. Upon completion of this course, students are expected to develop written narrative skills in various rhetorical modes, reading skills in formal texts, listening comprehension skills in longer and more complex narratives, oral presentational skills and interpersonal communication skills. [36L,12P]

*Exclusion:* CHI201H5 and CHI202H5 and LGGC60H3 and LGGC61H3 and EAS300Y1.

*Prerequisite:* CHI204H5 or appropriate language level as indicated in the language assessment questionnaire ([www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire](http://www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire)) or interview.

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**GER303H5 German Current Events Through Print and Online News Media (HUM)**

Taught in German. 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

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**CHI304H5 Advanced Chinese II (HUM)**

This course is the second half of Advanced Chinese for second-language learners of Mandarin Chinese. It continues the study of formal written and spoken Chinese at the advanced level. This course concludes the transition from spoken Chinese to formal written Chinese. Upon completion of the course, students are able to talk about topics related to their daily lives, write routine and some formal correspondence, understand information in long and complex speech on familiar topics, and read authentic texts with contextual clues. [36L,12P]

*Exclusion:* CHI201H5 and CHI202H5 and EAS300Y1 and LGGC60H3 and LGGC61H3.

*Prerequisite:* CHI303H5 or appropriate language level as indicated in the language assessment questionnaire ([www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire](http://www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire)) or interview.
GER305H5 German Literature: From the 18th to the 21st century (HUM)
Taught in German. Building on the work of GER205H5, this course explores texts from the 18th to the 21st century. [24L]
Prerequisite: GER100Y5 or GER205H5

ARA305Y5 Introductory Egyptian Colloquial Arabic (HUM)
This is an introductory course designed for high beginner level students, who desire to acquire fluency in spoken Egyptian Arabic, commonly known as Egyptian or Cairene Arabic. The course follows a teaching approach that places emphasis on the development of the listening and speaking skills of spoken Egyptian Arabic. This course develops communicative skills in Egyptian colloquial Arabic along parallel tracks of vocabulary and grammar. Therefore, student must be independently comfortable with the Arabic alphabet and must have developed elementary reading ability. The course is designed for students who have completed the beginner level of modern Standard Arabic ARA212Y5, and are now ready to branch out into their first experience of a major spoken dialect. [72L, 24P]
Prerequisite: ARA212Y5

CHI308H5 Introduction to Chinese Culture (HUM)
This course provides a brief overview of Chinese culture. The topics include Chinese civilization, customs, traditions, rituals, religion, philosophy, ideology, morals, literature, folk art and craft, performance arts, martial arts, cuisine, medicine, etc. The discussions may be either historical or contemporary. [36L]
Prerequisite: CHI201H5 and CHI202H5 or appropriate language level indicated by language assessment questionnaire (www.utm.utoronto.ca/language-studies/chinese-language-course-questionnaire).

CHI310H5 Business Chinese (HUM)
This advanced project-based language course introduces practical uses of spoken and written Mandarin Chinese in business contexts. The course emphasizes critical thinking skills in reading and writing, and focuses on developing students’ ability in writing argumentative essay and conducting oral presentation in formal settings. This course also prepares students for job applications through in-class workshops and follow-up activities and assignments.
Prerequisite: CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor. [24L, 12T]
Prerequisite: CHI201Y5 or equivalent as indicated in the language assessment questionnaire.
Corequisite: CHI301Y5

PRS301H5 Intermediate Persian I (HUM)
This course is for students who passed PRS211H or demonstrate commensurate Persian skills. As a continuation of introductory Persian II, 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 high level. [24L, 24P]
Exclusion: PRS310Y5
Prerequisite: PRS211H5 or permission of the instructor.

CHI311H5 Classical Chinese (HUM)
This course will examine representative genres of traditional Chinese literature—poetry, prose, fiction and drama—with emphasis on language structure and style. We will also analyze typical masterworks and discuss the intertextuality between these genres, as well as some of the major features of traditional Chinese society in terms of religion, philosophy, the imperial system, gender relations, ethnicity, family, and romance. [36L]
Exclusion: EAS358Y, EAS306Y, LGGC66H3, LGGC67H3
Prerequisite: CHI211H5 & CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor.

PRS311H5 Intermediate Persian II (HUM)
This course is for students who passed PRS310H5 or demonstrate commensurate Persian skills. As a continuation of intermediate 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 advanced level. [24L, 24P]
Exclusion: PRS310Y5
Prerequisite: PRS310H5 or permission of the instructor.

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 Panchatantra, Jataka and other folk stories will be discussed. [36L]
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 or (NMC310Y1 or NML310Y1) or (LGGC42H3 and LGGC43H3) or (ARA211H5 and 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. [24L, 24P]

Exclusion: HIN312Y5
Prerequisite: HIN212Y5 or as indicated by results from language assessment questionnaire.

URD312Y5 Intermediate Urdu (HUM)
In this course, students will continue developing skills in spoken and written Urdu with the study of more complex grammar. Students will continue to build vocabulary and advance their ability in literary and colloquial forms of the language. [72L, 24P] NOTE: All students who are enrolling in an URD 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/hindurdu-language-course-assessment-questionnaire.
Prerequisite: URD212Y or appropriate language level as indicated by the language assessment questionnaire.

CHI312H5 Overseas Chinese Literature and Culture (HUM)
This course emphasizes the analytical reading of publications in Chinese literature and culture by diaspora Chinese authors. We will focus on issues such as the pursuit of harmony in the co-existence of multiple cultures, and how overseas Chinese writers deal with and understand the dissemination of Chinese culture and its interaction with other cultures. [36L]

Exclusion: LGGC42H3 or LGGC43H3
Prerequisite: CHI211H5 & CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor.

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. [24L, 24P]

Exclusion: HIN312Y5
Prerequisite: HIN212Y5 or as indicated by language assessment questionnaire.

CHI313H5 The Wisdom of Life in Traditional Chinese Culture (HUM)
This course explores different thought systems, ideas and the wisdom of human life rooted in traditional Chinese culture from the following two approaches: a theoretical discussion of the purpose, meaning, and value of human life, ideals and ways of life, existential questions and multiple solutions; and a historical as well as critical examination of the conventional wisdom originated by Chinese cultural figures like Laozi, Confucius, Mencius, Sima Qian, Zhu Xi, Qian Mu, Qian Zhongshu and more. The goal of the course is to facilitate student consideration of the essence of human life and the understanding of contemporary Chinese views by ascertaining traditional Chinese erudition. [36L]

Exclusion: EAS414H1
Prerequisite: CHI211H5 & CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor.

SPA320Y5 Advanced Spanish (HUM,INTLO)
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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [48L, 24P]

Exclusion: SPA320Y1 or SPA319Y1
Prerequisite: SPA220Y5
GER320H5 Topics in German Literature (HUM)
Taught in English and open to all students. Topic, genre, period, and author studies. Such topics may include Fairy Tales, Johann Wolfgang von Goethe, Romanticism, Realism, Modernism, Franz Kafka, or East German Literature. Students should check with the department and/or instructor regarding the course focus in the term it is being offered. This course may be repeated for credit with different content. [24L]
Recommended Preparation: GER250H5 and 0.5 of 300/400-level literature or culture course.

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 or SPA323H1
Prerequisite: SPA220Y5

GER330H5 Topics in German Cultural Studies (HUM)
Taught in English and open to all students. This course covers various topics in the culture of German-speaking countries. Such topics may include Berlin, Weimar culture, the Cold War and multiculturalism. This course may be repeated for credit with new content. [24L]
Recommended Preparation: GER250H5 and 0.5 of 300/400 level literature or culture course.

GER335H5 Post-War German Culture and Literature: Memory and the Holocaust (HUM)
Taught in English and open to all students. Examines representations of the Holocaust in post-WWII German culture and literature across multiple generations and perspectives using a variety of media, including literature, film, architecture, photography and memoir. [24L]
Recommended Preparation: GER250H5 and 0.5 of 300/400 level literature or culture course.

GER353H5 German National Cinemas (HUM)
Taught in English and open to all students. An introductory survey of the history of German cinemas from the silent period to the present. Counts toward the Minor in Cinema Studies. [24L, 24P - includes screening of films]

GER354H5 Topics in German Cinema Studies (HUM)
Taught in English and open to all students. 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. [24L, 24P - includes screening of films]
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 and GER305H5.

GER370H5 German for a Global Context: Business and International Relations I (HUM)
Taught in German. An introduction to the use of German in a global and professional context, focusing on German for business and international relations. Emphasis on oral and written communication. [36L]
Prerequisite: GER200Y5 or GER201H1 or permission of the department.

GER371H5 German for a Global Context: Business and International Relations II (HUM)
Taught in German. An introduction to the use of German in a global and professional context, focusing on German for business and international relations. Emphasis on oral and written communication. [36L]
Prerequisite: GER370H5 or permission of the department

ITA376H5 Best Practices in Italian Teaching and Learning (HUM)
(Offered in English/Italian) This course provides an overview of the development of different methodologies of L2 teaching, in Italy and in the world. Particular attention will be given to the teaching implications introduced by ACTFL and the CEFR, which harness students' pragmatic, real-world language skills. Students will also explore the characteristics of various methodologies by creating their own teaching materials (curriculum, lesson plans, methods of assessment, etc.). [24L]
Prerequisite: ITA200Y5 or permission of the department.

SAN392Y5 Intermediate Sanskrit (HUM)
This course is a continuation of Introductory Sanskrit. It deepens students' knowledge of the phonology, morphology, and syntax of classical Sanskrit using both western and Indian linguistic terminology as descriptive devices. Students will apply their deeper grammatical knowledge and sharpened analytic skills to the reading of a variety of Sanskrit genres. This course counts towards LIN Major and Minor programs. [72L, 24P]
Exclusion: (SAN390H5 and SAN391H5) or (RLG359H1 and RLG360H1)
Prerequisite: (SAN291Y5 or RLG260Y1) and RLG260H1 and RLG263H1.
ARA408H5 Arabs in Western Literature and Arts: Reception and Interpretation (HUM)
(Offered in English). This survey course examines representative fiction and non-fiction texts, painting, films, operas, comics and video games to explore salient incidences of encounter, impact, and reception of the Arabs in medieval and modern Western thought. Examples of topics of analysis are Islamic imagery in Dante's Inferno, motifs of storytelling and narrative structures from the One Thousand and One night in Boccaccio's Decameron and Chaucer's Canterbury Tales, From the Moors in Spain, to the Arabs in Sicily, from Shakespeare's Othello to the Victorian Gothic Vathek, the course will move on to explore the extension of the French Orientalists' influence beyond European painting to operas, and later in cinema, exploring works such as Il Seraglio, Lawrence Arabia, Casablanca and others. Current representations of the Arabs in Western films, TV shows, comics, and video games will be analyzed to trace continuity and discontinuity of the earlier reception. Students who take this course to be counted towards the Language Citation must complete written course work in Arabic. [36L]
Prerequisite: Open to all students who have completed 9.0 credits.

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. [36L]
Prerequisite: (CHI301Y5 or CHI301H5) and CHI302H5 or adequate reading knowledge of Chinese as determined by department assessment questionnaire.

CHI409H5 Influence of Confucianism on Chinese Culture (HUM)
This advanced level course discusses the cultural influence of Confucianism on Chinese writing, philosophy, religion, education, literature, customs, ethics, society and so forth. The readings covered in this course are mainly in modern Chinese language. Critical reading and essay writing skills will be stressed. [36L]
Prerequisite: (CHI301Y5 or CHI301H5) and CHI302H5 or adequate reading knowledge of Chinese as determined by department assessment questionnaire.

ARA410H5 Advanced Arabic Reading I: Reading the Sacred and the Legendary (HUM)
This is the first of two intensive advanced reading courses in the Arabic language. Throughout this course, the students will also be familiar with different sacred texts such as Tafsir (Quranic exegesis) and Qisas al-Anbiyâ (Tales of the Prophets) to the fables focused on the description of amazing and mythological creatures such as Qazvini's 'Ajâ'ib al-Makhlûqât wa Gharâ'ib alMawjûdat (Marvels of Creatures and Strange things existing) and Kalila wa Dimna as well as the epic of the legendary Arabic heroin Dhât al-Himma in Sîrat Dhât al-Himma. [24L, 24P]
Prerequisite: ARA311H5 or ARA312Y5
Corequisite: ARA412Y5

CHI410H5 Modern Chinese Literature (HUM)
This seminar course offers a critical examination of different literary genres and writers from modern Chinese literature. The focus will be on poetry, prose, drama, and fiction of the modern era. Discussions will emphasize historical, cultural, and social-political contexts. Key techniques of literary criticism, analysis of literary devices and themes. [36S]
Exclusion: EAS358Y1
Prerequisite: CHI211H5 & CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor.

ARA411H5 Advanced Arabic Reading II: Literary Journeys into the Past (HUM)
This is the second of two intensive advanced reading courses in the Arabic language. This course will concentrate on works relating to history which includes universal histories in the world from creation up to their own eras; biographies of individuals and biographical dictionaries, advice literature that guide rulers to govern efficiently; poetry by poets and poetesses; maqãmãt or works of rhymed prose; mystical texts; travelogues that describe the adventures and observations of travelers to faraway lands; annalistic chronicles that record events from year to year; and chancery documents that shed light on the way medieval administrations worked. [24L, 24P]
Prerequisite: ARA311H5 or ARA312Y5
Corequisite: ARA412Y5
Recommended Preparation: ARA410H5

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. [24L, 12P]
Prerequisite: HIN312Y5
CHI411H5 Theory and Practice in English/Chinese Translation (HUM)
This course is an introduction to the major theories, methods and techniques involved in translating from English into Chinese. The course focuses on practical training for novice translators. Through practice, students will familiarize themselves with the translation process and develop a variety of translation skills and strategies. Students will discuss and reflect upon issues encountered during translation and develop decision-making ability to deal with translation challenges. This course provides a solid foundation for students to continue their studies in translation at the advanced level. [24L, 12P]
Exclusion: ECTB61H3
Prerequisite: CHI212H5, or adequate reading and writing knowledge in Chinese approved by the instructor.

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

ARA412Y5 Arabic for Advanced and Heritage Learners (HUM)
This course uses differentiated instruction and assessment methods to provide Arabic language instruction to two groups of students: 1) advanced learners of Arabic as a foreign language, and 2) heritage students who may have native or native-like proficiency in the Arabic language. Both groups of learners will have customized study materials and assessment schemes that provide for their specific learning needs and language abilities. [72L, 24T]
Exclusion: NML410Y1
Prerequisite: (ARA312Y5 or ARA311H5). Students who have not completed ARA312Y5 or ARA311H5 must obtain permission from the department before enrolling.

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 and GER205H5, 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 and GER305H5, 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
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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 15) section prior to selecting courses.

For courses in this area see:
FRE French (page 258)
ITA Italian (page 320)

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

Program Requirements: 7.0 credits are required. All written work will be done in Italian in all courses.
1. ITA200Y5/ ITA201Y5 and ITA350H5
2. ITA351H5/ ITA352H5/ ITA450H5
3. ITA437Y5
4. 2.0 additional credits in Italian Language; Linguistics; Teaching and Learning.
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:** FRE225Y5 or FRE272Y5.  
**Prerequisite:** FRE181H5

**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:** (FRE225Y5 or FRE272Y5) and FRE240H5 and FRE241H5 (or FRE240Y5) or FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.

**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 or FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

**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:** (FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

**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:** (FRE225Y5 or FRE272Y5) and FRE240H5 and FRE241H5 (or FRE240Y5) or FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent.

**FRE355H 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:** (FRE225Y5 or FRE272Y5) or (FRE240H5 and FRE241H5) and (FRE280Y5 or a minimum grade of 77% in FSL406H5 or equivalent).

**ITA376H5 Best Practices in Italian Teaching and Learning (HUM)**
(Offered in English/Italian) This course provides an overview of the development of different methodologies of L2 teaching, in Italy and in the world. Particular attention will be given to the teaching implications introduced by ACTFL and the CEFR, which harness students' pragmatic, real-world language skills. Students will also explore the characteristics of various methodologies by creating their own teaching materials (curriculum, lesson plans, methods of assessment, etc.). [24L]  
**Prerequisite:** ITA200Y5 or permission of the department.

**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. **Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian).** [24L]  
**Exclusion:** LIN380H5  
**Prerequisite:** FRE225Y5 and 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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN456H5
Prerequisite: FRE225Y5 and 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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Exclusion: LIN486H5
Prerequisite: FRE280Y5 and 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. Written work to be completed in French/Italian for credit towards a Specialist (French or Italian) or Major (French/Italian). [24L]
Prerequisite: FRE225Y5 and FRE280Y5
Recommended Preparation: FRE225Y5 and 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
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 16) section prior to selecting courses.

For courses in this area see:

- ANT Anthropology (page 50)
- DTS Diaspora and Transnational Studies (page 175)
- ENG English (page 205)
- FAH Fine Art History (FAH) (page 65)
- FRE French (page 258)
- FSL French (page 258)
- HIS History (page 289)
- LIN Linguistics (page 349)
- POL Political Science (page 401)
- SOC Sociology (page 424)
- SPA Language Studies (page 344)
- VCC Visual Culture and Communication (page 458)
- WGS Women and Gender Studies (page 463)

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
- History (HIS): HIS290H5, HIS330H5, HIS390H5, HIS391H5, HIS454H5, HIS490H5,
- 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

Minor Program ERMN0562 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.
Linguistics (HBA)

Department of Language Studies

Professors
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D. Denis, B.A., M.A., Ph.D.
A. Kahnemuyipour, B.Sc., M.A., Ph.D.
E. Nikiema, L.èsL., M.èsL., M.A., Ph.D.
A. Ozburn, B.Math, M.A., Ph.D.
M. Pirvulescu, B.A., M.A., Ph.D.
K. Rehner, B.A., B.Ed, TEIL, M.Ed, Ph.D.
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Why does "blick" sound like it could be a word in English but "bnick" does not? Are young people really destroying language? Why is Siri bad at understanding different accents and the speech of young children? Can the structures of all of the languages of the world be explained by a universal set of abstract operations? How can young children acquire languages so effortlessly, while it is often very difficult to learn a second language as an adult?

These are just some of the questions that you might encounter in a linguistics course. Linguistics is the scientific study of language, and the field is very broad, encompassing topics such as the internal structure of language, how infants and adults learn language(s), how language is used to express identity, and commonalities and differences among speakers of the world.

The linguistics programs at UTM provide a solid foundation in the core theoretical fields of linguistics, covering the structure of sounds, words, sentences, and meaning, as well as a wide selection of courses in areas such as language variation and change, experimental linguistics, first and second language acquisition, psycholinguistics, language teaching and learning, and computational linguistics.

Along with providing a foundation for future research and graduate studies in linguistics, the specific knowledge and skills acquired in linguistics courses can be relevant to diverse career paths, including the following:

- education (language teaching, teacher education, or educational research)
- clinical applications (audiology, speech therapy)
- language preservation and documentation
- communications (publishing, advertising, marketing/branding)
- language technology (speech recognition, natural language processing, computer mediated language learning)

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
ANT Anthropology (page 50)
CHI Language Studies (page 344)
FRE French (page 258)
ITA Italian (page 323)
JAL Linguistics (page 349)
JFL French (page 258)
LIN Linguistics (page 349)
LTL French (page 258)
PHL Philosophy (page 383)
PSY Psychology (page 412)
SAN Language Studies (page 344)

Major Program ERMAJ1850 Linguistic Studies (Arts)

8.0 credits are required including LIN101H5, LIN102H5/LIN100Y5

Limited Enrolment – Enrolment in the Major program is limited to students who have achieved at least 63% in both LIN101H5 and LIN102H5. Second year entry requirements (for those students who have not met the enrolment requirement in the first year): A grade of 70% in at least two of the following seven courses: LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN256H5/LIN288H5 (or LIN258H5).

Students cannot be enrolled simultaneously in the Linguistics Studies Major and either of the Linguistics Studies or the English Language and Linguistics Minor programs.

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) Method and analysis: LIN318H5 (or LIN368H5)/LIN409H5/ LIN418H5 (LIN468H5)/ LIN411H5 (or LIN481H5)
   (b) Phonetics/Phonology: LIN327H5, LIN328H5, LIN329H5, LIN421H5
   (c) Syntax and Morphology: LIN332H5 (or LIN331H5)/LIN476H5 (or LIN406H5)
   (d) Semantics/Pragmatics: LIN337H5/ LIN338H5
   (e) Language teaching, learning, and acquisition: JFL389H5/ LIN385H5 (or LIN356H5)/ LIN487H5 (or LIN417H5)/ JFL389H5, SAN392Y5.
   (f) Language variation, contact, and change: LIN360H5 (or LIN369H5)/LIN366H5/ LIN369H5 (or LIN356H5)/ LIN458H5/ LIN460H5/ LIN466H5/ LIN469H5
   (g) Computational Linguistics: LIN340H5

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/JAL courses, FRE454H5 (or FRE474H5), FRE489H5, ITA373H5, ITA437Y5, ITA373H5, LTL488H5, PSY315H5, PSY374H5, PSY376H5, PHL350H5, PHL451H5, SAN392Y5, ANT362H5, ANT358H5.

Students must have a minimum of 0.5 credits at the 400-level. No more than 1.0 credits outside of LIN/JAL offerings (excluding language courses in requirement 2) can be used towards program requirements.

**Minor Program ERMIN0506 Linguistic Studies (Arts)**

4.0 credits are required.
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 or LIN100Y1 or LINA01H3 or 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 or LIN100Y1 or LINA01H3 or 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 or LIN101H5 or LIN202H5 or LIN208H5.
This course will not count towards any Linguistics program of study. It will only count as an elective.

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. [24L, 12T]
Exclusion: LIN204H1 or LINB18H3

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

LIN208H5 English Sounds (HUM)
This course introduces the sounds and sound patterns of English from a linguistic perspective. Topics will include the articulation of speech sounds and their phonetic transcription, as well as analysis of the rules governing how these sounds are structured in natural language. This course does not count towards the Linguistic Studies minor or major programs. [24L, 12T]

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 or LINB09H3
Corequisite: LIN101H5

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 or LINB04H3.
Prerequisite: LIN101H5 (or LIN100Y5) and LIN228H5

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 or LINB10H3.
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5.

LIN232H5 Syntactic Patterns in Language (HUM)
This course is an introduction to generative syntax focusing on the Government and Binding framework. Problem sets will be used for practicing argumentation and analytical skills. [24L, 12T]
Exclusion: LIN232H1 or LINB06H3.
Prerequisite: LIN102H5 or LIN100Y5.
LIN233H5 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.** Formerly LIN203H5. [24L, 12T]
*Exclusion: LGGB18H3 or LIN203H1 or LIN203H5*
*Corequisite: LIN101H5*

LIN237H5 Semantics (HUM)
This course offers an introduction to Semantics, the subfield of linguistics that considers the different ways meaning is encoded in human language and the context within which language is used. The aim of the course is to introduce students to some of the basic concepts and central issues and scholars in the field. The course examines possible ways of describing and formalizing meaning at the level of the word, phrase, and sentence. The course naturally incorporates students' understanding of syntax and morphology thereby fostering a more holistic understanding of linguistic analysis. It also provides the foundation for more specialised studies in Semantics and Pragmatics. Topics include: sense and reference, compositionality, lexical relations, entailment, presupposition, event types, thematic roles, deixis, implicature, predicate logic, and quantification. [24L, 12T]
*Exclusion: LIN241H1 or LINC12H3 or LIN247H5*
*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). **While this course fulfills a requirement for the minor program in English Language Linguistics, it does not count towards the major or minor programs in Linguistic Studies.** [24L, 12T]
*Exclusion: JAL251H1 or LINB20H3*
*Prerequisite: LIN204H5 or LIN101H5 or 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: LINB20H3 and LIN251H1.*
*Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 or ANT206H5*

LIN271Y5 Introduction to Sanskrit (HUM)
This course introduces students to the basic grammar of classical Sanskrit. Students will engage with its phonology (including pronunciation, sandhi, and metrics) and morphology (including word formation, nominal declension and verbal conjugation, and dissolving compounds). Students will apply their grammatical knowledge and analytic skills to the reading of basic Sanskrit texts. By the end of the course, students will be able to read simple, narrative Sanskrit. This course is cross-listed with SAN291Y5 and can be used to count toward the Major Program’s Language Requirement. [72L, 24P]
*Exclusion: SAN291Y5*

LIN279Y5 A Language Unlocked (HUM)
Introduction to the fundamentals of grammar and usage in context of an understudied language. The language offered will vary from year-to-year, and may include American Sign Language, an Indigenous language of Canada, or an extinct or endangered language. **This course can be used to count toward the Major Program’s Language Requirement.** [24L, 12P]

LIN288H5 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. Suggested companion course: FRE355H5. Formerly LIN258H5. [24L, 12T]
*Exclusion: PSY374H5 or PLIC55H3 or JLP374H1 or LIN258H5*
*Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5.*

LIN299Y5 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 and International Opportunities (Page 23) 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 will 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 and 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 and LIN102H5 and (LIN228H5 or LIN229H5)

LIN318H5 Talking Numbers: Interpretation and Presentation of Quantitative Linguistic Data (HUM)
Do numbers and statistics make your vision go blurry? Do you avoid making eye contact with charts and tables? From measuring vowel formants to gradient grammaticality judgments to frequencies and patterns in natural language corpora, research in linguistics is becoming increasingly dependent on quantitative data and argumentation... but fear not! In this course, students with no prior background in statistics will learn the fundamentals of quantitative reasoning through hands-on experience with contemporary statistical tools and will be equipped with the basic numeracy skills necessary to critically evaluate quantitative arguments in a range of subfields of linguistics. Formerly LIN368H5. [24L, 12T]
Exclusion: LIN368H5
Prerequisite: (LIN256H5 or LIN258H5) (or LIN258H5) and (LIN229H5 or LIN232H5 or LIN231H5 or LIN237H5) (or LIN247H5).

LIN325H5 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]
Exclusion: LIN335H5
Prerequisite: (LIN101H5 or LIN100Y5) and LIN228H5

LIN327H5 Speech Perception (HUM)
For human listeners, understanding speech seems automatic and effortless, even when confronted with diverse talkers and many different communicative contexts. However, the underlying processes by which we perform this task are not well understood. This course covers the fundamentals of speech perception, discussing how it is shaped by a combination of linguistic, auditory, and cognitive influences. Through laboratory exercises, students will replicate classic experimental findings and gain hands-on experience with data analysis. [24L, 12L]
Exclusion: PLID50H3
Prerequisite: LIN228H5 and one of (LIN229H5 or LIN288H5 or LIN318H5 or PSY270H5 or PSY274H5)

LIN328H5 Acoustic Phonetics (HUM)
This course provides an overview of the fundamentals of acoustics, as well as the acoustic properties of vowels and consonants. Students will gain hands-on experience with primary acoustic data analysis through laboratory work, and will be exposed to classic and current research in the field. Additional topics that may be addressed include speech perception, second-language phonetics, and clinical applications. [12L, 24P]
Exclusion: LIN323H1
Prerequisite: LIN228H5 and LIN229H5.

LIN329H5 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]
Exclusion: LIN322H1 or LINC02H3 or LIN322H5
Prerequisite: LIN229H

LIN332H5 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.) Formerly LIN331H5. [24L, 12T]
Exclusion: LIN331H1 or LINC11H3 or LIN331H5
Prerequisite: LIN232H
LIN337H5 Lexical Semantics: What is (or is not) in a Word? (HUM)
25,000 is a modest estimate of the number of verbs with distinct meanings in English, but there are more likely upwards of 75,000 verbs. The number of nouns is three to four times this number. But how do we know what they all mean and how to use them appropriately? What is the nature of this knowledge? The meaning of words has been central to the study of language since the Ancient Greek and Sanskrit grammarians and philosophers, and it remains central to contemporary approaches to natural language. In this course, students will investigate basic issues and concepts in the linguistic study of word meaning, with a special focus on the relation between the semantics of words and their syntactic behaviour. Depending on the instructor, topics discussed in the course may include componential analysis; Lexical Conceptual Semantics; Cognitive Semantics; lexicalization patterns and differences cross-linguistically; categorization; compositionality; child language acquisition; computational applications. [24L, 12T]
Prerequisite:
LIN237H5 and LIN232H5

LIN338H5 Pragmatics (HUM)
This course examines the sub-field of linguistics known as pragmatics, an area concerned not only with what is said but, more importantly, with what is meant. Depending on the instructor, topics in this course may include implicature, reference, presupposition, speech acts, information structure, inferential relations, and static versus dynamic approaches to meaning. The course objectives are to i) explore in depth the concepts necessary to understand the theory of pragmatics, ii) define key terms used by linguists carrying out research in this area, and iii) connect theoretical and methodological concepts to everyday experiences of language in use. [24L, 12T]
Prerequisite: LIN237H5 and (LIN256H5 or LIN232H5)

LIN340H5 Language and Computers (HUM)
This course is designed to introduce students with some background in linguistics (but little background in Computing Sciences) to the two general aims of computational linguistics: to enable computers to analyze and process natural language (the technological aim) and to model human language on computers (the linguistic aim). Students will be introduced to the tools and resources (and their limitations) used by computational linguists and how they are applied in the latest research. [12L, 24P]
Exclusion: CSC485H1 or CSC401H1
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 and (LIN229H5 or LIN231H5 or LIN232H5 or LIN256H5)

LIN353H5 Discourse Analysis (HUM)
This course introduces students to the nature and uses of discourse analysis, notably the types of data on which it draws and its descriptive and critical goals. Topics addressed include discourse structures, participants in discourse, links across texts, the role of medium, and the importance of intention and interpretation. [24L, 12T]
Exclusion: JAL353H5 or JAL353H1
Prerequisite: LIN256H5 or JAL253H5 or ANT206H5

LIN357H5 English Worldwide (HUM)
The best estimate of linguists suggests that English is spoken (natively and non-natively) by around one billion people today. This makes it the most widely spoken language in the world. Within this language exists a high degree of global dialect diversity. In this course, we will examine the structure and history of Englishes around the world including British, North American, Antipodean, Caribbean, African, and Asian varieties. Students will also consider structural and sociolinguistic issues associated with English as a global language including creolization, post-creolization, the diffusion of innovation, language policy, and the linguistic effects of colonialism. [24L, 12T]
Prerequisite: LIN101H5 and LIN102H5, and LIN256/JAL253

LIN359H5 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]
Exclusion: LIN362H1
Prerequisite: LIN229H5 and (LIN231H5 or LIN232H5 or LIN237H5 or LIN247H5)
LIN366H5 Contact Languages: Pidgins, Creoles and Mixed Languages (HUM)
This course examines languages recently created by means of contact between languages of different socio-economical 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 from any of the following: LIN228H5 or LIN229H5 or LIN231H5 or LIN232H5 or LIN247H5 or (LIN256H5 or JAL253H5) or LIN258H5.

LIN369H5 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 and how their features evolved from a common ancestor, Latin. No prior knowledge of Latin or a Romance language is necessary. Suggested companion courses: FRE372H5, FRE373H5, ITA437Y5. [24L, 12T]
Prerequisite: LIN229H5 and (LIN231H5 or LIN232H5 or LIN237H5) (or LIN247H5)

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 or LTL380H5)
Prerequisite: 1.0 credit of any of the following: LIN228H5 or LIN229H5 or LIN231H5 or LIN232H5 or LIN237H5 (formerly LIN247H5) or (LIN256H5 or JAL253H5) or LIN288H5 (formerly LIN258H5).

LIN385H5 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. ( Formerly LIN356H5) [24L, 12T]
Exclusion: LIN356H5
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 and 0.5 credit at the 200-level (not including LIN204H5 and LIN205H5) and 0.5 credit at the 300-level in PSY.
Recommended Preparation: LIN288H5 or LIN258H5

LIN388H5 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 (for example French immersion programs), and various methods used in the study of bilingualism in individuals. Bilingual/multilingual corpora containing French as one of the languages will be examined. Suggested companion course: FRE325H5. (Formerly LIN358H5). [24L, 12T]
Exclusion: LIN358H5
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 and 0.5 credit at the 200-level (not including LIN204H5 and LIN205H5) and 0.5 credit at the 300-level in PSY.
Recommended Preparation: LIN288H5 or LIN258H5

JFL389H5 Second Language Assessment (HUM)
This course provides an introduction to the principles and frameworks of second language assessment as well as to the practices of standardized testing and classroom assessment. We begin by discussing models of linguistic competence and frameworks for second language assessment as well as test design including language benchmarking. In the second part of the course, the focus turns to best practices in the assessment of vocabulary, grammar, comprehension, production, and socio-pragmatic competence. [24L, 12T]
Prerequisite: FRE272Y5 or (LIN101H5 and LIN102H5)
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 and International Opportunities (Page 23) for more details.
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 and 1.0 credit from any of the following: LIN228H5 or LIN229H5 or LIN231H5 or LIN232H5 or LIN237H5 (formerly LIN247H5) or JAL253H5 or LIN256H5 or LIN288H5 (formerly LIN258H5).

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]
Prerequisite: LIN101H5 and LIN102H5, plus 1.0 credit at the 200-level in LIN.
Recommended Preparation: LIN205H5

LIN411H5 Introduction to Analysis and Argumentation (HUM)
This course examines several topics which have created controversy in linguistics, topics about which various scholars have expressed opposing views through published articles. By reading and discussing these debates, students will learn how to critically analyze linguistics articles. The aim of this course is for students to develop skills in identifying the authors' assumptions, assessing their argumentation and recognizing how linguists build arguments for opposing views on a certain issue. The topics may range from big picture questions like the validity of Universal Grammar to more specific questions about a linguistic phenomenon. By the end of the course, students will have developed more acute reading skills, thereby also improving their ability to write academically, and more particularly in linguistics. The title of the course might sound scary, but the course itself is not at all! Formerly LIN481H5.
[24L]
Exclusion: LIN481H1 or LIN481H5
Prerequisite: LIN229H5 and LIN232H5 and (LIN231H5 or LIN237H5 or LIN247H5 or LIN256H5 or LIN288H5 or LIN258H5) and 0.5 credit in a 300-level LIN course.

LIN418H5 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. Formerly LIN468H5 [24L]
Exclusion: LIN468H5
Prerequisite: (LIN256H5 or LIN288H5 or LIN258H5) and 0.5 credit in a 300-level LIN course.
Recommended Preparation: LIN318H5 or LIN368H5

LIN421H5 Speaking and Hearing with an Accent (HUM)
Much of linguistic theory assumes the existence of an "ideal speaker/hearer" of a given language. However, in the real world, particularly in linguistically diverse communities such as the GTA, there is an enormous amount of variability driven by differences in language background, regional affiliation, and social factors. This course examines the many factors contributing to accentedness, and how listeners adapt their perception when confronted with different accents. It also explores how models of language development, processing, and production account for accent-related variability. [24L]
Prerequisite: LIN229H5 and (LIN256H5 or LIN288H5) and and 0.5 credit in a 300-level LIN course.
Recommended Preparation: LIN322H5

LIN441H5 Computing Meaning (HUM)
How can we get a computer system to carry out meaningful tasks, such as determining if a restaurant review is positive? How can computational experiments help linguists understand meaning and its use better? This course will introduce students to computational linguistic concepts and techniques pertaining to meaning, such as vector space semantics and sentiment analysis. The course combines a theoretical perspective on meaning and computation with hands-on lab work. [12L, 24P]
Prerequisite: LIN237H5 and LIN340H5
**LIN447H5 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. [24L]

*Exclusion:* LIN477H5

*Prerequisite:* For LIN program students: (LIN232H5 or LIN247H5 or LIN347H5 or JAL353H5) plus 1.0 additional credit at the 300 level. For CS program students: CSC207H5 and STA256H5 and/or permission from the instructor.

**LIN454H5 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 or LIN374H5 or FRE474H5 or LIN474

*Prerequisite:* LIN256H5 (or permission from instructor), plus 0.5 credit in a 300-level LIN course and reading ability in French.

**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 or LTL456H5

*Prerequisite:* LIN256H5 (or permission from instructor), plus 0.5 credit in a 300-level LIN course.

**LIN458H5 Analyzing Sociolinguistic Variation (HUM)**
All languages, in all linguistic domains, exhibit variation - more than one way of saying the same thing. This variation is not random but dependent on various linguistic, social, and cognitive conditioning factors. This course explores the theory and practice of analyzing such sociolinguistic variation. Students will receive hands-on instruction in fieldwork methods for collecting natural speech data and quantitative methods for analyzing patterns in that data. [12L, 12P]

*Exclusion:* LIN456H1

*Prerequisite:* LIN256H5, plus 0.5 credit in a 300-level LIN course.

**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. [24L]

*Prerequisite:* (LIN231H5 or LIN232H5 or LIN237H5 or LIN247H5) and (LIN256H5 or LIN288H5 or LIN258H5) and 0.5 credit in a 300-level LIN course.

*Recommended Preparation:* LIN360H5 or LIN366H5 or LIN369H5 or LIN376H5

**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 and (LIN231H5 or LIN232H5 or LIN237H5 or LIN247H5) and (LIN256H5 or LIN288H5 or LIN258H5) and 0.5 credit in a 300-level LIN course.

**LIN469H5 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]

*Prerequisite:* LIN369H5 or LIN376H5 or LIN360H5 or LIN337H5 or LIN331H5 or LIN385H5 or LIN356H5 or LIN476H5 or LIN406H5 or LIN479H5

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LIN476H5 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]
Exclusion: LIN406H5
Prerequisite: LIN232H5 and 0.5 credit in a 300-level LIN course.
Recommended Preparation: LIN231H5

LIN479H5 The Structure of a Specific Language (HUM)
An introduction to the structure of a featured language other than English. Topics of analysis may include the phonological, morphological, syntactic, or semantic systems; the writing system; historical aspects; variation. Students will use the tools of linguistic analysis learned in prior courses to examine the structural properties of this language. No prior knowledge of the language is necessary. [24L]
Exclusion: LIN409H1 or LIN409H5 or LINC61H3 if the same language was analyzed.
Prerequisite: LIN228H5 and LIN229H5 and LIN232H5, 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 or JAL253H5 or LIN288H5 or LIN258H5

LIN487H5 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: LTL417H5 or LIN417H5
Prerequisite: (LIN101H5 and LIN102H5) or LIN100Y5 and 0.5 credit at the 300-level in a LIN course.

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.
A. Chattopadhyay, B.S., M.B.A., D.B.A., Ph.D.
F. Chen, B.A., M.A., M.A., Ph.D.
N. Chen, B.S., M.S., Ph.D.
R. Chiuzi, M.Sc., Ph.D.
L. Derksen, B.Sc., M.Sc., M.Res.
R. Gaetani, B.A., M.Sc., M.A., Ph.D.
A. Galasso, B.A., M.Sc., M.A., Ph.D.
D. Goetz, B.A., M.A., Ph.D.
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.
M. Schneider, B.Com., JD, MBA, CFP, CPA, CA
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.
A.K.P. Wensley, M.A., M.A., M.B.A., Ph.D.
M. Ye, B.A., M.A., Ph.D.
M. Zoican, Ph.D.

Chair, Economics
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Director, Undergraduate Programs
E. Schumann
The Management and Human Resources Specialist Program (BBA) The Management and Human Resources Specialist program leads to a Bachelor of Business Administration (BBA). The 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 (HRM) Specialist provides students with a good grounding in the management disciplines and a specialized education in HRM. It will allow students to complete the prerequisites for the CHRP designation.

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 for a wide range of careers in business or commerce, etc.

Management 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 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. Enrolment in Commerce and Management programs, and all 200+ level Management courses, is restricted to students in program.
3. “MGT” Management Courses are available to students in the Digital Enterprise Management (CCIT) program and, if all prerequisites have been met and pending availability, Marketing Stream program students.
4. “MGM” Management Courses at the 200+ level are available only to students in the Management programs.
5. “MGD” Management Courses at the 200, 300, and 400 levels are available only to students in the Commerce programs. Management students may be eligible to enrol in MGT courses as well. Please refer to the enrolment controls listed on the Timetable website at: https://student.utm.utoronto.ca/timetable
6. For the Minor in Business, Science and Entrepreneurship please see Institute for Management and Innovation (Page 314)

Certificate in Effective Business Practices & Leadership Skills

The Certificate in Effective Business Practices & Leadership Skills provides eligible students the opportunity to participate in a 4-month (non-credit) paid work placement while completing their program of study. Through the certificate, students will gain authentic learning experiences and apply what they are learning in the classroom to workplace environments. This certificate must be completed concurrently with any Department of Management program.

Although every effort is made to support students in securing a paid work placement, students must receive an offer of employment to complete the certificate. The Department of Management cannot guarantee that students will secure a paid work placement. 

Limited Enrolment: Enrolment in the Certificate in Effective Business Practices & Leadership Skills is limited
due to the experiential learning component. Students wishing to enrol at the end of their second year of study (min. 7.0 credits) must have a min. CGPA of 2.5. Please note that the CGPA requirement varies from year to year, based on the applicant pool, but will not fall below 2.5. Additionally, students must meet the following enrolment criteria:

1. Concurrent enrolment in one of the following programs:
   - Human Resource Management, Specialist (BBA);
   - Management, Specialist (BBA);
   - Management, Major (HBA);
   - Commerce, Specialist (BCom);
   - Commerce: Accounting, Specialist (BCom);
   - Commerce: Finance, Specialist (BCom);
   - Commerce: Marketing, Specialist (BCom); or
   - Commerce, Major (HBA)

2. Completion of the following courses prior to request for enrolment:
   - MGT231H5 - Business Finance I; and
   - MGT262H5 - Psychology for Work

3. Completion of at least 15 points prior to the admission deadline in the Professional Skills Development Program with mandatory attendance at all of the following sessions:
   - Career Investment Planning;
   - Excel Workshop;
   - Resume Critique; and
   - Mock/ Practice Interview

4. Submission of an application to the Department of Management for review by the Experiential Learning Officer.

5. Participation in an enrolment interview.

**Certificate Program Requirements:**

**Second Year:** MGT231H5, MGT262H5; 15 Professional Skills Development Program points (must include Career Investment Planning Session, Momentum: Excel Workshop, Resume Critique, and Mock Interview)

**Third Year:** MGT200H5; Workplace Preparation Workshop; Work-Integrated Learning Experience (4-month placement in Summer term)

**Fourth Year:** 0.5 credit from 400-level course list; MGT010H5 (NOTE: This is a zero-credit course).

400-level Course List: MGM464H5; MGT430H5, MGT433H5, MGT434H5, MGT437H5, MGT455H5, MGT463H5, MGT491H5, MGT493H5, MGT494H5.

**Students should also review the Degree Requirements (Page 16) section prior to selecting courses.**

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**Specialist Program ERSPE1882 Human Resource Management**

This program leads to a BBA degree. This program has a total of 15.0 credits.

**Limited Enrolment** – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar.

Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGM102H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGM102H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

**Other**

- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POSt request periods for all students.

**First Year:** For students who began studies prior to September 2018 (2.0 credits): MGM101H5, MGM102H5, ECO100Y5

For students who began studies in September 2018 and onwards (3.0 credits): MGM101H5, MGM102H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

It is recommended that students interested in pursuing this
management (HBA, BBA) programs

Program consider completing SOC100H5 to ensure access to some upper year SOC courses to fulfill the 1.5 Electives Program Requirement listed below.

Higher Years:

- Core courses (1.5 credits): MGT262H5, MGT270H5, MGM400H5
- Statistics (0.5 credits): STA218H5
- Electives (select 1.5 credits): ANT350H5, ECO261H5, HIS313H5, HIS314H5, SOC227H5, SOC236H5, SOC263H5, SOC361H5, WGS210H5, MGT461H5, MGT463H5, MGT467H5

Please note enough space is reserved each year in MGT480H5 to accommodate the full HRM cohort.

Specialist Program ERSPE2431 Management

This program leads to a BBA degree. This program has a total of 13.5 credits.

Limited Enrolment – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar.

Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGM102H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGM102H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

Other

- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POST request periods for all students.

First Year: For students who began studies prior to September 2018 (2.0 credits):
MGM101H5, MGM102H5, ECO100Y5
For students who began studies in September 2018 and onwards (3.0 credits): MGM101H5, MGM102H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5/ MAT135Y5 (or equivalent)

Higher Years:

- Core courses (2.0 credits): MGT260H5, MGT262H5, MGT270H5, MGM400H5
- Statistics (0.5 credits): STA218H5
- Electives (select 1.5 credits): Any 300/400 MGT/MGM courses. Cannot include any courses already used above.

NOTE: We recommend that students in the Management Specialist with the required prerequisites consider completing an Economics Minor program.
Major Program ERMAJ2431 Management

This program has a total of 9.0 required credits and must be taken as part of an Honours degree. This major program cannot be combined with Commerce, Digital Enterprise Management, Economics or Human Resource Management and Industrial Relations.

Limited Enrolment – Note: The following admission requirements will be in effect for students enrolling to the program in Spring 2021. For students enrolling during the Spring 2020 enrolment period, please consult the 2019-2020 Academic Calendar. Admission to this program is based on the following criteria:

- Completion of at least 4.0 credits
- A final mark of at least 63% in each of the following courses: ECO100Y5, MGM101H5, MGM102H5, and (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5)
- A weighted average of the grades earned in ECO100Y5, MGM101H5, MGM102H5, (MAT133Y5 or MAT135Y5 or both MAT135H5 and MAT136H5) that meets the program’s annual admission cutoff, which is determined annually by the Department of Management. This will vary from year to year and is based on capacity and the applicant pool.

Other

- Applicants with transfer credits will be assessed on a case-by-case basis.

Application for admission to the program is made during the Subject POSt request periods for all students.

First year: For students who began studies prior to September 2018 (2.0 credits):
MGM101H5, MGM102H5, ECO100Y5
For students who began studies in September 2018 and onwards (3.0 credits):
MGM101H5, MGM102H5, ECO100Y5, MAT133Y5/ MAT135H5, MAT136H5 (or equivalent)

Higher Years:

- Core courses (1.5 credits): MGT262H5, MGT270H5, MGM400H5
- Management Disciplines (3.0 credits): MGM221H5/ MGT120H5, MGM222H5, MGT231H5, MGM390H5, MGT252H5, MGT371H5
- Statistics (0.5 credits): STA218H5
- Electives (select 1.0 credit): Any 300/400 MGT/MGM courses. Cannot include any courses already used above.

The program requirements in effect at the time students are admitted to the program must be met in order to fulfill the degree requirements.

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

List of Courses

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: MGTA05H3 or MGTA01H3 and MGTA02H3 or RSM100Y1 or MGT100H1

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]
Exclusion: None
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, 12T]
Exclusion: MGT120H5 or MGT201H1 or MGAB01H3 or RSM219H1
Prerequisite: MGM101H5 and MGM102H5

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: MGT223H5 or RSM222H1 or MGAB03H3
Prerequisite: MGM101H5 and MGM102H5 and (MGM221H5 or MGT120H5)
MGM320H5 Financial Statement Analysis and Interpretation (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: MGM224H5 or MGM225H5 or MGM225H5 or RSM221H1 or MGAC01H3.
Prerequisite: (MGT120H5 or MGM221H5) and MGM222H5

MGM360H5 Compensation (SSc)
This course explores the theory and process of developing compensation systems as part of an organization’s larger system for managing human potential. The course focuses on the major components of compensation strategy design such as legislation, principles of equity and fairness, job analysis, job evaluation, compensation surveys, benefits and incentives. Current events in relation to compensation are explored. Students will also acquire hands-on experience in building a compensation strategy. [24L]
Prerequisite: MGM260H5

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 or IRE244H1 or MGHC53H3
Prerequisite: MGM260H5

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: MGM260H5

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 or MGT393H5 or MGT394H5 or RSM225H1 or MGSC32H3.
Prerequisite: MGM101H5 and MGM102H5

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]
Exclusion: MGT400H5 or MGT492H5
Prerequisite: MGM262H5 or 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: MGM260H5

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 or MGHD24H3
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]
Exclusion: IRE347H1 or MGHD26H3
Prerequisite: MGM260H5

MGT010H5 Effective Business Practices and Leadership Skills Capstone (SSc)
This culminating course offers students in the Effective Business Practices and Leadership Skills Certificate an opportunity to integrate and synthesize their academic learning with their work-integrated learning experience. Students will engage with other students in the certificate program to share their experiences, complete their final workplace reflection exercises, produce a written report of their workplace experience, and exhibit their experience in the form of a final poster presentation. This course is required for all students in the Certificate in Effective Business Practices and Leadership Skills. No credit is awarded for this course. [24L]
Prerequisite: Admission to the Certificate in Effective Business Practices and Leadership Skills
MGT120H5 Introduction to Financial Accounting (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 or MGAB01H3 and MGAB02H3 or RSM219H1

MGT130H5 Introduction to Personal Finance (SSc)
Personal finance is an essential skill set for today's current economy. Students will be provided with the knowledge and tools to confidently and efficiently manage their finances and guide those around them. Emphasis will be placed on cash flow analysis, asset management, taxation, risk management, retirement planning, and estate planning. Not open to students enrolled in the 3rd or 4th year of the Commerce Major or Specialist Program. [24L]

MGT200H5 Presentation Skills for Management (SSc)
The ability to verbally communicate effectively is an important skill in both business and life. Through various avenues such as impromptu speeches, group presentations and debates, students will work on improving their communication and networking skills as well as reflect on opportunities for further improvement via journaling and self-reflection. [24L]
Prerequisite: MGM101H5

MGT201H5 Coding for Business (SSc)
Targeted to business students with little or no programming experience, the course provides an understanding of the role computation has in solving business problems and to help students be able to write small programs to accomplish practical tasks in the business world. [36P]
Exclusion: CSC108H5

MGT211H5 Special Topics for Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L, 12P]

MGT212H5 Special Topics for Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L, 12P]

MGT220H5 Intermediate Accounting I (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, 12T]
Exclusion: RSM220H1 or 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 or MGAB03H3 or MGMB22H1
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, 12T]

Please note: This course will be phased out as of Summer 2021. Students admitted to the Accounting program in Fall 2020 and onward should enrol in MGT225H5 Intermediate Accounting II.
Exclusion: RSM221H1 or MGAC01H3 or MGT225H5
Prerequisite: MGT220H5

MGT225H5 Intermediate Accounting II (SSc)
Expands the analysis of financial accounting beyond MGT220H5. Technical topics include liabilities, shareholders' equity, complex financial instruments, accounting for leases, measuring and reporting pensions and earnings per share. The emphasis is on analysis and developing judgment [24L, 12T].
Exclusion: RSM221H1 or MGAC01H3 or RSM230H1 or MGAC02H3 or MGT224H5 or MGT322H5
Prerequisite: MGT220H5

MGT231H5 Business Finance I (SSc)
(Formerly MGT338H5) 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, 12T]
Exclusion: CCT321H5 or ECO358H5 or ECO358H1 or RSM332H1 or MGFB10H3 or MGT338H5

MGT232H5 Business Finance II (SSc)
(Formerly MGT339H5) This course extends material learned in MGT231H5, 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, 12T]
Exclusion: CCT321H5 or ECO359H5 or RSM333H1 or MGFC10H3 or MGT339H5
Prerequisite: MGT231H5 or MGT338H5

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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 or ECO358H5 or ECO359H5 or 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 or MGM252H5 or RSM250H1 or MGIA01H3

MGT260H5 Managing Human Potential (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 or MGT460H5 or RSM361H1

MGT262H5 Psychology at Work (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 or ER1260H5 or IRE260H1 or MGM300H5 or MGIB02H3 or PSY332H1 or RSM260H1 or WDW260H1

MGT270H5 Data Analytics for Management (SSc)
(Formerly MGM301H5). 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, 12P]
*Exclusion:* MGM200H5 or MGOC10H3 or MGM301H5
*Prerequisite:* MGM101H5 and (MGM102H5 or MGT120H5)
*Corequisite:* STA218H5 or ECO220Y5 or ECO227Y5 or (STA250H1 and 256H5) or (STA256H5 and STA258H5) or (STA256H5 and STA260H5)

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 and International Opportunities (Page 23) for more details.
*Exclusion:* MGT399Y5

MGT311H5 Special Topics for Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. This course may include 24 practical hours. See timetable for schedule. [24P]

MGT312H5 Special Topics for Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L, 12P]

MGT321H5 Audit & Assurance (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 or MGT225H5

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]
*Please note:* This course will be phased out as of Summer 2022. Students admitted to the Accounting program in Fall 2020 and onward should enrol in MGT225H5 Intermediate Accounting II.
*Exclusion:* RSM320H1 or MGAC02H3 or MGT225H5
*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 or MGAC03H3
*Prerequisite:* MGT223H5 and ECO220Y5 or ECO227Y5 or (STA256H5 and STA258H5) or (STA256H5 and STA260H5)

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MGT325H5 Critical Thinking, Analysis and Decision Making I (SSc)
(Formerly MGT320) This course introduces students to integration of different areas of studies, stressing the pervasive competencies and critical thinking skills required from business school graduates, future professional accountants and advisors. This course focuses on developing students’ decision-making and written communication skills. [36L]
Prerequisite: MGT220H5 and MGT223H5 and (MGT224H5 or MGT225H5) and MGT231H5
Corequisite: MGT321H5 and MGT322H5* and MGT323H5
*Students who have completed MGT224H5 are required to enrol in MGT322H5 as corequisite or prerequisite. Students who have completed MGT225H5 do not require MGT322H5 as corequisite or prerequisite.

MGT330H5 Investments (SSc)
Security analysis and portfolio management. Emphasis is placed on an analysis of bonds and common stocks. [24L]
Exclusion: RSM330H1 or MGFD10H3
Prerequisite: MGT231H5 and MGT232H5 as prerequisite or co-requisite

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: MGT231H5

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 or MGM252H5
Recommended Preparation: ECO220Y5 or ECO227Y5 or (STA256H5 and STA260H5)

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 Designing Effective Organizations (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 Business Technology Management (SSc)
This course covers key management decisions based on the impact of sustainable and disruptive technology and their role in strategy, profitable growth, and modern work environments. Unlike programming courses, the focus is on knowledge to help students contribute to technology based decisions in the organizations that they join. [24L, 12T]
Exclusion: CCT225H5 or MGM371H5 or MGAC70H3 or RSM327H1

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 or RSM270H1
Prerequisite: ECO220Y5 or ECO227Y5 or (STA256H5 and STA260H5) or STA218H5 or (STA256H5 and STA258H5)
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 or MGSC30H3 or RSM225H1 or MGM390H5

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 or 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 and International Opportunities (Page 23) for more details.
Exclusion: MGT299Y5 or 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. [24P]

MGT414H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L, 12T]

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. [36L]

MGT417H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT418H5 Special Topics in Management (SSc)
Topics and issues in Management. Content in any given year will depend on the instructor. [24L]

MGT419H5 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 II (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 or MGAD70H3
Prerequisite: MGT321H5 and (MGT322H5 or MGT225H5) and MGT323H5 and MGT423H5
Open only to 4th year Commerce students.
Corequisite: Highly Recommended: MGT421H5 and MGT422H5 and MGT426H5 and MGT429H5

MGT421H5 Advanced Audit & Assurance (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: RSM423H1
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, 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, 12T]
Exclusion: MGAC50H3 or RSM324H1
Prerequisite: MGT220H5, MGT231H5, and (MGT393H5 or MGM390H5)

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. [36L]
Exclusion: RSM321H1
Prerequisite: MGT322H5 or MGT225H5

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 or RSM422H1
Prerequisite: MGT325H5

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, 12T]
Exclusion: MGAC60H3 or 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: MGT231H5 and MGT232H5

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: MGT231H5 and MGT232H5

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]
Exclusion: RSM433H1
Prerequisite: MGT231H5 and MGT232H5

MGT434H5 Mergers and Acquisitions (SSc)
The main focus is to develop a solid understanding of the valuation of mergers and acquisitions from the perspective of a variety of stakeholders including: acquiring and target firm management, directors, and shareholders; financiers; consumers, and; competition regulators and policymakers. Themes to be explored include M&A and corporate strategy, motivations for M&A, corporate restructuring and divestitures, financing of M&A activity, dealing with competition authorities, and M&A 'waves' over the past century. [24L]
Exclusion: MGFD60H3 or RSM433H1
Prerequisite: MGT231H5 and MGT232H5

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. [36P]
Exclusion: MGFD60H3 or RSM434H1
Prerequisite: MGT330H5 and MGT231H5 and MGT232H5
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 transferable to entry level positions in finance. [24L, 12T]
Prerequisite: MGT330H5 and MGT336H5 and MGT232H5, and by special application only.

MGT437H5 Strategy and Governance (SSc)
This course covers concepts in management strategy 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 or MGT225H5) and MGT231H5

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 put and call options and swaps. Emphasis is placed on the 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 put and call options and swaps. [24L]

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: MGFC30H3 or RSM435H1
Prerequisite: 63% in MGT231H5 and MGT232H5
Recommended Preparation: MGT330H5

MGT440H5 Fixed Income Markets (SSc)
This is a capital markets course that describes important fixed income securities and markets. It will emphasize traditional bond and term structure concepts as well as current events and/or securities affecting the functioning of these markets. [24L]
Prerequisite: MGT231H5 and MGT232H5

MGT441H5 Financial Modeling (SSc)
This course studies applications in corporate finance, investments and risk management. Finance lab software tools will be used to work through problems on topics such as Capital Budgeting and Valuation, Portfolio Analysis, Firm Valuation, Valuing Securities and Risk Management. [24P, 12P]
Prerequisite: MGT231H5 and MGT232H5
Recommended Preparation: MGT330H5

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]
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 and ECO220Y5 or ECO227Y5 or STA218H5 or (STA256H5 and STA260H5) or (STA256H5 and STA258H5)

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. [24P]
Exclusion: MGMD01H3
Prerequisite: (MGT252H5 or MGM252H5) and (ECO220Y5 or STA221H5 or STA222H5) and (STA256H5 and STA258H5)
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. [24P]
Exclusion: RSM456H1
Prerequisite: 1.0 300/400 level credit.

MGT461H5 Negotiations (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: MGH52H3 or 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 or 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

MGT480H5 Internship (SSc,EXP)
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. [24L]
Prerequisite: 1.0 credits in MGT at the 300/400 level, 2.5 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: MGT490H1
Prerequisite: 1.0 credit in MGT/MGM at the 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 courses in calculus. This could be either a year long Y course (MAT133Y5 or MAT137Y5 or MAT157Y5) or two one-semester H courses (MAT132H5,MAT134H5) or (MAT135H5,MAT136H5).

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 (MAT135H5, MAT136H5) or MAT137Y5 or MAT157Y5 instead).

(MAT132H5, MAT134H5) and (MAT135H5, MAT136H5) are comparable in terms of mathematical content and difficulty, but differ in the nature of applications. (MAT132H5,MAT134H5) is specifically designed for students in the Life Sciences, and is often taken at the same time as BIO152H5. (MAT135H5,MAT136H5) gives a sense of the wide-ranging applications of calculus to the physical, biological and social sciences.

MAT137Y5 and MAT157Y5 are 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 these courses. MAT157Y5 offers the rigour and depth needed to prepare students for advanced studies in mathematics. Students with a very serious interest in mathematics should therefore consider taking MAT157Y5.

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 16) section prior to selecting courses.

For courses in this area see:
BIO  Biology (page 94)
CSC  Computer Science (page 162)
MAT  Mathematics (page 372)
STA  Statistics (page 445)

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 MAT102H5 (60%) and MAT137Y5 (60%)/MAT157Y5. (2) A minimum cumulative grade point average (CGPA), to be determined annually.

First Year:  CSC108H5, CSC148H5; MAT102H5, MAT137Y5/ MAT157Y5, MAT240H5
Second Year: CSC207H5/ CSC209H5/ CSC236H5; MAT202H5, MAT247H5, (MAT232H5/MAT233H5,MAT236H5)/MAT257Y5, MAT244H5; STA256H5, STA258H5/ STA260H5
Third Year:  MAT301H5, MAT337H5/ MAT378H5
Third & Fourth Years: 1. MAT311H5, MAT334H5, MAT392H5, MAT302H5/ MAT315H5, MAT402H5 2. 1.0 additional credit, chosen from MAT302H5, MAT309H5, MAT315H5, MAT332H5,MAT344H5. 3. 0.5 additional credits in MAT at the 400 level (MAT405H5 is recommended). 4. 1.5 additional credits at the 300+ level in CSC/MAT/STA

Note:
1. Recommended CSC courses: CSC236H5, CSC310H5.
2. Mathematical Specialists are strongly encouraged to enroll in MAT157Y5 and MAT257Y5.
3. 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 MAT134H5/ MAT136H5/MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT233H5 /50% in MAT157Y5. (2) A minimum cumulative grade point average (CGPA), to be determined annually.

Second Year: MAT202H5, MAT232H5/MAT233H5/MAT257Y5, MAT224H5/MAT247H5, MAT244H5

Higher Years:
2. STA256H5/0.5 MAT credit at the 300+ level

NOTES:
1. MAT137Y5 is highly recommended.
2. Mathematical Majors are strongly encouraged to enroll in MAT240H5 followed by MAT247H5.
3. Students enrolled in this program may participate in the PEY program. For more information visit www.pey.utoronto.ca

Minor Program ERMIN2511 Mathematical Sciences (Science)

4.0 credits in MAT are required, including 1.0 MAT credit at the 300+ level.

First Year: MAT102H5, (MAT132H5, MAT134H5)/(MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5


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 ((MAT132H5, MAT134H5)/(MAT135H5, MAT136H5)/MAT134Y5/MAT135Y5/MAT137Y5/MAT157Y5 and MAT232H5) with the combination (MAT133Y5 and MAT233H5).
4. Students may replace the combination (MAT224H5/MAT232H5/MAT240H5/MAT244H5/MAT247H5+0.5 MAT credit at the 200+ level) with MAT257Y5.

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. [41L, 12T]
Exclusion: MAT138H1 or MAT246H1 or CSC165H1 or CSCA67H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U)
Recommended Preparation: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

MAT132H5 Differential Calculus for Life Sciences (SCI)
Review of functions and their graphs, trigonometry, exponentials and logarithms. Limits and continuity of functions of a single variable. Derivatives and differentiation techniques. Applications of differentiation, including extreme values, related rates and optimization. Life science applications are emphasized. [40L, 12T]
Exclusion: MAT135H5 or MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT133Y1 or MAT135Y1 or MAT135H1 or MAT137Y1 or MAT157Y1 or MAT157Y5 or MAT293H or MAT303H or MAT313H or MAT323H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U) Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)
MAT133Y5 Calculus and Linear Algebra for Commerce (SCI)
Mathematics of finance, matrices and linear equations. Review of differential calculus; 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. [80L, 24T]
Exclusion: MAT132H5 or MAT134H5 or MAT135H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT133Y1 or MAT135Y1 or MAT135H1 or MAT136H1 or MAT137Y1 or MAY157Y1 or MAT30H3 or MAT31H3 or MAT32H3 or MAT33H3 or MAT35H3 or MAT36H3 or MAT37H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U). Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)
This course cannot be used for the specialist or major programs in Mathematics, Statistics or Computer Science, except in combination with MAT233H5.
Restricted to students admitted into Management or Commerce.

MAT134H5 Integral Calculus for Life Sciences (SCI)
Antiderivatives and indefinite integrals in one variable, definite integrals and the fundamental theorem of calculus. Integration techniques and applications of integration. Infinite sequences, series and convergence tests. Power series, Taylor and Maclaurin series. Life science applications are emphasized. [40L, 12T]
Exclusion: MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT133Y1 or MAT135Y1 or MAT136H1 or MAT136H5 or MAT137Y1 or MAT157Y5 or MAT30H3 or MAT31H3 or MAT32H3 or MAT33H3 or MAT35H3 or MAT36H3 or MAT37H3
Prerequisite: MAT132H5 or MAT135H5 or MAT135H1 or MAT29H3 or MAT30H3 or MAT31H3

MAT135H5 Differential Calculus (SCI)
Review of functions and their graphs, trigonometry, exponentials and logarithms. Limits and continuity of functions of a single variable. Derivatives and differentiation techniques. Applications of differentiation, including extreme values, related rates and optimization. A wide range of applications from the sciences will be discussed. [40L, 12T]
Exclusion: MAT132H5 or MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT135Y1 or MAT133Y1 or MAT136H5 or MAT137Y1 or MAT157Y1 or MAT157Y5 or MAT30H3 or MAT31H3 or MAT32H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U). Highly Recommended: Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

MAT136H5 Integral Calculus (SCI)
Antiderivatives and indefinite integrals in one variable, definite integrals and the fundamental theorem of calculus. Integration techniques and applications of integration. Infinite sequences, series and convergence tests. Power series, Taylor and Maclaurin series. A wide range of applications from the sciences will be discussed. [40L, 12T]
Exclusion: MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT133Y1 or MAT135Y1 or MAT136H1 or MAT134H5 or MAT137Y1 or MAT157Y5 or MAT33H3 or MAT35H3 or MAT36H3 or MAT37H3
Prerequisite: MAT132H5 or MAT135H5 or MAT135H1 or MAT29H3 or MAT30H3 or MAT31H3

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. [80L, 48T]
Exclusion: MAT133Y5 or MAT134Y5 or MAT135Y5 or MAT132H5 or MAT134H5 or MAT135H5 or MAT136H5 or MAT133Y1 or MAT135Y1 or MAT136H1 or MAT137Y1 or MAT157Y5 or MAT30H3 or MAT31H3 or MAT32H3 or MAT33H3 or MAT35H3 or MAT36H3 or MAT37H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U), Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)

MAT157Y5 Analysis I (SCI)
A theoretical course in calculus for students with a very serious interest in mathematics; emphasizing proofs and techniques, as well as geometric and physical understanding. Trigonometric identities. Limits and continuity; least upper bounds, intermediate and extreme value theorems. Derivatives, mean value and inverse function theorems. Integrals; fundamental theorem; elementary transcendental functions. Techniques of integration. Taylor's theorem; sequences and series, uniform convergence and power series. [72L, 48T]
Note: MAT157Y5 will be accepted anywhere where MAT137Y5 is accepted.
Exclusion: MAT157Y1 or MAT37H3
Prerequisite: Minimum 70% in Grade 12 Advanced Functions (MHF4U), Minimum 70% in Grade 12 Calculus and Vectors (MCV4U)
Corequisite: MAT102H5

MAT157Y5 Analysis I (SCI)
MAT202H5 Introduction to Discrete Mathematics (SCI)
Mathematics derives its great power from its ability to formulate abstract concepts and techniques. In this course, students will be introduced to abstraction and its power through a study of topics from discrete mathematics. The topics covered will include: Sets, relations and functions; Basic counting techniques: subsets, permutations, finite sequences, inclusion-exclusion; Discrete probability; random variables paradoxes and surprises; Basic number theory; properties of the integers and the primes. The course will emphasize active participation of the students in discussion and written assignments. [36L, 12T]
Prerequisite: MAT102H5 and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT137Y5 or MAT157Y5 or MAT233H5)
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.

MAT212H5 Modeling with Differential Equations in Life Sciences and Medicine (SCI)
Modeling with differential equations, applied to examples from Life Sciences and Medicine. Exponential and logistic growth of population, stability in first-order equations, higher order linear equations, forced oscillations, systems of first order equations, phase plane analysis, predator-prey models, modeling chemical reactions, modeling heart beat. [36L, 12T]
Exclusion: MAT244H5 or MAT244H1 or MATB44H3
Prerequisite: MAT233H5 or Corequisite (MAT232H5 or MAT257Y5)
Corequisite: MAT223H5 or MAT240H5

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 $\mathbb{R}^n$ to $\mathbb{R}^m$. 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. [39L, 12T]
Exclusion: MAT223H1 or MAT188H1 or MAT232H3 or MAT240H1 or MAT240H5
Prerequisite: Grade 12 Advanced Functions (MHF4U) and Grade 12 Calculus and Vectors (MCV4U or MAT102H5).

MAT224H5 Linear Algebra II (SCI)
Exclusion: MAT240H5 or MAT224H1 or MATB24H3
Prerequisite: MAT102H5 and MAT223H5

MAT232H5 Calculus of Several Variables (SCI)
"Bridging Course"; accepted as prerequisite for upper level courses in replacement of MAT232H5. Limited Enrolment.
Sequences and series, power series, Taylor series, trigonometric and inverse trigonometric functions and their use in integrations. Differential and integral calculus of several variables; partial differentiation, chain rule, extremal problems, Lagrange multipliers, classification of critical points. Multiple integrals, Green's theorem and related topics. [36L, 12T]
Exclusion: MAT233H5 or MAT235Y1 or MAT237Y1 or MAT257Y1 or MAT257YS or MATB41H3
Prerequisite: MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5
Recommended Preparation: MAT223H5 or MAT240H5

MAT233H5 Calculus of Several Variables (SCI)
"Bridging Course"; accepted as prerequisite for upper level courses in replacement of MAT232H5. Limited Enrolment.
Sequences and series, power series, Taylor series, trigonometric and inverse trigonometric functions and their use in integrations. Differential and integral calculus of several variables; partial differentiation, chain rule, extremal problems, Lagrange multipliers, classification of critical points. Multiple integrals, Green's theorem and related topics. [36L, 12T]
Exclusion: MAT232H5 or MAT235Y1 or MAT237Y1 or MAT257Y1 or MAT257YS or MATB41H3
Prerequisite: MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or 75% in MAT133Y5
Recommended Preparation: MAT223H5 or MAT240H5

MAT236H5 Vector Calculus (SCI)
Exclusion: MAT235Y1 or MAT237Y1 or MAT257Y1 or MAT257YS or MATB41H3
Prerequisite: (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5) or 75% in MAT133Y5
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics 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 or MAT224H1 or MAT240H1
Prerequisite: 60% in MAT102H5
Corequisite: MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5

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 or MAT244H1 or MATB44H3 or MAT322H5
Prerequisite: (MAT223H5 or MAT240H5) and (MAT232H5 or MAT257Y5).
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs; Astronomical Sciences Specialist (ERSPE1025), Astronomy Major (ERMAJ2204), Biomedical Physics Specialist (ERSPE1944)

MAT247H5 Algebra II (SCI)
Exclusion: MAT247H1
Prerequisite: MAT240H5 or MAT240H1

MAT257Y5 Analysis II (SCI)
A theoretical second course in calculus for students with a serious interest in mathematics. Topology of R^n; compactness, functions and continuity, extreme value theorem. Derivatives; inverse and implicit function theorems, maxima and minima, Lagrange multipliers. Integration; Fubini’s theorem, partitions of unity, change of variables. Differential forms. Manifolds in R^n; integration on manifolds; Stokes’ theorem for differential forms and classical versions. [72L, 48T] Note: MAT257Y5 will be accepted anywhere where MAT232H5 or MAT236H5 are accepted.
Exclusion: MAT237Y1 or MAT257Y1
Prerequisite: MAT157Y5 and MAT240H5

MAT299Y5 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 and International Opportunities (Page 23) for more details.
Prerequisite: Departmental permission.

MAT301H5 Groups and Symmetries (SCI)
Exclusion: MAT301H1 or MATC01H3
Prerequisite: MAT102H5 and (MAT202H5 or MAT224H5 or MAT240H5)
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.
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 or MATC16H3
Prerequisite: (MAT224H5 or MAT240H5) and MAT301H5
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.

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 or CSC309H1 or MATC09H3
Prerequisite: MAT102H5 and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5) and (MAT224H5 or MAT240H5)
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 or APM351Y1 or MATC46H3
Prerequisite: MAT102H5 and (MAT232H5 or MAT233H5) and (MAT212H5 or MAT244H5)
Corequisite: MAT236H5 or MAT257Y5
Priority is given to students enrolled in the Mathematics or Statistics 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 or MATC15H3
Prerequisite: MAT102H5 and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5) or (MAT133Y5 and MAT233H5) and (MAT224H5 or MAT240H5) and MAT301H5
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.

MAT322H5 Mathematical Modelling in Biology (SCI)
The course will serve as an introduction to mathematical modelling of biological processes. It will cover a selection of the following topics: Difference equations and applications. Linear differential equations and systems; phase plane analysis; nonlinear systems of differential equations and linearization; Poincaré-Bendixon Theorem. Applications of differential equations to biology, including a logistic population with harvesting; predator-prey model; competing species; epidemic models. Examples of partial differential equations; reaction-diffusion equation; pattern formation. [36L, 12T]
Exclusion: MAT388H5 or MAT244H5 or MAT244H1 or MATB44H3.
Prerequisite: MAT102H5 and (MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT233H5) and (MAT223H5 or MAT240H5)
Restricted at all times to students in the Math Minor program.

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 or MATC35H3
Prerequisite: (MAT232H5 or MAT233H5 or MAT257Y5) and (MAT223H5 or MAT240H5) and (MAT212H5 or MAT244H5)
Priority is given to students enrolled in the Mathematics or Statistics Specialist or Major programs and Bioinformatic Specialist.

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 or MAT354H5 or MAT354H1 or MATC34H3
Prerequisite: MAT102H5 and (MAT232H5 or MAT233H5 or MAT257Y5) and (MAT202H5 or MAT240H5)
Priority is given to students enrolled in the Mathematics or Statistics Specialist or Major programs.

MAT337H5 Introduction to Real Analysis (SCI)
(Formerly MAT378H5) The real numbers; Sequences and series; Functional limits; Topology in R^n; Differentiation and Integration; Power Series; Metric Spaces; Integrability and sets of measure zero. The course emphasizes rigour and theory. [36L, 24T]
Exclusion: MAT337H1 or MAT357H1 or MATB43H3 or MATC37H3 or MAT378H5
Prerequisite: MAT102H5 and (MAT224H5 or MAT240H5) and (MAT212H5 or MAT244H5) and (MAT232H5 or MAT233H5 or MAT257Y5)
Priority is given to students enrolled in the Mathematics or Statistics 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 or MATC44H3
Prerequisite: MAT102H5 and (MAT223H5 or MAT240H5)
Priority is given to students enrolled in the Mathematics or Statistics Specialist or Major programs.

MAT354H5 Complex Analysis (SCI)
Complex numbers, the complex plane and Riemann sphere, Möbius transformations, elementary functions and their mapping properties, conformal mapping, holomorphic functions, Cauchy's theorem and integral formula. Taylor and Laurent series, maximum modulus principle, Schwarz' lemma, residue theorem and residue calculus. [36L, 24T]
Exclusion: MAT334H1 or MAT334 H5, MAT354H1 or MATC34H3
Prerequisite: (MAT137Y5 or MAT157Y5) and (MAT202H5 or MAT240H5) and (MAT232H5 or MAT233H5 or MAT257Y5)

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 MAT major and specialist programs. [36L, 12T]
Exclusion: MAT329Y1 or MATC82H3
Prerequisite: Minimum 60% in (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y or MAT233H5) and minimum 60% in MAT102H5 and MAT223H5 or MAT240H5 and at least one additional MAT half-course at the 200+ level.

MAT387H5 Topics in Mathematics (SCI)
Introduction to a topic of current interest in mathematics. Content will vary from year to year. [36L, 12-24T]
Prerequisite: Departmental permission; Minimum 2.5 CGPA.

MAT388H5 Topics in Mathematics (SCI)
Introduction to a topic of current interest in mathematics. Content will vary from year to year. This course may include a tutorial and/or practical section in some years. [36L, 12-24T]
Prerequisite: Departmental permission and 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 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.

MAT397H5 Further Studies in Mathematics (SCI,EXP)
Students explore a topic in mathematics under the supervision of a faculty member. Interested students must consult with mathematics faculty at least two months prior to registration, to determine the topic and scope.
Prerequisite: Departmental permission; Minimum 2.5 CGPA.

MAT398H5 Further Studies in Mathematics (SCI,EXP)
Students explore a topic in mathematics under the supervision of a faculty member. Interested students must consult with mathematics faculty at least two months prior to registration, to determine the topic and scope.
Prerequisite: Departmental permission; Minimum 2.5 CGPA.

MAT399Y5 Research Opportunity Program (SCI)
This courses 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 and International Opportunities for more details.
Prerequisite: Departmental permission.

MAT401H5 Polynomial Equations and Fields (SCI)
Exclusion: MAT347Y1 or MAT401H1 or MATD01H3
Prerequisite: MAT102H5 and (MAT224H5 or MAT240H5) and (MAT232H5 or MAT233H5 or MAT257Y5) and (MAT301H5).
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics 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 or MATD02H3
Prerequisite: MAT102H5 and (MAT232H5 or MAT233H5 or MAT257Y5) and (MAT224H5 or MAT240H5) and at least one MAT half-course at the 300+ level.
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.

MAT405H5 Introduction to Topology (SCI)
Sets and functions; Topology in R^n; Topological spaces; Open and closed sets; Closure and interior; Continuous functions; Quotient spaces; Connectedness and compactness; Separation axioms and related theorems. [36L, 12T]
Exclusion: MAT327H1 or MATC27H3
Prerequisite: MAT102H5 and (MAT224H5 or MAT240H5) and (MAT232H5 or MAT233H5 or MAT257Y5) and at least one MAT half-course at the 300+ level with a mark of at least 65%.
Recommended Preparation: MAT337H5 or MAT378H5
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics 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 and (MAT223H5 or MAT240H5) and STA256H5
Priority is given to students enrolled in the Mathematics, Computer Science and Statistics Specialist or Major programs.

MAT478H5 Topics in Mathematics (SCI)
Introduction to a topic of current interest in mathematics. Content will vary from year to year. This course may include a tutorial and/or practical section in some years. [36L, 12-24T]
Prerequisite: Departmental permission and Minimum 2.5 CGPA.
Priority is given to students enrolled in the Mathematics Specialist or Major programs.

MAT488H5 Topics in Mathematics (SCI)
Introduction to a topic of current interest in mathematics. Content will vary from year to year. This course may include a tutorial and/or practical section in some years. [36L, 12-24T]
Prerequisite: Departmental permission and 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.

MAT497H5 Further Studies in Mathematics (SCI, EXP)
Students explore a topic in mathematics under the supervision of a faculty member. Interested students must consult with mathematics faculty at least two months prior to registration, to determine the topic and scope.
Prerequisite: Departmental permission; Minimum 2.5 CGPA.

MAT498H5 Further Studies in Mathematics (SCI, EXP)
Students explore a topic in mathematics under the supervision of a faculty member. Interested students must consult with mathematics faculty at least two months prior to registration, to determine the topic and scope.
Prerequisite: Departmental permission and 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.

**Neuroscience (HBSc)**

Offered through the Department of Psychology

Program Advisors
- Professor Brett Beston
  905-569-5697
  brett.beston@utoronto.ca

- Professor S.B. Kamenetsky
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Neuroscience is a multidisciplinary approach to understanding the structures and functions of the brain and nervous system. Students will have the opportunity to combine knowledge of behavioural, physiological, and cellular/molecular processes through lecture and laboratory courses, and to carry out research projects with faculty members. This program provides an excellent theoretical and empirical background for students interested in pursuing graduate studies in neuroscience and related fields.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:

- BIO Biology (page 94)
- CHM Chemistry (page 113)
- MAT Mathematics (page 372)
- PSY Psychology (page 412)
- STA Statistics (page 445)
Specialist Program ERSPE2470 Neuroscience (Science)

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

**Limited Enrolment** – Enrolment is limited to students who have:

1. completed 8.0 credits;
2. successfully completed PSY100Y5, BIO152H5, BIO153H5, CHM110H5, CHM120H5 and (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5) / MAT134Y5 / MAT135Y5 / MAT137Y5 / MAT157Y5;
3. completed PSY201H5, PSY202H5 (or equivalent), PSY290H5, and at least 0.5 FCE from: BIO202H5 / BIO205H5 / BIO206H5 / BIO207H5 / PSY210H5 / PSY270H5 / PSY274H5 / PSY280H5 with a minimum average of 77%
4. a minimum AGPA of 3.0

Students who do not meet these requirements and/or students who apply in third or later years must have a psychology and biology average of at least 77% (based on a minimum of PSY201H5, PSY202H5, and 1.5 recent completed credits in psychology and biology courses listed in Neuroscience Specialist program) as well as an AGPA of at least 3.0. These requirements are based on all courses taken during students' most recent academic year (including Summer, when applicable).

**First Year:** PSY100Y5; BIO152H5, BIO153H5; CHM110H5, CHM120H5; (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5) / MAT134Y5 / MAT135Y5 / MAT137Y5 / MAT157Y5

**Second Year:**

1. (PSY201H5, PSY202H5) / (STA220H5, STA221H5) / (STA215H5, BIO360H5) or equivalent
2. BIO202H5; BIO206H5; BIO207H5; PSY290H5
3. one of the following: PSY210H5, PSY270H5, PSY274H5, PSY280H5

Second year notes:

- BIO202H5 is required for several courses in the Neurobiology area.
- PSY210H5 (Introduction to Developmental Psychology) is required for several courses in the Behavioural Neuroscience area.

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 areas:


3. Neurobiology area: BIO304H5, BIO310H5, BIO380H5, BIO404H5, BIO409H5, PSY318H5, PSY346H5, PSY369H5, PSY393H5, PSY397H5

Third year note:

- Students interested in taking PSY400Y5 are advised to take PSY309H5.

**Fourth Year:**

1. One seminar from the following: BIO403H5, BIO404H5, BIO406H5, BIO407H5, BIO408H5, PSY490H5, PSY495H5

2. One thesis/ research project from the following: BIO481Y5, PSY400Y5, PSY403H5 / PSY404H5 / PSY405H5 / PSY406H5 / PSY499H5

**Important notes about Psychology programs and courses.**

1. **Access to courses.** PSY309H5, PSY319H5, PSY329H5, PSY379H5, PSY369H5 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.

2. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).

3. **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.
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.
- 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.
- O.W. Ware, B.A. Ph.D
- J. Weisberg, B.A., Ph.D.
- B. Yi, B.A., M.A., Ph.D.

Chair
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Elisabeta Vanatoru
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Departmental Supervisor
Robert Eberts
Maanjiwe nendamowinan, Room 6166

Faculty Advisor - Ethics, Law and Society
Sergio Tenenbaum
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Undergraduate Advisor
Jane Medeiros
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ugadvisor.philosophy.utm@utoronto.ca

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 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 section prior to selecting courses.

For courses in this area see:
PHL Philosophy (page 383)

Specialist Program ERSPE0231 Philosophy (Arts)

Students must complete 10.0 credits in Philosophy (not including PHL204H5). 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.

Program Requirements: The program must include:

1. at least 3.5 credits in the History of Philosophy:
   - PHL200H5 and PHL210Y5 and 2.0 additional credits from PHL220H5, PHL300H5, PHL301H5, PHL302H5, PHL307H5, PHL310H5, PHL314H5, PHL315H5, PHL324H5, PHL325H5, PHL327H5, PHL400H5, PHL410H5, PHL420H5;

2. at least 1.0 credit in Logic and Philosophy of Language: PHL245H5 and 0.5 additional credit from PHL246H5, PHL340H5, PHL341H5, PHL345H5, PHL346H5, PHL347H5, PHL350H5, PHL451H5

3. at least 1.5 credits in Metaphysics and Epistemology: from PHL332H5, PHL333H5, PHL341H5, PHL342H5, PHL355H5, PHL358H5, PHL360H5, PHL430H5

4. at least 1.5 credits in Ethics and Political Philosophy: PHL265H5 and PHL275H5 and 0.5 additional credit from PHL365H5, PHL370H5, PHL374H5, PHL376H5, PHL475H5.

It is recommended that all students discuss their course selection requirements with the Undergraduate Advisor.

Major Program ERMAJ0231 Philosophy (Arts)

Program Requirements: Students must complete a program of 7.0 credits in Philosophy (not including PHL204H5), 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:
   - PHL200H5, PHL210Y5 and 1.0 additional credit from PHL220H5, PHL300H5, PHL301H5, PHL302H5, PHL307H5, PHL310H5, PHL314H5, PHL315H5, PHL324H5, PHL325H5, PHL327H5, PHL400H5, PHL410H5, PHL420H5;

2. at least 0.5 credits in Logic: PHL245H5;

3. at least 1.0 credits in Metaphysics and Epistemology: from PHL240H5, PHL258H5, PHL332H5, PHL333H5, PHL340H5, PHL341H5, PHL342H5, PHL350H5, PHL355H5, PHL358H5, PHL360H5, PHL430H5

4. at least 1.0 credits in Ethics and Political Philosophy: PHL265H5, PHL274H5, PHL275H5

It is recommended: that students begin their study of Philosophy with PHL103H5 or PHL113H5; and that students planning to enrol in the Major Program in Philosophy complete at least 2.0 credits of PHL200H5, PHL210Y5, PHL245H5, and PHL265H5 or PHL275H5 by the end of their second year.

Minor Program ERMIN0231 Philosophy (Arts)

Program Requirements: 4.0 credits in Philosophy (not including PHL204H5) 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.

**Program Requirements:** 4.0 credits (not including PHL204H5) are required including at least 1.0 at the 300/400 level.

1. 1.0 credit from the following: PHL101H5, PHL102H5, PHL103H5, PHL105Y5, PHL210Y5, PHL235H5, PHL240H5, PHL244H5, PHL247H5, PHL255H5, PHL258H5, PHL284H5, PHL285H5
2. 0.5 credit from PHL265H5, PHL271H5, PHL275H5
3. 1.0 credit from PHL267H5, PHL273H5, PHL274H5, PHL277Y5, PHL283H5, PHL284H5, PHL365H5, PHL367H5, PHL370H5, PHL374H5, PHL376H5 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 Jane Medeiros at ugadvisor.philosophy.utm@utoronto.ca or 905-569-4601.

**Notes:**

- All 200-level courses, with the exception of PHL204H5, 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: PHL103H5 or 113H5 or 200H5 or 210Y5 or 245H5 or PHL265H5 or PHL275H5. 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.

**List of Courses**

- **PHL103H5 Introduction to Philosophy: Knowledge and Reality (HUM)**
  This introductory course takes up philosophical questions about knowledge, reality, language, and the mind. A variety of traditional and contemporary perspectives will be considered. [24L, 12T]
  **Exclusion:** PHL105Y5 or PHL101H5 or PHL100Y1 or PHL101Y1 or PHL201H1 or PHLA10H3
  Note: Students may take either or both PHL103H5 and PHL113H, in any order or simultaneously. The two courses differ only in the philosophical topics they cover.

- **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 or PHL101Y5

- **PHL113H5 Introduction to Philosophy: Persons and Value (HUM)**
  This introductory course explores philosophical theories of human nature, morality, justice, the good life, freedom, and responsibility. A variety of traditional and contemporary perspectives will be considered. [24L, 12T]
  **Exclusion:** PHL105Y5 or PHL102H5 or PHL100Y1 or PHL101Y1 or PHL201H1 or PHLA10H3
  Note: Students may take either or both PHL113H5 and PHL103H5, in any order or simultaneously. The two courses differ only in the philosophical topics they cover.

- **PHL200H5 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. [24L, 12T]
  **Exclusion:** PHL200Y5 or PHL202H5 or PHLB31H3
  **Prerequisite:** (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.
PHL204H5 Philosophy in Everyday Life (HUM)
This one-semester course covers philosophical topics that most people talk about, or at least think about, in their everyday lives, e.g., during conversations with friends, or while watching the news, or when deciding how to vote in an election. Such topics include, for example, the difference between art and pornography, the possibility of life after death, the evolution vs. creationism debate, the ethics of abortion and doctor-assisted suicide, and the possibility of intelligent robots. Each topic will be introduced via relevant public media (e.g., articles from the New York Times series "The Stone" and similar pieces from The Guardian, CBC news, NPR) and other popular sources (e.g., Ted Talks, youtube videos) and then pursued in several accessible readings from the philosophical literature. A shared "library" of readings for the course will be built up (e.g., on Blackboard) by the instructors and students and updated as new issues of popular interest arise. [36L] PHL204H5 does not count for credit toward any minor, major, or specialist program in philosophy, but can be taken to fulfill the Humanities breadth/distribution requirement.

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. [48L, 24T]
Exclusion: PHLB35H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.
Recommended Preparation: PHL100Y5 or PHL101Y5 or PHL105Y5

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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL221H5 Philosophy at the Movies (HUM)
This course considers fundamental philosophical themes - the meaning of life and death, the nature of responsibility, fate and agency, knowledge and illusion, personal identity, alienation and belonging, love and sex, politics, ethics, and morality, among others - through film. The course also considers some questions about film as a philosophical genre: of the medium of film as an alternative medium (an alternative to language and explicit argument) of philosophical expression; of whether and how film may convey philosophical insight otherwise unavailable; and of the role of interpretation in understanding film philosophically. [36L]
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL239H5 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: (PHL145H5 and PHL247H5) or TRN200Y1
Prerequisite: None

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 or PHLB81H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL245H5 Modern Symbolic Logic (HUM)
An introduction to formal deductive logic. Semantics, symbolization, and techniques of natural deduction in sentential logic. Symbolization, natural deduction, and models in monadic predicate logic. Symbolization and natural deduction with polyadic predicates. Introduction to advanced concepts in first-order logic, such as operations, identity, and models. [36L]
Exclusion: PHL245H1 and PHLB50H3
Recommended Preparation: PHL103H5 or PHL113H5

PHL246H5 Probability and Inductive Logic (HUM)
The elements of axiomatic probability theory, and its main interpretations (frequency, logical, subjective). Reasoning with probabilities in decision making and science. [24L, 12T]
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.
Recommended Preparation: PHL100Y5 or PHL101H5 or PHL102H5 or PHL105Y5 or PHL245H5

PHL255H5 Philosophy of Science (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: PHL252H5 or PHL355H1 or PHLC72H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL258H5 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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.
Recommended Preparation: PHL245H5

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? [24L, 12T]
Exclusion: PHL277Y5 or PHLB16H3 or PHLB17H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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 or PHL367H1 or PHLB13H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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. [24L, 12T]
Exclusion: PHLB11H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: PHLB15H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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. [24L, 12T]
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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? [24L, 12T]
Exclusion: PHL277Y5 or PLA11H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) 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. [48L, 24T]
Exclusion: PHL265H or PHL275 or PHLB17H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

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]
Exclusion: PHL382
Prerequisite: PHL101H5 or PHL102H5 or PHL105Y5 (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 or PHL281H1 or PHLB09H3
Prerequisite: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL284H5 Ethics of Eating (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]
Prerequisite: PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5 (may be taken as a corequisite) or 4.0 credits.
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? [36L]
*Exclusion*: PHLB03H3
*Prerequisite*: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL290H5 Philosophical Issues in 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]
*Exclusion*: PHL319H1
*Prerequisite*: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (may be taken as a corequisite) or 4.0 credits.

PHL293H5 Special Topics in Philosophy (HUM)
Topic to vary from year to year [36L].
*Prerequisite*: PHL103H5 or PHL113H5 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]
*Exclusion*: PHLB06H3
*Prerequisite*: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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 and International Opportunities (Page 23) for more details.
*Prerequisite*: (PHL101H5 or PHL102H5 or PHL103H5 or PHL105Y5 or PHL113H5) (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. [36L]
*Prerequisite*: 1.5 credits in PHL
*Recommended Preparation*: PHL200Y5 or PHL210Y5

PHL301H5 The Philosophy of Plato (HUM)
This course explores major themes in Plato’s philosophy through a selective reading of his dialogues. Among the areas tackled are the human good, the nature of the soul, knowledge, and the ultimate constitution of reality. Readings may include, though will not necessarily be confined to, the Euthyphro, Protagoras, Euthydemus, Meno, Gorgias, Republic, Phaedo, Phaedrus and Theaetetus. [36L]
*Prerequisite*: 1.5 credits in PHL.
*Recommended Preparation*: PHL202H5 and PHL210Y5

PHL302H5 The Philosophy of Aristotle (HUM)
This course explores major themes in Aristotle’s philosophy belonging to the fields of natural philosophy, metaphysics, ethics and epistemology. Readings may include, though are not necessarily confined to the Ethics, Physics, Metaphysics, Categories, On the soul and Analytics. [36L]
*Prerequisite*: 1.5 credits in PHL.
*Recommended Preparation*: PHL202H5 and PHL210Y5

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. [36L]
*Exclusion*: PHL309H1
*Prerequisite*: 1.5 credits in PHL
*Recommended Preparation*: PHL200Y5 or PHL210Y5
PHL310H5 Topics in 17th and 18th Century Philosophy (HUM)
A study of a topic or thinker in the 17th or 18th century. [36L]
Exclusion: PHL309H5 or PHL310H1 or PHL311H1 or PHL313H5
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL210Y5

PHL314H5 Kant (HUM)
A systematic study of The Critique of Pure Reason. [36L]
Exclusion: PHL312H5 or PHLC37H3
Prerequisite: PHL210Y5 and 1.5 additional credits in PHL
Recommended Preparation: PHL245H5 or PHL309H5

PHL315H5 Topics in Nineteenth Century Philosophy (HUM)
A study of some topic or thinker in the 19th century. [36L]
Exclusion: PHL317H5
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL210Y5 or PHL309H5 or PHL312H5

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. [36L]
Exclusion: PHL320H1 or PHL321H1
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL210Y5 or PHL309H5 or PHL312H5 or PHL317H5

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. [36L]
Exclusion: PHLC43H3
Prerequisite: PHL245H5 and 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. [36L]
Prerequisite: PHL 245H5 and 1.5 additional credits in PHL
Recommended Preparation: PHL325H5

PHL332H5 Metaphysics (HUM)
Typical topics: ontological categories; ontological commitment; the objectivity of space and time: causality and determinism; mind and body. [36L]
Exclusion: PHL330Y1 or PHL331H1 or PHLC60H3
Prerequisite: 1.5 credits in PHL

PHL333H5 Epistemology (HUM)
Typical topics: knowledge and belief, perception, the analytic-synthetic distinction, theories of truth, necessity and the a priori. [36L]
Exclusion: PHL330Y1 or PHL332H1
Prerequisite: 1.5 credits in PHL

PHL340H5 Philosophy of Mind (HUM)
Typical topics: the brain-mind identity theory; consciousness intentionality and the mental; personal identity; the nature of human action. [36L]
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 continuation of PHL245, requiring no other prior knowledge of philosophy or mathematics. Symbolization, natural deduction, and models in polyadic predicate logic with operations and identity. Symbolization, natural deduction, and models for theories of descriptions. Introduction to metatheory, such as soundness and completeness. [36L]
Exclusion: PHL345H1 and PHLC51H3
Prerequisite: PHL245H5 and 1.0 credits on PHL
PHL346H5 Choice and Chance (HUM)
An intermediate level look at reasoning and decision making in the face of uncertainty. Topics may include: decision theory, game theory, social choice theory, confirmation theory, foundations of probability and statistics, puzzles of infinity and self-location, and the relationship between knowledge and uncertainty. [36L]
Prerequisite: 1.5 PHL credits
Recommended Preparation: PHL246H5 or any first course in probability/statistics/decision-making

PHL347H5 Modality in Logic and Philosophy (HUM)
Study of the concepts of necessity and possibility using extensions of classical logic: modal sentential logic, modal quantification logic, possible-world semantics, the metaphysics of modality. Other possible topics include: counterfactuals, epistemic logic, temporal logic, deontic logic, many-valued logic, and supervaluations. [36L]
Exclusion: PHL347H1
Prerequisite: PHL245H5 and 1.0 credit in PHL
Recommended Preparation: PHL345H5

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. [36L]
Exclusion: PHL351H1 or PHL380H3
Prerequisite: PHL245H5 and 1.5 additional credits in PHL

PHL354H5 Philosophy of Mathematics (HUM)
Platonism versus nominalism, the relation between logic and mathematics, implications of Godel’s and Church’s theorems, formalism and intuitionism. [36L]
Exclusion: PHL344H5 and PHL346H1
Prerequisite: PHL245H5 and 1.0 credit in PHL/MAT/CSC
Recommended Preparation: PHL345H5

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. [36L]
Exclusion: PHL356H1
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL245H5 or PHL252H5

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: PHL255H5 or PHL355H5 and 1.5 PHL credits

PHL358H5 Philosophical Issues in 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. [36L]
Exclusion: COG250Y1
Prerequisite: (PHL340H5 or PHL345H5 or PHL350H5) and 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. [36L]
Exclusion: PHL366H1
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 or PHL274H5 or PHL277Y5

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 or PHL277Y5

PHL374H5 Issues in Normative Ethics (HUM)
Normative Ethics concerns general questions about what makes actions right or wrong. Topics include, among others, the plausibility of various ethical theories such as consequentialism, deontology, and virtue ethics, and questions about the moral significance of distinctions such as doing vs allowing and intending vs foreseeing. [36L]
Exclusion: PHL375H5 or PHL376H1 or PHLC05H3 or PHLC06H3
Prerequisite: 1.5 credits in PHL
Recommended Preparation: PHL275H5 or PHL277Y5

PHL376H5 Issues in Metaethics (HUM)
Metaethics concerns the place of values in the world, and the status of ethics as a field of inquiry. Topics may include: the objectivity of morality; moral psychology; the possibility of ethical knowledge; and meanings of ethical concepts. [36L]
Exclusion: PHL375H5 or PHLC05H3 or PHLC06H3
Prerequisite: 1.5 credits in PHL
PHL390H5 Special Topics in Philosophy (HUM)
A course primarily for Specialists and Majors in Philosophy. Topic to vary from year to year. [36S]
Exclusion: PHL395H5
Prerequisite: 1.5 credits in PHL

PHL390H5 Special Topics in Philosophy (HUM)
A course primarily for Specialists and Majors in Philosophy. Topic to vary from year to year. [36S]
Exclusion: PHL395H5
Prerequisite: 1.5 credits in PHL

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

PHL410H5 Seminar in 17th and 18th Century Philosophy (HUM)
Advanced discussion of principal figures and themes in 17th or 18th century philosophy. [36S]
Exclusion: PHL416H5 or PHL402H1
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

PHL432H5 Seminar in Metaphysics (HUM)
Advanced topics in metaphysics. [36S]
Exclusion: PHL430H5
Prerequisite: 4.5 PHL credits

PHL433H5 Seminar in Epistemology (HUM)
Advanced topics in epistemology. [36S]
Exclusion: PHL430H5
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

PHL445H5 Metalogic (HUM)
A continuation of PHL345H5, this is a course in the mathematical study of logic, also known as meta-logic. We will investigate and prove theorems about logical systems. Topics covered will include: basic set theory and recursion theory, completeness, compactness, and the Loewenheim-Skolem theorems for first-order logic, and Gödel's incompleteness theorems. [36L]
Exclusion: PHL348H1 and PHL348H5
Prerequisite: (PHL345H5 or MAT309H5) and 1.0 credit in PHL

PHL447H5 Seminar in Philosophy of Logic (HUM)
Study of advanced topics in logic or the philosophy of logic. [36S]
Exclusion: PHL451H5
Prerequisite: PHL345H5 and 4.0 PHL credits.

PHL450H5 Seminar in Philosophy of Language (HUM)
Study of advanced topics in philosophy of language. [36S]
Exclusion: PHL451H5
Prerequisite: PHL245H5 and 4.0 PHL credits

PHL455H5 Seminar in Philosophy of Science (HUM)
Study of advanced topics in the philosophy of science. [36S]
Prerequisite: (PHL355H5 or PHL357H5) and 4.0 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 3 components. First, you will serve as a TA for a section of PHL103H/PHL113H during the Fall and Winter terms. During the Fall semester, you will attend two 1-hour PHL103H/PHL113H 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 approximately 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 that meets once per week for 3 hours each time, during the fall term. Most of the seminar will be devoted to more in-depth study of the topics taken up in the PHL103H/PHL113H; but you will also discuss the methods and challenges of teaching philosophy-grading papers, prompting and guiding discussion, and so forth.

Third, during the winter term you will write a seminar paper, on a topic of your choosing, under the supervision of a UTM Philosophy faculty member working in the relevant area. You will also present your work orally at an undergraduate research conference held jointly with the Socrates students from the St. George campus.

Admittance to the Socrates Project is by application only. Instructions and the application form are available on the web at: http://philosophy.utoronto.ca/employment/cupe-3902-unit-1

University of Toronto Mississauga
Philosophy of Science (HBA)

Consult Department of Philosophy

Students should also review the Degree Requirements section prior to selecting courses.

For courses in this area see:
PHL Philosophy (page 383)

Minor Program ERMIN1370 Philosophy of Science (Arts)

Program Requirements: 4.0 credits (not including PHL204H5) are required including at least 1.0 at the 300/400 level.

1. At least one of PHL101H5 or PHL102H5 or PHL103H5 or PHL113H5 or PHL105Y5
2. At least one of PHL255H5 or PHL355H5
3. At least one of PHL350H5 or PHL357H5 or PHL358H5
4. 1.5 credits in AST, BIO, ERS, CHM, PSY, PHY
5. 1.0 credits in any other PHL course, with exception to PHL204H5

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
V. Barzda, Ph.D.
W. Ghobriel, Ph.D.
C. Gradinaru, Ph.D.
A. Hilfinger, Ph.D.
J.N. Milstein, Ph.D.
G.W.K. Moore, Ph.D.
S.R. Rauscher, Ph.D.

Chair
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Claudiu Gradinaru
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Academic Counsellor/Undergrad Program Administrator
Christina Fortes
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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 16) section prior to selecting courses.

For courses in this area see:
BIO Biology (page 94)
CHM Chemistry (page 113)
CPS Chemistry (page 113)
ISP Institute for the Study of University Pedagogy (ISUP) (page 316)
JCB Chemistry (page 113)
JCP Chemistry (page 113)
MAT Mathematics (page 372)
PHY Physics (page 394)
STA Statistics (page 445)

Specialist Program ERSPE1944 Biomedical Physics (Science)

13.5-14.0 credits are required.

Limited Enrolment – Enrolment in this program is limited.
For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits, including PHY146H5 (with a minimum grade of 70%) and PHY147H5 (with a minimum grade of 70%) is required.
For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits, including PHY146H5 (with a minimum grade of 70%) and PHY147H5 (with a minimum grade of 70%) and ISP100H5 is required.

First Year:
• PHY146H5 and PHY147H5
• BIO152H5
• CHM110H5 and CHM120H5
• (MAT135H5 and MAT136H5) or MAT135Y5 or MAT137Y5 or MAT157Y5
• For students entering the program in 2021-2022 (and beyond): ISP100H5

Second Year:
• PHY241H5 and PHY245H5 and PHY255H5
• JCP221H5 and JCP265H5
• MAT232H5 and (MAT212H5 or MAT244H5 or STA256H5)
• BIO206H5

Third Year:
**Programs**

**Physics (HBSc)**

- PHY324H5 and PHY325H5 and PHY332H5 and PHY333H5 and PHY347H5
- JCP321H5 and JCP322H5

**Fourth Year:**

- PHY426H5 and PHY451H5 and JCP421H5

**Notes**

- Not all 300 and 400 level courses are offered every year. Please check the course timetable carefully each academic year.
- Check all prerequisites and corequisites when registering for 200+ level courses.

**Major Program ERMAJ1944 Physics (Science)**

8.0-8.5 credits are required.

**Limited Enrolment** – Enrolment in this program is limited.

For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year: 4.0 credits, including PHY146H5 (with a minimum grade of 60%) and PHY147H5 (with a minimum grade of 60%) is required.

For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond): 4.0 credits, including PHY146H5 (with a minimum grade of 60%) and PHY147H5 (with a minimum grade of 60%) and ISP100H5 is required.

**First Year:**

- PHY146H5 and PHY147H5
- (MAT135H5 and MAT136H5) or MAT135Y5 or MAT157Y5
- For students entering the program in 2021-2022 (and beyond): ISP100H5

**Second Year:**

- PHY241H5 and PHY245H5
- JCP221H5 and JCP265H5

**Third & Fourth Years:**

- PHY324H5 and PHY325H5 and PHY343H5 and PHY451H5 and JCP321H5 and JCP421H5
- 1.0 additional credit of PHY or JCP or CPS courses at the 300/400 level

**Notes**

- PHY333H5 alternates with PHY332H5 in consecutive years.
- Check individual course listing for the details in a given calendar year.
- Check all prerequisites and corequisites when registering for second (and higher) year courses.
- The calculus-based 1st year PHY146H5,147H5 courses are highly recommended for upper year physics courses and JCP courses.

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**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 PHY146H5 (minimum grade of 60%), PHY147H5 (minimum grade of 60%).

**Year 1:**

- (PHY146H5,PHY147H5) (minimum grade of 60%)

**Year 2:**

- PHY241H5, PHY245H5, JCP265H5

**Years 3 & 4:**

- JCP321H5
- 1.0 credits from: JCP322H5, JCP421H5 or any 300/400 level Physics course.

**Notes**

- PHY333H5 alternates with PHY332H5 in consecutive years.
- Check individual course listing for the details in a given calendar year.
- Check all prerequisites and corequisites when registering for second (and higher) year courses.
- The calculus-based 1st year PHY146H5,147H5 courses are highly recommended for upper year physics courses and JCP courses.
**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, or PHY100H1 or PHY197H1 or PHY205H1

**PHY136H5** Introductory Physics I (SCI)

A first year introductory Physics course for students who do **not intend to pursue** a Physics or an Astronomy program. This course is focused on providing students with conceptual understanding and problem solving skills through the study of physical phenomenon that include: Forces and Newton's Laws of Motion; Rotational Dynamics; Simple Harmonic Motion and Waves. [36L, 15P, 12T]

**Exclusion:** PHY146H5 or PHY151H1 or PHY152H1 or PHY157H1

**Prerequisite:** Grade 12 Advanced Functions (MHF4U) / Grade 12 Calculus & Vectors (MCV4U)

**Recommended Preparation:** Grades 12 Physics (SPH4U) is recommended.

Students who have achieved a minimum grade of 70% in PHY100H5 are also accepted into PHY136H5/ 137H5.

**PHY137H5** Introductory Physics II (SCI)

A second introductory Physics course for students who do **not intend to pursue** a Physics or an Astronomy program. This course is focused on providing students with conceptual understanding and problem solving skills through the study of physical phenomenon that include: Electric Forces and Fields; Electric Circuits; Magnetic Forces and Field; Optics. [36L, 15P, 12T]

**Exclusion:** PHY147H5 or PHY152H1 or PHY157H1

**Prerequisite:** PHY136H5 or PHY146H5 or permission of instructor

**Recommended Preparation:** Grade 12 Physics (SPH4U) is recommended.

Students who have achieved a minimum grade of 70% in PHY100H5 are also accepted into PHY136H5/ 137H5.

**PHY146H5** Principles of Physics I (SCI)

The first physics course is for students intending to pursue any of the Physics or Astronomy programs and highly recommended for some of the other programs in the Department of Chemical and Physical Sciences. This course provides a rigorous introduction to the concepts, approaches and tools that physicists use to describe the physical world through the study of classical and modern mechanics. Topics include mathematical physics, kinematics and dynamics as well as conservation laws for energy and momentum. Special relativity will be introduced as a topic that successfully addresses problems that arose in classical mechanics. [36L, 15P, 12T]

**Exclusion:** PHY136H5 or PHY131H1 or PHY151H1 or PHY152H1, PHY157H1

**Prerequisite:** Grade 12 Physics (SPH4U) and Grade 12 Calculus & Vectors (MCV4U)

**Corequisite:** (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

**PHY147H5** Principles of Physics II (SCI)

The second physics course for students intending to pursue any of the Physics or Astronomy programs and highly recommended for some of the other programs in the Department of Chemical and Physical Sciences. The concept of a field and its mathematical description in terms of vector calculus will be introduced as a way to provide a description of gravity and electromagnetism. The wave-particle duality will be introduced as way to address issues with the classical view of the behavior of sub-atomic phenomena. [36L, 15P, 12T]

**Exclusion:** PHY137H5 or PHY132H1 or PHY152H1 or PHY157H1

**Prerequisite:** PHY146H5

**Corequisite:** (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

**JCP221H5** Thermodynamics (SCI)

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, 12T]

**Exclusion:** CHM220H1 or CHM221H1 or CHM225Y1 or CHM226H3, B23H3

**Prerequisite:** (CHM110H5 and CHM120H5 with a minimum grade of 60% in CHM120H5) / (PHY136H5 and PHY137H5)

**Corequisite:** (CHM110H5 and CHM120H5) or (PHY146H5 and PHY147H5 with a minimum 60% in PHY147H5) and (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT134Y5 or MAT135Y5 or MAT137Y5)

**Recommended Preparation:** (MAT212H5 or MAT223H5 or MAT232H5 or MAT233H5 or MAT236H5 or MAT240H5 or MAT242H5) or MAT244H5.
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: (PHY146H5 and PHY147H5) and (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

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]
Exclusion: PHY252H1
Prerequisite: (PHY146H5 and PHY147H5) and (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

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, 15P, 8T]
Prerequisite: (PHY146H5 and PHY147H5) and (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

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: (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5) or Permission of Instructor

JCP265H5 Introduction to Scientific Computing (SCI)
This course is an introduction to computing in the physical sciences. Students will gain experience utilizing numerical software tools used in both academic and industrial settings. A variety of numerical techniques will be covered, with topics to include: curve fitting, numerical approximations of derivatives and integrals, root finding, solutions of differential equations, Fourier series, Monte Carlo methods, and more. Students will also acquire skills in data analysis and visualization. No prior experience in computer programming is required. [24L, 24P]
Exclusion: CSC108H5 or CSC108H1 or CSC120H1 or CSC148H1 or CSCA08H3
Prerequisite: (PHY146H5 and PHY147H5) and (MAT135H5 and MAT136H5) or (MAT135Y5 or MAT137Y5)

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 and International Opportunities (Page 23) for more details.

JCP321H5 Quantum Mechanics I: Foundations (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 or PHY256H1 or PHY356H1 or PHYB56H3, C56H3
Prerequisite: (PHY136H5 and PHY137H5) or (PHY146H5 and PHY147H5 with minimum 60%) and (JCP221H5 or PHY245H5) and (MAT212H5 or MAT223H5 or MAT232H5 or MAT242H5 or MAT244H5)

JCP322H5 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 or CHMC20H3 or PHY452H1
Prerequisite: JCP321H5
PHY324H5 Advanced Physics Laboratory (SCI,EXP)
A modular practical course that develops the experimental and computational skills necessary to get deeper insight in physical phenomena. Selected physics experiments and modeling that illustrate important principles of physics are applied: Experimental measurements and skills, data and uncertainty analysis, mathematical models, computational simulations and solutions. [48P]
Exclusion: PHY327H1
Prerequisite: PHY241H5 or PHY242H5 or PHY245H5 or JCP221H5

PHY325H5 Mathematical and Computational Physics (SCI)
The theory and application of mathematical methods for the physical sciences. Topics may include: vector calculus, linear algebra applied to coordinate transformations, probability distributions, systems of linear ordinary and partial differential equations and boundary value problems, Fourier analysis and orthogonal functions, the Heat and Wave equations in various coordinate systems, and the use of Legendre polynomials and Spherical Bessel functions. Computational methods and standard software tools will be used to solve complex physics problems. [24L, 12P]
Prerequisite: PHY241H5 and PHY245H5 and JCP221H5 and JCP265H5

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: PHY255H5 and JCP221H5
PHY332H5 is offered in alternate years, alternating with PHY333H5.

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: PHY431H1
Prerequisite: PHY255H5 and JCP221H5
PHY333H5 is offered in alternate years, alternating with PHY332H5.

PHY343H5 Classical Mechanics (SCI)
An introduction to classical Newtonian mechanics. Topics to be covered include energy and momentum conservation, coupled harmonic oscillators, central forces and gravitation, rigid bodies and rotational motion, non-inertial reference frames, and the calculus of variations including the Euler-Lagrange equation and Hamiltonian mechanics. [24L, 12T]
Exclusion: PHY354H1
Prerequisite: JCP221H5 or PHY245H5

PHY347H5 Optics (SCI,EXP)
This course focuses mainly on providing a strong foundation of wave optics, while also presenting advanced geometrical optics aspects and an introduction to modern optics and the quantum nature of light. The topics in this course may vary but will include: electromagnetic waves and the 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 accompany the lectures, allowing students to put into practice the optical principles learned during the lecture by performing laboratory experiments with lasers and other optical devices. [24L, 15P, 12T]
Exclusion: PHY385H1
Prerequisite: PHY241H5 and PHY245H5

PHY385H1

University of Toronto Mississauga
**PHY351H5 Climate Physics (SCI,EXP)**
This course presents the physics of Earth’s climate. Emphasis will be placed on the basic principles and processes involved in physical and dynamic climatology and the physical interactions between the atmosphere, oceans, and land surface. Topics may include components of the climate system and global energy balance, atmospheric radiative transfer, surface energy balance, the hydrological cycle, general circulation of the atmosphere, ocean circulation and climate, climate modeling, and climate change. In the lab practicals, students will gain hands-on experience in analyzing climate data and simple climate modeling. [24L, 24P]
*Exclusion:* PHY392H1
*Prerequisite:* (PHY242H5 or JCP221H5 or PHY245H5) and JCP265H5F

**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 and International Opportunities (Page 23) for more details.

**CPS400Y5 Chemical and Physical Sciences Internship (SCI,EXP)**
This internship opportunity will allow students to apply theoretical and practical skills acquired during their undergraduate education in order to gain vital industry experience. Students will be trained in effective job searching skills (writing a CV and a Cover Letter, participating in job interviews) and will gain valuable experiences that are sought after by employers in both public and private sectors. Students will be placed with various employers in the GTA based on their interest and skill set, and on the employer needs and availability. The placement is a 200 h unpaid internship. The Course Coordinator/Instructor(s) will schedule biweekly meetings to discuss the setup and progress of the student projects. Student attendance is mandatory. At the end of the term, students must submit a written report and prepare an oral presentation about the outcomes of their work experience. In order to be considered for the internship, students must apply for the course. The Course Coordinator will approve enrolment in the course based on the number of internship opportunities available, which will vary from year-to-year, and student qualifications (e.g. GPA, experience, qualifications related to the requirements of the available placement(s), and interview performance).
*Exclusion:* none
*Prerequisite:* For Chemistry Internships (CHM372H5 or CHM394H5 or CHM396H5) and an additional 1.0 credit from any 300/400 level CHM/JCP/JBC/BCH/FSC courses. For Earth Science/Geology Internships: (ERS301H5 and ERS303H5) and an additional 1.0 credit from any 300/400 level courses. For Physics Internships: (PHY324H5 and PHY347H5) and an additional 1.0 credit from any 300 or 400 level PHY/JCP courses.
*Corequisite:* Students must be in their fourth year of study and registered in one of following Programs: Chemistry Major, Chemistry Specialist, Biological Chemistry Specialist, Earth Science Major, Earth Science Specialist, Geology Specialist, Physics Major, Biomedical Physics Specialist.
*Recommended Preparation:* For Chemistry Internships: (CHM373H5 or CHM395H5 or CHM397H5) For Earth Science & Geology Internships: ERS302H5 and ERS311H5 and ERS401H5 For Physics Internships: ERS302H5 and ERS311H5 and ERS401H5 For Physics Internships
PHY325H5 and PHY332H5 and PHY333H5
**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.

**Prerequisite:** (JCP221H5 or PHY241H5) and PHY245H5 and (MAT212H5 or MAT223H5 or MAT232H5 or MAT242H5 or MAT244H5)

**Recommended Preparation:** JCP321H5

JCP410H5 is offered in alternate years, alternating with JCP422H5.

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**JCP421H5 Quantum Mechanics II: Applications (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. [24L, 12T]

**Exclusion:** PHYC563H3 or PHY456H1

**Prerequisite:** JCP321H5 and PHY325H5

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**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 or PHY241H5) and PHY245H5 and (MAT212H5 or MAT223H5 or MAT232H5 or MAT242H5 or MAT244H5)

**Recommended Preparation:** JCP321H5 and CHM361H5

JCP422H5 is offered in alternate years, alternating with JCP440H5.

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**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 or PHY333H5

Course offered in alternate years.

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**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 or (PHY332H5 or PHY333H5)

**Recommended Preparation:** CHM362H5 and JCP221H5

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**JCP426H5 Computational Modeling in Physics (SCI)**
In this advanced course in computational modeling and physical simulation, students will apply numerical techniques to study a range of physical phenomena. Topics may include: chaotic and nonlinear systems, mean-field and Monte Carlo methods, variational and spectral methods, stochastic processes, molecular dynamics simulations, protein folding, self-organized criticality, neural networks, clustering and percolation, and so on. [24L, 24P]

**Exclusion:** PHY407H1

**Prerequisite:** JCP265H5 and PHY325H5

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**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](http://uoft.me/cpsforms).

**Prerequisite:** Permission of the course co-ordinator.
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](http://uoft.me/cpsforms). Application should be submitted to the CPS Undergraduate Assistant.
Registration on ACORN is also required. [240P]
Exclusion: BIO400Y5 or BIO481Y5 or CBJ481Y5 or CHM489Y5 or ER470Y5 or ERS471H5 or ERS472H5 or PHY489Y5 or BCH472Y1 or BCH473Y1 or CHM499Y1 or CBB497H1 or CBB498Y1 or CBB499Y1 or ESS491Y1 or ESS492Y1 or MGY480Y1 or PHY478H1 or PHY479Y1 or BIOD98Y3 or CHMD90Y3 or CHMD91H3 or ESSD09H3 or ESSD10H3 or PSCD10H3
Prerequisite: 2.0 credits 300 level from BIO/CHM/JPC/JCP/ERS/ESS(G)/PHY and 1.0 credit from BIO206H5 and BIO314H5 and CHM372H5 and CHM373H5 and CHM394H5 and CHM395H5 and CHM396H5 and CHM397H5 and ERS201H5 and ERS202H5 and PHY324H5 and PHY473H5. Normally taken in 4th year. Students must obtain approval from the faculty member(s) who will serve as the supervisor(s) in advance of the start of the course.

PHY489Y5 Introduction to Research in Physics (SCI,EXP)
An experimental or theoretical research problem in Physics will be investigated under the supervision of the Physics faculty. In addition to learning to plan, conduct and evaluate a research problem, students will receive training in written and oral presentation skills by writing a report and presenting a public seminar on their work. This course is normally taken in the student’s fourth program year and application for enrolment should be made to the Department in the spring of the student’s third year. 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](http://uoft.me/cpsforms). Acceptance into the course is dependent on the student achieving a minimum GPA of 3.0 and having reached an agreement with a potential supervisor, as well as having completed the course prerequisites below. [240P].
Exclusion: PHY473H5
Prerequisite: PHY324H5 or PHY325H5 or PHY347H5 and 2.0 300 level credits in PHY or JCP.
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
N. Anderson, B.A., Ph.D.
M. Balaguera, B.A., M.A., Ph.D.
S.F. Bernstein, B.A., M.A., Ph.D.
R. Besco, B.A., M.A., Ph.D.
A. Braun, B.A., M.A., Ph.D.
M. Lippincott, B.A., M.A., Ph.D.
S. Mukherjee, B.A., M.A., Ph.D.
E. Nacol, B.A., M.A., M.Phil., Ph.D.
A. Reisenbichler, B.A., M.A., Ph.D.
E. Schatz, B.A., M.A., Ph.D.
A. Smith, B.A., M.A., Ph.D.
D.A. Wolfe, 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 aim 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 (Page 16) section prior to selecting courses.
PROGRAMS
Political Science (HBA)

For courses in this area see:
JEP Environment (page 232)
JPE Political Science (page 401)
POL Political Science (page 401)

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 and no more than 1.0 at the 100 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 and POL209H5 and POL210H5 and POL215H5 and POL216H5, POL218Y5 and POL242Y5 and POL320Y5
2. 1.0 credit in the field of Public Policy and Public Administration: POL316Y5 or POL317Y5 or POL317H5 or POL318H5 or POL336Y5 or POL346Y or POL353Y5 or POL355Y5 or POL368H5 or POL368Y5 or POL369Y5 or JEP351H5 or JEP356H5 or JEP452H5 or JPE250Y5 or JPE251H5 or JPE252H5
3. 3.0 additional POL courses where 2.0 must be at 400 level

Minor Program ERMIN2015 Political Science (Arts)

Program Requirements: 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, 11T] 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, 11T]
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, 11T]

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, 11T]
Exclusion: POLA83H3

POL115H5 Evidence and Argument in the Study of Politics (SSc)
To understand politics in our information-abundant world, we need ways to make sense of the political information that surrounds us. In this course, we ask what makes for good evidence and what makes for convincing argument. We do so by raising a series of weekly topics on which there is a mass of available information - topics like climate change, political correctness, populism, and democracy promotion, among others - and discussing fundamentally different perspectives on each topic. In the end, students will develop a fuller sense of what constitutes a well-argued and evidence-supported analysis of the political. [24L, 11T]
Prerequisite: n/a

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, 23T]
Prerequisite: 1.0 POL credit or 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][23T]
Exclusion: POL203Y1 or POLC92H3 or POLC93H3
Prerequisite: 1.0 POL credit or 4.0 credits

POL209H5 Introduction to International Relations (SSc)
This course provides a general overview of the study of international relations. It builds a theoretical, conceptual, and empirical foundation for understanding the actors, processes, and structures that shape and constrain global politics. [24L, 11T]
Exclusion: POL208Y5 or POL208Y1 or POLB80H3 or POLB81H3
Prerequisite: 1.0 POL credit or 4.0 credits

POL210H5 Contemporary Challenges in International Relations (SSc)
This course explores contemporary challenges in the study of international relations. Building off of theoretical foundations, it provides an analytic exploration of key puzzles and topical issues that currently confront international relations scholarship. [24L, 11T]
Exclusion: POL208Y5 or POL208Y1 or POLB80H3 or POLB81H3
Prerequisite: POL209H5

POL215H5 Canadian Government (SSc)
This course will focus on Canadian Institutions, the Constitution, Federalism, the Courts, the Charter of Rights and Freedoms, etc. This course will contribute to the students' understanding of their immediate political surroundings. This course will enhance the students' ability to engage and participate in the democratic system by teaching them about the foundations of the Canadian system of government. [24L, 11T]
Exclusion: POL214Y5 or POL214Y1 or POL224Y1 or POLB50Y3
Prerequisite: 1.0 POL credit or 4.0 credits

POL216H5 Canadian Politics (SSc)
This course will focus on political parties, elections, gender, cleavages, etc. This course will enhance the knowledge of the Canadian system of politics to give students better skills and objectives. [24L, 11T]
Exclusion: POL214Y5 or POL214Y1 or POL224Y1 or POLB50Y3
Prerequisite: POL215H5
**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][23T]
Prerequisite: 1.0 POL credit or 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. [48L][24P]
Prerequisite: 1.0 POL credit or 4.0 credits

**JPE251H5 Introduction to Canadian Environmental Law and Policy I (SSc)**
This course serves as an introduction to environmental policy and law in Canada. The primary intent is to provide an overview of the political context in which environmental policy and law is made and implemented. The emphasis in this course will be on environmental policy. The course begins with an outline of the Canadian parliamentary system and policymaking process. A series of case studies, from biodiversity to climate change, are then explored as a way to see the policy process in action. [24L][11T]
Exclusion: JPE250Y5 or POL250Y5 or ENV250Y5 or ENV320H1
Prerequisite: 3.5 credits

**JPE252H5 Introduction to Canadian Environmental Law and Policy II (SSc)**
This course builds on the themes and concepts introduced in JPE251H5. The primary intent is to provide an overview of the political context in which environmental policy and law is made and implemented. The emphasis in this course will be on environmental law. [24L][11T]
Exclusion: JPE250Y5 or POL250Y5 or ENV250Y5 or ENV320H1
Prerequisite: JPE251H5
this course will be taught by Professor Andrea Olive or another full time faculty member
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: POL200Y5 or POL200Y1

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: POL316Y1 or POLC57H3
Prerequisite: POL100Y5 or POL102Y1 or (POL110H5 and POL111H5) or POL214Y5 or POL214Y1

POL316Y5 Contemporary Canadian Federalism (SSc)
Constitutional, political, administrative, and financial aspects of federal-provincial relations, regionalism and cultural dualism. [48L]
Exclusion: POL316Y1 or POLC57H3
Prerequisite: POL100Y5 or POL102Y1 or (POL110H5 and POL111H5) or POL214Y5 or POL214Y1

POL317H5 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. [24L]
Exclusion: POL317Y5
Prerequisite: POL203Y5 or POL218Y5 or POL302Y5 or POL309Y5 or POL353Y5

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. [24L]
Exclusion: POL317Y5
Prerequisite: POL203Y5 or POL218Y5 or POL302Y5 or POL309Y5 or POL353Y5

POL318H5 Power and Conflict in Federalism (SSc)
This course looks at how Canadian federalism has evolved and adapted to policy-making challenges, including urbanization, regionalism, and demographic changes among the Canadian population. In addition to the Constitution and the role of federal and provincial governments, we also examine the involvement of municipalities, First nations, and non-governmental actors including private and third sector groups. [24L]
Prerequisite: POL100Y5 or POL102Y1 or POL110H5 and POL111H5 or POL214Y5 or POL215H5 and POL216H5

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][23T]
Exclusion: POL320Y1 or POLC73H3
Prerequisite: POL200Y5 or POL200Y1

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.[48L]
Prerequisite: POL200Y5 or POL200Y1
Recommended Preparation: POL320Y

POL327Y5 Comparative Foreign Policy (SSc)
Comparative study of the foreign policies of Russia/USSR, the United States, Great Britain, France and Germany. [48L]
Exclusion: POL326Y1 or POLC82H3 or POLC83H3
Prerequisite: POL208Y5 or POL208Y1

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 or POL102Y1) or (POL110H5 and POL111H5) or POL214Y5 or POL214Y1

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: POL340Y1
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 examines urban politics and policy problems in both a Canadian and comparative context. Students will be introduced to the key theories and concepts of urban politics scholarship as well as the important policy issues facing contemporary cities such as globalization, sustainability, immigration, and regionalism. [48L]
*Exclusion: POL349Y1*
*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 or POL316Y5 or POLC57H3 or POLC54H3*
*Prerequisite: POL100Y5 or (POL110H5 and POL111H5) or POL214Y5*

**POL354H5 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: POL204Y5 or POL 204Y1 or POL354H1 or POL354H5 or 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. [48L]
*Exclusion: POLC58H3*
*Prerequisite: Any 2.0 POL 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: 9.0 credits*

**POL360H5 State, Society and Regime Change in Latin America (SSc)**
Comparatively 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: POL305Y1 or POLC91H3*
*Prerequisite: POL201Y5 or POL218Y5*
POL361H5 After Regime Change: The Quality of Democracy in Latin America (SSc)
Explore 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 Gender and Politics (SSc)
An introduction to gender and politics that examines women as political actors and their activities in formal and grassroots politics. [24L]
Exclusion: POLC91H3
Prerequisite: 2.0 POL credits or 2.0 CCIT or VCC credits

POL368Y5 Gender and Politics (SSc)
An introduction to gender and politics that examines women as political actors and their activities in formal and grassroots politics. [48L]
Exclusion: POLC91H3 or POL368H5 or POL450H1
Prerequisite: 2.0 POL credits or 2.0 CCIT or VCC 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: POLC91H3
Prerequisite: 2.0 POL credits or 2.0 CCIT or VCC credits

POL390H5 Topics in Comparative Politics (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
Prerequisite: POL218Y5

POL391H5 Topics in Comparative Politics (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
Exclusion: POL218Y

POL392H5 Topics in Political Theory (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
Exclusion: POL2000

POL392Y5 Topics in Political Theory (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [48L]
Exclusion: POL2000

POL393H5 Topics in Political Science (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
Prerequisite: POL200Y or POL208Y or POL214Y or POL218Y

POL394H5 Topics in Political Science (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
Prerequisite: POL200Y or POL208Y or POL214Y or POL218Y

POL399H5 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 POL399H 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 and International Opportunities for more details.
Exclusion: students are not allowed to take POL399Y5 and POL399H5 concurrently
Prerequisite: 1.0 POL credit

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 POL399Y 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 and International Opportunities (Page 23) for more details.
Exclusion: adding 0.5 credit 300 level ROP option to enhance experiential learning offerings for students (now permitted by Dean’s office)
Prerequisite: 1.0 POL credit
**POL401Y5 Senior Major Research Paper (SSc)**

This course provides students with the basic skills and knowledge necessary to complete a major independent research paper. The course will have a broad theme (power, equality, justice, federalism, etc.) and students will pursue a research project of their own interest that relates to the course theme. This Y course will meet weekly in the first semester and every other week in the winter semester. Under the course instructors’ supervision, students will identify potential research questions, acquire methodological and research skills appropriate for addressing the research questions, and conduct primary research. Students will present their paper in an open forum late in the second term. This course is intended for students with a strong academic background who intend to pursue graduate studies. [48L]

**Prerequisite:**
Enrollment limited to POL Specialists, Joint Specialists and POL Majors with at least 6.0 POL credits and permission of instructor

**Restrictions:**
1) 400-series POL courses are limited to POL Specialists and Joint Specialist and POL Majors; 2) No POL Specialist may take more than 2.0 POL credits at the 400-level (1.0 for Joint Specialists). 3) 3.3 minimum CGPA and permission of instructor(s)

**POL402H5 Topics in Political Science (SSc)**

Content of course will vary from year to year. Consult the Political Science Handbook. [24L]

**Prerequisite:**
POL200Y or POL208Y or POL 214Y or POL 218Y

**POL403H5 Topics in Political Science (SSc)**

Content of course will vary from year to year. Consult the Political Science Handbook. [24L]

**Prerequisite:**
POL200Y or POL208Y or POL 214Y or POL 218Y

**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. [48L]

**Prerequisite:**
POL200Y5 or POL200Y1

**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

**POL438H5 Topics in Comparative Politics (SSc)**

Content of course will vary from year to year. Consult with the Political Science Handbook. [24L]

**Prerequisite:**
POL 218Y5

**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).

**POL438Y5 Topics in Comparative Politics (SSc)**

Content of course will vary from year to year. Consult the Political Science Handbook. [48L]

**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. [48L]

**Prerequisite:**
POL204Y5 or POL208Y5 or POL354Y5

**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. [48L]

**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. [24L]

**Prerequisite:**
POL218Y5 or permission of the instructor
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 of 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: 14.0 credits including ENV100Y5 and ENV251H5

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. [48L]
Prerequisite: Enrollment limited to POL Specialists and Joint Specialists with at least 6.0 POL credits and permission of instructor
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).

POL475Y5 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. [24L]
Prerequisite: POL208Y5

POL476H5 Topics in Political Economy (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [24L]
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. [24L]
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.’ [48L]
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).

POL484Y5 Topics in Political Thought (SSc)
Content of course will vary from year to year. Consult the Political Science Handbook. [48L]
Prerequisite: POL320Y5 or consent of the instructor
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. [24L]
Prerequisite: POL320Y5 or consent of the instructor
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. [48L]
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. [24L]
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*. [24L]
*Prerequisite:* POL100Y5 or (POL110H5 and POL111H5) or POL214Y5
*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).

**POL494Y5 Topics in Canadian Politics (SSc)**
Content of course will vary from year to year. Consult the *Political Science Handbook*. [48L]
*Prerequisite:* POL100Y5 or (POL110H5 and POL111H5) or POL214Y5
*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. [48L]
*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. [24L]
*Prerequisite:* Permission of Instructor and of the Chair

**POL499Y5 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 POL499H 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 and International Opportunities for more details.
*Exclusion:* students are not allowed to take POL499Y5 and POL499H5 concurrently
*Prerequisite:* 2.0 POL credit

**POL499H5 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 POL499H 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 and International Opportunities for more details.
*Exclusion:* students are not allowed to take POL499Y5 and POL499H5 concurrently
*Prerequisite:* 2.0 POL credits
Psychology (HBSc)

The Psychology Department offers the following programs:

1) Psychology
2) Exceptionality in Human Learning
3) Neuroscience

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.
M. Daneman, 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.
M.K. Pichora-Fuller, B.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.
E.G. Schellenberg, B.Sc., Ph.D.
M.L. Smith, B.Sc., M.Sc., 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.
J.M. Chung, B.A., M.A., Ph.D.
N.A.S. Farb, B.A., M.A., Ph.D.
K. Fukuda, B.Sc., M.Sc., 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.
U. Schimmack, B.A., M.A., Ph.D.
B. Schneider, B.A., Ph.D.
J.E. Stellar, B.A., 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.

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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, developmental, 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, language 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. Because 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 the Psychology curriculum.

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, educational organizations, hospitals and clinics, government agencies, research and development units in industry, data science fields, and as self-employed professionals. 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 16) section prior to selecting courses.

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For courses in this area see:
BIO  Biology (page 94)
ECO  Economics (page 188)
PSY  Psychology (page 412)
SOC  Sociology (page 424)
STA  Statistics (page 445)

Specialist Program ERSPE1160 Psychology (Science)

At least 10.0 credits in Psychology are required. 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.

Students who do not meet these requirements and/or students who apply in third or later years must have a psychology average of at least 77% (based on a minimum of PSY201H5, PSY202H5 and 1.5 recent completed credits in psychology) as well as an AGPA of at least 3.0. These requirements are based on all courses taken during students’ most recent academic year (including Summer, when applicable).

Psychology Department website: www.utm.utoronto.ca/psychology

**First Year:** PSY100Y5

**Second Year:**
1. PSY201H5, PSY202H5 or equivalent
2. PSY210H5, PSY290H5
3. one of the following: PSY270H5, PSY274H5, PSY280H5
4. one of the following: PSY220H5, PSY230H5, PSY240H5
5. one additional half credit at the 200 level

**Third Year:**
1. PSY309H5
2. One laboratory course from the following: PSY319H5, PSY329H5, PSY369H5, PSY379H5
3. 3.0 credits from the following courses: 0.5 credit must be taken from each group:

(a) Biological Bases of Behaviour: PSY318H5, PSY346H5, PSY351H5, PSY352H5, PSY353H5, PSY354H5, PSY355H5, PSY362H5, PSY372H5, PSY391H5, PSY392H5, PSY393H5, PSY395H5, PSY397H5, PSY398H5; BIO304H5, BIO310H5, BIO318Y5, BIO320H5

(b) Perception/Cognition/Communication: PSY312H5, PSY315H5, PSY316H5, PSY360H5, PSY362H5, PSY371H5, PSY372H5, PSY374H5, PSY376H5, PSY384H5, PSY387H5, PSY393H5, PSY397H5

(c) Developmental/Abnormal/Social/Personality: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY320H5, PSY321H5, PSY324H5, PSY325H5, PSY327H5, PSY328H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY345H5, PSY346H5, PSY353H5

**Fourth Year:**
2. 1.0 credits from the following courses: PSY402H5, PSY410H5, PSY415H5, PSY420H5, PSY430H5, PSY435H5, PSY440H5, PSY442Y5, PSY471H5, PSY480H5, PSY490H5, PSY495H5; BIO403H5, BIO407H5; STA441H5

**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.

**Limited Enrolment** – All students must have completed Ontario Grade 12 Biology (SBI4U) and Advanced Functions (MHF4U) or equivalents. Students applying at the end of their first year (minimum 4.0 completed credits) must have a grade of at least 64 in PSY100Y5 and a CGPA of at least 2.0. Students who do not meet these requirements and/or students who apply after second or later years must have a psychology average of at least 64% (based on a minimum of 1.5 completed credits in psychology) as well as an AGPA of at least 2.0. Both these requirements are based on all courses taken during students’ most recent academic year (including Summer, when applicable).

**First Year:** PSY100Y5

**Higher Years:**
2. PSY210H5, PSY290H5
3. one of the following: PSY270H5, PSY274H5, PSY280H5
4. one of the following: PSY220H5, PSY230H5, PSY240H5
5. 1.5 credits from the following courses: 0.5 credit must be taken from each group:
   (b) Perception/Cognition/Communication: PSY312H5, PSY315H5, PSY316H5, PSY360H5, PSY362H5, PSY371H5, PSY372H5, PSY374H5, PSY376H5, PSY384H5, PSY387H5, PSY393H5, PSY397H5
   (c) Developmental/Abnormal/Social/Personality: PSY310H5, PSY311H5, PSY312H5, PSY313H5, PSY315H5, PSY316H5, PSY317H5, PSY318H5, PSY320H5, PSY321H5, PSY324H5, PSY325H5, PSY327H5, PSY328H5, PSY331H5, PSY333H5, PSY340H5, PSY341H5, PSY343H5, PSY344H5, PSY345H5, PSY346H5, PSY353H5
6. 1.5 additional credits in Psychology. At least 0.5 must be at the 300/400 level

Minor Program ERMIN1160 Psychology (Science)

4.0 credits are required, including 1.0 at the 300 level.

Limited Enrolment – All students must have completed Ontario Grade 12 Biology (SBI4U) and Advanced Functions (MHF4U) or out of province equivalents. Students applying at the end of their first year (minimum 4.0 completed credits) must have a grade of at least 61 in PSY100Y5 and a CGPA of at least 2.0. Students who do not meet these requirements and/or students who apply after second or later years must have a psychology average of at least 61% (based on a minimum of 1.5 completed credits in psychology) as well as an AGPA of at least 2.0. Both these requirements are based on all courses taken during students’ most recent academic year (including Summer, when applicable).

First Year: PSY100Y5

Higher Years:

   (a) PSY290H5
   (b) one of the following: PSY270H5, PSY274H5, PSY280H5
   (c) one of the following: PSY210H5, PSY220H5, PSY230H5, PSY240H5
2. 1.0 credit in PSY at the 300 level, excluding PSY399H5 and PSY399Y5.

Important notes about Psychology programs and courses.

1. Access to courses. PSY309H5, PSY319H5, PSY329H5, PSY369H, PSY379H5 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.
2. Students may take no more than 2.0 credits combined in ROP, Individual Projects or Thesis courses (contact Undergraduate Advisor for exemptions).
3. No more than 0.5 credits can be applied from ROP courses toward the satisfaction of Major or Specialist program requirements.
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 10 two-hour computer labs, is a prerequisite for all other Psychology courses except for PSY201H5 and PSY202H5. [48L, 20P]
Exclusion: PSY100H1 or PSYA01H3 or PSYA02H3

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PSY201H5 Research Design and Analysis in Psychology I (SCI)
Basic descriptive and inferential statistics. [24L, 12P]
Exclusion: ECO220Y5 or ECO227Y5 or SOC300Y5 or SOC350H5 or STA215H5 or STA218H5 or STA220H5 or STA256H5 or STA258H5 or PSY201H1 or PSYB07H3 or STAB22H3
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, 12P]
Exclusion: ECO220Y5 or ECO227Y5 or STA221H5 or STA256H5 or STA258H5 or BIO360H5 or SOC300Y5 or PSY202H1 or PSYC08H3 or STAB27H3
Prerequisite: PSY201H5

PSY210H5 Introduction to Developmental Psychology (SCI)
How do children learn to interact with the world around them; to communicate, solve problems, establish moral principles, form meaningful relationships, and develop a sense of self? In this course, you will take an interdisciplinary approach to understanding how a child's mind and brain develop through exploration of cognitive, biological, social, and cultural factors. At the end of this course, you will have developed an understanding of the theoretical, experimental, ethical, and psychological foundations of developmental psychology. [36L]
Exclusion: PSY210H1 or PSYB20H3 or 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 or 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 or 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 or PSYB32H3
Prerequisite: PSY100Y5

PSY270H5 Cognition: The Machinery of the Mind (SCI)
In your everyday life, you are constantly bombarded with information from the external world. How does your mind select important information, remember it, and use it to govern your behaviour? Cognition is the study of the mechanisms involved in the processing of information. In this course, you will learn how your mind allows you to pay attention, create mental representations, remember information, manipulate knowledge, and express thoughts. [36L]
Exclusion: PSY270H1 or PSYB57H3
Prerequisite: PSY100Y5

PSY274H5 Language, Mind, and Brain (SCI)
Language is often described as the quintessential human ability. In this course, you will explore questions such as: Do animals have language? How do children learn language? How do we understand and produce language in real time? How does bilingualism work? What can neuroscience tell us about language abilities? What is the relationship between language and thinking? [36L]
Exclusion: JLP374H1
Prerequisite: PSY100Y5

PSY280H5 Sensation and Perception: Where the World Meets the Brain (SCI)
What you see, hear, taste, and smell is not only a product of sensory stimulation, but also your brain's attempt to make sense of that information. Perception is the gateway between the external world and your internal representation of what is going on around you. In this course, you will be introduced to current empirical research in perceptual science. You will develop a greater awareness of the biological underpinnings of how you perceive the world and how your brain actively interprets information from the environment. [36L]
Exclusion: PSY280H1 or PSYB51H3
Prerequisite: PSY100Y5

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PSY290H5 Introduction to Neuroscience (SCI)
The human brain is made up of billions of cells and trillions of connections that give rise to our ability to perceive, act, think, and learn. Neuroscience, the scientific exploration of the brain, is beginning to unravel how this amazing structure works. In this course, you will learn the fundamental anatomical organization and physiological properties of the brain. You will develop a greater understanding of the structures of the brain, how neurons communicate, and the processes that give rise to perception, learning, and memory. [36L]
Exclusion: PSY290H1 or PSYB64H3
Prerequisite: PSY100Y5

PSY299H5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to participate in the research project of a professor or a faculty member in return for 299H 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 and International Opportunities (Page 23) for more details.
Exclusion: PSY299Y1
Prerequisite: Completion of 4.0 FCE including PSY100Y5

PSY299Y5 Research Opportunity Program (SCI,EXP)
This course provides a richly rewarding opportunity for students in their second year to participate in the research project of a faculty member 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 and International Opportunities (Page 23) 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. [36P]
Exclusion: PSY309H1
Prerequisite: PSY201H5 and PSY202H5 or equivalent and 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 (or equivalent) and PSY210H5

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 or PSYC23H3
Prerequisite: PSY201H5 (or equivalent) and PSY210H5

PSY312H5 Children’s Thinking: Cognitive Development in a Social World (SCI)
This course seeks to answer two questions about the development of children’s thinking: (1) What develops? (2) How does this development occur? Students will develop an understanding of theory and research in cognitive development across a range of topics including perception, social cognition, language, conceptual development, and problem solving. [24L, 12P]
Exclusion: PSY312H1
Prerequisite: PSY201H5 (or equivalent) and PSY210H5 and PSY270H5

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 or PSY313H1
Prerequisite: PSY201H5 (or equivalent) and one additional second year course in PSY
PSY315H5 Language Development (SCI)
By three years of age, children have mastered many of the complexities of human language. How do they do this so rapidly, and with such ease? In this course, you will examine language acquisition from a psychological perspective. Topics include the acquisition of speech sounds, sentence structure, and conversational abilities, as well as patterns of development in special populations. You will also learn about childhood bilingualism and social aspects of language development. Hands-on experience analyzing recordings of children will be provided. [36L]
Exclusion: JLP315H1
Prerequisite: PSY201H5 (or equivalent) and (PSY210H5 or PSY270H5 or PSY274H5) or (LIN101H or LIN102H or LIN200H5)

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 and (PSY210H5 or PSY270H5 or PSY280H5)

PSY317H5 Gender and Sexual Development (SCI)
Gender and sexuality influence how we think about ourselves and relate to others. This course explores the development of these aspects with emphasis on cognitive, social and cultural processes. Topics include gender stereotypes and the emergence of gender differences, gender and education, gender identity, sexual development in children and youth, and sexual partner preferences. [24L, 12P]
Exclusion: PSY323H1
Prerequisite: PSY201H5/ equivalent, PSY210H5

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 (or equivalent) and PSY210H5 and PSY290H5

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 or PSYC26H3
Prerequisite: PSY201H5 and PSY202H5 (or equivalent) and PSY210H5 and PSY309H5

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, PSY220H5

PSY321H5 Cross-cultural Psychology (SCI)
Culture influences our daily experience and has far-reaching implications for psychological development. This course explores the origins of culture as well as human cultural universals and cultural diversity through consideration of multiculturalism and the various ways culture influences people’s self-concepts, perceptual and cognitive processes, social and emotional lives, concepts of morality, and health. [36L]
Exclusion: PSY321H1 or PSYC14H3
Prerequisite: PSY210H5 or PSY220H5 or PSY230H5 or PSY240H5 or PSY270H5 or PSY274H5

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 (or equivalent) and (PSY220H5 or PSY230H5)

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 (or equivalent) and (PSY210H5 or PSY220H5 or PSY230H5)
PSY327H5 Psychology of Intimate 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 or PSYD11H3
Prerequisite: PSY201H5 (or equivalent) and (PSY220H5 or PSY230H5)

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 or PSYC39H3
Prerequisite: PSY201H5 (or equivalent) and (PSY220H5 or PSY240H5)

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 or PSYC11H3
Prerequisite: PSY201H5 and PSY202H5 (or equivalent) and (PSY220H5 or PSY230H5) and PSY309H5

PSY331H5 Psychology of Emotion (SCI)
In this course you will develop an in-depth understanding of the role of emotions in human psychology. You will learn theories of emotion, emotional regulation, expression and experience, the role of emotion in decision-making, and the relationship between emotion, cognition and behaviour. [36L] 
Exclusion: PSY331H1
Prerequisite: PSY201H5 (or equivalent) and (PSY220H5 or PSY230H5 or PSY240H5)

PSY333H5 Health Psychology (SCI)
Examines research evidence concerning the impact of psychological factors on physical health and illness. [36L] 
Exclusion: PSY333H1
Prerequisite: PSY201H5 (or equivalent) and (PSY230H5 or PSY240H5)

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 or PSYB32H3
Prerequisite: PSY201H5 (or equivalent) and PSY240H5

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 (or equivalent) or PSY210H5 and PSY240H5
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 or PSYC36H3
Prerequisite: PSY201H5 (or equivalent) and (PSY230H5 or PSY240H5)

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

PSY346H5 Abnormal Psychology: Neuroscience Perspectives (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 (or equivalent) and PSY240H5 and PSY290H5

PSY351H5 Evolutionary Psychology (SCI)
Application of the theory of biological evolution to understanding the origins and structure of the human mind. [36L]
Prerequisite: PSY201H5 (or equivalent) and PSY290H5

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: BIO318Y5 or BIO328H5 or PSY252H5
Prerequisite: PSY201H5 (or equivalent) and PSY290H5

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. [24L 12P]
Exclusion: PSY473H1 or PSYC23H3 or PSYD17H3
Prerequisite: PSY201H5 (or equivalent) and PSY290H5

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 (or equivalent) and PSY290H5

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 (or equivalent) and PSY290H5

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 or PSY362H1
Prerequisite: PSY201H5 (or equivalent) and PSY270H5 and PSY290H5

PSY369H5 Behavioural Neuroscience Laboratory (SCI,EXP)
In this course, you will be guided through hands-on laboratory exercises to learn how behavioural paradigms, along with anatomical, genetic, and physiological methods, can be used to answer questions relevant to behavioural neuroscience research. [14L 22P]
Exclusion: PSY369H1 and PSYC06H3
Prerequisite: PSY202H5 (or equivalent) and PSY290H5

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 (or equivalent) and PSY270H5
Your everyday life hinges on the ability to encode perceptual information around you (what's in the fridge?) and build a model of the world in your mind (need to buy milk) so that you can retrieve information later when you need it (at the grocery store). How does your mind and brain support this fundamental yet complex mental ability? In this course, you will learn how human memory works, drawing on key findings in cognitive psychology and recent advances in neuroscience. [36L]

**Exclusion:** PSY372H1

**Prerequisite:** PSY201H5 (or equivalent) and PSY270H5 and PSY290H5

**PSY374H5 Psycholinguistics (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]

**Prerequisite:** PSY201H5 (or equivalent) and (PSY270H5 or PSY274H5 or PSY315H5 or PSY384H5 or LIN101H5 or LIN102H5 or LIN200H5)

**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 (or equivalent) and (PSY270H5 or PSY274H5 or PSY315H5 or PSY374H5)

**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:** PSY201H5 and PSY202H5 (or equivalent) and (PSY270H5 or PSY274H5) and PSY309H5

**PSY384H5 Speech Perception and Production (SCI)**
Imagine an animal species where one creature can generate thoughts in other creatures' minds simply by causing the air molecules around them to vibrate. Although this sounds exotic, it is what we as humans do every time we speak and listen. In this course, we will explore the production and perception of spoken language from an interdisciplinary perspective. Sample topics will include perceptual and cognitive aspects of speech communication, speech signal acoustics, audio-visual speech integration, speech sound articulation, artificial speech recognition, multilingualism, and contextual influences on speech communication. Hands-on experience reading spectrograms and carrying out acoustic analyses will be provided. [24L 12P]

**Prerequisite:** PSY201H5 (or equivalent) and (PSY270H5 or PSY274H5 or PSY280H5 or PSY374H5 or LIN228H5)

**PSY387H5 Psychology of Music (SCI)**
An examination of the psychological foundations of music perception and performance. Consideration of processing differences between naive 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. [24L 12P]

**Exclusion:** CCT371H or PSYC56H3

**Prerequisite:** PSY201H5 (or equivalent) and (PSY210H5 or PSY270H5 or PSY274H5 or PSY280H5)

**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 (or equivalent) and PSY290H5

**PSY392H5 Behavioural Epigenetics (SCI)**
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 (or equivalent) and PSY290H5
PSY393H5 Human Neuropsychology (SCI)
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 or PSYC31H3 or PSYC55H3
*Prerequisite:* PSY201H5 (or equivalent) and PSY270H5 and PSY290H5

PSY395H5 Hormones and Behaviour (SCI)
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. [24L 12P]
*Prerequisite:* PSY201H5 (or equivalent) and PSY290H5

PSY397H5 Neuroplasticity and Behaviour (SCI)
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 circuity components of neural plasticity in relation to learning and experience. [36L]
*Prerequisite:* PSY201H5 (or equivalent) and PSY290H5

PSY399Y5 Research Opportunity Program (SCI,EXP)
This course provides third year undergraduate students who have developed an understanding of psychological research methods with an opportunity to participate in the research program of a faculty member in return for course credit. Enrolled students will 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 and International Opportunities (Page 23 for more details.
*Exclusion:* PSY399Y1
*Prerequisite:* Completion of 8.0 FCE and 1.0 200-level credit in Psychology and last AGPA of 3.0 or above.

PSY400Y5 Thesis (SCI,EXP)
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. To register in the course, students must obtain approval from a faculty supervisor, and apply for and obtain approval from Department of Psychology (see the Psychology department website for details). Advanced-level students who do not meet the stated course prerequisites but who possess relevant research experience may be admitted at the discretion of the course instructor. In addition to the seminar component, students complete at least 72 hours of research in the laboratory of their supervisor. [72S]
*Exclusion:* PSY400Y1/ PSYD98Y3
*Prerequisite:* PSY202H (or equivalent) and at least 0.5 credits in advanced laboratory or research courses in Psychology at the 300 or 400 level (e.g., PSY courses ending in "9" at the 300 or 400 level, and PSY403) and last AGPA of 3.2 (varies from year to year and is rarely below 3.4).
Note that entry to the course is competitive and that the satisfaction of minimum requirements does not guarantee admission to the course.

PSY402H5 Systems of Psychology (SCI)
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

PSY403H5 Individual Project (SCI,EXP)
Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.
*Prerequisite:* PSY201H5 equivalent and 1.0 300-level credit in Psychology and minimum last AGPA of 3.0 or above
PSY404H5 Individual Project (SCI,EXP)
Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.  
Prerequisite: PSY201H5 (or equivalent) and 1.0 300-level credit in Psychology and minimum last AGPA of 3.0 or above

PSY405H5 Individual Project (SCI,EXP)
Independent research on a specific aspect of human or animal behaviour. Students arrange for a Faculty supervisor during the preceding term.  
Prerequisite: PSY201H5 (or equivalent) and 1.0 300-level credit in Psychology and minimum last AGPA of 3.0 or above

PSY406H5 Individual Project (SCI,EXP)
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 and 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 or PSYD22H3  
Prerequisite: PSY210H5 and 1.0 credit from (PSY311H5 or PSY312H5 or PSY315H5 or PSY316H5 or PSY317H5 or PSY318H5 or PSY319H5 or PSY341H5 or PSY345H5 or PSY442Y5)

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: PSY417H1  
Prerequisite: PSY313H5 and 1.0 credit from (PSY311H5 or PSY312H5 or PSY316H5 or PSY319H5 or PSY320H5 or PSY321H5 or PSY325H5 or PSY343H5 or PSY333H5 or PSY340H5 or PSY345H5 or PSY374H5 or PSY442Y5)

PSY420H5 Special Topics in Social Psychology (SCI)
In depth examination of selected topics in social psychology. (Topics change periodically.) [36S]  
Exclusion: PSY420H1 or PSYD12H3 or PSYD15H3 or PSYD16H3  
Prerequisite: PSY220H5 and 1.0 credit from (PSY311H5 or PSY319H5 or PSY320H5 or PSY321H5 or PSY325H5 or PSY329H5 or PSY343H5 or PSY350H5 or PSY341H5)

PSY430H5 Special Topics in Personality (SCI,EXP)
In depth examination of selected topics in personality. (Topics change periodically.) [36S]  
Exclusion: PSY430H1 or (PSYD30H3 or PSYD32H3)  
Prerequisite: (PSY220H5 or PSY230H5) and 1.0 credit from (PSY311H5 or PSY320H5 or PSY321H5 or PSY324H5 or PSY325H5 or PSY327H5 or PSY331H5 or PSY333H5

PSY440H5 Special Topics in Abnormal Psychology (SCI)
In depth examination of selected topics in abnormal psychology. (Topics change periodically.) [36S]  
Exclusion: PSY440H1 or PSYD33H3  
Prerequisite: PSY340H5 and one of (PSY320H5 or PSY321H5 or PSY331H5 or PSY343H5 or PSY333H5 or PSY341H5 or PSY344H5 or PSY346H5 or PSY442Y5)

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 (80 hours). Course is required for students enrolled in the Exceptionality in Human Learning Specialist program and is available to Psychology Specialists, 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 should submit an application to the Psychology office by mid-April. Application procedures: [72S]  
Exclusion: PSY345H5  
Prerequisite: 10.0 completed credits, including PSY210H5 and 1.0 300 level credit in Psychology

PSY471H5 Special Topics in Cognition (SCI)
In-depth examination of selected topics in cognition. (Topics change periodically.) [36S]  
Exclusion: PSY471H1 or PSYD50H3  
Prerequisite: PSY270H5 and 1.0 credit from (PSY311H5 or PSY315H5 or PSY360H5 or PSY362H5 or PSY372H5 or PSY374H5 or PSY379H5 or PSY393H5 or PSY397H5)

PSY474H5 Special Topics in Human Communication (SCI)
In-depth examination of selected topics in the psychology of human communication. (Topics change periodically.) [36S]  
Exclusion: PSY474H1 or PSYD50H3  
Prerequisite: 1.0 300 level credit in Psychology including (PSY315H5 or PSY374H5) and one of (PSY312H5 or PSY315H5 or PSY316H5 or PSY319H5 or PSY374H5 or PSY379H5 or PSY397H5)

PSY474H5 Special Topics in Human Communication (SCI)
In-depth examination of selected topics in the psychology of human communication. (Topics change periodically.) [36S]  
Prerequisite: 1.0 300 level credit in Psychology including (PSY315H5 or PSY374H5) and one of (PSY312H5 or PSY315H5 or PSY316H5 or PSY319H5 or PSY374H5 or PSY379H5 or PSY384H5)
PSY480H5 Special Topics in Perception (SCI)  
In-depth examination of selected topics in perception. (Topics change periodically.) [36S]  
*Exclusion:* PSY480H1 or PSYD51H3  
*Prerequisite:* PSY280H5 and 1.0 300 level credit in Psychology  

PSY490H5 Advanced Topics in Neuroscience (SCI)  
In depth examination of selected topics in biological psychology. (Topics change periodically.) [36S]  
*Exclusion:* PSY490H1 or PSYD66H3  
*Prerequisite:* (PSY270H5 or PSY290H5) or 1.0 credit from (PSY346H5 or PSY362H5 or PSY369H5 or PSY372H5 or PSY395H5 or PSY397H5 or PSY398H5 or BIO304H5)  

PSY495H5 Special Topics in Neuropsychology (SCI)  
In depth examination of selected topics in neuropsychology. (Topics change periodically.) [36S]  
*Prerequisite:* PSY290H5 and 1.0 credit from (PSY315H5 or PSY318H5 or PSY346H5 or PSY362H5 or PSY372H5 or PSY374H5 or PSY379H5 or PSY393H5 or PSY397H5)  

PSY499H5 Research Opportunity Program (SCI,EXP)  
This course provides a rewarding opportunity for students in their fourth year to undertake relatively advanced work in the research project of a faculty member in return for PSY499H 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 and International Opportunities (Page 23) for more details.  
*Prerequisite:* Completion of 13.0 FCE and 1.0 300-level credit in Psychology and minimum last AGPA of 3.0 or above.  

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**Sociology (HBA)**  
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.  

**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.  
J.B. Kervin, 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**  
J. Adese, B.A., B.A. (Hons), M.A., Ph.D.  
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.  
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.  
J. Flores, B.A., M.A., Ph.D.  
P. Goodman, B.A., M.A., Ph.D.  
R. Gray, B.A.S., M.A., Ph.D.  
J. Haag, B.A. (Hons), M.A.  
S. Hoffman, B.A., Ph.D.  
N. Innocente, B.A., M.A., Ph.D.  
J. Johnston, B.A., M.A., 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.  
K. Plys, B.A., M.Phil., Ph.D.  
Z. Richer, B.A., M.A., Ph.D.  
Y. Sherwood, B.A., M.A., Ph.D.  
C. Smith, B.A., Ph.D.  
G. Super, B.A., LL.B., M.Sc, Ph.D.  
W. Zhang, B.S., M.A., Ph.D.  

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2020-2021 Calendar 421
The Department offers Specialist, Major, and Minor programs in Sociology, and Specialist and Major programs in Criminology, Law and Society.

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.

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 should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
SOC Sociology (page 424)

Specialist Program ERSPE1013 Sociology (Arts)

10.0 credits in Sociology are required.

Limited Enrolment – Space in the Specialist Program in Sociology is limited. To be considered for admission, students must meet the following minimum criteria:

1. Eligibility: Students registered in the Sociology Major program can apply to the Specialist program towards the end of Year 2.

2. Credits: Students must have a minimum of 8.0 credits.

3. Prerequisite Course(s): Students must have an average final mark of at least 73% in UTM SOC100H5, SOC221H5, SOC222H5, and SOC231H5.

4. Cumulative Grade Point Average (CGPA): The Department of Sociology determines the CGPA requirement each admission period in relation to the number of applicants and it is never below 2.00.

Note: Meeting the minimum requirements does not guarantee admission.

Year 1: SOC100H5

Year 2:

- SOC221H5
- SOC222H5
- SOC231H5

Please note upper-year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enrol in 300- and 400-level courses.

Additional Requirements:

- SOC350H5
- SOC387H5
- SOC439Y5
- 3.0 SOC credits at the 300/400 level
- 2.0 additional SOC credits
- 1.0 SOC credit from:
  SOC230H5, SOC299H5, SOC299Y5, SOC382H5, SOC399H5, SOC399Y5, SOC401H5, SOC403H5, SOC406H5, SOC410H5, SOC411H5, SOC412H5, SOC413H5, SOC414H5, SOC415H5, SOC416H5, SOC417H5, SOC418H5, SOC419H5, SOC420H5, SOC421H5, SOC423H5, SOC440Y5, SOC450H5, SOC452H5, SOC456H5, SOC467H5, SOC480Y5, SOC485H5, SOC499H5, SOC499Y5
Major Program ERMAJ1013 Sociology (Arts)

7.0 credits in Sociology are required.

**Limited Enrolment** – Space in the Major program in Sociology is limited. To be considered for admission, students must meet the following minimum criteria:

1. **Credits**: Students must have a minimum of 4.0 credits.
2. **Prerequisite Course(s)**: Students must have a final mark of at least 67% in their first successful attempt at UTM SOC100H5 or a final mark of at least 70% in each of two 0.5 credit UTM SOC courses at the 200 level or above.
3. **Cumulative Grade Point Average (CGPA)**: The Department of Sociology determines the CGPA requirement each admission period in relation to the number of applicants and it is never below 2.00.

**Note**: Meeting the minimum requirements does not guarantee admission.

**Year 1**: SOC100H5

**Year 2**:
- SOC221H5
- SOC222H5
- SOC231H5

Please note upper-year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enrol in upper-year courses.

**Additional Requirements**:
- 1.0 SOC credit at the 300 level
- 1.0 SOC credit at the 400 level
- 1.0 SOC credit at the 300/400 level
- 2.0 additional SOC credits

Minor Program ERMIN1013 Sociology (Arts)

4.0 credits in Sociology are required.

**Limited Enrolment** – Admission is based on the following criteria:

1. **Credits**: Students must have a minimum of 4.0 credits.
2. **Prerequisite Course(s)**: Students must have a minimum final mark of 65% in their first successful attempt at UTM SOC100H5 or a final mark of 67% in each of two 0.5 credit UTM SOC courses at the 200 level or above.
3. **Cumulative Grade Point Average (CGPA)**: The Department of Sociology determines the CGPA requirement each admission period in relation to the number of applicants and it is never below 2.00.

**Note**: Meeting the minimum requirements does not guarantee admission.

**Year 1**: SOC100H5

Please note upper-year prerequisite requirements when choosing your courses. Students must have completed all published prerequisites in order to enrol in upper-year courses.

**Year 2**: 2.5 SOC credits at the 200 level

**Year 3**: 1.0 SOC credit at the 300 level

**Important Information**

1. Students can choose to pursue a Sociology Specialist, a Sociology Major or a Sociology Minor; these programs cannot be combined. Please note it is not possible to combine a Sociology Specialist with a Criminology, Law & Society Specialist.

2. Students must check with the Sociology Academic Counselor before enrolling in a course at another U of T campus in order determine whether the course may be applied towards Sociology program requirements.

3. Students are not permitted to take the following courses elsewhere:
   - (a) SOC100H5
   - (b) SOC109H5
   - (c) SOC205H5
   - (d) SOC221H5
   - (e) SOC222H5
   - (f) SOC231H5
   - (g) SOC350H5
   - (h) SOC387H5
If students do take any of the above noted courses elsewhere, it will not apply to their Sociology program. Such students may still take the course with the UTM Department of Sociology in order to satisfy our program requirements; however, this "extra course" will appear on official transcripts with the notation "EXT".

Special consideration may be given to new students assessed for transfer credit at UTM.

4. Students without prerequisites can be removed at any time; no waivers will be granted.

5. Courses may be restricted to students in particular programs and/or enrollment priority may be given to particular categories of students.

6. Students entering the program after their second year should plan sufficient time for its completion; program/course requirements will not be waived.

For more information about Sociology programs and the Department of Sociology, please visit https://www.utm.utoronto.ca/sociology.

List of Courses

**SOC100H5 Introduction to Sociology (SSc)**
An introduction to the conceptual and empirical foundations of the discipline intended on providing a foundation for subsequent Sociology and Criminology, Law and Society courses and programs. Students will learn the sociological approach of theory and inquiry to a range of topics. [24L]

*Exclusion:* SOC101Y5 or SOC100H1 or SOC101Y1 or SOC102H1 or SOC103H1 or SOCA01H3 or SOCA02H3 or SOCA03Y3

**SOC109H5 Introduction to Criminology, Law & Society (SSc)**
This course provides an introduction to the overlapping areas of “criminology” and “law and society” within the Criminology, Law & Society (CLS) stream. The goal of the course is to provide a sociological foundation for subsequent CLS courses. In addition to a criminological/socio-legal introduction to theory and methods, topics may include law, inequality, intersectionality, legal institutions, legal professions, crime, criminal justice, and punishment. [24L]

*Exclusion:* SOC209H5

**SOC202H5 Cultural Sociology (SSc)**
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 or SOC280H1 or SOCB58H3

*Prerequisite:* SOC100H5

**SOC205H5 Theories in Criminology (SSc)**
This course will cover major theoretical paradigms in the field of criminology included, among others, classical, positivist, strain, control, social learning, critical, feminist, postmodern and critical race theories. Students are required to take this course upon entry to the Criminology, Law and Society Major and Specialist programs. [24L, 12T]

*Exclusion:* SOC305H5

*Prerequisite:* SOC100H5 and SOC109H5

**SOC206H5 Introduction to the Sociology of Genocide (SSc)**
This lecture course will lead students through an in-depth consideration of why genocides occur. [24L]

*Prerequisite:* SOC100H5

**SOC207H5 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 and SOC109H5

**SOC210H5 Canadian Criminal Justice (SSc)**
This course provides an introduction to sociological and criminological analyses of crime, law, and the operation of the Canadian criminal justice system, with emphasis on how law and criminal justice are shaped by social, political and economic considerations. It will also consider how social identities such as race, class and gender influence individuals’ perceptions of, and experiences in, the Canadian criminal justice system. [24L]

*Exclusion:* CRI205H1 or CRI210H1 or SOC209H5

*Prerequisite:* SOC100H5 and SOC109H5

**SOC211H5 Law and Social Control (SSc)**
This course investigates the role of law in shaping social norms and regulating behavior. [24L]

*Exclusion:* SOC212Y1 or SOC212H1 or SOCB50H3 or SOCB51H3

*Prerequisite:* SOC100H5 and SOC109H5

This course is required for Criminology, Law and Society Major and Specialist programs.
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 or CRI215H1
Prerequisite: SOC100H5 and SOC109H5

SOC219H5 Gender and Crime (SSc)
This course explores how masculinity and femininity shape and are shaped by offending, violence, and victimization. Possible topics may include the gender gap in crime, intersectionality, gender diversity, victimless crimes, survival crimes, gender-based violence, and missing and murdered Indigenous women. [24L]
Exclusion: CRI380H1 or SOC365H5 Special Topics in Criminology: Gender, Violence and Offending (Fall 2019 and Winter 2020)
Prerequisite: SOC100H5 and SOC109H5

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. Students are introduced to a range of data collection methods. Students are required to take this course upon entry to the Sociology and Criminology, Law and Society Major and Specialist programs. [24L, 12T]
Exclusion: SOC200Y5 or SOC200Y1 or SOC200H1 or SOCB05H3 or SOC150H1 or SOC204H1
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. Students are required to take this course upon entry to the Sociology and Criminology, Law and Society Major and Specialist programs. [24L, 12P]
Exclusion: SOC200Y5 or SOC200Y1 or SOC200H1
Prerequisite: SOC100H5

SOC224H5 Sociology of Education (SSc)
This course examines what some of our key sociological thinkers have said about the role of education in society, from socialization to sorting students into different opportunities, including along the lines of race, class and gender. The course also covers the development of the education system in Canada, the career of teaching, curriculum development, and standardized testing. Students will have the opportunity to apply sociological insights to contemporary issues in education. [24L]
Exclusion: SOCB26H3
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 or SOC207Y1 or SOC207H1 or SOC854H3
Prerequisite: SOC100H5

SOC228H5 Introduction to Indigenous Studies (SSc)
This survey course introduces students to the interdisciplinary field of Indigenous Studies. Students will explore the themes, theories and methods of the discipline, and develop a foundational knowledge about Indigenous history, peoples, cultures and societies in Canada. [24L]
Prerequisite: 0.5 SSC credit

SOC230H5 Thinking Like a Sociologist (SSc,EXP)
This course builds on SOC100H5 through a deep engagement with 4-5 significant new publications in Sociology, typically books by department faculty and visiting scholars. By developing reading and writing skills through a variety of assignments, including reflections, and experiential learning in classroom debates and simulations with the researchers who produced the publications, students will learn to "think like a sociologist". Possible topics covered include race/ethnicity, gender, work, immigration, political sociology, cultural sociology, and criminology, as well as other major subfields within the discipline. [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, Weber and Dubois among others. Students are required to take this course upon entry to the Sociology Major and Specialist programs and the Criminology, Law and Society Specialist program. [24L]
Exclusion: SOC314Y5 or SOC203Y1 or SOC201H1
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 or SOC242Y1
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 or SOC214Y1 or SOC214H1 or SOCB49H3
Prerequisite: SOC100H5

SOC253H5 Social History of Race and Ethnicity (SSc)
This course examines how ideas about "race" and "ethnicity" evolved and became institutionalized on a global scale, as well as systems of exploitation, exclusion and inequality that have given rise to today's patterns of racial and ethnic inequality in the world. We focus on examples from different regions of the world, as well as examine large-scale historical events such as colonialism, slavery and immigration. [24L]
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 or SOC363H5 or SOC220H1 or 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 or SOC265H1 or SOCB22H3 or SOCC24H3
Prerequisite: SOC100H5

SOC299H5 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 SOC299H5 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 and International Opportunities (Page 23) for more details.
Exclusion: Students may not take SOC299H5 and SOC299Y5 concurrently.
Prerequisite: SOC100H5 and 2nd Year Standing and permission of instructor

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 SOC299Y5 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 and International Opportunities (Page 23) for more details.
Exclusion: Students may not take SOC299H5 and SOC299Y5 concurrently.
Prerequisite: SOC100H5 and 2nd Year Standing and permission of instructor

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: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
### Programs: Sociology (HBA)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>SOC302H5</td>
<td>Indigenous-Canada Relations (SSc)</td>
<td>This course analyzes Indigenous-Canada relations. Topics may include nationhood, diplomatic relations, trade, military relationships, assimilation/civilization policy, land claims, self-government, and/or education. [24L]</td>
<td>Exclusion: SOC345H5 (Fall 2018) Prerequisite: 1.0 SSC credit</td>
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<tr>
<td>SOC303H5</td>
<td>White-collar and Corporate Crime (SSc)</td>
<td>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]</td>
<td>Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5</td>
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<tr>
<td>SOC304H5</td>
<td>Environmental Sociology (SSc)</td>
<td>This course focuses on human-nature interactions, and the social processes that modify and threaten the natural world. Students develop a better understanding of environmental issues, the interrelationship between social problems and environmental problems, as well as the ways that humans themselves are part of nature. [24L]</td>
<td>Exclusion: SOC336H5 Special Topics in Sociology: Environmental Sociology (Winter 2020) Prerequisite: SOC100H5 and 1.0 SSC credit at the 200-level</td>
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<tr>
<td>SOC306H5</td>
<td>Education and Social Control (SSc)</td>
<td>This course explores the intersections of education and social control. In particular, we focus on moments when social control is evident in schooling, including how that control is used on some populations more than others. Topics include zero-tolerance policies, police/security presence in schools, education programming in prison, and the school-to-prison pipeline. [24L]</td>
<td>Exclusion: SOC336H5 Special Topics in Sociology: Environmental Sociology (Winter 2020) Prerequisite: SOC100H5 and 1.0 SSC credit at the 200-level</td>
</tr>
<tr>
<td>SOC309H5</td>
<td>Sociology of Mass Communication (SSc)</td>
<td>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]</td>
<td>Exclusion: SOC309Y5 Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 Recommended Preparation: SOC224H5</td>
</tr>
<tr>
<td>SOC310H5</td>
<td>Youth Justice (SSc)</td>
<td>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]</td>
<td>Exclusion: CRI370H1 or SOC310H1 Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5</td>
</tr>
<tr>
<td>SOC311H5</td>
<td>Special Topics in Law (SSc)</td>
<td>This course will provide an in-depth exploration of a specific topic in law. Topics vary from year to year and are noted on the timetable once confirmed. [24L]</td>
<td>Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5</td>
</tr>
<tr>
<td>SOC312H5</td>
<td>Law, Race and Racism (SSc)</td>
<td>The course investigates the relationship between law, race, and racism and the societal implications. Students will gain a stronger understanding of how law creates race for the purposes of legitimating and perpetuating racism and the ways that law can, under some conditions, generate social change that reduces racial inequality. [24L]</td>
<td>Exclusion: SOC311H5 Special Topics in Law: Law, Race and Racism (Winter 2020) Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5</td>
</tr>
<tr>
<td>SOC316H5</td>
<td>Crime Prevention and Security (SSc)</td>
<td>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]</td>
<td>Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5</td>
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<tr>
<td>SOC317H5</td>
<td>Shopping and Society (SSc)</td>
<td>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]</td>
<td>Exclusion: SOC217H5 Prerequisite: SOC100H5 and 1.0 SOC credit at the 200 level Recommended Preparation: SOC202H5</td>
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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. [24L]
*Exclusion:* SOC363H1
*Prerequisite:* (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC320H5 Criminal Justice Organizations (SSc)
This course uses organizational theory to examine major criminal justice institutions—police, courts, and prisons. It examines the role of organizational goals, structure, resources, legitimacy, culture, and front-line workers in shaping organization-level decisions about policy and practice. It also examines the interactions, mutual influence, and competition between government, interest groups, and criminal justice institutions that help to initiate and sustain field-wide change. [24L]
*Exclusion:* SOC300H5 Special Topics in Criminology: Criminal Justice Organizations (Fall 2016, Winter 2017)
*Prerequisite:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC321H5 Law & Rights (SSc)
This course investigates the promise and limitations of rights as a legal framework to safeguard citizens and residents of Canada and abroad. Topics include the framing and implementation of novel rights claims, the relationship between formal rights and social norms, and the impact of rights frameworks on civic and community ties. [24L]
*Prerequisite:* (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC323H5 Law, Culture and Social Problems (SSc)
This course explores contemporary social problems related to law with an emphasis on cultural dynamics such as perception, group and community culture, stereotyping, and meaning-making. Topics covered may include law in everyday life, gun carrying by gun owners, workplace discrimination lawsuits, the #MeToo movement, and the Canadian government's marginalization of Indigenous legal orders. [24L]
*Prerequisite:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC324H5 Carceral Feminisms: Race, Gender and State Violence (SSc)
This course explores how different strains of feminism shape practices of punishment. Course topics may include: intersectional debates in the regulation of domestic violence, gender-responsive policing, state regulation of gender-based violence, and prison abolition theory and praxis. [24L]
*Exclusion:* SOC447H5S (Winter 2019)
*Prerequisite:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC325H5 Law and Social Theory (SSc)
This course examines the writings on law-related topics in classical and contemporary social theories. At the intersection between socio-legal studies and sociological theory, the course traces how different generations of social theorists approach law, from classical theorists such as Montesquieu, Tocqueville, Marx, Durkheim, and Weber to contemporary socio-legal theorists across the world. [24L]
*Prerequisite:* (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 or SOCC11H3
*Prerequisite:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC327H5 Drugs and the Modern World (SSc)
The course examines how "drugs", as well as attempts to police and control their use, have been implicated in the making of the modern world. Instead of taking drugs as inherently criminal and deviant, the course will look at how drugs have played a central role in the development of capitalism, colonialism and global inequality in the past 200 years. [24L]
*Prerequisite:* (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
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]
Exclusion: SOC421H5 (Fall 2014)
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC329H5 Law & Social Movements (SSc)
This course focuses on how popular movements and legal institutions influence efforts to produce or prevent social change. Taking a comparative approach, it examines the social conditions that mobilize and sustain popular movements, factors that contribute to movement success, and the receptivity of courts to pressure from below. [24L]
Exclusion: SOC446H5 Advanced Topics in Criminology, Law and Society: Law and Social Movements (Winter 2020)
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC330H5 Criminology and Immigration (SSc)
This course examines the intersection between immigration and crime control. More specifically, it examines immigration detention and deportation, concerns with immigrant risk, security and terrorism, as well as the impact of public policy on immigration and crime. [24L]
Exclusion: CRI383H1
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC331H5 Gender and Criminal Justice (SSc)
This course explores how gender impacts criminalization and how gender shapes the way criminal justice is conceptualized and delivered. Possible topics may include masculinity & criminalization; gender & policing; gender & court outcomes; women's prisons, and trans issues in prisons.[24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC332H5 Race and Ethnicity in Canada (SSc)
This course deals with the social construction of racial and ethnic categories in the Canadian context, as well as with how Canadian institutions have used racial and ethnic categories to generate inequality and exclusion. It also addresses how individuals, social movements and institutions have at times worked to resist, challenge or modify these practices of categorization and exclusion. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC333H5 Criminal Groups and Organizations (SSc)
An analysis of the intersection between criminal groups and crime and organizations. This course introduces students to various organizational theories and examines how criminal groups and organizations form, crime by organizations, and crime that is "organized." [24L]
Exclusion: SOC208H5
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 or SOC245Y1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 or SOCC39H3 or SOCB30H3
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
Recommended Preparation: SOC263H5

SOC336H5 Special Topics in Sociology (SSc)
This course explores a particular area within sociology. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC337H5 Special Topics in Criminology, Law and Society (SSc)
This course will explore a particular area within criminology, law and society. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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SOC227H5 Recommended Preparation:
SOC222H5 and SOC228H5 or SOCC15H3
Exclusion:
Race relations shape work and occupations. [24L]
Emphasis will be placed on how class, gender, ethnic and
as women in the workforce, recent immigrant and migrant
We will engage different sides of debates about such issues
since the 1970s and their implications for different groups.
This course will focus on key changes in the world of work
Work (SSc)
SOC341H5 Contemporary Issues in the Sociology of
and SOC222H5
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5
or SOC231H5) and SOC221H5 and SOC222H5
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 - 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: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
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: SOC213H1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
SOC342H5 Sociology of Scandals (SSc)
This course takes up scandals as sociological events: What
are the causes of scandals? How are scandals ‘made’?
How are scandals represented? and What are the
consequences of scandals? The course will pay attention to
how scandals are made public: Leaks, investigations,
whistleblowers, and media reporting, and the framing of
events as scandals worth of public condemnation. To do so,
this course will focus on scandals among professionals, in
the private corporate sector and in government,
domestically and worldwide, both current and past. By
understanding scandals as sociological events, students will
learn to trace how scandals may lead to new organizational,
professional, social, cultural, and political responses. [24L]
Prerequisite: SOC100H5 and 1.0 SOC credit at the 200
level
SOC343H5 Urban Sociology (SSc)
The course will introduce students to the core and
cutting-edge scholarship in urban sociology. We will discuss
theories and empirical studies related to the issue of urban
politics, including the issues of food, housing, gentrification,
and neighborhood change. Despite the focus on Canadian
and American cities, this course also highlights global and
transnational perspectives, such as immigrant experiences,
“ethnic” restaurants, and forces of globalization that are
intricately tied to urban lives. This course aims to open this
discussion about how we connect the micro-level of our
social interactions, consumption, and daily lives to
macro-levels of progress, global economic forces, politics
and culture. [24L]
Exclusion: SOC205H1 or SOCB44H3
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
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]
Exclusion: SOC222H5 or SOC213H1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
SOC345H5 Special Topics in Sociology (SSc)
This course explores a particular area within sociology.
Topics vary from year to year and are noted on the
timetable once confirmed. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
SOC346H5 Special Topics in Criminology, Law and
Society (SSc)
This course will explore a particular area within criminology,
Topics vary from year to year and are noted on the
timetable once confirmed. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
SOC347H5 Sociology of Masculinities (SSc)
In this course students will engage with foundational
material on the intersections of gender, sex, and sexuality
as they relate to masculinity. This includes foundational
work on hegemonic masculinity and multiple masculinities.
[24L]
Exclusion: SOC345H5 Special Topics in Sociology:
Sociology of Masculinities (Winter 2017)
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5
and SOC222H5
SOC348H5 Indigenous Rights, Resistance, and Resurgence (SSc)
This course explores Indigenous people’s confrontations with colonization through an examination of rights-based processes, resistance movements, and community-led resurgence efforts. Topics may include: rights, courts, and legal action; land reoccupation; political organizing; everyday acts of resistance and resurgence such as petitioning, social media, arts-based movements, and community initiatives. [24L]
Prerequisite: 1.0 SSC credit

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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 multicollinearity, 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. All students in the Sociology and Criminology, Law and Society Specialist programs are required to take this course. [24L, 11P]
Exclusion: SOC300Y5 or SOC300H1 or SOC252H1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC351H5 Politics and Violence: Spot the Difference (SSc)
This course aims to develop a critical approach to the study of violence. We will examine the linkages between politics and crime, between violence and democracy and the political context of specific forms of violence, such as vigilantism, state, collective and, structural violence. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 it’s 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 and 1.0 SOC/WGS credit at the 200 level
Recommended Preparation: SOC263H5 or SOC275H5 or WGS200Y5

SOC354H5 Global Sociology (SSc)
Approaches to transnational networks, structures and processes, such as diasporic networks, transnational corporations, and social movements. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC356H5 Population and Society (SSc)
This course will discuss 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 or SOC312H1 or SOC325H1
Prerequisite: SOC100H5 and 1.0 SOC credit at the 200 level
SOC357H5 The Legal Profession (SSc)
This course introduces the legal profession from a sociological perspective. Focussing on the social structure of the legal profession, the course draws on the sociology of professions and the sociology of law and covers topics such as the creation of the profession, competition from inside and outside, historical and modern challenges to professional boundaries, and structural transformations and shifts. The course will provide examples from global legal professions. It does not teach how to think like a lawyer, nor does it provide the perspective of legal practitioners, but instead it provides social science perspectives for understanding how the legal profession is organized, differentiated, and transformed over space and time. [24L]  
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC358H5 Indigenous People: Legal Orders and Law (SSc)
This course examines Indigenous people’s traditional and contemporary legal orders and confrontations and interactions with non-Indigenous legal systems. Topics may include: treaties; land and resource rights and laws; rights; self-government; governance; restorative justice; colonial legal systems; criminalization and criminal law; and/or international law. [24L]  
Prerequisite: 1.0 SSC credit

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 or SOC231H5) and SOC221H5 and SOC222H5  
Recommended Preparation: SOC263H5 or SOC275H5 or WGS200Y5

SOC361H5 Sociology of Organizations (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: SOC317Y1  
Prerequisite: SOC100H5 and 1.0 SOC credit at the 200 level  
Recommended Preparation: SOC227H5

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: SOC317Y1 or SOC09H3  
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5  
Recommended Preparation: SOC227H5

SOC363H5 Sexuality and Crime (SSc)
This course focuses on the socio-legal origins, regulations, and consequences of sexuality, reproduction, and sexual violence. Possible topics may include historical and contemporary sexual and reproductive regulations, sexual violence, sex offenders, sex work, pornography, trafficking, and hate crimes against sexual minorities. [24L]  
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC364H5 New Directions in Social Inequality (SSc)
This course reviews current ways of viewing and researching social inequality. Particular attention will be paid to how foundational work on social inequality connects to contemporary patterns, especially as demonstrated through current research. [24L]  
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC365H5 Special Topics in Criminology (SSc)
This course will explore a particular area within criminology. Topics vary from year to year and are noted on the timetable once confirmed. [24L]  
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC366H5 Special Topics in Criminology (SSc)
This course will explore a particular area within criminology. Topics vary from year to year and are noted on the timetable once confirmed. [24L]  
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 or SOC413H1  
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
SOC373H5 Economic Sociology (SSc)
How is the worth of an item determined? What do financial crises reveal about social life? How do financial traders make decisions? Economic questions, and facts, are inherently sociological. This course teaches you to connect the economy to society by examining a range of phenomena that are more readily related to the economy, such as financial crises, CEO compensation, Silicon Valley innovation, markets and firms, but also those that are not, such as love, art, doormen, the organs of dead bodies, and nature. This course will emphasize how economic transactions create, legitimate, and transform social relations, how economic behaviour needs to be understood within its social context, and how economic principles permeate aspects of social life that seem to resist or lie outside of the economic realm. [24L]
Exclusion: SOC323H1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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 or SOC311H1 or SOC342H1
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC378H5 Law, Crime and Justice (SSc)
This course draws on case law to explore a particular area within law and justice. Topics will vary from year to year. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

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]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
Recommended Preparation: SOC263H5 or SOC275H5 or WGS200Y5

SOC382H5 Genocide and Memory (SSc,EXP,INTLO)
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? 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. The specific cultural and historical sites for the course will vary from year to year. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]

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)
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, social media and privacy. [24L]
Exclusion: SOC284H5
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5
Recommended Preparation: SOC202H5
SOC387H5 Qualitative Analysis (SSc)
This course surveys various qualitative methods sociologists use. Students gain insight into the craft of sociology through reading examples of the different qualitative methods, discussing the theories behind the methods, conducting hands-on research exercises and analyzing qualitative data. The objective of this course is to learn to design and conduct a qualitative research project and to analyze qualitative sociological data. All students in the Sociology and Criminology, Law and Society Specialist programs are required to take this course. [24L, 10P]
Exclusion: SOC302H1 or SOC204H1 or SOCC23H3
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5

SOC388H5 Race and Indigeneity (SSc)
This course examines how the concept of race, and the ideologies that inform it, impacts identity politics for Indigenous peoples. Special attention will be paid to the socio-cultural and legal effects of racialized knowledge production. Topics may include: human genome projects, museums, recognition politics, legal definitions, criminalization, access to resources, stereotypes and personhood. [24L]
Prerequisite: 1.0 SSC credit

SOC391H5 Independent Research in Sociology (SSc)
This course is intended for Sociology Specialists and Majors who wish to explore a specific Sociology topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.
Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 3rd Year Standing and permission of instructor
Professors have discretion whether to accept students wishing to pursue an independent studies course; they are not required to serve as faculty supervisors.

SOC392H5 Independent Research in Sociology (SSc)
This course is intended for Sociology Specialists and Majors who wish to explore a specific Sociology topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.
Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: SOC221H5 and SOC222H5 and SOC231H5 and 3rd Year Standing and permission of instructor
Professors have discretion whether to take on an independent study; they are not required to serve as faculty supervisors.

SOC393H5 Independent Research in Criminology, Law and Society (SSc)
This course is intended for Criminology, Law and Society Specialists and Majors who wish to explore a specific Criminology, Law and Society topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.
Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 3rd Year Standing and permission of instructor
Professors have discretion whether to take on an independent study; they are not required to serve as faculty supervisors.

SOC394H5 Independent Research in Criminology, Law and Society (SSc)
This course is intended for Criminology, Law and Society Specialists and Majors who wish to explore a specific Criminology, Law and Society topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.
Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 3rd Year Standing and permission of instructor
Professors have discretion whether to accept students wishing to pursue an independent studies course; they are not required to serve as faculty supervisors.

SOC399H5 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 SOC399H5 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 and International Opportunities (Page 23) for more details.
Exclusion: Students may not take SOC399H5 and SOC399Y5 concurrently.
Prerequisite: SOC221H5 and SOC222H5 and 3rd Year Standing and permission of instructor
SOC399Y5 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 SOC399Y5 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 and International Opportunities (Page 23) for more details.
Exclusion: Students may not take SOC399H5 and SOC399Y5 concurrently.
Prerequisite: SOC221H5 and SOC222H5 and 3rd Year Standing and permission of instructor

SOC401H5 Doing Public Sociology (SSc,EXP)
In this seminar course, students learn to communicate insights based in sociological research to a broader audience, beyond the university. Students design and execute projects (essays, creating a podcast or video, and/or public speaking) on sociological topics of their choosing related to law and/or crime. The course also provides students with guidance on how to locate sociological research through library resources and how to incorporate that research into their public sociology projects. Priority may be given to Criminology, Law and Society students.
[24S]
Exclusion: SOC456H5 Senior Seminar in Law and Society: How to Communicate about Law to Different Audiences (Winter 2018)
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC403H5 Prisons, Punishment & Surveillance Across the Globe (SSc)
This seminar course will focus on possible solutions for issues related to prisons, punishment and surveillance across the globe. Along with this surveillance you have a rise in prisons and other forms of state sponsored punishment.

[24S]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC404H5 Special Topics in Social Policy (SSc)
This lecture course will explore a particular area within Social Policy. Topics vary from year to year and are noted on the timetable once confirmed.

[24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level
Recommended Preparation: SOC240H5

SOC405H5 Surveillance in a Digital World (SSc)
This course introduces students to theories of surveillance and risk in the digital era. The era of big data has given rise to smart policing, preventative security measures, and data driven solutions which are producing new knowledge about risk. It focuses on how surveillance is shifting institutional risk practices within law and criminal justice systems and how marginalized populations and particular geographical spaces are constructed as security risks.

[24L]
Exclusion: SOC448H5 Advanced Topics in Criminology, Law and Society: Surveillance in a Digital World (Fall 2019)
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC406H5 Vigilantism on the Margins of the State (SSc)
This seminar examines the social problem of "vigilantism". It focuses on how the act is defined in terms of scholarly works on punishment and policing, as well as mainstream popular opinion. The course looks at questions such as how vigilantism manifests in different geographic spaces (e.g. the "global north" and the "global south"), in rich and poor areas, and in different historical periods.

[24S]
Exclusion: SOC421H5S Senior Seminar in Criminology: Vigilantism on the Margins of the State (Winter 2020)
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

Recommended Preparation: SOC350H5
SOC407H5 Development and Social Change: The Case of China (SSc)
This course introduces concepts, theories, and policies of development and underdevelopment. With China as a case, it focuses on social, economic, political, and cultural factors shaping the nature and meaning of social change. [24L]
Exclusion: SOC444H5 Advanced Topics in Sociology: Contemporary Chinese Society (Fall 2017, Fall 2018, Fall 2019)
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC408H5 The Sociology of Anti-Muslim Racism (SSc)
This reading-intensive course explores historical and contemporary manifestations of anti-Muslim racism through a transnational lens, while paying special attention to scholarship from and about Canada and the United States. Issues related to gender and sexuality, race, citizenship status, Orientalism, colonialism, and military intervention cut across the readings. [24L]
Exclusion: SOC444H5 Advanced Topics in Sociology: The Sociology of Anti-Muslim Racism (Fall 2018, Winter 2020)
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC410H5 Senior Seminar in Inequality (SSc)
This course offers an in-depth examination of selected topics in the sociology of inequality. [24S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor

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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor

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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor
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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor
Recommended Preparation: SOC275H5

SOC414H5 Senior Seminar in Political Sociology (SSc)
This course offers an in-depth examination of selected topics in political sociology. [24S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor
Recommended Preparation: SOC335H5

SOC415H5 Senior Seminar in Indigenous Studies (SSc)
This course offers an in-depth examination of selected topics in Indigenous Studies. [24S]
Prerequisite: 1.0 SSC credit, including 0.5 credit at the 300 level

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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor
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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor
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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC419H5 Senior Seminar in Race and Ethnicity (SSc)
This course offers an in-depth examination of selected topics in Race and Ethnicity. [24S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC420H5 Senior Seminar in Punishment (SSc)
Restricted to Criminology, Law and Society Specialists and Majors. Topics vary from year to year and are noted on the timetable once confirmed. [24S]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor
SOC421H5 Senior Seminar in Criminology (SSc)
Restricted to Criminology, Law and Society Specialists and Major. Topics vary from year to year and are noted on the timetable once confirmed. [24S]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC423H5 Identity Crime (SSc,EXP)
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, Fall 2013)
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level.

SOC424H5 Law, Emotions, and Justice (SSc)
This course investigates emotional dynamics in law and justice. Topics will include public attitudes towards crime and punishment, the rights of victims in criminal proceedings, and restorative justice. [24L]
Exclusion: SOC420H5 - Senior Seminar in Punishment: Emotions and Punishment (Fall 2019)
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5, 1.0 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]
Exclusion: SOC263H5 or SOC275H5 and SOC222H5 and 1.0 SOC credit at the 300 level
Recommended Preparation: SOC263H5 or SOC275H5 or WGS200Y5

SOC429H5 Disability, Politics and Society (SSc)
This course situates disability within a social and political context. We focus on how disability serves as a basis for exclusion from social, legal, political and economic institutions as well as the ways in which actors (policymakers, activists, etc.) have sought to undermine this system of discrimination. We will investigate a variety of related themes including the "social model of disability," policy and judicial transformations, the evolution of the disability rights movement (including the use of legal mobilization), disability identity, intersectionality, and the future of disability politics and the law. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC432H5 Contemporary Issues in Genocide and State Violence (SSc)
This advanced lecture course will provide students with the analytical tools necessary to engage in deep analysis of contemporary genocides and state violence. [24L]
Exclusion: SOC445H5 (Fall 2009, Winter 2010)
Prerequisite: (SOC205H5 or SOC231H5) and SOC222H5 and SOC206H5 and 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: (SOC205H5 or SOC231H5) and SOC222H5 and 1.0 SOC credit at the 300 level

SOC434H5 Race, Class, Gender in the Global South (SSc)
Three of the most fundamental cleavages in the contemporary world-economy are those between whites and people of colour, men and women, and capital and labour. This seminar course focuses on these cleavages and analyzes each through both an historical and global south perspective. [24S]
Exclusion: SOC444H5 Advanced Topics in Sociology: Global Perspectives on Race, Class and Gender (Winter 2018)
Prerequisite: (SOC205H5 or SOC231H5) and SOC222H5 and 1.0 SOC credit at the 300 level and 4th Year Standing and permission of instructor

SOC439Y5 Research Project in Sociology (SSc,EXP)
This is a seminar course where students engage in an independent research project supervised by a faculty member in Sociology. Students develop a research proposal, conduct independent research, analyze data and present findings. Admission by academic merit. Interested students should submit an application to the Department of Sociology (see website for details). Preference given to eligible Sociology Specialists and Majors. [48S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 4th Year Standing and permission of instructor
SOC440Y5 Research Project in Criminology, Law and Society (SSc,EXP)
This is a seminar course where students pursue advanced research supervised by a faculty member in Criminology, Law and Society. Students develop a research proposal, conduct independent research, analyze data and present findings. Admission by academic merit. Interested students should submit an application to the Department of Sociology (see website for details). Preference given to eligible Criminology, Law and Society Specialists and Majors. [48S]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 4th Year Standing and permission of instructor

SOC444H5 Advanced Topics in Sociology (SSc)
An in-depth examination of selected topics in Sociology. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC445H5 Advanced Topics in Sociology (SSc)
An in-depth examination of selected topics in Sociology. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC446H5 Advanced Topics in Criminology, Law and Society (SSc)
An in-depth examination of selected topics in Criminology, Law and Society. Restricted to Criminology, Law and Society Specialists and Major. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC447H5 Advanced Topics in Criminology, Law and Society (SSc)
An in-depth examination of selected topics in Criminology, Law and Society. Restricted to Criminology, Law and Society Specialists and Major. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC448H5 Advanced Topics in Criminology, Law and Society (SSc)
An in-depth examination of selected topics in Criminology, Law and Society. Restricted to Criminology, Law and Society Specialists and Major. Topics vary from year to year and are noted on the timetable once confirmed. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC450H5 Walls to Bridges: Carceral Seminar (SSc,EXP)
Based on the Walls to Bridges Program model, this seminar course matches a group of University of Toronto Mississauga students ("outside" students) with an approximately equal number of incarcerated students ("inside" students) who study together as peers at an off-campus setting. Topics vary from term to term. All class sessions are held inside the institution (e.g., penitentiary, detention centre, halfway house, etc.). Inside and outside students work together on small teams to develop and present a final project. Interested students should submit an application to the Department of Sociology (see website for details), and an interview may be required. Preference given to eligible Criminology, Law and Society Specialists and Majors. [36S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC209H5 and SOC221H5 and SOC222H5 and 4th Year Standing and permission of instructor

Once students are accepted into this course a criminal record check (CPIC) may be required to access the offsite location for classes.

Students are advised to schedule approximately seven hours for class time (to allow time sufficient time for travel, institution check-in and -out in addition to the seminar time).

SOC452H5 Contemporary Issues in Higher Education (SSc,EXP)
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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level
Recommended Preparation: SOC224H5
SOC454H5 Sociology of the Global South (SSc)
This course examines the causes and consequences of empire, imperialism, and colonization to help better understand contemporary inequalities across the globe. The first part of the course focuses on theories of the Global South and the second part of the course applies those theories to the practice of social science research. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC455H5 Comparative Indigenous Politics (SSc)
Using a comparative approach, this course explores the politics of Indigeneity in settler colonial contexts. It centers critical analyses of settler colonialism and decolonization, and focuses on examples from Canada, the USA, New Zealand, and Australia to examine the differences and similarities between Indigenous peoples and politics in these places. [24L]
Prerequisite: 1.0 SSC credit, including 0.5 credit at the 300-level

SOC456H5 Senior Seminar in Law and Society (SSc)
The course will examine substantive debates in law and society. Restricted to Criminology, Law and Society Specialists and Major. Topics vary from year to year and are noted on the timetable once confirmed. [24S]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC457H5 Sociology of Race and Ethnicity (SSc)
This course offers an overview of some of the major theories and research programs in the sociology of race and ethnicity. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 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: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC463H5 The Sociology of Disasters (SSc)
The modern world leans heavily on the assumption that organizations run smoothly, but often they do not and sometimes the consequences are disastrous. This course draws on a variety of sociological theories and explanatory frameworks to better understand how and why large scale disasters occur. The class will investigate high risk technologies, issues and problems related to organizational culture, deviance and misconduct, community dynamics and resilience, environmental justice, and social problems related to racialization, gender, class, and other inequalities. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC465H5 Climate Change and Society (SSc)
In this course a variety of classical and contemporary sociological perspectives will be deployed to understand the social context, factors and consequences of climate change. Possible topics include the political economy of the environment, environmental refugees, environmental movements, media representations of climate change, the social context and consequences of fracking, the politics of global protocols on carbon emissions, climate justice and social inequality, etc. [24L]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 1.0 SOC credit at the 300 level

SOC467H5 Peel Social Lab Seminar: Translating Research for the Wider Public (SSc,EXP)
This is a seminar course where students work on data from the Peel Social Lab to produce various media to translate sociological findings for a broader audience. [24S]
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 4th Year Standing and permission of instructor
SOC475H5 Sociology of Legal Careers (SSc)
This course examines legal careers from the sociological perspective. As one of the most elite and influential professions, lawyers are key players in economic, political, and social life. This course traces the various careers of lawyers from their experiences in law school to their jobs in law firms, courts, and other professional settings. In so doing the course will also focus on structures of inequality, such as gender, race and class. [24L]
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level

SOC480Y5 Internship in Sociology, Criminology, Law and Society (SSc,EXP)
Through a part-time, unpaid, 200-hour internship, students apply sociological knowledge gained primarily through previous coursework. Students can seek internship opportunities 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 must confirm internship arrangements well in advance and secure departmental approval for their internship position prior to the start of term (with students and host organizations required to complete institutional documentation in order for the internship to commence). This experiential learning course also includes class meetings, written assignments and oral presentations, as well as an assessment by the internship employer.

An application/interview may be required (see Department of Sociology website for details).
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 4th Year Standing and minimum CGPA 3.0 and permission of instructor

International students should visit the International Education Centre to ensure they have the appropriate documentation required to work in Canada well before the start of the course/internship.

SOC485H5 Investigation through Study Abroad (SSc,EXP,INTLO)
An in-depth examination of selected topics in sociology as part of a UTM Study Abroad experience. Topics vary from year to year and are noted on the timetable once confirmed. During the international experience, students will collect data and observations to use as the basis for a final analytical project. As part of this course, students will have the option of participating in an international learning experience that will have an additional cost and application process. An interview may be required, with priority given to Sociology and Criminology, Law and Society Specialists and Majors.

SOC491H5 Independent Research in Sociology (SSc)
This course is intended for Sociology Specialists and Majors who wish to explore a specific Sociology topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.
Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

Professors have discretion whether to take on an independent study; they are not required to serve as faculty supervisors.

SOC492H5 Independent Research in Sociology (SSc)
This course is intended for Sociology Specialists and Majors who wish to explore a specific Sociology topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.

Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

Professors have discretion whether to take on an independent study; they are not required to serve as faculty supervisors.

SOC493H5 Independent Research in Criminology, Law and Society (SSc)
This course is intended for Criminology, Law and Society Specialists and Majors who wish to explore a specific Criminology, Law and Society topic in depth. To enrol, a student must prepare a proposal form in consultation with a faculty supervisor and submit the approved form to the academic counsellor.

Exclusion: Students may take a maximum of 1.0 credits of SOC independent studies.
Prerequisite: (SOC109H5 or SOC209H5) and (SOC205H5 or SOC231H5) and SOC221H5 and SOC222H5 and 0.5 SOC credit at the 300 level and 4th Year Standing and permission of instructor

Professors have discretion whether to take on an independent study; they are not required to serve as faculty supervisors.
**South Asian Humanities (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 Humanities 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 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- ARA Language Studies (page 344)
- CIN Cinema Studies (page 121)
- DTS Diaspora and Transnational Studies (page 175)
- FAH Fine Art History (FAH) (page 65)
- HIN Language Studies (page 344)
- HIS History (page 289)
- POL Political Science (page 401)
- PRS Language Studies (page 344)
- RLG History of Religions (page 304)
- SAH South Asian Humanities (page 442)
- SAN Language Studies (page 344)
- SOC Sociology (page 424)
- URD Language Studies (page 344)
- VCC Visual Culture and Communication (page 458)
- WGS Women and Gender Studies (page 463)

**Minor Program ERMIN1333 South Asian Humanities (Arts)**

4.0 credits, including at least 1.0 credits at the 300/400 level.
Students wishing to complete a South Asian Humanities 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, PRS210Y5, RLG204H5, RLG205H5, RLG206H5, RLG207H5, RLG208H5; SAN291Y5
- 2.5 credits from the list of electives below

**ELECTIVES:**

Students are responsible for checking the co- and prerequisites for all courses.

- **Anthropology:** ANT316H5, ANT320H5
- **Cinema Studies:** CIN302H5
- **Diaspora and Transnational Studies:** DTS201H5
- **Fine Art History:** FAH281H5, FAH282H5, FAH385H5, FAH395H5, FAH495H5
- **Geography:** GGR367H5
- **Language Studies:** HIN211H5, HIS212H5, HIN311H5, HIN312H5, HIS313H5, HIN411H5, HIN412Y5, PRS210H5, PRS211H5, PRS310H5, PRS311H5, SAN291Y5, SAN392Y5, URD212Y5, URD312Y5
- **History:** HIS211H5, HIS212H5, HIS282H5, HIS382H5, HIS386H5, HIS394H5, HIS484H5
- **History of Religions:** RLG204H5, RLG205H5, RLG206H5, RLG207H5, RLG208H5, RLG304H5, RLG307H5, RLG310H5, RLG347H5, RLG356H5, RLG360H5, RLG371H5, RLG373H5, RLG374H5, RLG449H5, RLG460H5
- **Political Science:** POL303Y5, POL304Y5, POL446H5
- **Visual Culture and Communication:** VCC306H5, VCC406H5

**List of Courses**

**South Asian Humanities**

**SAH200H5 Being Human in South Asia (HUM)**

What does it mean to be human? We will explore South Asian food, music, poetry, and objects to understand human experience through the lived practice of South Asian communities in historical and contemporary contexts. This course uses South Asian texts and practices as theory—as usable tools that help us become better readers of the cultures we study and of ourselves. [24L]
Statistics, Applied (HBSc)

Emeritus Senior Lecturer
O. Fraser, B.Com., M.Sc.

Professors and Lecturers
L. Al Labadi, B.Sc., M.Sc., Ph.D.
L.J. Brunner, B.A., Ph.D., M.A., Ph.D.
D. Kong, B.Sc., Ph.D.
A. Nosedal-Sánchez, B.Sc., M.Sc., Ph.D.
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Statistical methods have applications in almost all areas of science, medicine, engineering, business, politics, psychology, law, and the environment. A practicing statistician is involved in a diversity of projects: testing the effectiveness of a new vaccine, working on the human genome project, forecasting stock yields, examining the effectiveness of television advertising, predicting election results.

Today we are bombarded with information from quantitative studies, information generated from the application of statistical methodologies. While much of this information is valid, some of it is not. An understanding of applied statistics will make you a critical consumer of numbers presented by the media. A basic knowledge of statistics should be an integral part of everyone’s education.

The Applied Statistics Specialist Program at U of T Mississauga provides students with a solid foundation in the fundamental aspects of probability and introduces students to a broad range of applied statistics methodologies. The Major and Minor Programs in Applied Statistics consist largely of STA courses, and may be combined with programs in other subjects.

Introductory Applied Statistics Courses: Non-Calculus Based U of T Mississauga Statistics courses STA215H5, STA220H5 and STA221H5 are non-calculus entry-level introductions to statistics. Rough equivalents to these courses are offered by the Biology department (BIO360H5, and BIO361H5), the Economics department (ECO220Y5), 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 University of Toronto Engineering Career Centre (ECC).

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
BIO  Biology (page 84)
CSC  Computer Science (page 162)
ECO  Economics (page 188)
MAT  Mathematics (page 372)
PSY  Psychology (page 412)
SOC  Sociology (page 424)
STA  Statistics (page 445)

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/ STA257H5; and MAT137Y5/ MAT157Y5 or 60% in MAT134H5 / MAT136H5 / MAT134Y5 / MAT135Y5 or 55% in MAT233H5; a minimum cumulative grade point average, to be determined annually.


Second Year:  MAT232H5/ MAT233H5/ MAT257Y5,MAT212H5/ MAT244H5; STA256H5, STA258H5, STA260H5

Third Year:  STA302H5, STA304H5, STA305H5, STA348H5

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**Third and Fourth Years:** 2.0 credits from (STA312H5, STA313H5/STA360H5, STA314H5, STA315H5, STA413H5, STA431H5, STA437H5, STA441H5, STA457H5); 2.0 credits from (CSC322H5, CSC411H5; MAT302H5, MAT311H5, MAT332H5, MAT334H5, MAT344H5, MAT337H5/MAT378H5); 1.0 additional credit make up of any other STA courses

**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. ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
4. STA107H5 is highly recommended in first year, but it is not required.
5. MAT337H5/ MAT378H5 is highly recommend for students intending to pursue graduate level studies in statistics.

**Major Program ERMAJ1540 Statistics, Applied (Science)**

7.0 credits are required.

**Limited Enrolment** — Enrolment in the Major program is limited to students with a minimum of 4.0 courses to include 60% in STA107H5 or 60% in STA256H5/STA257H5; and MAT134H5/ MAT136H5/ MAT137H5/MAT135Y5/ MAT137Y5/ MAT157Y5/ MAT233H5; a minimum cumulative grade point average, to be determined annually.

**First Year:** CSC108H5; MAT102H5, (MAT132H5,MAT134H5)/ (MAT135H5, MAT136H5) /MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5, 223H5/240H5

**Second Year:** MAT232H5/ MAT233H5/ MAT257Y5; STA256H5, STA258H5, STA260H5

**Third Year:** STA302H5, STA304H5, STA305H5

**Third and Fourth Years:** 1.0 credit from (STA310H5, STA312H5, STA313H5/STA360H5, STA314H5, STA315H5, STA348H5, STA413H5, STA431H5, STA437H5, STA441H5, STA457H5, CSC322H5, CSC411H5; MAT302H5, MAT311H5, MAT332H5, MAT334H5, MAT344H5, MAT337H5/ MAT378H5).

**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. ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
4. STA107H5 is highly recommended in first year, but it is not required.
5. MAT337H5/ MAT378H5 is highly recommend for students intending to pursue graduate level studies in statistics.
Minor Program ERMIN1540 Statistics, Applied (Science)

4.5 credits are required.

First Year: MAT133Y5/ (MAT132H5, MAT134H5)/ (MAT135H5, MAT136H5)/MAT134Y5/ MAT135Y5/ MAT137Y5/ MAT157Y5

Higher Years: 1. MAT232H5/ MAT233H5/ MAT257Y5; STA256H5, STA258H5
2. 1.0 additional credits made up of any combination of any other STA course OR PSY201H5, PSY202H5; BIO360H5, BIO361H5; SOC350H5; ECO220Y5
3. 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 STA258H5, but not for STA260H5.
3. Students who include any of PSY201H5, 202H5; BIO360H5, 361H5; SOC350H5; ECO220Y5 in this program are responsible for ensuring that these courses are completed prior to enrolling in STA256H5 and that all STA course prerequisites and exclusions are met.

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 or STA257H5 or ECO227Y5 Corequisite: (MAT132H5 and MAT134H5)/ (MAT135H5 and MAT136H5)/MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5

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 or STA220H5 or STA256H5 or STA257H5 or STA220H3 or ECO220Y5 or ECO227Y5 or PSY201H5 or PSYB07H3 or 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 or STA220H5 or STA256H5 or STA257H5 or STA220H3 or ECO220Y5 or ECO227Y5 or PSY201H5 or PSYB07H3 or 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: MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT157Y5 or MAT233H5

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: STA221H5 or STA256H5 or STA220H1 or STA222H3 or ECO220Y5 or ECO227Y5 or PSY201H5 or PSY207H3 or 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 or STA256H5 or STA257H5 or STA257H1 or STA258H5 or STA223H3 or STA302H5 or BIO360H5 or ECO220Y5 or ECO227Y5 or PSY202H5 or PSYB08H3
Prerequisite: STA215H5 or STA220H5
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. [39L, 12T]  
Exclusion: STA257H5 or STA257H1 or STAB52H3 or ECO227Y5  
Prerequisite: MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or 75%+ in MAT133Y5  
Corequisite: MAT232H5 for students with MAT133Y5. For others, MAT232H5 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 or STA255H1 or ECO227Y5  
Prerequisite: STA256H5 or STA257H5

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: STAB57H3 or STA261H5 or STA261H1 or STAC58H3  
Prerequisite: STA256H5 or STA257H5 or 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, multicollinearity, variable search methods. [36L, 12T]  
Exclusion: STA302H1 or STAC67H3  
Prerequisite: (STA260H5 or STA261H1) and (MAT223H5 or MAT240H5)  
Recommended Preparation: STA258H5  
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 or STA256H5 or STA257H5 or 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 or STA305H1  
Prerequisite: STA302H1 or STA302H5 or STA331H5 or ECO375H5  
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: STA302H or STA442H5 or STA441H1  
Prerequisite: STA215H5 or STA220H5 or STA257H1 or STA256H5 or ECO220Y5 or ECO227Y5 or PSY201H5  
Priority is given to students enrolled in Statistics and Forensic Science 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]
Prerequisite: (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5) and (STA310H5 or STA258H5 or STA221H5 or ECO227Y5 or BIO361H5 or PSY202H5)
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: Permission of the instructor.
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: Permission of the instructor.
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA314H5 Introduction to Statistical Learning (SCI)
A thorough introduction to the basic ideas in supervised statistical learning with a focus on regression and a brief introduction to classification. Methods covered will include multiple linear regression and its extensions, k-nn regression, variable selection and regularization via AIC,BIC, Ridge and lasso penalties, non-parametric methods including basis expansions, local regression and splines, generalized additive models, tree-based methods, bagging, boosting and random forests. Content will be discussed from a statistical angle, putting emphasis on uncertainty quantification and the impact of randomness in the data on the outcome of any learning procedure. A detailed discussion of the main statistical ideas behind crossvalidation, sample splitting and re-sampling methods will be given. Throughout the course, R will be used as software, a brief introduction will be given in the beginning. [36L, 12T]
Prerequisite: (MAT223H5 or MAT240H5) and (STA258H5 or ECO327Y5) and STA260H5
Corequisite: STA302H5 and Permission of the Instructor
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA315H5 Advanced Statistical Learning (SCI)
The second part of the course will focus on basic ideas in classification problems including discriminant analysis and support vector machine, and unsupervised learning techniques such as clustering, principal component analysis, independent component analysis and multidimensional scaling. The course will also cover the modern statistics in the "big data" area. The high dimensional problems when p > n and n > p will be introduced. In addition, the students will be formed as groups to do data analysis projects on statistical machine learning and present their findings in class. This will prepare them for future careers in industry or academia. [36L,12T]
Prerequisite: STA314H5 and Permission of the Instructor
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 or STAC63H3
Prerequisite: (STA260H5 or STA261H5) and (MAT223H5 or MAT240H5)
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA360H5 Introduction to Bayesian Statistics (SCI)
A thorough introduction to statistics from a Bayesian perspective. Methods covered will include: the rules of probability, including joint, marginal, and conditional probability; discrete and continuous random variables; discrete and continuous random variables; Bayesian inferences for means and proportions; the simple linear regression model analyzed in a Bayesian manner; and (time permitting) a brief introduction to numerical methods such as the Gibbs sampler. Throughout the course, R will be used as software, a brief introduction will be given in the beginning. [36L, 12T]
Exclusion: STA313H5 or STA258H5 or STA248H1 or STA255H1 or STA257H3 or ECO227Y5 or STA365H1
Prerequisite: (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5) and (STA215H5 or STA220H5 or STA257H1 or STA256H5 or ECO220Y5 or ECO227Y5 or PSY201H5)
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 and Minimum 2.5 CGPA.  
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA388H5 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.[36L, 12T]  
Prerequisite: Permission of instructor and department and 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 or STA257H5) and (MAT134H5 or MAT136H5 or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5 or MAT233H5)  
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA398H5 Research Project (SCI,EXP)  
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 and Minimum 2.5 CGPA.  
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 and International Opportunities (Page 23) for more details.  
Prerequisite: Permission of instructor and department.  
Corequisite: STA302H5 or STA302H1  
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 Lehmann-Sheffe theorems, and asymptotics. [36L, 12T]  
Exclusion: STA452H1  
Prerequisite: STA260H5 or STA261H5  
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: STA302H5 or STA302H1  
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 or STAD37H3  
Prerequisite: STA302H1 or STA302H5 or STA331H5 or ECO327Y5  
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 or STAD37H3  
Prerequisite: STA302H1 or STA302H5 or STA331H5 or 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
Prerequisite: STA302H5 or permission of the instructor
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 or STAD57H3
Prerequisite: STA302H1 or STA302H5 or STA331H5 or ECO227Y5
Offered in alternate years. Priority is given to students enrolled in Statistics Specialist or Major programs.

STA478H5 Statistics 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 and a 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.[36L,12T]
Prerequisite: Permission of instructor and department and Minimum 2.5 CGPA.
Priority is given to students enrolled in Statistics Specialist or Major programs.

STA498H5 Research Project (SCI,EXP)
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 and a minimum CGPA 2.5.
Priority is given to students enrolled in Statistics Specialist or Major programs.

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.

No more than 1.5 credits can be double counted towards two programs of study in English, Drama, or Creative Writing.

Students should also review the Degree Requirements (Page 16) section prior to selecting courses.

For courses in this area see:
CIN  Cinema Studies (page 121)
CLA  Classical Civilization (page 126)
DRE  Drama (page 451)
DRS  Drama (page 451)
ENG  English (page 205)
FAH  Fine Art History (FAH) (page 65)
FRE  French (page 258)
GER  Language Studies (page 344)
ITA  Italian (page 323)

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 Dramaturgy and Drama Studies (Arts)

Dramaturgy and Drama Studies (DDS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the DDS program includes courses that examine theatre history, dramatic literature, critical theory, playwriting, devising, and
intermedial performance, among others. DDS 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:

DRS courses cannot be counted toward this program.

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 Dramaturgy and Drama Studies (Arts)

Dramaturgy and Drama Studies (DDS) integrates creative and scholarly approaches to theatre through a common emphasis on dramaturgy. In addition to specific courses in developmental and production dramaturgy, the DDS program includes courses that examine theatre history, dramatic literature, critical theory, playwriting, devising, and intermedial performance, among others. DDS 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:

DRS courses cannot be counted toward this program.

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*/461H5*/462H5*/463H5* (when drama related); 470H5*/471H5*/472H5*/473H5* (when drama related), FAH475H5, FRE317H5, 393H5, 397H5; GER353H5, 355H5*; ITA242H5, 243H5, 246H5, 247H5, 307H5, 315Y5, 342H5, 343H5, 413Y5, 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.

DRS 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. [24L, 12T]
Exclusion: DRM100Y1 or 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 productions. May include a research performance component. This course is also listed as ENG122H5. [24L, 12T]
Exclusion: DRM100Y1 or 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 and ENG122H5, or permission of the U of T Mississauga program director.
DRE201H5 Acting (HUM,EXP)
A practical introduction to the art and craft of performance, intended for students with little or no previous experience or training. The course uses a range of acting exercises to teach critical thinking, active listening, specificity of action, intention of thought, and team building. Students will engage in text analysis, collective creation, storytelling, physical and vocal exercises, and character development, in the process cultivating skills transferable to their chosen career path. This course is ideally suited for any student seeking to enhance their interpersonal and presentation skills. [12L, 24P]
Exclusion: DRS121H5 or DRS122H5

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. [48L, 24T]
Exclusion: ENG220Y5 or DRE224H5 or DRE226H5 or DRE370H5
Prerequisite: DRE121H5 or ENG121H5, and DRE122H5 or ENG122H5

Students who do not meet the prerequisite may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

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 or DRE242H5 or DRE244H5 or DRE246H5
Prerequisite: DRE/ENG121H5 and DRE/ENG122H5 and (DRE200H5 or DRE220H5) and DRE222H5 or permission of the UTM program director

DRE244H5 Introduction to Shakespeare (HUM)
This course introduces students to Shakespeare. Lectures equip them with historical knowledge about literature, politics, and the theatre in Shakespeare’s time. Tutorials help them to grapple with Shakespeare’s language, versification, and stagecraft. By the end of the course students will have a new framework within which to understand - and interrogate - the enduring power of Shakespeare’s work. [24L, 12T]
Exclusion: ENG220Y5 or DRE221Y5 or ENG223H5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits. Students who do not meet the prerequisite but are enrolled in any 100-level ENG or DRE course (except ENG100H5) may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

DRE226H5 Shakespeare in the Theatre (HUM)
This course introduces students to Shakespeare’s plays as works of theatre. We will study the spaces and performance practices for which these texts were originally written and explore how subsequent generations of theatre makers approached, adapted, and repurposed them for different performance venues and styles, and from different aesthetic, cultural, and political perspectives, from the seventeenth century to our own time, in Britain, North America, and beyond the English-speaking world. The course will include screenings of select landmark productions. [36L, 12P]
Exclusion: DRE221Y5
Prerequisite: Open to students who have successfully completed DRE121H5 or ENG121H5 and DRE122H5 or ENG122H5.

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 and International Opportunities (Page 23) for more details.
Prerequisite: 4.0 credits.
DRE305H5 Studies in Indigenous Performance (HUM, EXP)
Topic for this course vary from year to year, depending on faculty research interests. The course may cover such matters as interdisciplinary approaches to Indigenous storytelling in experimental film, new media, digital arts and performance, including community collaboration, public spaces, archival or historical content, participatory performance, and decentralized theatre. It may include a practical workshop component and attending a rehearsal for an Indigenous lead production in Toronto. [36L]
Prerequisite: 4.0 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director
Recommended Preparation: DRE200H5 and DRE222H5

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: 4.0 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM 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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

DRE346H5 Studies in Theatre and Drama 2 (HUM)
Topic varies from year to year, depending on faculty research interests. [24S]
Prerequisite: 4.0 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

DRE347H5 Studies in Theatre and Drama 3 (HUM)
Topic varies from year to year, depending on faculty research interests. [24S]
Prerequisite: 4.0 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

DRE348H5 Production Dramaturgy (HUM)
Plays from the Western theatrical tradition in contemporary productions. [24S]
Prerequisite: DRE/ENG121H5 and DRE/ENG122H5 and (DRE200H5 or DRE220H5) and DRE222H5 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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

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 Shakespearian England to 17th-century Spain and 20th-century Germany. [24S]
Prerequisite: 4.0 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

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 and DRE/ENG122H5 and (DRE200H5 or DRE220H5) and DRE222H5
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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; permission of instructor. Admission to this limited enrolment course will be determined by the evaluation of a portfolio to be submitted by May 15 for an "F" course, by November 1 for 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 full credits, including DRE/ENG121H5 and DRE/ENG122H5; or permission of the UTM program director.

DRE370H5 Exploring Shakespeare in Performance (HUM)
In this course, students will be introduced to contemporary theatrical approaches to the most canonical of dramatists. Through selected theoretical readings, interviews, practical exercises, and screenings of recent productions, we will explore tensions between reverential and radical treatments of the Shakespearean text, including topics such as the politics of casting, the role of the director, and the authority of the actor. The course will ask what it means to stage Shakespeare now and will equip students to develop their own and conceptual and theatrical responses to that question. [24L, 24T]
Exclusion: DRE221Y5
Prerequisite: Open to students who have successfully completed at least 4.0 full credits, including (DRE121H5 or ENG121H5) and (DRE122H5 or ENG122H5) and DRE226H5.

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 and DRE122H5 and DRE200H5, and DRE222H5 or approved equivalent courses.
Recommended Preparation: Any DRE course on the 300- or 400-level and ENG340H5 and 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 or 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 or 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 and International Opportunities (Page 23) for more details
*Prerequisite: permission of instructor*

**DRE405H5 Topics in Indigenous Performance (HUM,EXP)**
This senior research and creation seminar will explore topics in contemporary Indigenous performance. These topics will vary with faculty research interests; course may cover such matters as intergenerational cross-cultural collaboration, Anishinaabe star and land knowledge, working with culturally-codified objects, contextualizing projects in non-institutional spaces, international inter-indigenous productions, community outreach, and Indigenous feminisms and futurisms. The course may include a practical workshop component or a capstone research or performance project. [24S]
*Prerequisite: 9 credits including (DRE121H5 or ENG121H5) and (DRE122H5 or ENG122H5) and either (DRE200H5 or DRE222H5).*

Students who do not meet the prerequisite may petition the department in writing for approval to take the course. See the guidelines for written petitions on the department website.

**DRE420H5 Senior Seminar 1 (HUM)**
A senior research seminar in Theatre and Performance. Topic will vary with instructor. [24S]
*Prerequisite: 9 credits, including (DRE121 or ENG121H5) and (DRE122H5 or ENG122H5) and (DRE200H5 or DRE222H5) 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 (DRE121H5 or ENG121H5) and (DRE122H5 or ENG122H5) and (DRE200H5 or DRE222H5); 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 (DRE121H5 or ENG121H5) and (DRE122H5 or ENG122H5) and (DRE200H5 or DRE222H5); 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: DRE121H5 or ENG121H5*

**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 and (DRE121H5 or ENG121H5)*
*Corequisite: DRE122H5 or ENG122H5*

**DRS221H5 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 and DRS122H5 and (DRE121H5 or ENG121H5) and (DRE122H5 or ENG122H5)*
*Corequisite: At least one of DRE200H5 or DRE222H5 or DRE240H5 or DRE244H5 or DRE246H5*

**DRS222H5 Acting 4 (HUM,EXP)**
The continuation of DRS221H5 Acting 3. [108P (72 studio classes plus minimum 36 labs and/or production)]
*Prerequisite: DRS221H5*
DRS321H5 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: DRS222H5 and (DRE200H5 or DRE220H5) and DRE222H5
Corequisite: DRS325H5

DRS322H5 Acting 6 (HUM,EXP)
The continuation of DRS321H5, 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: DRS321H5
Corequisite: DRS326H5

DRS325H5 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 (DRE200H5 or DRE220H5) and DRE222H5
Corequisite: DRS321H5

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
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 and DRS326H5 and 1.0 DRE credit at 300 level
Corequisite: DRS425H5

DRS422H5 Acting 8 (HUM,EXP)
The continuation of DRS421H5, Acting 7. [108P (96 studio classes plus tutorials)]
Prerequisite: DRS421H5
Corequisite: DRS426H5

DRS425H5 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 1.0 DRE credit at 300 level.
Corequisite: DRS421H5

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
Corequisite: DRS422H5
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) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- CLA Classical Civilization (page 126)
- ENG English (page 205)
- HIS History (page 289)
- VCC Visual Culture and Communication (page 458)

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.
Specialist Program ERSPE1200 Visual Culture and Communication (Arts)

12.5-13.0 credits are required, including at least 1.0 credit of VCC 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):

**For students applying in 2019-2020 for program entry in the 2020-2021 Academic Year:**
- A minimum of 4.0 credits, including CCT109H5 and CCT110H5 and FAH101H5 and VCC101H5;
- A minimum CGPA determined annually. It is generally between 2.7 and 3.0 and never lower than 2.2; and
- A minimum 65% average among CCT109H5 and CCT110H5 and FAH101H5 and VCC101H5; with at least 60% in each course.

**For students applying in 2020-2021 (and beyond) for program entry in the 2021-2022 Academic Year (and beyond):**
- A minimum of 4.0 credits, including ISP100H5 and CCT109H5 and CCT110H5 and FAH101H5 and VCC101H5;
- A minimum CGPA determined annually. It is generally between 2.7 and 3.0 and never lower than 2.2; and
- A minimum 65% average among CCT109H5 and CCT110H5 and 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 Sciences programs.

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

**First Year:**
- CCT109H5 and CCT110H5 and FAH101H5 and VCC101H5 and CIN101H5

**Second Year:**
- 1.0 credits from: CCT204H5 or CCT250H5 or CCT270H5
- 1.0 credits from: CCT200H5 or CCT206H5 or CCT210H5
- 1.0 credits from: VCC205H5 or VCC236H5 or VCC290H5

**Third Year:**
- CCT336H5 and CCT351H5 and CCT352H5 and CCT353H5
- 1.5 credits of VCC at the 300/400 level
- 1.0 credit from VST410H5 or any CIN or FAH course at the 300/400 level

**Fourth Year:**
- VCC400H5 and 0.5 additional credit of VCC at the 400 level
- CCT357H5 and CCT452H5 and CCT434H5 (with permission and the appropriate prerequisites, up to 1.0 credit can be replaced with FAS246H5 or FAS346Y5 or FAS347Y5)

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 or CCT201H5 or VCC201H5
Recommended Preparation: CCT109H5 or (FAH101H5 or 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
Recommended Preparation: VCC101H5 or 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]
Recommended Preparation: VCC101H5 or 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, 12T]
Exclusion: HIS336H5 or VCC336H5
Recommended Preparation: VCC101H5 or VCC201H5

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]
Recommended Preparation: VCC101H5 or VCC201H5

VCC292H5 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, 12T]
Recommended Preparation: VCC101H5 or VCC201H5

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]
Prerequisite: CCT200H5 or VCC101H5 or 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 or 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]
Prerequisite: VCC101H5 or 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]
Exclusion: VCC209H5
Prerequisite: VCC101H5 or VCC201H5

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 or 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 or 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 or 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 or VCC201H5

VCC392H5 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 or 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 and International Opportunities (Page 23) for more details.
Exclusion: CCT299Y5 or CCT399Y5
Prerequisite: (VCC101H5 or VCC201H5) and 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. [24S]
Exclusion: CCT400H5 or HSC400H5
Prerequisite: (VCC101H5 or VCC201H5) 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 we make 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 or VCC201H5) and 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 or VCC201H5).
Recommended Preparation: FAH289H5 and 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 or VCC201H5) and VCC309H5 and at least 1.0 credit in VCC

VCC410H5 The Collective Afterlife of Things (HUM)
This fourth-year interdisciplinary seminar provides students with an opportunity to examine theories of art and artistic practice in the context of contemporary visual culture, environmental devastation, global warming, climate injustice, and species extinction. Readings are drawn from eco-criticism and philosophy, visual studies and political theory, accompanied by contemporary art, film, literature in order to critically examine the concepts of "collective," "afterlife," and "things."
Prerequisite: VCC101H5 and a minimum of 1.0 VCC credit in VCC at the 300//400 level.

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 or FAH105H5) and (VCC101H5 or VCC201H5) and at least 1.0 credit in VCC.

VCC415H5 Theory and Criticism of New Media (HUM)
Introduces a variety of approaches for interpreting, criticizing, evaluating, and theorizing digital media with a particular emphasis on visual cultural phenomena including augmented reality and virtual reality. Examines how the thinking of new media is conditioned and altered via major theoretical models. [24S]
Prerequisite: VCC101H5 and a minimum of 1.0 credit in VCC at 300/400 level

VCC420H5 The Visual Culture of Automobility (HUM)
Cars are the quintessential mass-produced commodities, and as such are central to the spread of capitalism and to the forms, spaces, affects, and imaginaries of modernity, postmodernity and beyond. Drawing on anthropology, geography, architectural theory and cinema studies as well as visual studies, art history and critical theory, this seminar examines the visual cultures of automobility over a range of historical periods and cultural contexts. [24S]
Exclusion: VCC490H5 topics course - The Visual Culture of Automobility.
Prerequisite: 13.0 credits including (VCC101H5 or VCC201H5) and a minimum of 1.0 VCC credit at the 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 or VCC201H5) and a minimum of 1.0 VCC credit.
Recommended Preparation: FAH289H5 and 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 or VCC201H5) and at least 1.0 credit 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 or VCC201H5) and a minimum of 1.0 VCC credit.
VCC492H5 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 or VCC201H5

Women and Gender Studies (HBA)

Professors
- N. Charles, B.A., M.A., Ph.D.
- J.A. Ellapen, B.A., M.A., M.A., Ph.D.
- R.C. Lord, B.A., M.A., Ph.D.
- J. G. Simalchik, B.A., M.A., Ph.D.
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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 16) section prior to selecting courses.

For courses in this area see:
- ANT Anthropology (page 50)
- CCT Communication, Culture, Information and Technology (page 138)
- CLA Classical Civilization (page 126)
- DRE Drama (page 451)
- ENG English (page 205)
- FAH Fine Art History (FAH) (page 65)
- FRE French (page 258)
- GGR Geography (page 274)
- HIS History (page 289)
- ITA Italian (page 323)
- JAL Linguistics (page 349)
- PHL Philosophy (page 383)
- POL Political Science (page 401)
- PSY Psychology (page 412)
- RLG History of Religions (page 304)
- SOC Sociology (page 424)
- WGS Women and Gender Studies (page 463)
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 in WGS or from the list of electives below

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 in WGS or from the list of electives below

Electives:

Students are responsible for checking the co- and prerequisites for all courses.

Anthropology: ANT211H5, ANT331H5, ANT335H5

Classical Civilization: CLA319H5

Communication, Culture, Information & Technology: CCT340H5

Drama: DRE366H5

English: ENG269H5, ENG275H5, ENG307H5

Fine Art History: FAH435H5

French: FRE391H5

Geography: GGR313H5

History: HIS308H5, HIS310H5, HIS314H5, HIS326Y5, HIS374H5, HIS386H5, HIS441H5, HIS454H5

History of Religions: RLG314H5, RLG449H5, RLG462H5

Italian: ITA392H5

Linguistics: JAL355H5

Philosophy: PHL243H5, PHL267H5, PHL367H5

Political Science: POL368Y5

Psychology: PSY317H5, PSY354H5


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, 12T]
Exclusion: WGS160Y1 or WSTA01H3 or WSTA03H3. 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, 12T]
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, 24T]
Exclusion: ERIL200Y5 or NEW160Y1 or WGS160Y1 or WSTA01H3 or WSTA03H3 or 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. [24L, 12T]  
Exclusion: WGS271Y1 or WSTB13H3. May not be taken in combination with or after WGS470H5.

WGS210H5 Women, Gender and Labour (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. [24L, 12T]

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, 12T]  
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. [24L, 12T]  
Recommended Preparation: WGS200Y5

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 and International Opportunities (Page 23) 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 or 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 or NEW335H1 or WGS380H1 or 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 or 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 - Canada, the United States and the Caribbean. [24L]
Prerequisite: WGS101H5 or 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, race, language, politics, religion, geography, and the arts in Quebec. After six classroom sessions, the class will travel to 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. Ancillary fees apply for this course. [24L]
Recommended Preparation: WGS101H5 or 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: WGS101H5 or WGS200Y5

WGS347H5 Indigenous Feminisms and Decolonization (HUM)
This course explores themes related to Indigenous feminist scholarship and activism in North America. The course centres on how Indigenous women engage in decolonial practices as a response to histories of colonialism and genocide. Themes include status and tribal nations; oral history and narrative; violence and resistance, knowledge construction and pedagogy, community, self-governance and freedom. [24L]
Prerequisite: WGS101H5 or WGS200Y5

WGS350H5 Critical Race Theory in Women and Gender Studies (HUM)
This 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 permission of instructor
Recommended Preparation: WGS368H5

WGS351H5 Gender, Race, and Surveillance (HUM)
From forced sterilization and sex-selective abortion, to selfies, prisons, and biosecurity, this course conceptualizes suspicion and technologies of surveillance in transnational perspectives. Informed by a range of interdisciplinary scholarship, namely critical transnational feminist and Black feminist texts, it interrogates how surveillance has long enacted racialized, gendered, and biopolitical injustices. [24L]
Prerequisite: WGS200Y5
Recommended Preparation: WGS101H5

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 or 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 or 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 or 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 or WGS372H1 or 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 or NEW367H1 or WGS367H1 or WSTC21H3
Recommended Preparation: WGS200Y5

WGS368H5 Women in World Cultures (HUM,INTLO)
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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24L]
Exclusion: ERI368H5 or NEW368H1 or WGS368H1

WGS369Y5 Gender, Colonialism and Postcolonialism (HUM)
An examination of the complexities and the processes of colonialism/postcolonialism. Emphasis is placed on writings by feminists in the Global South, and the diaspora, to explore how subordination was forged and resisted in specific colonial and postcolonial settings. [48L]
Exclusion: NEW369Y1 or 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 permission of instructor

WGS372H5 Theories of Sexuality (HUM)
This course offers a critical overview of contemporary theories of sexuality, focusing on transnational discussions by feminists and queer theorists. [24L]
Exclusion: WGS450H5 or WSTD03H3
Recommended Preparation: WGS101H5 or WGS200Y5

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 or 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 or WGS411Y5
Prerequisite: WGS200Y5 and 2.0 WGS 300+ 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 or WGS410H5
Prerequisite: WGS200Y5 and 2.0 WGS 300+ level credits.
**Recommended Preparation:**

- WGS353H5 or WGS370H5
- WGS430H1

**Exclusion:** relationships in both private and public domains. [24S]

This course examines how sex and sexuality are culturally 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 and 1.0 WGS 300+ 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 and 1.0 WGS 300+ level credits or (HIS338H5 or HIS438H5)

**WGS420H5 Engendering Human Rights (HUM, INTLO)**

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. As part of this course, students may have the option of participating in an international learning experience that will have an additional cost and application process. [24S]

**Exclusion:** WSTD04H3

**Prerequisite:** WGS200Y5 and 1.0 WGS 300+ level credits or (HIS338H5 or 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]

**Exclusion:** WSTD04H3

**Prerequisite:** WGS200Y5 and 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. [24S]

**Exclusion:** WGS430H1

**Prerequisite:** WGS200Y5 and 1.0 WGS300+ level credits

**Recommended Preparation:** WGS353H5 or 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 and 1.0 WGS 300+ 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 or WSTC23H3

**Prerequisite:** WGS200Y5

**Recommended Preparation:** 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 and 1.0 WGS 300+ level credits

**Recommended Preparation:** WGS370H5

**WGS470H5 Politicizing Culture: Pop Feminism and Representation (HUM)**

This course examines the intricate relationships among feminism, culture, power and representation. Major themes include: the construction of gendered, sexualized, and racialized subjectivities; ideologies and the media; bio-and communication technologies; neoliberalism and neo-colonialism; and counter interpretations, reclamation, and remixes of hegemonic cultural forms. [24S]

**Prerequisite:** WGS200Y5 and 1.5 WGS 300+ level credits

**Recommended Preparation:** WGS101H5 and WGS205H5

**WGS472H5 #FeministMediaConsumers (HUM)**

Amidst the proliferation of social media marketing, fake news, and gendered pharmaceutical advertising, what might it mean to engage in feminist media consumption? This course looks to intersectional feminist theory to analyze the multiple effects of media productions and to practice oppositional feminist reading practices. [24S]

**Prerequisite:** WGS200Y5 and 1.0 WGS 300+ level credits

**Recommended Preparation:** WGS101H5

**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.
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