The following changes have been made to the Calendar since its publication in March, 2007.

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<tr>
<th>Page Number</th>
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<tbody>
<tr>
<td>10</td>
<td>Officers of the University of Toronto Scarborough Several changes have been made in this section.</td>
</tr>
<tr>
<td>31</td>
<td>Anthropology Introductory paragraph: Replace information on Supervisor of Studies with Undergraduate Counsellor: J. Roopnarinesingh Email: <a href="mailto:undergrad-asst-program-advisor@utsc.ca">undergrad-asst-program-advisor@utsc.ca</a></td>
</tr>
<tr>
<td>31</td>
<td>Specialist (Co-operative) Program in Anthropology Delete information on Supervisor of Studies, Advisor and Co-op Contact</td>
</tr>
<tr>
<td>36</td>
<td>ANTB22Y3 Change to ANTB22H3</td>
</tr>
<tr>
<td>52</td>
<td>Specialist Program in Integrative Biology Requirement 3: Remove BGYC31H from the Structure &amp; Diversity options. Suggested Year 2 Course Sequence: Change BGYB32H, BGYB33H to BGYB32H or BGYB33H</td>
</tr>
<tr>
<td>53</td>
<td>Major Program in Integrative Biology Suggested Year 2 Course Sequence: Change BGYB32H, BGYB33H to BGYB32H or BGYB33H</td>
</tr>
<tr>
<td>63</td>
<td>Specialist Program in Chemistry Change Supervisor to: S. Dalili (416-287-7215), Email: <a href="mailto:sdalili@utsc.utoronto.ca">sdalili@utsc.utoronto.ca</a></td>
</tr>
<tr>
<td>70</td>
<td>City Studies Introductory paragraph: Replace information on Supervisor of Studies with Undergraduate Counsellor: J. Roopnarinesingh. Email: <a href="mailto:undergrad-asst-program-advisor@utsc.ca">undergrad-asst-program-advisor@utsc.ca</a></td>
</tr>
<tr>
<td>71</td>
<td>Major Program in City Studies Requirement 2: Change DST to DTS</td>
</tr>
<tr>
<td>72</td>
<td>Specialist (Co-operative) Program in City Studies Delete information on Supervisor of Studies, Advisor and Co-op Contact</td>
</tr>
<tr>
<td>73</td>
<td>CITB01H3 Add: Recommended preparation: Completion of Requirement 1 of the Major Program in City Studies</td>
</tr>
<tr>
<td>97</td>
<td>Diaspora and Transnational Studies Introductory paragraph: Replace information on Supervisor of Studies with</td>
</tr>
<tr>
<td>Page</td>
<td>Text</td>
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| 98 | **Major Program in Diaspora and Transnational Studies**  
Group B (Social Sciences) courses: Change the title of **SOCC34H** to “Globalization and Transnationalism” |
| 109 | **Major Program in Economics for Management Studies**  
1st note - 2nd sentence: Delete "& **CSCA02H**". |
| 116 | **ECMC92H3**  
Delete **ECMC40H** from the exclusions  
**ECMC93H3**  
Delete **ECMC61H** from the exclusions |
| 125 | **NEW COURSE**  
**ENGC34H3** Early Modern Women and Literature: 1500-1700 |
| 134 | **Environmental Science Faculty List**  
Add: W.A. Gough, B.Sc. (Waterloo), M.Sc. (Toronto), Ph.D. (McGill), **Associate Professor** |
| 144 | **EESC16H**  
Change year in course description to 2008. |
| 146 | **EESD07H**  
Change year in course description to 2008. |
| 150 | **Geography**  
Introductory paragraph: Replace information on Discipline Representative/Supervisor of Studies with **Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca** |
| 150 | **Major Program in Human Geography**  
Please note that the program requires 7.0 credits which must include the 6.5 credits described in Requirements 1 to 5. The additional half credit should be chosen from the courses listed in either Requirement 2 (Theory and Concepts) or Requirement 4 (Applications). |
| 150 | **Major Program in Human Geography**  
Requirement 2: Add **(GGRB06H)** Planning in Canada as an alternative to **CITB01H** |
| 151 | **Major Program in Physical and Human Geography**  
Requirement 3: Add **(GGRB06H)** Planning in Canada as an alternative to **CITB01H** |
| 155 | **Health Studies**  
Introductory paragraph: Replace information on Supervisor of Studies with **Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca** |
| 156 | **Major (Co-operative) Program in Health Studies**  
Delete information on Supervisor of Studies, Advisor and Co-op Contact  
Change 3rd sentence of Program Requirements to: |
In order to be eligible for the first work term, students must complete at least 9 full credits, including the requirement in sections 1 and 2 plus any 1 FCE from among requirements 3 and 4 below.

| 157 | Major Program in Health Studies  
Add Requirements 6 & 7 and note as follows:  
• For this program, no more that 4 FCEs can be counted from any single course prefix (e.g., ANT) other than HLT.  
• For the Major in Health Studies alone to qualify for B.Sc. Major, at least 5 FCEs taken to complete the program must carry science credit. These include HLTB01H, HLTB02H, any Anthropology option listed as a science credit in the Anthropology section of the Calendar and any option in Biology, Environmental Science, Neuroscience, Psychology, and Statistics.  
**Note:** Students should check carefully the prerequisites required for particular B- and C-level courses. Note that some upper-level courses (e.g., SOC and ECM) are part of limited enrolment programs, with first preference in these courses going to students enrolled in those programs. |

| 165 | **NEW COURSE**  
HISC46H3 Introduction to Canadian International Relations |

| 173 | Minor Program in Religion  
Requirement 3: Change ENGB42H to ENGC16H and ENGB43H to ENGC17H |

| 178 | International Development Studies  
Introductory paragraph: Replace information on Supervisor of Studies with Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca |

| 181 | Specialist Program in International Development Studies (B.Sc.)  
Requirement 1: Change 7.5 credits to 7.0 credits |

| 185 | Major Program in International Development Studies  
Change Requirements 5, 6 & 7 to 4a, 4b & 4c |

| 186 | Major Program in International Development Studies  
Add the following at the end of the requirements:  
"The requirements for a B.Sc. Major in IDS are that at least four full credits carry science credit. These include EE01H, any Anthropology options listed as a science credit in the Anthropology section of the Calendar and any course under Requirement 4(c)." |

| 188 | International Studies  
Introductory paragraph: Replace information on Discipline Representative/Supervisor of Studies with Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca |

| 189 | Major (Co-operative) Program in International Studies  
Delete information on Co-op Contact |
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| 192  | Specialist (Joint) Program in Journalism  
      Requirement c): Change **LGGA01H** to **LGGA60H** |
| 197  | Languages and Linguistics  
      Replace section description with:  
      "The Languages and Linguistics discipline encompasses degree programs Linguistics (LIN), as well as certain language courses (LGG) which are not associated with a specific degree." |
| 197  | French  
      Remove entire French entry from pages 197-206 and insert between Environmental Science and Technology which ends on page 150 and Geography which starts on page 151. |
| 213  | Specialist Program in Psycholinguistics  
      Requirement 4: Add **FREC49H** to the French linguistics options. |
| 213  | Specialist Program in Linguistics  
      Requirement 2: Add **LINB23H** Language and Power to the options. |
| 219  | Management- Guidelines for Course Selection for Students Admitted to Pre-Program  
      Change **[MATA32H & MATA32H]** to **[MATA32H & MATA33H]** |
| 222  | Specialist Program in Management  
      International Business stream: Add **MGTC46H** to the options. |
| 231  | **NEW COURSE**  
      **MGTC46H3 Managerial Perspectives in a Global Economy** |
| 235  | Mathematics Faculty List  
      S. Tryphonas, M.Sc. (Toronto), Senior Lecturer |
| 236  | Introduction to the Mathematics section, 2nd paragraph  
      Add a final sentence: The Supervisor of Studies for the Co-operative programs is S. Tryphonas (tryphon@utsc.utoronto.ca). |
| 240  | Specialist Program in Mathematics & Its Applications, Computational Physical Sciences stream - Requirement 2  
      Delete: **PHYB24H Introduction to Quantum Physics**  
      Add: **PHYB25H Foundation of Modern Physics**  
      Add: **PHYC24H Quantum Physics I** |
| 242  | **MATB41H3**  
      Add exclusion: MAT232H |
| 243  | **MATB42H3**  
      Add exclusion: MAT368H |
| 246  | Specialist Program in Neuroscience  
      Supervisor of Studies: Change TBA to:  
      Until May 31: S. Erb Email: erb@utsc.utoronto.ca  
      June 1 to August 31: J. LeBoutillier Email: leboutillier@utsc.utoronto.ca  
      From September 1: K. Zakzanis Email: zakzanis@utsc.utoronto.ca |
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| 247  | Specialist (Co-operative) Program in Neuroscience  
Supervisor of Studies: Change TBA to:  
Until May 31: S. Erb Email: erb@utsc.utoronto.ca  
June 1 to August 31: J. LeBoutillier Email: leboutillier@utsc.utoronto.ca  
From September 1: K. Zakzanis Email: zakzanis@utsc.utoronto.ca |
| 248  | Major Program in Neuroscience  
Supervisor of Studies: Change TBA to:  
Until May 31: S. Erb Email: erb@utsc.utoronto.ca  
June 1 to August 31: J. LeBoutillier Email: leboutillier@utsc.utoronto.ca  
From September 1: K. Zakzanis Email: zakzanis@utsc.utoronto.ca |
| 250  | NROC35H3  
Delete: "Offered in alternate years with BGYD16H." |
| 252  | New Media Studies  
Introductory paragraph: Replace information on Supervisor of Studies with  
Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca |
| 253  | Major (Joint) Program in New Media Studies  
Requirement 5: Change (a), (b), (c), and (d) to 1, 2, 3 and 4  
Requirement 6: Change (e) to 5 |
| 268  | Co-operative Program in Physical Sciences – Program Admission  
The courses listed in 2 (Major Program in Biochemistry) should have appeared in 3  
(Specialist Program in Biological Chemistry).  
Similarly, the courses that appear in 3 should appear in 2 instead. |
| 271  | Specialist Program in Physical and Mathematical Sciences  
Third and Fourth Year Courses: Delete PSCC10H |
| 279  | Political Science  
Introductory paragraph: Replace information on Discipline Representative and  
Supervisor of Studies with Undergraduate Counsellor: J. Roopnarinesingh Email:  
undergrad-asst-program-advisor@utsc.ca |
| 280  | Specialist and Major Programs in Political Science  
Delete information on Supervisor of Studies |
| 281  | Minor Program in Political Science & Major Program in Public Policy  
Delete information on Supervisor of Studies |
| 282  | Major Program in Public Policy  
Requirement 7: Change GGRB06H Planning in Canada to CITB01H Canadian Cities and Planning |
| 283  | Major (Co-operative) Program in Public Policy  
Delete information on Supervisor of Studies, Advisor and Co-op Contact |
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
<th>Changes</th>
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<tbody>
<tr>
<td>284</td>
<td>Major (Co-operative) Program in Public Policy</td>
<td>Year 2 courses to be completed for the first work term: Change <strong>GGRB06H</strong> Planning in Canada to <strong>CITB01H</strong> Canadian Cities and Planning</td>
</tr>
</tbody>
</table>
| 298  | Specialist (Co-operative) Program in Psychology and Its Applications - Behavioural Disorders stream | b) Other disciplines  
1st sentence: Delete "at the B-level or higher"  
• Change to "The choice of the remaining 1.0 full-credit equivalent which must be at the B-level or higher is unconstrained." |
| 308  | Society and Environment                                                                      | Introductory paragraph: Replace information on Discipline Representative/Supervisor of Studies with *Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca*|
| 310  | Sociology                                                                                     | Introductory paragraph: Replace information on Discipline Representative with *Undergraduate Counsellor: J. Roopnarinesingh Email: undergrad-asst-program-advisor@utsc.ca*|
| 311  | Specialist Program in Sociology                                                                | Delete information on Supervisor of Studies                                                                           |
| 311  | Specialist (Co-operative) Program in Sociology                                                | Delete information on Supervisor of Studies, Advisor and Co-op Contact                                                |
| 312  | Major and Minor Programs in Sociology                                                          | Delete information on Supervisor of Studies                                                                           |
| 316  | **SOCC23H3**                                                                                 | Change title to: Practicum in Qualitative Research Methods  
Change description to: This course provides students with hands-on experience conducting qualitative research. Each student will design and carry out a research project. Students will select their own research questions, review the relevant sociological literature, develop a research design, and conduct qualitative research, analyze, write-up and present their findings.  
Change enrolment limit to: 30  
Exclusions: Delete SOC200H, (SOC200Y), (SOCB01Y) and add SOC387H|
| 317  | **SOCC31H3**                                                                                 | Change title to: Practicum in Quantitative Research Methods  
Change description to: This course provides students with hands-on experience conducting quantitative research. Each student will design and carry out a research project using secondary data. Students will select their own research questions, review the relevant sociological literature, develop a research design, conduct statistical analyses and write-up and present their findings.  
Change enrolment limit to: 30  
Exclusions: Delete SOC200H, (SOC200Y), (SOCB01Y) and add SOC300H|
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<tr>
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<th><strong>SOCC44H3</strong></th>
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<tr>
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<td>Prerequisite: Change <strong>SOCB18H</strong> to <strong>SOCB58H</strong></td>
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<th><strong>SOCD40H3</strong></th>
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<tr>
<td></td>
<td>Change course description to: Independent research using field methods, survey analysis, library or archival research; regular supervision of data collection and analysis; final written research report. Intended for upper level students with well above average performance in sociology and whose interests or needs are not met by other sociology courses being offered. Prerequisite: Change <strong>SCOB06H</strong> to <strong>SOCB06H</strong> and add permission of the supervisor of studies.</td>
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</table>

|   | **NEW COURSE** **SOCD41H3** Supervised Independent Research |

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<th><strong>VPAD06H3</strong></th>
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<tbody>
<tr>
<td></td>
<td>Exclusion: Change (<strong>VPHC14H</strong>) to (<strong>VPAC14H</strong>)</td>
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</table>

|   | **NEW COURSES** **VPHC70H3** Modern and Contemporary Arts and Visual Culture of the Middle East **VPHC71H3** Brazilian Modernism: Art and Architecture |

|   | Major Program in Women’s Studies Requirement 6: Add **ENGD34H3** Early Modern Women and Literature: 1500-1700 to the options |

|   | Karlheinz Theil Prize in English Delete **ENGB01H** and **ENGB02H** and add **ENGB05H** |

|   | D. Petitions (#3) Change the link to the medical certificate to: http://www.utoronto.ca/health/forms/medcert.pdf |

*Published Friday January 18th, 2008  Section last updated Fri Jan 18, 2008*
University of Toronto Scarborough

Calendar

"Always the university must foster the search for truth... it is the search for truth and not truth which keeps civilization alive."


2007/2008

1265 Military Trail, Toronto, Ontario, Canada, M1C 1A4 (416-287-UTSC)
GREETINGS FROM THE PRINCIPAL

It is with great pleasure that I welcome new and returning students to the 2007/08 academic year at U of T Scarborough. I am also new and returning. I began my career at U of T Scarborough and am very happy to come back to the community as your new Principal. Ours is a vibrant, positive and academically excellent environment that is flexible and responsive to intellectual and social change.

At the undergraduate level, U of T Scarborough offers a wide array of specialist, major and minor programs through its Departments of Biological Sciences, Computer and Mathematical Sciences, Humanities, Management, Physical and Environmental Sciences, Psychology, and Social Sciences. We offer the only program at the University of Toronto leading to the Bachelor of Business Administration (BBA). We also offer the only degree program in Canada in Paramedicine, which is one of the five joint programs we offer with Centennial College. U of T Scarborough is very proud of our Co-operative Programs, which enrich the student learning experience through integrating related practical experience with academic studies. It is no wonder that more and more faculty and students are choosing the U of T Scarborough experience.

Since we began just over 40 years ago, we have grown from a small college of 500 students and 16 faculty members to more than 10,000 students and nearly 600 faculty and staff. We have addressed the needs of our expanded community through new, environmentally-advanced facilities, including a new science building, which is currently under construction and scheduled to open in spring 2008. These facilities provide space for stimulating, collaborative academic and social activity that will be the essence of your university experience.

Because of its leading research, outstanding faculty and vibrant student life, the campus is thriving. I invite you to take advantage of the many opportunities for intellectual and personal growth available to you here.

Best wishes for a very successful year.

Franco J. Vaccarino, PhD
Principal, University of Toronto Scarborough
Vice President, University of Toronto
Statement of Institutional Purpose

PURPOSE OF THE UNIVERSITY

The University of Toronto is dedicated to fostering an academic community in which the learning and scholarship of every member may flourish, with vigilant protection for individual human rights, and a resolute commitment to the principles of equal opportunity, equity and justice.

THE UNIVERSITY COMMUNITY

The University of Toronto believes that it best serves Canada and the wider world by pursuing to the limit its abilities its fundamental mandates research and teaching in the spirit of academic freedom. In seeking to achieve the above objectives, the University of Toronto is committed to four principles:

1. Respect for intellectual integrity, freedom of enquiry and rational discussion;
2. Promotion of equity and justice within the University and recognition of the diversity of the University community;
3. A collegial form of governance;
4. Fiscal responsibility and accountability.

The University values its graduates as life-long members of the University community who make significant contributions to its on-going life and reputation.

The University recognizes that in the foreseeable future the majority of its funding will come from public sources, and thanks the people of Ontario and of Canada for this support.

Statement on Human Rights

Acknowledging its fundamental and distinctive commitment to freedom of thought, inquiry, and expression, the University of Toronto affirms its commitment to the values of equal opportunity, equity and social justice. In this affirmation, the University:

- acknowledges that it conducts its teaching, research and other activities in the context of a richly diverse society;
- recognizes that the attainment of excellence in pursuit of its mission is furthered by the contribution made by persons reflecting this rich diversity;
- acts within its purview to prevent or remedy discrimination or harassment on the basis of race, gender, sexual orientation, age, disability, ancestry, place of origin, colour, ethnic origin, citizenship, creed, marital status, family status, receipt of public assistance or record of offence;
- acts conscientiously in keeping with its own policies and existing legislation related to human rights, such as its Code of Behaviour on Academic Matters, its Policies and Procedures: Sex & Harassment, its Employment Equity Policy and the Human Rights Code of the Province of Ontario.

University of Toronto Scarborough: Past and Present

Founded in 1964 as a constituent college of the Faculty of Arts and Science, the University of Toronto Scarborough enrolled its first full-time students in 1965 in temporary quarters on the St. George campus. In January 1966 the college moved to the current site when the original buildings opened. Designed by Toronto architect John Andrews, the buildings won immediate international acclaim for their striking architecture.

Since its inception the campus facilities have continued to expand. In 1973 the Student Village residence complex and the Bladen Building, housing classrooms, offices and the athletic centre, were opened. The 1980's saw the opening of the Vincent W. Bladen Library and a large addition to the original Student Village and in 1990 the West Village residence complex opened, followed by the Nilsen/Smith Child Care Centre and the Leigha Lee Browne Studio Theatre. In 2002 U of T Scarborough began a major capital expansion program. Three new facilities opened in 2003: the Academic Resource Centre, Joan Flory Hall, an apartment style residence, and the Doris McCarthy Gallery. In the Fall of 2004, the Management Building and the Student Centre were opened. In 2005, the Arts and Administration building was opened and the new Science Building, currently under construction, is expected to open in spring 2008.

Since 1972, U of T Scarborough has been a separate division of the University of Toronto. In 2002, in recognition of the tri-campus nature of the University, the Scarborough Principal became a Vice President of the University as well. Originally there were three academic divisions (Humanities, Sciences and Social Sciences). Later, the Sciences were split into two divisions (Life Sciences and Physical Sciences). In 1991, Commerce and Economics separated from Social Sciences to form the Division of Management and in 2002 Physical Sciences was split into the Division of Physical and Environmental Sciences and the Division of Computer and Mathematical Sciences. In 2004 the term “Division” was replaced by “Department” in keeping with the naming practice at the University of Toronto. In 2007, the Department of Life Sciences will be dissolved and two new departments – the Department of Biological Sciences and the Department of Psychology – will be formed. There will be seven Departments – Biological Sciences, Computer and Mathematical Sciences, Humanities, Management, Physical and Environmental Sciences, Psychology and Social Sciences.

The campus offers the only U of T program leading to the Bachelor of Business Administration degree (B.B.A.). We also offer the University’s only formal co-operative programs. These are enrichment programs designed to integrate related practical experience with academic studies. There are five Joint Programs which are offered in collaboration with Centennial College – Journalism, New Media Studies, Paramedicine, Environmental Science and Technology, and Industrial Microbiology. In 2007 the Concurrent Teacher Education Program (CTEP) is being introduced. CTEP draws on the expertise of OISE/UT, U of T Scarborough and six other academic partners, and integrates the study of education across a five-year period. At the end of their course of study at U of T Scarborough, graduates from CTEP will have earned a Bachelor’s degree in Arts or Science and a Bachelor of Education degree.

Beginning with the 2003 summer session, U of T Scarborough started operating on a trimester system, with three equal terms each year. This has enhanced opportunities for year-round study as well as facilitated our growing co-op programs.
Writing at U of T Scarborough

Effective writing is foundational to the academic experience. Good thinking demands good writing; good writing reflects both sound reasoning and insightful teaching. Good writing is not only an index to intellectual clarity but the basis of meaningful communication.

It is the aim of the University of Toronto Scarborough to assist its students to achieve proficiency in writing, irrespective of their program. Students will be expected to learn how to frame an argument and support it, to research, critique and integrate materials from a variety of sources, and to present written work that is both cogent and precise.

Individual disciplines may encourage their students to hone skills which are particular to their specific areas of study, but all are expected to help their students generate ideas, analyze their sources, and synthesize and interpret information in coherent forms of written expression.

Some disciplines have identified writing-intensive courses which aim expressly at enhancing a student’s writing ability. Others have adopted their own innovative ways of assisting students to develop and improve their writing skills. Specialized courses in academic writing are available to non-native speakers of English. The U of T Scarborough Writing Centre is available to every student. These and other resources are in place to help ensure that all students, regardless of the point from which they begin, achieve a standard of written expression that is consistent with the rigour of their programs of study.

Important Notices

1. Changes in Programs of Study (Subject Posts)

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

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

2. Regulations and Policies

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

3. 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.

4. Copyright in Instructional Settings

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

5. Person ID (Student Number)

   Each student at the University is assigned a unique identification number. The number is confidential. The University, through the Policy on Access to Student Academic Records, strictly controls access to person ID numbers. The University assumes and expects that students will protect the confidentiality of their Person IDs.

6. Fees and Other Charges

   The University reserves the right to alter the fees and other charges described in the Calendar. Specific tuition and fees information can be found at www. fees.utoronto.ca.

7. Notice of Collection concerning Freedom of Information and Protection of Privacy

   The University of Toronto respects students’ privacy. Personal information that you provide to the University is collected pursuant to section 21(4) 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, financial assistance and awards, graduation and university advancement, and for the purpose of statistical reporting to government agencies. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act. If you have questions, please refer to www.utoronto.ca/privacy or contact the University Freedom of Information and Protection of Privacy Coordinator at 416-946-7400, McMurrich Building, Room 201, 12 Queen’s Park Crescent West, Toronto, ON, M5S 1A9.

8. Separate Calendars are published by the Faculty of Arts and Science and by the University of Toronto Mississauga. Students are reminded that University of Toronto Scarborough is a separate faculty of the University and that rules covering students registered at University of Toronto Scarborough may differ from those elsewhere in the University.

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

10. Calendar changes

    The information published in this calendar outlines the rules, regulations, curricula and Programs for the University of Toronto Scarborough. The University of Toronto Scarborough reserves the right to change without notice any information contained in this Calendar, including any rules or regulations. The publication of information in this Calendar does not bind the University to the provision of courses, programs or facilities as listed herein. Go to www.ustc.utoronto.ca (under quick links) for the most up-to-date copy of this Calendar. You will also find any amendments to the Calendar posted there.

11. ACADEMIC OFFENCES ARE A SERIOUS MATTER. See the section of this Calendar on the Code of Behaviour on Academic Matters.

12. Email

    The University of Toronto Scarborough’s primary method of communication with students is email. Therefore, students should ensure that their email in ROSS is accurate.

13. The University of Toronto Scarborough has a No-Smoking Policy.
Sessional Dates

There are three academic sessions: Summer Session (May to August), Fall Session (September to December) and Winter Session (January to April). For dates related to courses on other campuses, see the appropriate Calendar or registration guide.

Duration of course

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<th>ROSSi section code</th>
<th>Summer Session</th>
<th>Fall &amp; Winter Sessions</th>
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<tr>
<td>F</td>
<td>May - June</td>
<td>September - December</td>
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<td>June - August</td>
<td>January - April</td>
</tr>
<tr>
<td>Y</td>
<td>May - August</td>
<td>September - April</td>
</tr>
</tbody>
</table>

For ROSSi hours on deadline dates, go to http://www.rossi.utoronto.ca/hours.html

2007 Summer Session

May 4

Last day to pay or defer fees.

May 7

Classes begin in Y & F courses.

May 21

Victoria Day \( \rightarrow \) University closed.

June 10

Last day to add Y and F courses.

June 18

Last day of classes in F courses.

June 19

Last day for submission of term assignments in F courses.

July 2

Canada Day holiday \( \rightarrow \) University closed.

July 3-6

Reading Week. (Courses continue on other campuses.)

July 9

Last day to add S courses.

July 22

Last day to drop Y courses without academic penalty.*

July 30

Last day to drop S courses without academic penalty.*

August 3

Last day of classes and last day for submission of term assignments in S & Y courses EXCEPT courses that normally meet on a Monday.

Last day to confirm intention to graduate at the Fall Convocation.

August 6

Civic holiday \( \rightarrow \) University closed.

August 7 (Tuesday)

UTSC Monday: Last day of classes and last day for submission of term assignments in S & Y courses that normally meet on a Monday.

August 8-10

Study Break.

August 11-24

Final examinations in Y & S courses.

November 12-16

Fall Convocation ceremonies. Check "Ceremony Dates" at www.utoronto.ca/convocation for the date of the UTSC ceremony.

* After this date grades are recorded on transcripts whether course work is completed or not (with a '0' assigned for incomplete work) and they are calculated into GPAs.

2007 Fall Session

August 21

Last day to pay or defer fees.

September 3

Labour Day \( \rightarrow \) University closed.

September 10

Classes begin in F and Y courses.

September 23

Last day to add F and Y courses.

October 8

Thanksgiving Day \( \rightarrow \) University closed.

November 18

Last day to drop F courses without academic penalty.*

December 3

Last day of classes in F courses. Last day for submission of term assignments in F courses.

December 4-6

Final examinations in F courses.

December 7-21

Final examinations in F courses. 2007 Summer deferred examinations.

December 24-January 4

December break \( \rightarrow \) University closed.

February 15

Last day to confirm intention to graduate at the Spring Convocation.

2008 Winter Session

December 7

Last day to pay or defer fees.

January 7

Classes begin in S courses and resume in Y courses.

January 20

Last day to add S courses.

February 15

Last day to confirm intention to graduate at the Spring Convocation.

February 17

Last day to drop Y courses without academic penalty.*

February 18-22

Reading Week \( \rightarrow \) No classes held.

February 25

Classes resume in S and Y courses.

March 21

Good Friday \( \rightarrow \) University closed.

March 23

Last day to drop S courses without academic penalty.*

April 3

Last day of classes in S & Y courses and last day for submission of term assignments in S & Y courses EXCEPT courses that normally meet on a Friday.

April 7 (Monday)

UTSC Friday: Last day of classes in S & Y courses and last day for submission of term assignments in S & Y courses that normally meet on a Friday.

April 8-11

Study Break. (Courses continue on other campuses.)

April 14 - May 2

Final examinations in S and Y courses.

2007 Fall deferred examinations.

June TBA

Spring Convocations. Check "Ceremony Dates" at www.utoronto.ca/convocation for the date of the UTSC ceremonies.

* After this date grades are recorded on transcripts whether course work is completed or not (with a '0' assigned for incomplete work) and they are calculated into GPAs.

Examination Schedules

As soon as they are finalized, examination schedules are posted on the web at: http://www.utoronto.ca/registrar.

The date of posting is normally no later than:

August examination period: Mid-July

December examination period: Mid-November

April examination period: Mid-March

Note: Examinations may be held on any day of the week. Every effort will be made to avoid scheduling them on Sundays. However, U of T Scarborough reserves the right to do so if necessary.
Officers of the University of Toronto

A list of officials of the University of Toronto can be found at: http://www.utoronto.ca/gov/en/cio/01.01.07.pdf

Officers of the University of Toronto Scarborough

Vice-President (U of T) & Principal (U of T Scarborough)
J. D. Freedman, A.B., Ph.D.
Until June 30: J. J. Vaccarino, Ph.D.
From July 1: TBA

Vice-Principal (Academic) & Dean
R.G. Buchweitz, Ph.D.

Vice-Principal, Research and Graduate Studies
J. Coleman, Ph.D.

Assistant Principal
L. Lewis, B.A., M.I.S.

Chief Administrative Officer
K. McLean, B.A., M.B.A.

Dean of Student Affairs
T. Nowers, B.Sc., M.Ed.

Executive Director of Advancement
TBA

Registrar & Director of Enrollment Services

Director of Human Resource Services
K. Richard, B.Sc., M.Ed.

Chair, Department of Computer & Mathematical Sciences
J. Scherk, B.Sc., M.Sc., Ph.D.

Chair, Department of Humanities

Chair, Department of Life Sciences
J. W. Gurd, B.A., Ph.D.

Chair, Department of Biological Sciences
TBA

Chair, Department of Psychology
TBA

Chair, Department of Management
M. Krasinsky, B.B., M.Phil., Ph.D.

Chair, Department of Physical & Environmental Sciences
D. Cormack, B.A.Sc., M.A.Sc., Ph.D.

Chair, Department of Social Sciences
J.R. Miron, B.A., M.A., M.Sc., Ph.D.

Department of Biological Sciences:
- Biology
- Industrial Microbiology
- Pharmacology

Department of Computer & Mathematical Sciences:
- Computer Science
- Mathematics
- Statistics

Department of Humanities:
- Classical Studies
- Cognitive Science
- Diaspora & Transnational Studies
- English
- History
- Humanities
- Journalism
- Languages & Linguistics
- Philosophy
- Visual & Performing Arts
- Women's Studies

Department of Management:
- Economics for Management Studies
- Management

Department of Physical & Environmental Sciences:
- Astronomy
- Chemistry
- Environmental Science
- Physical Sciences
- Physics

Department of Psychology:
- Neuroscience
- Psychology

Department of Social Sciences:
- Anthropology
- City Studies
- Geography
- Health Studies
- International Development Studies
- International Studies
- New Media
- Political Science
- Society and Environment
- Sociology

U of T Scarborough Departmental Structure

As of July 1, 2007, the University of Toronto Scarborough will be comprised of seven Departments made up as follows:

- **Department of Biological Sciences**
  - Biology
  - Industrial Microbiology
  - Pharmacology

- **Department of Computer & Mathematical Sciences**
  - Computer Science
  - Mathematics
  - Statistics

- **Department of Humanities**
  - Classical Studies
  - Cognitive Science
  - Diaspora & Transnational Studies
  - English
  - History
  - Humanities
  - Journalism
  - Languages & Linguistics
  - Philosophy
  - Visual & Performing Arts
  - Women's Studies

- **Department of Management**
  - Economics for Management Studies
  - Management

- **Department of Physical & Environmental Sciences**
  - Astronomy
  - Chemistry
  - Environmental Science
  - Physical Sciences
  - Physics

- **Department of Psychology**
  - Neuroscience
  - Psychology

- **Department of Social Sciences**
  - Anthropology
  - City Studies
  - Geography
  - Health Studies
  - International Development Studies
  - International Studies
  - New Media
  - Political Science
  - Society and Environment
  - Sociology

Academic Resources

- ITIS Faculty/Staff Help Desk: 416-287-7618
- ITIS Student Support Office: 416-287-7391
- Writing Centre: 416-287-7562
- ESL Specialist: 416-287-7562
- Presentation Skills Instruction: 416-287-5666
- Research Skills Instruction: 416-287-7504
- Math & Statistics Help Centre: 416-287-5668
- Cultural Affairs: 416-287-7076
- Doris McCarthy Gallery: 416-287-7007

For library telephone numbers, U of T Library below.

AR Website: http://www.arts.utoronto.ca/~arsweb/

Academic Resources (located in the Academic Resource Centre) is an innovative academic support department that brings together Library Services, Information & Instructional Technology Services, Teaching and Learning Services, Cultural Affairs and the Doris McCarthy Gallery. AR provides co-ordinated and comprehensive learning, research, technology and teaching services to U of T Scarborough students and faculty.
Student Services

Office of Student Affairs and Services
Student Affairs and Services supports student success. We strive to cultivate the intellectual and personal development of students within a community based on principles of mutual respect and inclusion.

The Student Affairs and Services division includes the following Departments:
- Academic Advising & Career Centre
- AccessAbility Services
- Health & Wellness Centre
- International Student Centre at U of T Scarborough
- Physical Education and Athletics
- Office of Student Affairs
- Student Housing and Residence Life

The Office of Student Affairs is a positive space environment that provides official recognition to over 100 student clubs, advises and seeks advice from student societies and the Council on Student Services (CSS) and advocates on issues of student concern to the Vice-President and Principal. The office offers support for a variety of initiatives, assists students in academic or personal difficulty, offers guidance to students planning events and responds to student queries and referrals.

Programs & Services include:
- The Student Mentorship Program
- The Explore U of T Passport Program
- Student Advocacy
- Orientation Activities
- Student Group Recognition
- Focus Groups and Roundtable Discussions
- myUTSC Website – www.uts.cc/taff

Contact Information:
Office of Student Affairs and Services
Student Centre, SL-157
Phone: 416-287-7659
Email: staff@uts.cc/taff
Website: www.uts.cc/taff

Academic Advising & Career Centre
The Academic Advising & Career Centre provides a unique comprehensive and integrated set of services to U of T Scarborough students. We help students become informed decision-makers and independent learners, to be motivated and goal-oriented - while maintaining a maximum degree of flexibility of planning towards a range of academic and career goals. Our services include:
- Workshops and seminars on academic issues, learning skills, career planning and looking for employment
- Individual appointments with professional career counselors and academic advisors
- Front line resource specialists who can provide information and referral
- Career Centre Online: exclusive electronic job postings for U of T students
- Special events, such as the Professional and Graduate Schools Fair and the Expand Your Horizons: Volunteer and Internship Fair
- An interactive website: www.uts.cc/counselling

Come see us in AC213 or phone 416-287-7561.
AccessAbility Services
University of Toronto's Statement of Commitment Regarding Persons with a Disability
It is the University's goal to create a community that is inclusive of all persons and treats all members of the community in an equitable manner. In creating such a community, the University aims to foster a climate of understanding and mutual respect for the dignity and worth of all persons.
In working toward this goal, the University will strive to provide support for, and facilitate the accommodation of individuals with disabilities so that all may share the same level of access to opportunities, participate in the full range of activities that the University offers, and achieve their full potential as members of the University community.
The University will work to eliminate or minimize the adverse effects of barriers, including physical, environmental, attitudinal, communication and technological barriers, which may prevent the full participation of individuals with disabilities in the University community.
The University will provide the members of its community with opportunities for education and access to information regarding disability and the University's policies on disability. At the same time, the University will endeavor to protect the individuals' privacy, confidentiality and autonomy.
The University reaffirms that all individuals are expected to satisfy the essential requirements of their program of studies or employment, while recognizing that students and employees with disabilities may require reasonable accommodations to enable them to do so. The University is, as always, committed to preserving academic freedom and its high level of academic standards.
The achievement of the University's goal depends on the participation of each and every member of the University community, including students, faculty, staff and alumni, as well as their respective representative organizations. Each of these parties has a role in creating an equitable and inclusive environment, as well as in the accommodation process and the identification, removal, and/or reduction of barriers. The consultative relationship among the members of the University community is based upon a shared desire for an open, supportive learning and working environment, and a shared respect for individual rights and dignity.
In working toward its goals under this Statement, the University is committed to acting conscientiously and in keeping with its own policies and existing legislation related to disability.

Responsibility of Students Who Have Disabilities
Students who request accommodations for their academic programs and related activities at the University have the responsibility to disclose their needs in a timely manner to facilitate the implementation of support and services. It is vitally important that students discuss their needs with Academy Early in the term to ensure that adequate accommodation can be arranged. In some cases, the university may require that students provide documentation to support their accommodation requests.

AccessAbility Services
Services are provided to students who have a mental health disability, learning disability, attention deficit disorders, such as autism spectrum disorder, or any other disability that may impact their ability to access course content. The University's services are designed to support students in achieving their academic goals. These services may include accommodation assessments, testing co-proctors, academic advising, and accommodations for co-proctors.

Voice/TTY: 416-287-7560
Room: SW302
Email: ability@utoronto.ca
Website: www.tsc.utoronto.ca/ability

Financial Aid & Awards
The Financial Aid & Awards office provides programs and services to assist students in financing their education. Programs include OSAP and various provincial loan programs, bursaries and emergency loan support. Work-Study and scholarships/awards. The staff is available to help students make sound financial decisions through personal or group counselling opportunities. The Financial Aid & Awards office is located in the Registrar's Office (Room A142). To book an appointment, please call 416-287-7801.
Website: http://www.utoronto.ca/final

Health & Wellness Centre
Hours: Monday - Friday - 9:00 a.m. - 5:00 p.m.
Room #: SL270 (Student Centre)
Telephone #: 416-287-7065
E-mail: health-services@utoronto.ca
Website: http://www.utoronto.ca/health
We are your convenient and confidential medical clinic on campus - much like your family doctor's office.
The Health & Wellness Centre offers three free services:
• Health Care: is provided daily by physicians and nurses for the treatment of minor illnesses, first aid, pregnancy tests, annual check-ups, birth control prescriptions and sales, STI tests including HIV/AIDS, immunizations, and over-the-counter medications for colds and headaches. Appointments are recommended and walk-ins are accommodated. U of T Scarborough international students may pick up their UHIP cards here.
• Personal Counselling: Our staff includes a social worker, a psychotherapist, a psychologist, a psychiatrist, and a physiatrist-counsellor. Each of these counsellors is trained to help with family problems, relationships, crisis counselling, anxiety, depression, stress management, sexuality, bereavement, and eating disorders.
• Health Promotion: Aimed at supporting healthy lifestyle choices, it is an integral part of the services, and the staff often collaborates with other student services such as Physical Education & Athletics to further enhance the quality of our outreach programs.

International Student Centre @ U of T Scarborough
The International Student Centre (ISC), a division of Student Affairs & Services, serves and supports international and internationally-minded students at U of T Scarborough. The ISC @ U of T Scarborough is an inclusive and positive space where students of all backgrounds can find community and benefit from information, programs and services.

We offer programs and services for students in three areas:
• International Students & Newcomers to Canada: Orientation activities, Buddy Program, English Conversation Program, educational and social/cultural events, international student advising, referrals to university and community services.
• Study Abroad: Find out about opportunities to study in another country and earn credit towards your degree! Attend an information session and find resources about Summer Abroad, Student Exchange and Study Elsewhere programs.
• Diversity Training & Workshops: Explore issues of diversity, identity and equity. Learn more about yourself and about your community.

Our programs and services are open to all students.
International and internationally-minded students can register with the ISC by visiting our website: www.utoronto.ca/isc.
Contact Information:
Student Centre, SL151
Tel: 416-287-7518
Email: isc@utoronto.ca
Website: www.utoronto.ca
N'sheenamahn: Child Care Centre

Hours: Monday - Friday - 7:30 a.m. - 6:00 p.m.
Your child can be as close as your next lecture hall at N'sheenamahn (pronounced Nuh-shเยeh-nuh) located on the U of T Scarborough grounds. The Centre was constructed with children in mind. Its large, low level windows invite the natural environment inside and through which the children watch for birds, squirrels, raccoons and deer. Child size furniture, equipment, sinks and toilets enable children to develop independence and self-esteem.

The centre provides care and education for 54 children from birth to five years of age. Every day, children learn through play in a professional, nurturing, stimulating and safe environment. Children develop co-operative, empathetic, and negotiating skills and strategies to thrive today, and throughout their lifetime.

Meals and snacks are provided by an on site cook, with attention to how they taste, look, and how nutritionally sound they are for growing and developing children. Allergies and food restrictions are accommodated.

This non-profit Centre is governed by a Board of Directors made up of parents and U of T Scarborough appointees.

In accordance with the Centre’s mission, parents are valued as the primary caregivers of their children. Parents are encouraged to volunteer, and are expected to participate in the Centre’s development in various ways.

For more information about the Centre, or to arrange for a visit, please contact the Director, Bonnie Quinn at 416-287-7624.

E-mail: childcare@ustc.utoronto.ca

Web Site: http://www.ustc.utoronto.ca/~childcare/

Office of the University Ombudsperson

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

The Ombudsperson is available by appointment at all three U of T campuses (for an appointment, please telephone or e-mail us). For additional information, please visit our website at: www.utoronto.ca/ombudsperson

222 College Street, Suite 161,
Toronto M5S 3J1
Telephone: 416-978-6874
E-mail: ombuds.person@utoronto.ca

Physical Education & Athletics – Recreation Centre

Hours: Monday - Friday - 7:45 a.m. - 10:30 p.m.
Saturday - Sunday - 8:00 a.m. - 4:00 p.m.
(Hours are adjusted hours during exam periods, Christmas holidays & summer months.)
Main Office: R247
General Information #: 416-287-7900
E-mail: phyed@ustc.utoronto.ca
Website: http://phyed.utoronto.ca/

Our mission is: "To provide a safe, healthy, inclusive and enjoyable environment that promotes lifelong participation in physical activity; to foster a sense of community among students through programs and activities."

We offer a wide range of sports, social activities, intramural programs, tournaments, recreational play, instruction, and special events to promote skill development, leadership, social interaction and enjoyment for an active, healthy lifestyle.

Facilities:

- Co-ed fitness/weight training facility 'THE KEY' and the Cardiac Theatre space, Cycling Room; The Palamoti Gymnasium - a double gym for basketball, volleyball, badminton, ball hockey, indoor soccer, indoor cricket etc.; Teaching Studio - for instructional and fitness classes.
- Athletics Lounge - study space, table tennis; seven air-conditioned North American squash courts; Golf “practise tee” Cage; Varsity Blues Baseball Diamond; two multi-purpose outdoor playing fields and eleven outdoor tennis courts in the valley; locker/shower areas - including men’s and women’s areas; athletic service counter offering program and membership information as well as playing equipment rentals and various supplies.

University Police Services

Office Location: SW304 (Sciences Wing)
Emergencies: 416-287-7333
General: 416-287-7398

(U of T Scarborough Police are dispatched by the U of T St. George Police Communications Centre. Please specify that you are calling from U of T Scarborough and be specific about your location.)

E-mail: police@ustc.utoronto.ca
Website: www.ustc.utoronto.ca/police/

UTSC Patrol (formerly Walk Safer): 416-287-7022
Student Crime Stoppers website: www.ustc.utoronto.ca/~crimestop/
non-partisan advice and counsel to those involved in the complaint process. Contacting the Sexual Harassment Officer is not a commitment to filing a complaint; people can contact the office on an anonymous basis simply for advice.

All complaints and requests for information are kept completely confidential unless the individuals involved approve otherwise. Members of the University of Toronto Scarborough may arrange an appointment at U of T Scarborough with the Sexual Harassment Officer or may go to the St. George campus, whichever is more convenient. For an appointment, information, to arrange educational or to file a complaint, contact the Sexual Harassment Office, University of Toronto, 40 St. George Street, Room 750, Toronto, Ontario, M5S 3G9 (Telephone 416-978-4093). Further information is available at www.utoronto.ca/sho.

For information about online harassment go to www.utoronto.ca.

Degrees
University of Toronto Scarborough students may earn an Honours Bachelor of Arts, an Honours Bachelor of Science or a Bachelor of Business Administration degree after completing the appropriate requirements listed below. In doing so, students are expected to adhere to the rules and regulations outlined in this Calendar. Students who first registered at U of T Scarborough prior to the 2004 Summer Session may elect to receive a B.A. or a B.Sc. degree after having completed the requirements for a three-year (fifteen-credit) degree.

Degrees are conferred at university convocations, held twice annually: the Spring Convocation held in June and the Fall Convocation held in November. Students who have confirmed their intention to graduate will be mailed complete information about the time and arrangements in March for the June Convocation and in October for the Fall Convocation.

Students in their graduating year who intend to take part in the next Convocation must notify the Registrar's Office of their intention either through ROSI or on a confirmation of graduation form by the deadline listed in the Sessional Dates section of this Calendar. To determine if you have met degree and/or program requirements, log in to Degree Navigator at www.utoronto.ca. For more information about Degree Navigator see the Student Web Service section of this Calendar.

Degree Requirements

Honours Degree
• To qualify for an Honours degree, students must:
  1. Pass at least twenty full credits.
  2. Complete: (a) a Specialist Program, or (b) two Major Programs, or (c) three Minor Programs, or (d) two Minor Programs and a Major Program. Combinations of programs used to meet this requirement must include at least twelve different full credits.
  3. Earn a cumulative grade point average of at least 1.60.

Bachelor of Business Administration Degree
• Pass at least twenty full credits.
  2. Complete either (a) the Specialist Program in Economics for Management Studies; or (b) one of the Specialist Programs in Management listed in the Management section of this Calendar.
  3. Earn a cumulative grade point average of at least 1.60.

Note: Only programs offered by the University of Toronto Scarborough may be used to fulfill degree requirements.
B.A. and B.Sc. Degrees
The type of degree students receive is determined by the Program(s) completed. See the list in Programs of Study (Subject POs) for the type of degree towards which each Program leads. Students must monitor their own progress to degree completion.

- In order to receive a B.Sc., students must complete one of the following: One specialist, one major, or two minor programs in the sciences.
- In order to receive a B.A., students must complete one of the following: One specialist, one major, or two minor programs in the arts.
- Students who fulfill more than one requirement may select which degree they will receive.

Graduation with High Distinction and with Distinction
University of Toronto Scarborough students who have completed at least ten full credits while registered at University of Toronto Scarborough or at the University of Toronto's Faculty of Arts and Science will graduate with high distinction if their cumulative grade point average is 3.50 or better and will graduate with distinction if their cumulative grade point average is between 3.20 and 3.49. Students who have completed fewer than ten University of Toronto Scarborough or Faculty of Arts & Science credits who have a cumulative grade point average of 3.20 or better will be considered on an individual basis.

Three-Year Degree
U of T Scarborough has discontinued the three-year degree. Students registered at U of T Scarborough prior to the 2004 Summer Session may still choose to complete a three-year degree. To qualify for a three-year degree, these students must:
1. Pass at least fifteen full credits.
2. Complete the requirements of a Major Program or two Minor Programs. Combinations of Programs used to meet this requirement must include at least eight different full credits.
3. Earn a cumulative grade point average of at least 3.60.

Where students use two minor Programs to satisfy the requirements of a three-year degree, in order to receive a B.Sc., both must be in the sciences.

Upgrading Three-Year Degrees
Students who have graduated with a three-year degree may still choose to complete the requirements of the Honours degree. A second degree will not be conferred but completion of the Honours degree requirements will be noted on the student's transcript. Students who upgrade a three-year degree to an Honours degree may exchange the diploma for an Honours diploma of the same kind, e.g., a three-year B.Sc. may only be replaced by an Honours B.Sc. diploma. Students who have received a three-year degree and are in the final year of the Honours degree should notify the Registrar's Office through ROSS or by means of a confirmation of graduation form by the deadline listed in the Sessional Dates section of this Calendar.

Students who first registered at U of T Scarborough before the 1989 Summer Session Students who first registered at the University of Toronto Scarborough before the 1989 Summer Session may, if they wish, complete the degree requirements outlined in the 1988-89 Calendar. Students who first registered before the 1980 Summer Session may, if they wish, complete the degree requirements outlined in the 1979-80 Calendar. For these students, the type of degree is determined by the number of science credits completed.

Transfer Students
Students transferring to the University of Toronto Scarborough are required to complete at least half of their credits and half of their Program requirements as University of Toronto Scarborough students. Students transferring from other divisions of the University of Toronto are exempt from this requirement.

"Second Degree" Requirements
Students beginning a second degree are normally exempted from first year of the degree requirements by being granted five (5) credits, regardless of the number of previous degrees. Students who hold a B.A., B.B.A. or B.Sc. from the University of Toronto will be considered for admission to a second degree Program only of a different type (e.g., students with a B.A. degree may only complete a B.B.A. or B.Sc. degree). Application for admission to a second degree Program is made through the Assistant Registrar-Admissions.

Certificate Program in Business
Students in this program must complete the following in order to qualify for the Certificate in Business:
1. Pass 6.0 full credits in Management and Economics for Management Studies, including ECOM01H & ECOM05H and [MGTA03H & MGTA04H] or MGTA02Y
2. Earn a cumulative grade point average of at least 2.00.

Students in their graduating session who intend to take part in the next Convocation must notify the Registrar's Office of their intention either through ROSS or on a confirmation of graduation form by the deadline listed in the Sessional Dates section of this Calendar.

University of Toronto Scarborough certificate students will graduate with honours if their cumulative grade point average is 3.20 or better.

Non-Degree Students
"Non-degree students" are students registered in degree courses at the University of Toronto Scarborough:
- who are not proceeding towards a University of Toronto degree or Certificate, or
- who have been admitted on an interim basis and who must meet certain conditions before admission as regular degree students. Except for regulations concerning degree requirements and regulations where non-degree students are specifically exempted, all regulations apply equally to non-degree students and degree students. Where students have been admitted on an interim basis as non-degree students, the conditions of their admission supersede the normal regulations governing academic status.

Programs of Study
Programs are groupings of courses in one or more disciplines. Degree students must select and register in a Program or Programs following the session in which they receive their fourth credit. (Note: Some Programs have limited enrolment. See the Program descriptions for admission requirements or speak to the Program Supervisor.) A list of Programs may be found in the Programs of Study (Subject POs) section of this Calendar. Only programs offered by the University of Toronto Scarborough may be used to meet the degree requirements.

Specialist Programs
1. Specialist Programs which consist of at least nine full credits are designed to provide depth and intensity of study within a limited area defined as a discipline, a group of disciplines, or a particular theme or area of study.

Major Programs
2. Major Programs which consist of six to eight full credits are designed to provide concentration in an area of study defined as a discipline, a group of disciplines or a particular theme or area of study.
Minor Programs

3. Minor Programs which consist of four full credits, including at least one full credit at the C- or D-level are designed to provide study in a specific area for students desiring wide-ranging but coherent Programs of study in different areas of the curriculum.

Approved Individual Programs

4. Students may propose individual Programs of study, other than those described in this Calendar. Such proposals will be considered favourably only from students with cumulative grade point average of 3.5 or greater. To be approved, individual Programs should specify four full credits for a Minor Program, six to eight full credits for a Major Program and ten to fourteen full credits for a Specialist Program. The courses should all be offered at U of T Scarborough and should form a logical program. The student should offer a rationale for the proposal. Proposals should be made to the Associate Dean and must be submitted at least eight months prior to the session in which the student expects to graduate.

Co-operative Programs

5. Co-operative programs are enrichment Programs designed to integrate related, practical experience with regular University studies. All Co-operative Programs are either Specialist or Major Programs and may be taken only as part of a four-year degree. Major Co-operative Programs must be combined with another Major Program. Academic credits associated with the successful completion of work-term requirements are additional to the 20.0 normally required for a degree. For this reason, some Co-operative Programs may take up to five years to complete.

Joint Programs

6. Joint programs are offered in collaboration with Centennial College. All Joint Programs are either Specialist or Major Programs and may be taken only as part of an Honours degree. Joint Major Programs must be combined with another Major Program or two Minor Programs. In most cases, students also have the opportunity to qualify for a diploma or certificate from Centennial College, which may require one additional academic session. See specific program descriptions for more details.

Course selection and registration for Programs of study

1. Students are responsible for ensuring that their course selection will enable them to complete the requirements of their Program(s) by the time they complete their other degree requirements. In certain Programs, approval by the supervisor of some or all courses is necessary. In all Programs, the supervisor is available for advice concerning Program requirements and course selection.

2. While students with fewer than 4.0 credits are not required to select a Program, they should, when selecting their courses, consider carefully the requirements of any Programs they may later choose to follow. Supervisors, instructors in A-level courses and academic advisors may be consulted for assistance.

3. Students who have registered in a Program should consult annually with the supervisors of their Programs to ensure that their course selection will meet Program requirements.

4. Students must register in their Programs following the session in which they attain their fourth full credit.

Note: Successful completion of a program does not in itself ensure successful completion of the degree requirements. See the Degrees section of this Calendar.

Program Transfers

Students who wish to transfer from one Program to another after classes have started should discuss the proposed transfer with the supervisor of the new Program and notify the Registrar's Office of the change through ROSI.

Certification of completion of Programs

Completion of Programs is certified when the degree is conferred. Certification is given only for University of Toronto Scarborough programs. Students in their final year who have confirmed their intention to graduate at the next Convocation or who have confirmed that they are about to complete an upgraded degree do not have to request certification of completion of their Programs. When Program requirements are changed, students may elect to satisfy the requirements in effect when the student first commenced courses at U of T Scarborough or subsequent requirements if the student finds them more favourable. However, U of T Scarborough reserves the right to require substitution for courses which are no longer offered.

Regulations concerning Programs of study

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

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

3. Students may register in no more than one Co-operative Program at any one time.

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

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

6. Supervisors have the authority to deal with special circumstances concerning Program requirements. They may

- accord to Program requirements, courses taken on other campuses of this University or at other Universities; and
- permit course substitutions or other modifications of Program requirements where they deem them appropriate.

When special arrangements are made, students should ask their supervisor to record them on a Program exceptions form.

7. Students should note that certain Programs will require them to take some of their courses on the St. George Campus. However, only University of Toronto Scarborough Programs may be used to meet degree requirements.

8. Students intending to enrol in any course on another campus which they intend counting towards their Program should consult with their Program Supervisor first.

9. Students transferring from another institution to the University of Toronto Scarborough will be required to complete at least half of their credits and half of their Program requirements as University of Toronto Scarborough students. Students transferring from other divisions of the University of Toronto are exempt from this requirement.

Registration in Programs which have been Withdrawn

Normally students will not be allowed to register in Programs that have been withdrawn. However, where the required courses for the Programs are still offered or suitable substitutions are available, students who have completed at least four full credits at the end of the session in which the Program is withdrawn may still apply for admission to the Program. Such admission will be contingent on a written agreement with the Chair of the relevant Department (or delegate), stipulating the requirements to be met and a time limit for the student's completion of the Program. Students should note that the University is not obliged to make such arrangements.
### Programs of Study (Subject Posts)

Some Programs have strict enrolment limits. In the event that the number of qualified applicants exceeds the teaching or other resources available, enrolment in other Programs may have to be limited at a future date.

**Notes:**
- Application procedures for current students are available at: www.utsi.utoronto.ca/registrar
- Tuition amounts vary with different University programs. Please consult the Student Accounts website at www.sfas.utoronto.ca for further information.

The following is a list of programs currently offered by U of T Scarborough. (CMS = Department of Computer & Mathematical Science, P&ES = Department of Physical & Environmental Science; Co-op = Co-operative option available).

<table>
<thead>
<tr>
<th>Area</th>
<th>Department</th>
<th>Program</th>
<th>Type</th>
<th>Degree</th>
<th>Co-op</th>
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**Courses in:**
- **Anthropology**
- **Biology**
- **Chemistry**
- **Humanities**
- **Geography**
- **Health Studies**
- **History**
- **International Development Studies**
- **International Studies**
- **Journalism**

**Programs of Study (Joint Centennial):**
- **Economics**
- **Political Science & Economics**
- **Environmental Science**
- **Environmental Geoscience**
- **Environmental Physics**
- **Environmental Science**
- **Environmental Science & Technology**
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**Co-operative Programs**

**General Information**

Co-operative Programs are enrichment programs designed to integrate related practical experience with academic studies. All co-op programs are either Specialist or Major Programs and may be taken only as part of a four-year degree. Major co-op programs must be combined with another major program. Academic credits associated with the successful completion of work-term requirements are additional to the 20.0 normally required for a degree. For this reason, some co-op programs may take up to five years to complete.

No student may be enrolled in more than one co-op program. For a listing of co-op programs, the academic supervisors, and the sponsoring academic Department, see the Programs of Study (Subject POIs) section of this Calendar.

**Admission to Co-op Programs**

In most cases, students may apply to enter co-op programs either directly from secondary school or after their first year of university studies.

**Prospective Applicants:** For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, applicants must indicate the special code for the program on the Application for Admission to an Ontario University. See the Admissions section of this Calendar for deadlines. Once U of T is notified of the application, applicants are given information about documents required to support it. Co-op programs require a Supplementary Application available at the Admissions and Student Recruitment website: www.utsa.ontario.ca/admissions.

Enrolment in co-op programs is limited. Admission is granted on the basis of applicants' academic performance and their interest and potential ability. The Supplementary Application will indicate what information is required in addition to the academic record, but it may include a statement of interest, a resume, and letters of reference. In some cases, an interview may be conducted, either in person or by telephone.
Current U of T Scarborough Students: For the minimum qualifications for consideration for entry into Co-op Programs following First Year, see the individual co-op program entries elsewhere in this Calendar. Application procedures can be found at the Registrar’s Office website: www.uts.tro.utoronto.ca/registrar.

Fees
Every student in a co-op program is required to pay co-op fees as established by the University. The co-op fees relate to the additional costs associated with the administration of work terms and are calculated in accordance with Ministry of Education and University of Toronto policies. However, no tuition fees are charged when registering for the work-term credit courses, nor are there any additional fees associated with the required non-credit co-op work-term preparation course. If a student leaves the program for any reason, co-op fees paid in earlier sessions are not refundable.

Program Requirements
Co-op programs require at least eight four-month terms of full-time study, and the satisfactory completion of two or three four-month work terms, as specified by the particular program. Students who successfully complete all the requirements associated with a work-term are awarded 0.5 full credit equivalents, these credits being additional to the 2.0 normally required for the degree. Work terms are evaluated by program faculty, the Co-op Office, and the employer, and a grade of CR (credit)/NCR (no credit) is recorded on the transcript.

To maintain good standing in a co-op program, to be eligible for a work term, and to receive certification for its completion on graduation, a student must:
- Meet all of the normal requirements for the Honours B.A., B.Sc. or B.B.A. degree;
- Follow the course of studies described for the specific program;
- Complete the non-credit co-op work-term preparation course and any other prerequisites for the work-term as required by the specific program;
- Maintain a cumulative grade point average (CGPA) of at least 2.50 (note that this is higher than the CGPA of 1.60 required for good standing in regular non-co-op programs);
- Receive a satisfactory evaluation for work term performance and work term report;
- Register as a full-time student during study terms (i.e., a course load in each study term of at least 1.5 full-course equivalents and normally 2.5);
- Return to studies after each work term;
- Remit co-op fees as assessed by the University.

For additional information about any requirements specific to a particular program, see the program description in this Calendar.

Status in Co-op Programs
- Status in a co-op program will be determined at the end of each session (Fall, Winter, and Summer) for students who have attempted at least three full credits equivalents since beginning their studies at the University of Toronto Scarborough or in other arts and science divisions of the University.
- Students who have attempted at least three full credit equivalents in each a CGPA of less than 2.50 but of 2.30 or more are placed on probation in the co-op program (i.e., they remain in the program subject to certain conditions). Students may clear probation by achieving a CGPA of 2.50 or better in the next study session.
- Students may continue on probation by achieving a sessional CGPA of at least 2.50 in the next session. Students must clear their probation within two study sessions in order to remain in a co-op program.

- Students on probation in the co-op program may not apply for a work term until they have successfully cleared their probation. However, if a student's CGPA falls below 2.50 after having secured a job placement through the placement process, the student will be permitted to complete the work term; such a student will be permitted to participate in the next recruitment process only after successfully clearing probation.
- Students who have attempted at least three full credit equivalents and have a CGPA of less than 2.30, or who have failed to clear probation within two study sessions, will be removed from the co-op program.

Introduction to Co-op Work Term Preparation Course
During their first year of enrolment in a co-op program, students will participate in a non-credit co-op work term preparation course designed to prepare them for their work term experience and to maximize the benefits to be obtained from the associated learning opportunities. The tutorial will cover a variety of topics to help students develop the skills and tools needed to secure work placements appropriate to their program of study, and to perform professionally in the workplace. Satisfactory participation in this preparation course is required before students may go on work terms. No academic credit is given for the course and no fee is charged. For the name of the course appropriate to each program, see the relevant program description.

Work Terms
Work terms are an integral part of the co-op program curriculum. Practical work experience in an approved setting is undertaken to enhance academic studies through the opportunity to apply and develop concepts and/or skills that are important in the academic programs. Work term opportunities are arranged by the Co-op Office for the program, but must be won by students in competition with all applicants for the position. While on a work term, students remain in contact with the University, and prepare for the submission of a work-term report for evaluation by a faculty member. In addition, both the employer and the coordinator for the program will evaluate the student's performance on work terms. The work-term report must be submitted no later than the end of the second week of the study term immediately following the completion of the work term. Failure to meet this deadline will result in a grade of NCR (no credit) for the work term. A failed work term will be recorded on the transcript, and the student will be removed from the co-op program.

Work terms normally begin in September, January, or May, and students are normally eligible for a work placement after three or four academic terms of full-time study, as specified for individual programs. To be eligible for the first work term, students must be in good standing in the program (see above, under Program Requirements) and have completed any other requirements specified by the particular program. To be eligible for later work terms, students must be in good standing in the program, have completed any requirements specific to the program, and have received a grade of CR (credit) on their earlier work term(s).

Course Requirements
For the courses required, see the calendar entry for each specific program.

Joint Programs with Centennial College
The University of Toronto Scarborough and Centennial College have established joint programs. The programs build on the academic strengths of the University of Toronto degree together with Centennial College’s strengths in technical and practical education. Students earn a University of Toronto degree. Students also have the opportunity to qualify for a diploma or certificate from Centennial College, in some cases may require one additional academic session. All Joint Programs may be taken only as part of an honours degree. For specific program details, please see the detailed program entry in the appropriate discipline and visit the Joint Programs website: www.uts.tro.utoronto.ca/jiprogs.
Specialist (Joint) Program in Environmental Science and Technology
Specialist (Joint) Program in Industrial Microbiology
Specialist (Joint) Program in Journalism
Major (Joint) Program in New Media Studies
Specialist (Joint) Program in Paramedicine

APPLICATION PROCEDURES:
Prospective Applicants: See the Joint Programs website for details about the application procedures and the Admissions section for deadlines to apply.
Once University of Toronto is notified of the application, applicants are given information about documents required to support the application.

Current U of T Scarborough Students: Application procedures can be found at the Registrar’s Office website: www.utsc.utoronto.ca/register/

Selection Process: The programs have enrolment limits and admission is competitive. Applicants are evaluated by both U of T Scarborough and Centennial College. Application information is shared with the relevant Program Supervisor at Centennial College. See the detailed program description for New Media Studies, Journalism and Paramedicine for other admission or post-admission requirements.

Students Enrolled in Joint Programs: Students are encouraged to meet with their U of T Scarborough Program Supervisor regularly. As these are Joint Programs, registrarial and academic information will be shared with the relevant Program Supervisor and Departments at Centennial College.

REGISTRATION PROCEDURES:
Course enrolment: Students enrol in all degree credit courses, including those taken at Centennial College (all of which are listed in this Calendar) at U of T Scarborough.

Fees: Tuition and incidental fees are payable to the University in the normal way. In each session in which students are taking one or more courses at Centennial College, a program fee relating to the use of materials is charged. The amount of the fee varies by program.

Anthropology
(B.A./B.Sc.)

Faculty List
F. D. Burton, B.Sc., M.A., (NYU), Ph.D. (CUNY), Professor Emeritus
R. W. Shirley, M.A., (Stanford), Ph.D. (Columbia), Professor Emeritus
M. Lamber, B.A. (McGill), M.A., Ph.D. (Michigan), F.R.S.C., Professor
S. Bamford, B.A. (Toronto), M.A. (McMaster), M.A., Ph.D. (Virginia), Associate Professor
M. Latta, B.A. (Kwanz), M.A., Ph.D. (Toronto), Associate Professor
L. Sawchuk, B.A., M.A. (Manitoba), Ph.D. (Toronto), Associate Professor
L. Mortensen, B.A. (Cornell), M.A., Ph.D. (Indiana), Assistant Professor
M. Schillaci, B.A. (New Mexico), M.A. (Toronto), Ph.D. (New Mexico), Assistant Professor

Supervisor of Studies: TBA Email: anthropology-supervisor-studies@utsc.utoronto.ca

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

Because of its vast subject matter, Anthropology is traditionally divided into four sub-fields: Social/Cultural Anthropology, Archaeology, Physical Anthropology and Linguistics. At the present time, University of Toronto Scarborough offers courses in the first three areas. Students intending to complete a program in Anthropology should take ANTA01H & ANTA02H within their first year in order to prepare them for more advanced courses. Students wondering about appropriate course sequences in a subfield are invited to consult with the Supervisor of Studies and faculty in the appropriate subfield. Students may elect either a B.A. or a B.Sc. degree in Anthropology. Most courses in Archaeology and Physical Anthropology carry science credits (see course descriptions below). Consult the Supervisor of Studies for clarification.

SPECIALIST (CO-OPTERATIVE) PROGRAM IN ANTHROPOLOGY (B.A./B.SC.)

Supervisor of Studies: L. Chan Email: chan@utsc.utoronto.ca

Adviser: TBA Email: anthropology-supervisor-studies@utsc.utoronto.ca

Co-op Contact: TBA Email: askcoop@utsc.utoronto.ca

The Co-operative Program allows students to pursue an in-depth study of Anthropology, combined with two-four month work terms in areas complementary to the area of study. Students select a focus for their course work and work term in Biomedical Anthropology, Medical Anthropology, Archaeology or Social-Cultural Anthropology. Work terms can be with Canadian employers including NGOs, research institutes, the private sector, and public institutions. Students who wish to carry out their work terms in a developing country where there is no Canadian employer working, may be asked to finance the living allowance expenses of the placements themselves. The location of work terms is determined according to each student’s preferences and abilities, the availability of positions, the practicability of working in that area, and above all, the safety of the area.

Program Admission
Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.utsc.utoronto.ca/register/. The minimum qualifications for entry are 4.0 credits including ANTA01H & ANTA02H plus a cumulative GPA of at least 2.5. 
Program Requirements

For information on admissions, fees, work terms, and standing in the program, please see the Co-operative Programs section in this Calendar. To be eligible for a work term, students must have completed at least 9 FCEs (full credit equivalents) including at least 3 FCEs in Anthropology, and must have completed the Arts & Science Work Term Preparation course.

Course Requirements

Students must complete the requirements for the Specialist Program in Anthropology. Study of a foreign language is recommended. Within the 10 FCEs in Anthropology required for the Co-op Program, they must concentrate at least 4 FCEs in ONE of the following fields: Biological Anthropology, Medical Anthropology, Archaeology or Socio-Cultural Anthropology.

SPECIALIST PROGRAM IN ANTHROPOLOGY (B.A./B.Sc.)

The Specialist Program in Anthropology is intended to provide the professionally oriented student with background preparation of sufficient breadth and depth to pursue specialized training at the graduate level. It is also designed to offer interested students a course structure as background for a wide range of occupations and professions. All students are required to consult with the Supervisor of Studies regarding the selection of a course sequence appropriate to their interests and objectives.

In exceptional circumstances, supervised research and reading courses are available at the C- and D-levels (ANTC01H, ANTC04H, ANTD1H, ANTD32H). These courses require special arrangements prior to registration. Read the descriptions for these courses carefully, as restrictions apply.

Program Requirements

The program requires completion of twelve FCEs (full credit equivalents), including ten in Anthropology, as indicated below.

1. ANTA01H Introduction to Anthropology: Becoming Human
   ANTA02H Introduction to Anthropology: Society, Culture and Language

2. At least one FCE from each of the following three streams:
   a) ANTB14H Biological Anthropology: Beginnings
      and
      ANTB15H Contemporary Human Evolution and Variation
   b) ANTB19H Varieties of Social Life
      and
      ANTB20H Culture, Politics and Globalization
   c) [ANTB11H World Prehistory: the Old Stone Age and
      ANTB12H World Prehistory: The Rise of Civilization] or
      [ANTB38H First Nations of North America: Hunters and Gatherers and
      ANTB39H First Nations of North America: Social Complexity and the State]

3. Seven FCEs at the B-Level or above, of which two FCEs should be at the C- or D-level.

   Students are encouraged to take at least one course in each of the following field methods, such as ANTC12H, ANTC22Y and ANTC09H.

4. At least 2 FCEs in disciplines other than Anthropology to be agreed upon in consultation with the Supervisor of Studies.

   Students selecting a B.A. degree should ensure that at least two FCEs from the above courses are in area studies.

   For a B.Sc. at least seven of the FCEs required for the program must be science credits. In addition to Anthropology courses that have been designated science credits (see course descriptions below), the following may also be counted as science credits if they are used to meet the requirement for two FCEs in disciplines other than Anthropology: HILT801H, HILT802H or any course in a science discipline (e.g. Biology, Environmental Science, Mathematics).

MAJOR PROGRAM IN ANTHROPOLOGY (B.A./B.Sc.)

The Major Program in Anthropology provides a course structure for those students desiring to expand upon or supplement other areas of academic interest by taking advantage of Anthropology’s unique global, chronological and biological perspective on humankind.

Program Requirements

The program requires completion of six FCEs (full credit equivalents) in Anthropology, including:

1. ANTA01H Introduction to Anthropology: Becoming Human
   ANTA02H Introduction to Anthropology: Society, Culture and Language

2. At least one FCE from each of the following streams:
   a) ANTB14H Biological Anthropology: Beginnings and
      ANTB15H Contemporary Human Evolution and Variation
   b) ANTB19H Varieties of Social Life and
      ANTB20H Culture, Politics and Globalization
   c) [ANTB11H World Prehistory: the Old Stone Age and
      ANTB12H World Prehistory: The Rise of Civilization and the State] or
      [ANTB38H First Nations of North America: Hunters and Gatherers and
      ANTB39H First Nations of North America: Social Complexity and the State]

3. Three additional FCEs at the B-Level or above, of which at least one FCE must be at the C- or D-Level.

For a B.Sc., at least four of the FCEs required for the program should carry science credit (see course descriptions below).

MINOR PROGRAM IN ANTHROPOLOGY (B.A.)

The Minor Program in Anthropology provides a course structure for students majoring or specializing in other disciplines who want some directed exposure to anthropological thought.

Program Requirements

The program requires completion of four FCEs (full credit equivalents), as follows:

1. ANTA01H Introduction to Anthropology: Becoming Human
   ANTA02H Introduction to Anthropology: Society, Culture and Language

2. At least one FCE from among the following:
   a) ANTB14H Biological Anthropology: Beginnings
      and
      ANTB15H Contemporary Human Evolution and Variation
   b) ANTB19H Varieties of Social Life
      and
      ANTE20H Culture, Politics and Globalization
   c) [ANTB11H World Prehistory: the Old Stone Age and
      ANTB12H World Prehistory: The Rise of Civilization] or
      [ANTB38H First Nations of North America: Hunters and Gatherers and
      ANTB39H First Nations of North America: Social Complexity and the State]

3. Two additional FCEs in Anthropology, of which one FCE must be at the C- or D-Level.
ANTB101H3 Political Ecology

This course examines human-environmental relations from an anthropological perspective. Throughout the semester, we explore how peoples from different parts of the globe situate themselves within culturally constructed landscapes. Topics covered include eco-ecology, conservation, green consumerism, and the concept of "wilderness," and what happens when competing and differentially empowered views of the non-human world collide.
Exclusion: (ANTB101Y)
Prerequisite: [ANTA01H & ANTA02H] or permission of the instructor

ANTB104H3 Artifacts and Prehistory

An introduction to the analysis of archaeological artifacts of stone, ceramics, metal and bone. Emphasis on identification, construction, and function of material culture in ancient societies, together with the ways that this information helps to reconstruct the past.
Scientific credit
Prerequisite: ANTA01H & ANTA02H
ANTB101H3 or ANTB101Y recommended

ANTB105H3 African Cultures and Societies I: Survey

An overview of the range and diversity of African social institutions, religious beliefs and ritual, kinship, political and economic organization, pre-colonial, colonial and post-colonial experience.
Area course
Prerequisite: [ANTA01H & ANTA02H] or permission of the instructor

ANTB108H3 The Chinese Diaspora

This course investigates the societies and cultures of the Chinese diaspora, with special but not exclusive focus on Southeast Asia and elsewhere in the Asia Pacific.
Area course
Prerequisite: [ANTA01H & ANTA02H] or permission of instructor

ANTB111H3 Introduction to World Prehistory: The Old Stone Age

The development of art, technology, religion and lifeways of hunters and gatherers living during the Paleolithic, from two million to ten thousand years ago. Emphasis is placed on ecological-adaptive factors and archaeological evidence bearing on the beginnings of human culture.
Area course
Science credit
Exclusion: (ANTB11Y)
Prerequisite: [ANTA01H & ANTA02H] or permission of the instructor

ANTB112K Introduction to World Prehistory: The Rise of Civilization

An examination of the agricultural and urban transformations which gave rise to modern human societies. The course emphasizes the ecological-adaptive factors and the archaeological evidence bearing on the beginnings of permanent human settlements, the domestication of plants and animals, and the development of complex social and technological systems.
Area course
Science credit
Exclusion: (ANTB11Y)
Prerequisite: ANTA01H & ANTA02H

ANTB114H3 Biological Anthropology: Beginnings

This course surveys humanity's origin. The synthetic theory of evolution, its principles, processes, evidence and application underlies this course. Lecture topics and laboratory projects include: evolutionary theory, human variation, human adaptability, primate biology, and behaviour, taxonomy and classification, paleontological principles and human origins.
Science credit
Exclusion: ANTD20Y, (ANTB15Y)
Prerequisite: [ANTA01H & ANTA02H] or permission of instructor

ANTB115H3 Contemporary Human Evolution and Variation

Basic to the course is an understanding of the synthetic theory of evolution and the principles, processes, evidence and application of the theory. Laboratory projects acquaint the student with the methods and materials utilized by the Physical Anthropologist. Specific topics include: the development of evolutionary theory, the biological basis for human variation, the evolutionary forces, human adaptability and health and disease.
Science credit
Exclusion: ANTD20Y, (ANTB15Y)
Prerequisite: [ANTA01H & ANTA02H] or permission of instructor
ANTIB54H3 Peoples of the Middle East: An Introduction
An exploration of the range of cultures, languages, religions, and practices of the Middle East and North Africa, with particular focus on Islam.
Area course.
Exclusion: (ANTIB55Y)
Prerequisites: [ANTA41H & ANTA21H] or permission of the instructor

ANTIB56H3 Health and the Urban Environment
Described literally as 'deathtraps of humankind', urban centres prior to 1900 subjected their inhabitants to crowded living conditions, poor sanitation, increased inter-personal contact and, at times, excessive mortality through acute infections. Using a holistic approach, the course will trace the origin and development of cities with particular emphasis on the importance and development of housing infrastructure, food by-laws, water supply, sanitation system, medical facilities and their role in influencing the health of urban dwellers.
Science credit.
Prerequisite: Any A-level course

ANTC215H3 Anthropology Directed Reading in Anthropology
A directed exploration of specific topics in Anthropology, based on extensive investigation of the literature.
These courses are available in exceptional circumstances and do not duplicate regular course offerings. Students are advised that they must obtain consent from the supervising instructor before registering. Individual tutorials, as arranged. A minimum B average is normally required to be considered for these courses. May be science credit or area course depending on topic.
Prerequisite: Permission of the instructor & ANTA41H & ANTA21H & one B-level full credit in Anthropology

ANTC355H3 Culture, Science and Biotechnology: Redefining the 'Natural' Order of Things
This course examines how recent developments in biotechnology - cloning, the manufacture of genetically modified organisms, assisted reproduction technologies, and the mapping of the human genome, to name a few - are transforming our understanding of what it means to be human, including the relationship between human beings and other species. Limited enrolment: 70
Prerequisite: ANTA41H, ANTA21H, ANTB19H & ANTA21H

ANTC256H3 African Cultures and Societies II: Case Studies
Complements ANTB256Y by giving closer examination to selected issues in African ethnography. Case studies from different parts of the continent are used to highlight specific themes and issues.
Area course.
Prerequisites: ANTB201H or ANTB19H or permission of the instructor

ANTC270H3 The Making of Modern Life: Artifacts of Contemporary Society
Complements ANTB201H. An investigation of the origins and development of material and immaterial artifacts which make up modern society. We will examine tools, toys, ornaments, housing, clothing, food and communications media, and we will consider this information as used in culture resource management, forensic anthropology and museology.
Science credit.
Prerequisite: ANTB201H or permission of the instructor. ANTB212H recommended

ANTC363H3 Development, Inequality and Social Change in Latin America
Addresses agrarian policies, immigration, modernization and dependency theories, structural adjustment and free trade, U.S. foreign policy and militarism, especially post-World War II, as well as revolution, liberation theology and other movements for alternative development. Who speaks for the poor and marginalized? Who is served by development aid?
Area course.
Limited enrolment: 60
Prerequisite: ANTB19H or ANTB20H
ANTC263H The Theory of Archaeology: Basic Concepts

This course introduces fundamental concepts of prehistoric archaeology in the New and Old Worlds, including dating methods, site survey, and excavation techniques.

Exclusion: ANT200Y, (ANTC26Y)
Prerequisite: ANT101H & ANT102H or [ANT101H & ANT102H] or [ANT101H & ANT102H]

ANTC272H The Practice of Archaeology: Practical Applications in a Global Society

This course introduces theoretical and methodological concepts in archaeology including questions related to reconstruction of prehistoric environments and the identification and explanation of social-cultural systems. It will also examine the role of archaeology in modern society through Culture Resource Management.

Science credit.
Exclusion: ANT200Y, (ANTC26Y)
Prerequisite: ANT101H & ANT102H, [ANT101H & ANT102H] or [ANT101H & ANT102H]

ANTC194H Producing People and Things: Economics and Social Life

This course examines economic arrangements from an anthropological perspective. It focuses on how people produce themselves as particular kinds of human beings. Topics covered include gift giving, commodities, consumption, capitalism and the importance of objects as cultural mediators in colonial and post-colonial encounters.

Exclusion: [ANT101H & ANT102H] or permission of the instructor.
Prerequisite: [ANT101H & ANT102H]

ANTC263H Private Sexuality

This course examines human sexuality from an anthropological perspective. It covers a broad survey of mating patterns, ranging from monogamy, polygyny, polyandry, and close-ended marriage. Topics include gender roles and their effect on social and economic relations. Science credit.
Prerequisite: ANT101H, ANT102H, ANTH101H 

ANTC163H Apologies, Prisons, and the Anthropology of Incarceration

This course examines social justice issues in the context of the criminal justice system. It focuses on the development and implementation of anthropological methods to address issues of incarceration. Science credit.
Prerequisite: [ANT101H & ANT102H] or permission of the instructor.

ANTC115H1 Gender and Sexuality

This course examines gender and sexuality in historical and cultural contexts.
Exclusion: ANT115Y
Prerequisite: [ANT115Y & ANT102H] or permission of the instructor.

ANTC175H3 Human Origins: The Emergence of Homo sapiens

This course examines the emergence of Homo sapiens in light of recent archaeological evidence. It focuses on the biology, culture, and environment of early human societies.
Exclusion: ANTH101Y, (ANTC175Y)
Prerequisite: [ANT101H & ANT102H] or permission of the instructor.

ANTC170H3 Human Origins: Recent Discoveries

This course examines recent archaeological discoveries and their impact on our understanding of human evolution.
Exclusion: ANTH101Y, (ANTC170Y)
Prerequisite: [ANT101H & ANT102H] or permission of the instructor.

ANTC176H3 Urban Anthropology

This course examines the urban environment from an anthropological perspective. It explores social and cultural issues in urban settings.
Exclusion: ANTH101Y
Prerequisite: [ANT101H & ANT102H] or permission of the instructor.
ANTC283Y Introductions to Archaeological Field Methods
Introduction and training in the methods and theory of archaeological fieldwork, including excavation, environmental evaluation, survey and mapping methods, and basic artifact identification and conservation. Special components on criteria relevant to the site including site history, soils and natural resources. This course takes place at an archaeological site, and it involves full-time excavation (all day, five days per week) over the full duration of the course. Science credit. Exclusion: ANTC31Y Prerequisite: Any B-level course in Archaeology or Physical Anthropology or a B-level course in a cognate discipline.

ANTC313H Ritual and Religious Action
The nature and topic of ritual. Religious practices and projects; the interface of religion, power, morality, and history in the contemporary world. Exclusion: ANTC05Y Prerequisite: [ANTC41H & ANTC42H] or ANTB30H/M or permission of the instructor. ANTB10H & ANTB12H recommended.

ANTC323H Political Anthropology
A general survey of the role of political systems in a largely "development" framework. Prerequisite: [ANTC41H & ANTC42H] or permission of the instructor: ANTB10H & ANTB12H recommended.

ANTC434H The Anthropology of Transnationalism
Considers dimensions of transnationalism as a mode of human sociality and site for cultural production. Topics covered include transnational labour migration and labour circuits, the transnational dissemination of electronic imagery, emergence of transnational consumer publics, transnational movements by refugees and social movement activists, and border crossing by international NGOs. Limited enrollment: 60. Prerequisite: ANTB10H & ANTB20H.

ANTC353H Quantitative Methods in Anthropology
A consideration of quantitative data and analytical goals, especially in archaeology and physical anthropology. Some elementary computer programming, and a review of program packages suitable for anthropological analysis will be included. Science credit. Exclusion: ECMB11H, PSYR30H/37H, SQCB10H Prerequisite: [ANTC41H & ANTC42H] ANTB13H & ANTC42H are recommended.

ANTC359H3 Foundations and Theoretical Issues in Anthropological Demography
An examination of the biological, demographic, ecological and socio-cultural determinants of human and non-human population structure and the inter-relationships among them. Lecture topics include population and societal strategies for survival and adaptation, population structure of small-scale and urban societies, and palaeo-demography and palaeo-pathology. Prerequisite: [ANTC41H & ANTB15H] or permission of the instructor.

ANTC426H Methods and Analysis in Anthropological Demography
An examination of the biological, demographic, ecological and socio-cultural determinants of human and non-human population structure and the inter-relationships among them. Exphasis is given to constructing various demographic measures of mortality, fertility and immigration and their interpretation. Science credit. Prerequisite: ANTC39H or permission of the instructor.

ANTC453H Environmental Stress, Culture and Human Adaptability
Human adaptability refers to the human capacity to cope with a wide range of environmental conditions, including aspects of the physical environment like climate (extreme cold and heat), high altitude, geology, as well as aspects of the socio-cultural milieu, such as pathogens (disease), nutrition and malnutrition, migration, technology, and social change. Science credit. Prerequisite: [ANTC14H & ANTC15Y] or [BGYA01H & BGYA02H]

ANTC424H3 Human Growth, Development and Adaptability
Human adaptability refers to the human capacity to cope with a wide range of environmental conditions. Emphasis is placed on human growth and development in stressed and non-stressed environments. Case studies are used extensively. Science credit. Prerequisite: ANTC41H or permission of instructor.

ANTC479H3 Human Osteology
A "hands-on" laboratory course which introduces students to the methods of analyzing human skeletal remains. The first half of the course is the "Bone Biology / Anatomy" part, while the second half is the "Anthropological" unit. Lectures and labs will cover (1) the composition and microstructure of bone; (2) the development, growth, remodeling and plasticity of bone and (3) the detailed "normal" gross anatomy of the skeleton and dentition. Science credit. Limited enrollment: 40 Exclusion: ANTC34H, ANTC34Y, ANTC34Y Prerequisite: [ANTC41H & ANTB15H] or [BGYA01H & BGYA02H], ANTC16H & ANTC17H recommended.

ANTC489H3 Advanced Topics in Human Osteology
A "hands-on" laboratory course which introduces students to the methods of analyzing human skeletal remains. Topics and analytic methods include: (1) the recovery and treatment of skeletal remains from archaeological sites; (2) odontological description, including dental pathology; (3) ontometric description; (4) somatic trait description; (5) methods of estimating age at death and sex; (6) quantitative analysis of metric and somatic data; and (7) palaeopathology. Science credit. Limited enrollment: 40 Exclusion: ANTC34H, ANTC34Y, ANTC34Y Prerequisite: ANTC47H or permission of instructor.

ANTC595H3 Death and Burial
A cross-cultural study of human responses to the problem of death and suitable treatment of the dead from the Paleolithic to the present, including the origins of symbolic thought, and the impact of cultural complexity, urbanization and social stratification. Course work involves an independent research project on a chosen aspect of this topic. Science credit. Prerequisite: Any B-level course in Anthropology or permission of the instructor.

ANTC595H3 Muslim Societies
Complements ANTC454 by more closely considering selected issues in societies professing Islam, based on ethnographic case studies from the Middle East, Africa, and Asia. Area course. Exclusion: ANTC53Y Prerequisite: ANTC44H or permission of the instructor.

ANTC656H Fieldwork in Social and Cultural Anthropology
An introduction of how social-cultural anthropologists collect data and conduct fieldwork. Students complement reading and lectures on method with designing and carrying out a small project. Emphasis on participant-observation, interviewing, and ethics. Limited enrollment: 25 with preference given to students in anthropology and international development studies. Prerequisite: [ANTC10H & ANTB12H] or permission of the instructor.

ANTC656H Medical Anthropology: Illness and Healing in Cultural Perspective
Social and symbolic aspects of the body, the life-cycle, the representation and popular explanation of illness, the logic of traditional healing systems, the culture of North American illnesses and biomedicine, mental illness, social roots of disease, innovations in health care delivery systems. Prerequisite: [ANTC10H & ANTB12H] or permission of the instructor.
ANTC2H3 Medical Anthropology: Biological and Demographic Perspectives

The examination of health and disease in ecological and socio-cultural perspective. Emphasis is placed on variability of populations in disease susceptibility and resistance in an evolutionary context. With its sister course, ANTH21H3, this course is designed to introduce students to the basic concepts and principles of medical anthropology. Principles of epidemiology, patterns of inheritance and biological evolution are considered.

Science credit.
Exclusion: (ANTC35Y) Prerequisite: [ANTB14H & ANTB15H] or permission of the instructor

ANTC68H3 Anthropology of Tourism

This course explores the global cultural phenomena of tourism. Using case studies and historical perspectives, we investigate the complex motivations and consequences of travel, the dimensions of tourism as development, the ways tourism commodifies daily life, the politics of tourism representation, and the intersections of travel, authenticity and modernity.

Limited enrolment: 20
Prerequisite: ANTA1H & ANTA2H & at least two B-level courses in Anthropology.

ANTD10H3 The Body In Culture and Society

An ethno-graphic inquiry into the culturally configured human body as a reservoir of experiential knowledge, focus of symbolism, and site of social, moral, and political control. Seminar. Limited enrolment: 25
Prerequisite: Two of the following: ANTC13H, ANTC16H, ANTC20H, ANTC33H, ANTC32H.

ANTD15H3 Frontiers of Anthropology

An advanced seminar course primarily for majors and specialists in anthropology. Topic to be announced. May be science credit depending on topic. Prerequisite: Permission of the instructor

ANTD16H3 Biomedical Anthropology

This course is designed for advanced students seeking an intensive examination of specific problems in medical Anthropology. Problems to be discussed include: genetic disorders in families and populations, the interaction of malnutrition and infectious diseases in human populations, chronic non-infectious diseases in populations today, and epidemiology and medical anthropology as complementary disciplines.

Science credit.
Prerequisite: ANTC62H1 and one C-level full credit in Physical Anthropology

ANTD23H3 Ethnomedicine

This seminar course focuses on the intersection of body, mind, and self in cross-cultural perspective. Particular attention will be paid to the analysis of symbols, ritual, and the meaning-making of bodily experience; issues of gender and power; and to the healing process. Limited enrolment: 20
Prerequisite: ANTC61H1 or permission of instructor. ANTC25H1, ANTC44H1, and ANTC15H1 are highly recommended.

ANTD24H3 Theory and Methodology in Social/Cultural Anthropology

An overview of the history of ethnological thought. This course focuses on certain key theoretical debates which run through it and largely determine the "state of the art" today. Evolutionary, diffusionist, psychological, cross-cultural, functionalist, structuralist, and hermeneutical approaches will be considered through selected writings from such major figures as Tylor, Durkheim, Boas, Kroeber, Malinowski, Radcliffe-Brown, and Levi-Strauss. An attempt will be made to understand these individuals in terms of the social and intellectual climates in which they wrote.
Prerequisite: [ANTA0H & ANTA20H & ANTB19H & ANTB20H] or permission of the instructor

ANTD31H3

ANTD32H3 Advanced Research in Anthropology

Directed critical examination of specific problems in Anthropology based on library and/or field research. These courses are available in exceptional circumstances and do not duplicate regular course offerings. Students are advised that they must obtain consent from the supervising instructor before registering. Individual tutorials, as arranged. A minimum B average is normally required to be considered for these courses. May be science credit or area course depending on topic.

Prerequisite: Permission of the instructor & ANTA0H & ANTA20H & two full credits in Anthropology, one of which must be at the C-level

Art History
See the Visual and Performing Arts section of this Calendar.

Arts Management
See the Visual and Performing Arts section of this Calendar.

Astronomy (B.Sc.)
Faculty List
P. Artemowicz, M.Sc. (Warsaw University), Ph.D. (N. Copernicus Astron. Center, Polish Academy of Sciences), Professor
C.C. Dyer, B.Sc. (Bishop's), M.Sc., Ph.D. (Toronto), Professor
J.P. Lowman, B.Sc. (Toronto), M.Sc., Ph.D. (York Univ), Assistant Professor

Astronomy is at the same time one of the oldest and one of the most dynamic areas of science. It is basically the attempt to understand the environment in which humanity developed, from the solar system in which we find our direct and recent origins, to the largest distance scales typified by quasars and the big bang, in which we must search for the very origins of structure ranging from the solar system to the largest structures, such as large clusters of galaxies and cosmic voids. The past quarter century has seen startling discoveries, such as the cosmic microwave background radiation, that have given us both new scales of understanding of the universe and made us more aware of the problems still facing us in attaining a further understanding. The last decade has witnessed an explosion in the number of known planets, with more than one hundred already
ASTB3H3 Great Moments in Astronomy
An examination of the people, the background and the events associated with some major advances in astronomy. Emphasis is given to the role of a few key individuals and to how their ideas have revolutionized our understanding of nature and the Universe. The perspective gained is used to assess current astronomical research and its impact on society. Exclusion: AST210H
Prerequisite: Four full-credit equivalents

ASTB2H3 Solar System and Stellar Astrophysics
The application of physical principles to study the structure and evolution of astrophysical bodies, particularly planets and stars and their locale and motion in the universe. The motion of these bodies can usually be described using Kepler's laws of planetary motion, which will be considered as a consequence of Newton's gravitational inverse square force law. The use of the Euler-Lagrange equations to describe such mechanical systems will be considered. Exclusion: AST221H
Prerequisite: [ASTA01H & ASTA02H or (ASTA03Y) & [MAT300H (MAT31H) & MAT33H] or [MAT250Y] & PHYA21H
Corequisite: MATB41H

ASTC01H3 Research Topics in Astronomy
An application of individual effort to reading and research on a topic of current interest. The student will research on some topic of current interest in astrophysics and write a report ("mini-thesis") on his or her work. The student is expected to gain an appreciation of the current state of knowledge about a particular topic of astrophysical interest and to become familiar with the basic methods of research. The topic will be selected by one of the instructors in consultation with the student. For more detailed information see Professor Dyer. The bibliography is dependent upon the topic selected.
Students are advised that they must obtain consent from the supervising instructor before registering for this course. Exclusion: AST425H
Prerequisite: [ASTA01H & ASTA02H or (ASTA03Y) & PHYB21H] & permission of the instructor

ASTC22H3 Galactic and Extragalactic Astrophysics
The study of the structure of the Galaxy and other galaxies, and the place of galaxies, clusters of galaxies, and other large-scale systems, in the Universe, using the principles of physics and mathematics. Building on the knowledge of the structure of individual astrophysical bodies, their place in successively larger scale systems in the Universe, such as star clusters, galaxies, and clusters of galaxies, will be considered. Leading to the consideration of the Universe as a whole system. Questions concerning the possible origins of structure in the Universe, its final end-state, and related topics in cosmology will conclude the course. Exclusion: AST222H, (ASTR22H)
Prerequisite: ASTB21H & MATB41H Corequisite: MATB42H

SCIB01H3 Science Engagement (See the Science Engagement section of this Calendar for full course descriptions.)

SCIB03H3 Science Engagement In-Reach (See the Science Engagement section of this Calendar for full course descriptions.)
Courses in Neuroscience and Environmental Science
NROC34H, Neuroethology, NROC35H Developmental Neurobiology, EESC304H Biodiversity and Biogeography and EESC390H Microbial Biogeochemistry, were previously Biology courses and may still be used as Biology courses to satisfy requirements in the Major and Specialized Programs in Integrative Biology.

Science Engagement Courses
For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

Admissions

Biology Programs
All programs in Biology, except the Minor Program, have enrolment limits. Students apply to the program after completing a minimum of 4.0 FCEs (full credit equivalents), including 1.0 FCE in Biology, 1.0 FCE in Chemistry, and 0.5 FCE in Mathematics or Statistics. Admission is based on cumulative grade point average with a 2.8 or greater GPA guaranteeing admission. Students with a GPA lower than 2.8 but greater than 2.0 will be admitted to the extent that laboratory course spaces are available. The minimum GPA used to admit these students will be determined in May (after the Winter Session) and August (after the Summer Session). Application for admission is made to the Registrar through ROSI in April/May and July/August

Biology courses
Priority access is in B-, C- and D-level Biology courses is given to Majors and Specialists in Biology and other programs requiring these courses. During the first two weeks of Fall/Winter registration, the courses will be restricted to these students. Provided space is available, the courses will be open to other students by the third week.

SPECIALIST PROGRAM IN CELL AND MOLECULAR BIOLOGY
Supervisor: C. Hasenkamp, Email: hasenkamp@uoguelph.ca

Program Requirements
This Program consists of 14 required FCEs (full credit equivalents). Please note 20 FCEs are required to complete an Honours Degree. Students in this Program MUST take CHMA101H, CHMA111H during the first year, and CHMB211H, CHMB212H and CHY1B1H during the second year to return properly through the Program. The required credits are:

1. 4.0 FCEs consisting of the core curriculum components: BGYA41H, BGYA42H, BGYB1H, BGYB31H, BGYB32H, BGYB33H, BGYB34H, BGYB35H;
2. 0.5 FCE in BGYB12H;
3. 3.5 FCEs in essential concepts courses: BGYC12H, BGYC13H, BGYC14H, BGYC15H, BGYC17H, BGYC23H, BGYD21H, and [BGYD01Y or BGYD22H or BGYD23H or BGYD25H or BGYD27H];
4. 1.0 FCE from among the following Cell and Molecular Biology courses: BGYC19H, BGYC21H, BGYC22H, BGYC29H, BGYC31H, BGYC37H, BGYD70H and NROC35H;
5. 2.0 FCEs in Chemistry: CHMA101H, CHMA111H, CHMA112H, CHMB42H;
6. 0.5 FCE in Physics: PHYA10H;
7. 1.5 FCE in Mathematics and Statistics: MATA35H & [MATA35H or MATA36H] & [STAR22H or PSYB10H];
8. 1.0 FCE from the courses listed by the Departments of Humanities, Management or Social Sciences.

All students would be well advised to take all core B-level courses before entering C-level Biology courses in order to avoid timetable conflicts that may cause delays in degree completion.
**Suggested Course Sequence**

**Year 1:**
- BGYA01H, BGYA02H, CHMA01H, CHMA02H, MATA03H, MATA05H or MATA04H, PHYA10H, 1 FCE of Item 8, or unspecified electives.
- **Year 2:** BGYB10H, BGYB11H, BGYB12H, BGYB30H, BGYB32H, BGYB35H, CHMB31H, CHMB32H, STAT222H or PSYB07H, 0.5 FCE of Item 8 or unspecified electives.

**Year 3:**
- BGYC12H, BGYC13H, BCY31H, BCY317H, BCY231H, plus 1.5 FCE of Item 4 or Item 8, or unspecified electives.

**Year 4:**
- BGYD21H, 0.5 FCE of additional course work from Item 3, plus 3.5 FCE of Item 4 or Item 8, or unspecified electives.

**SPECIALIST (CO-OPE/OPERATIVE) PROGRAM IN CELL AND MOLECULAR BIOLOGY**

**Supervisor:** C. Hasenkampf, Email: hasenkampf@uetc.utoronto.ca

Co-op Contact: N. Heyd, Email: askcoop@uetc.utoronto.ca

The Program provides the student with a broad education in biochemistry, cell biology, genetics, microbiology and molecular biology through lecture, lecture/lab, and intensive laboratory courses, and couples this theoretical and practical training with work experience in government, health care, or in public or private industry. For information on admissions, fees, work terms and standing in the Program, please see the Co-operative Programs section of this Calendar.

**Program Admission**

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.ute.utoronto.ca/registrar/. The minimum qualifications for entry are 5.0 credits including BGYA01H, BGYA02H, CHMA10H, CHMA11H, MATA30H, [MATA35H or MATA36H], PHYA10H plus a cumulative GPA of at least 2.75.

**Program Requirements**

This Program consists of 14 required FCEs (full credit equivalents). Please note 20 FCEs are required to complete an Honours Degree. Students in this Program MUST take CHMA10H, CHMA11H during the first year, and CHMB11H, CHMB21H and BGYB12H during the second year to stream properly through the Program. The required credits are:

1. 4.0 FCEs consisting of the core curriculum components: BGYA01H, BGYA02H, BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB32H, BGYB35H;
2. 0.5 FCE in BGYB12H;
3. 3.5 FCEs in essential concepts courses: BGYC12H, BGYC13H, BGYC15H, BGYC17H, BGYC23H, BGYD21H and [BGYD01Y or BGYD22H or BGYD23H or BGYD52H];
4. 1.0 FCE from among the following Cell and Molecular Biology courses: BGYC19H, BGYC21H, BGYC22H, (BGYC29H), BGYC31H, BGYC317H, BGYD37H and NR0C51H;
5. 2.0 FCEs in Chemistry: CHMA10H, CHMA11H, CHMA41H, CHMA42H;
6. 0.5 FCE in Physics: PHYA10H;
7. 1.5 FCE in Mathematics and Statistics: MATA30H & [MATA35H or MATA36H] & [STAT222H or PSYB07H];
8. 1.0 FCE from the courses listed by the Departments of Humanities, Management or Social Sciences.

All students would be well advised to take all core B-level courses before entering C-level Biology courses in order to avoid timetable conflicts that may cause delays in degree completion.

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**Suggested Course Sequence**

**Year 1:**
- BGYA01H, BGYA02H, CHMA01H, CHMA02H, MATA03H, MATA05H or MATA04H, PHYA10H, 1 FCE of Item 8, or unspecified electives.
- **Year 2:** BGYB10H, BGYB11H, BGYB12H, BGYB30H, BGYB31H, BGYB35H, CHMB41H, CHMB42H, STAT222B or PSYB07H, 0.5 FCE of Item 8 or unspecified electives.

**Year 3:**
- BGYC12H, BGYC13H, BGYC15H, BGYC17H, BGYC23H, plus 1.5 FCE of Item 4 or Item 8, or unspecified electives.

**Year 4:**
- BGYD21H, 0.5 FCE of additional course work from Item 3, plus 3.5 FCE of Item 4 or Item 8, or unspecified electives.

**Work Terms**

The program requires eight four-month terms of study and two four-month work terms. Practical work experience in the fields of Cell Biology, Genetics, Molecular Biology or Biotechnology are alternated with study terms to enhance academic studies and develop professional and personal skills. Students must submit a report in the form of an oral presentation on each work term for evaluation and will also complete a standardized form, assessing the quality of their co-op work term. Students are expected to do at least one of their work placements in the fall or winter term.

To be eligible for their first work term, students must be in good standing in the program and have completed at least 10 FCEs, including BGYA01H, BGYA02H, CHMA01H, CHMA02H, MATA03H, MATA05H or MATA36H, PHYA10H, BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB35H, CHMB41H, CHMB42H, and the non-credit Co-op Work Term Preparation course.

In order to be eligible for their second work term placement, students must have completed at least 12.5 FCEs which must include [BGYC12H & BGYC13H] or [BGYC10H & BGYC14H], and have received a satisfactory evaluation for their performance and for their report on their first work term.

**SPECIALIST PROGRAM IN CONSERVATION BIOLOGY**

**Supervisor:** L. Mannos. Email: lmannos@uetc.utoronto.ca

This program aims to prepare students to become practitioners in conservation biology. This program is built primarily from the Life Sciences (Biology) and Earth & Environmental Science departments, with additional courses from Chemistry, Geography, and Statistics, for a total of 14.5 specified FCEs. Please note 20 FCEs are required to complete an Honours Degree. Below is a list of required and optional courses; following that is a recommended course sequence. Students would be well-advised to follow the recommended course sequence to ensure proper streamlining through the program, and to prevent timetable conflicts that could delay graduation.

**Program Requirements**

Required courses: 14.5 full credit equivalents (FCEs)

1. 4.5 FCEs consisting of the core curriculum components: BGYA01H, BGYA02H, BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB32H, BGYB35H, BGYC30H, BGYC317H, BGYD03H, BGYD06H
2. 3.0 FCEs from Practical Field Conservation or Basic Ecology courses: BGYC32H, BGYC32H, BGYC34H, BGYC36H, BGYC37H, BGYC34H, BGYC37H, BGYD33H, BGYD35H
3. 2.0 FCEs from Impact Assessment/Monitoring/Data Analysis: BGYC53H, EESC03H, EESC13H, EESC01H, EESC09H
4. 0.5 FCE from Social Issues/Sustainability: GGBD20H, DSH20H, POLB90H, SOCC37H
5. 1.0 FCE in Community Studies: AMST01H, AMST01H
6. 1.0 FCE in Environmental Science courses: EASA01H, EESC04H, GGRA01H, GGRA03H
7. 2.0 FCEs in Conservation Biology courses: EASA01H, EESC04H, GGRA01H, GGRA03H
8. 1.0 FCE in STARB2H, STARB2H

Note: Some courses in bins 3-5 above require prerequisites that are not included in the Conservation Biology Program.
**Suggested Course Sequence**

**Year 1 required courses:**
- BGYA01H, BGYA02H, CHMA10H, CHMA11H, EESA00H, GGRA30H, GGRA30H

**Year 2 required courses:**
- BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB30H,
- BGYB31H, BGYB32H, STAR22H, STAR27H

**Year 3 required courses:**
- BGYC30H, BGYC31H, BGYC31H, BGYC31H, EESS04H plus 1.0 FCEs from Items 3, 4, or 5 above

**Year 4 required courses:**
- BGYC60H, BGYD60H plus 2.0 FCEs from Items 3, 4, or 5 above

**SPECIALIST (CO-OPERATIVE) PROGRAM IN CONSERVATION BIOLOGY**

**Supervisor:** L. M. E. Email: manson@stec.utoronto.ca

**Co-op Contact:** N. H. Email: nho@stec.utoronto.ca

This program aims to prepare students to become practitioners in conservation biology. This program is built primarily from the Life Sciences (Biology) and Earth & Environmental Science departments, with additional courses from Chemistry, Geography, and Statistics, for a total of 1.45 specified FCEs. Please note 20 FCEs are required to complete an Honours Degree. Below is a list of required and optional courses, following that is a recommended course sequence. Students will be well-advised to follow the recommended course sequence to ensure proper streaming through the program. Students will also complete two work terms prior to graduation. For information on admissions, fees, work terms and standing in the Program, please see the Co-operative Programs section of this Calendar.

**Program Admission**

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.stec.utoronto.ca/registrar. The minimum qualifications for entry are 4.0 credits including BGYA01H, BGYA02H, CHMA10H, CHMA11H, EESA00H, GGRA30H, GGRA30H plus a cumulative GPA of at least 2.75.

**Program Requirements**

**Required courses:** (1.45 FCEs)

1. **4.5 FCEs consisting of the core curriculum components:**
   - BGYA01H, BGYA02H, BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB32H
2. **3.0 FCEs in essential concepts courses:**
   - BGYC30H, BGYC31H, BGYC30H, BGYC31H, BGYC31H, BGYC30H
3. **2.0 FCEs from Practical Field Conservation or Basic Ecology courses:**
   - BGYC30H, BGYC31H, BGYC31H, BGYC31H, BGYC30H, BGYC31H
4. **2.0 FCE from Impact Assessment/Monitoring/Data Analysis:**
   - BGYC60H, EESS04H, EESS04H, EESS04H
5. **0.5 FCE from Social Issues/Sustainability:**
   - GGRA30H, GGRA30H, GGRA30H, GGRA30H
6. **1.0 FCE in CHMA10H, CHMA11H**
7. **2.0 FCEs in Environmental Science courses:**
   - EESA00H, EESS04H, GGRA30H, GGRA30H
8. **1.0 FCE in STAR22H and STAR27H**

Note: Some courses in this 3.5 above require prerequisites that are not included in the Conservation Biology Program.

**Suggested Course Sequence**

**Year 1 required courses:**
- BGYA01H, BGYA02H, CHMA10H, CHMA11H, EESA00H, GGRA30H, GGRA30H

**Year 2 required courses:**
- BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB30H,
- BGYB31H, BGYB32H, STAR22H, STAR27H

**Year 3 required courses:**
- BGYC30H, BGYC31H, BGYC31H, BGYC31H, EESS04H plus 1.0 FCEs from Items 3, 4, or 5 above

**Year 4 required courses:**
- BGYC60H, BGYD60H plus 2.0 FCEs from Items 3, 4, or 5 above

**Work terms**

Students will complete two, paid work terms, coordinated through the U of T Scarborough Arts & Science Co-op office. These work terms will provide personal and professional experience and have the potential to lead to post-university employment. At the end of each work term, students will fill out a standardized form rating their work experience, and will submit a report in the form of an oral presentation for evaluation. Students will be eligible for their first work term if they are in good standing, within the Co-op Program and have completed 8.5 FCEs (all of the A and B level required courses) as well as the Arts & Science Co-op Work Term Preparation course. To be eligible for their second work term, they must remain in good standing, within the Co-op Program and have completed at least 12 FCEs (including all of the required C-level courses), and have received a satisfactory evaluation for their performance from their first work term employer, and for their oral report on the first work term experience.

**SPECIALIST PROGRAM IN HUMAN BIOLOGY**

**Supervisor:** S. Reid Email: sreid@stec.utoronto.ca

**Program Requirements**

This Program consists of 15.0 required FCEs. Please note 20 FCEs are required to complete an Honours Degree. Students must take CHMA10H and CHMA11H during the first year. The specific Program requirements are:

1. **4.5 FCEs consisting of the core curriculum components in biology:**
   - BGYA01H, BGYA02H, BGYB10H, BGYB11H, BGYB30H, BGYB31H, BGYB32H
2. **3.5 FCEs in essential knowledge courses:**
   - BGYC30H, BGYC31H, BGYC32H, BGYC33H, BGYD33H
3. **1.0 FCE in PSY301H and PSY302H**
4. **0.5 FCE in NROB40H**
5. **2.0 FCE in CHMA10H, CHMA11H, CHMB41H and CHMB42H**
6. **1.0 FCE in PHYA101H and [PHYA21H or PHYA22H]**
7. **1.0 FCE in MATA301H & MATA302H or MATA303H**
8. **1.0 FCE from the additional list of Psychology and Neuroscience credits:**
9. **0.5 FCE in Health Studies:**
   - HLTA101H, BGYC30H, BGYD30H, ANTS60H, ANTS60H, ANTS60H
10. **1.0 FCE in STAR22H and STAR27H**

Note: It is recommended that students take a statistics course such as STAR22H.

All students will be well advised to take all core B-level courses before entering C-level Biology courses in order to avoid timetable conflicts that may cause delays in degree completion.

**Suggested Course Sequence**

**Year 1:**
- (5 FCEs of required courses) BGYA01H, BGYA02H, CHMA10H, CHMA11H, MATA308H, MATA351H or MATA352H, PHYA101H, PHYA21H, PSYB10H

**Year 2:**
- (5 FCEs of required courses) CHMB41H, CHMB42H, BGYB11H, BGYB31H, BGYB30H, BGYB32H, BGYB11H, BGYB31H

**Year 3 & 4:**
- BGYC32H or BGYC33H, BGYC35H, BGYC37H, BGYC31H, BGYC33H, BGYD33H, NROB60H and Items 8 and 9
SPECIALIST PROGRAM IN INTEGRATIVE BIOLOGY
Supervisor: K. Persaud Email: kpersaud@uottawa.ca

Program Requirements
This Program consists of 13.5 required FCEs (full credit equivalents). Please note 20 FCEs are required to complete an Honours Degree. Students must successfully complete CHMA101H and CHMA111H prior to enrolment in this program. The specific Program requirements are:
1. 4.0 FCEs consisting of the core curriculum components: BGYA01H, BGYA02H, BGYB01H, BGYB11H, BGYB30H, BGYB31H, BGYB51H, BGYB53H.
2. 0.5 FCE from among the four core labs: BGYB12H, BGYB22H, BGYB33H or BGYB52H.
3. 0.5 FCE from the offerings in Structure and Diversity: BGYC17H, BGYC18H, BGYC21H, BGYC22H, BGYC29H, BGYC30H, BGYC34H, BGYC57H, BGYC65H, BGYD33H, BGYD52H, ESGC04H or ESGC05H.
4. 0.5 FCE from the offerings in Plant Biology: (BGYC29H, (BGYC30H, BGYC31H, (BGYC32H, BGYC40H, ESGC04H, (BGYC52H, BGYC53H or BGYD27H.
5. 4.0 FCEs in additional Biology courses.
6. 1.0 FCE in CHMA101H and CHMA111H.
7. 0.5 FCE in Physics: PHYA10H.
8. 1.5 FCE in MATA30H & (MATAS3H or MATAS4H) & (STAB22H or PSIYB07H).
9. 1.0 FCE from the courses listed by the Departments of Humanities, Management or Social Sciences.

All students would be well advised to take all core B-level courses before entering C-level Biology courses in order to avoid timetable conflicts that may cause delays in degree completion.

Suggested Course Sequence
Year 1:
BGYA01H and BGYA02H, CHMA101H and CHMA111H, MATA30H and MATAS3H, PHYA10H.

Year 2:
BGYB10H and BGYB11H, BGYB30H and BGYB31H, BGYB50H and BGYB51H, BGYB12H or BGYB22H, BGYB33H or BGYB52H, and STAB22H or PSIYB07H.

Year 3 & 4:
0.5 FCE of the courses designated as structure/diversity offerings and 0.5 FCE of the courses designated as plant biology offerings and 4.5 FCE of other BGY courses and 1.0 FCE of courses listed by the Departments of Humanities, Management or Social Sciences. (Note: It is likely that this last requirement could be just as easily fulfilled in any year of your program).

MAJOR PROGRAM IN INTEGRATIVE BIOLOGY
Supervisor: K. Persaud Email: kpersaud@uottawa.ca

Program Requirements
This Program consists of 8 required FCEs (full credit equivalents). Please note 20 FCEs are required to complete an Honours Degree. Students must successfully complete CHMA101H and CHMA111H prior to enrolment in this program.

1. 4.0 FCEs consisting of the core curriculum components: BGYA01H, BGYA02H, BGYB01H, BGYB11H, BGYB30H, BGYB31H, BGYB50H, BGYB51H, BGYB53H.
2. 0.5 FCE from among the four core labs: BGYB12H, BGYB22H, BGYB33H or BGYB52H.
3. 0.5 FCE from the offerings in Structure and Diversity: BGYC17H, BGYC18H, BGYC21H, BGYC22H, BGYC29H, BGYC30H, BGYC34H, BGYC57H, BGYC65H, BGYD33H, BGYD52H, ESGC04H or ESGC05H.
4. 4.5 FCEs in Biology.
5. 1.0 FCE in CHMA101H and CHMA111H.
6. 0.5 FCE from MATA30H or STAB22H.

All students would be well advised to take all core B-level courses before entering C-level Biology courses in order to avoid timetable conflicts that may cause delays in degree completion.

Suggested Course Sequence
Year 1:
BGYA01H and BGYA02H, CHMA101H and CHMA111H, MATA30H or STAB22H.
Year 2:
BGYB10H and BGYB11H, BGYB30H and BGYB31H, BGYB50H and BGYB51H, BGYB12H or BGYB22H, BGYB33H or BGYB52H, and STAB22H or PSIYB07H.
Year 3 & 4:
0.5 FCE of the courses designated as structure/diversity offerings and 1.5 FCE of other BGY courses.

MINOR PROGRAM IN BIOLOGY
Supervisor: K. Persaud Email: kpersaud@uottawa.ca

Program Requirements
This Program must include BGYA01H & BGYA02H plus three full-credit equivalents in Biology. At least 1 FCE must be at the C- or D-level.

SPECIALIST (JOINT) PROGRAM IN INDUSTRIAL MICROBIOLOGY
(See the Industrial Microbiology section of this Calendar.)

SPECIALIST (JOINT) PROGRAM IN PARAMEDICINE
(See the Paramedicine section of this Calendar.)

Other Programs with Biology content
Courses in Biology can also be used to fulfill some requirements in the following programs:
Biochemistry, Biological Chemistry, Environmental Science, Health Studies, Natural Sciences and Neuroscience. Please see the detailed program descriptions in this calendar.

BGYA10H3 Introductory Biology: Part I
A lecture and laboratory course providing an overview of biological processes at the cellular level. Topics include cell structure, DNA replication, transcription, translation, cell division and inheritance, bioenergetics and enzymes, metabolism and transport processes, and aspects of plant cell structure and function; the diversity of life is emphasized throughout.
Exclusion: (BGYA10V)

BGYA20H3 Introductory Biology: Part II
A lecture and laboratory course providing an overview of animal physiology, ecology and evolution; physiological adaptations to environmental problems; interaction of organisms with each other and the environment in an evolutionary context; adaptation and speciation.
Exclusion: (BGYA10V), BIO150V
Prerequisite: BGYA01H or the non-credit tutorial on laboratory safety, methodology and instrumentation.

BGYB10H3 Cell Biology
This course is designed to introduce theory and modern experimental techniques in cell biology. Emphasis will be on eukaryotic cells. Structure and function of major animal and plant organelles will be covered. Subsequent topics include the role of the cytoskeleton. Plasma membrane and extra-cellular matrix will also be detailed in the context of cellular interactions with the environment. Exclusion: BGYB10V, BIO250V
Prerequisite: BGYA01H & BGYA02H or (BGYA10V) & (CHMA101H & CHMA111H) or (CHMA10V) or (CHMA12V)

BGYB10Y3 Cell Biology and Molecular Aspects of Genetic Processes
A course designed to introduce theory and modern experimental techniques in cell and molecular genetics. Emphasis will be on eukaryotic cells. First half topics include: Structure and function of major animal and plant organelles, the role of the cytoskeleton, the role of the plasma membrane and extra-cellular matrix in the context of cellular interactions with the environment. In the second half of the course topics will include structure and
function of the nucleus, DNA replication and cell cycle control, transcription and translation, gene regulation, signal transduction and basic aspects of immunology. Please note this course contains the content of both BGYB101H and BGYB111H.
Exclusion: BGYB101H, BGYB111H, BID250Y
Prerequisite: [BGYA01H & BGYA02H] or (BGYA01H & CHMA110H) or (CHMA10Y) or (CHMA20Y)

BGYB111H Molecular Aspects of Cellular and Genetic Processes
A course focusing on the central dogma of genetics and how molecular techniques are used to investigate cellular processes. Topics include structure and function of the nucleus, DNA replication and cell cycle control, transcription and translation, gene regulation, signal transduction and basic aspects of immunology.
Exclusion: BGYB109Y, BID250Y
Prerequisite: BGYB101H

BGYB121H Cell and Molecular Biology Laboratory
A practical introduction to experimentation in cell and molecular biology. Six modules will introduce students to concepts and techniques in the general preparation of solutions and buffers, microbiology, molecular biology, biochemistry, microscopy and data manipulation and communication skills.
This core laboratory course is the gateway for Cell & Molecular Biology specializations at upper level laboratory offerings.
Limited enrollment: This course is restricted to students enrolled in the Specialist Program in Cell and Molecular Biology (C-M or non-C-M), Specialist Program in Biological Chemistry or the Major Program in Biochemistry.
Additional students will be admitted only if space permits.
Prerequisite: [CHMA100H & CHMA111H] or (CHMA10Y)
Corequisite: BGYB101H or BGYB110Y

BGYB201H3 Mammalian Physiology I
A core animal physiology course covering the regulatory mechanisms which control and co-ordinate the functioning of the body such as nerve action potentials, synaptic transmission, muscle contraction, neuromuscular systems, sensory receptors, and hormonal action.
Exclusion: (BGYA10Y, NRDB30H) Prerequisite: [BGYA01H & BGYA02H] or (BGYA01H)

BGYB311H Plant Physiology
An introduction to plant biology. Topics include plant and cell structure, water balance, nutrition, transport processes at the cell and whole plant level, physiological and biochemical aspects of photosynthesis, and growth and development in response to hormones and environmental cues.
Exclusion: (BGYA10Y) (BGTA21Y +) Prerequisite: [BGYA01H & BGYA02H] or (BGYA01H)

BGYB321Y Animal Physiology Laboratory
A laboratory course examining the mechanisms that control the co-ordinate functioning of the body. Laboratory exercises examine aspects of action potential, synaptic transmission, contraction of striated muscle, heart rhythm, mechanisms of reception, digestion, excretion, and the effect of exercise on metabolism. Abstracts, lab reports, tests and a final examination are required.
Exclusion: ZOO252Y
Corequisite: BGYB301H or (BGYA310Y) or (NRDB30H)

BGYB331H Human Development and Anatomy
A lecture and laboratory course which deals with the functional morphology of the human organism. The subject matter extends from early embryo-genesis through puberty to late adult life.
Priority will be given to students in the Human Biology and Paramedicine program. Additional students will be admitted as space permits.
Exclusion: ANA306Y, ANA309H Prerequisite: [BGYA01H & BGYA02H] or (BGYA01H)

BGYB501H3 Ecology
An introduction to the main principles of ecology, the science of the interactions of organisms with each other and with their environment. The course covers community and population ecology, and provides an emphasis on how ecology relates to other areas of biology, and to contemporary human and environmental issues.
Exclusion: (BGYA01H, (BGYA01Y)
Prerequisite: [BGYA01H & BGYA02H] or (BGYA01H)

BGYB511H Evolutionary Biology
Students learn about development of evolutionary theory, maintenance of genetic variation, origin of species, adaptation, and current research topics in evolution.
Exclusion: (BGYA01H, (BGYA01Y)
Prerequisite: [BGYA01H & BGYA02H] or (BGYA01Y)

BGYB521H Ecology and Evolutionary Biology Laboratory
The emphasis will be on hands-on experimentation, interpretation, and statistical analysis.
Laboratories will cover ecology (e.g., paleoecology, population analysis and dynamics, mininutia, acidification, simulation modelling, eutrophication), and evolution (e.g., genetic drift, phylo-genetic analysis, plasticity). This course will utilize computer resources at UTSC. One Saturday field trip is mandatory.
Exclusion: BIO50Y
Corequisite: [BGYA01H & BGYA02H] or (BGYA01H)

BGYB121H3 Biochemistry I: Proteins & Enzymes
A lecture course describing factors involved in determining protein structure and the relationships between proteins structure and function.
Topics will include: amino acids, the primary, secondary, tertiary and quaternary structures of proteins; protein motifs and protein domains, glycoproteins; classical enzyme kinetics and allosteric enzymes; mechanisms of enzyme action.
Exclusion: BCD201Y, BCD202Y, BCD310Y, BCD321Y
Prerequisite: [BGYB101H & BGYB111H] or BGYB10Y & [CHMB41H & CHMB42H] or (CHMB41Y)

BGYB131H3 Biochemistry II: Bio-energetics and Metabolism
A lecture course that introduces cellular metabolism, the process by which living organisms extract and utilize energy from their environment.
Topics include: biochemical, oxidative phosphorylation; aspects of carbohydrate, lipid and amino acid metabolism, regulation of metabolism, and the integration of metabolic pathways.
Exclusion: BCD211H, BCD252Y, BCD310H, (BCD321Y)
Prerequisite: [BGYB101H & BGYB111H] or BGYB10Y & [CHMB41H & CHMB42H] or (CHMB41Y)

BGYB131H3 Genetics
Topics for this lecture and laboratory course include: a brief review of transcription, translation, and molecular techniques; inheritance and its chromosomal basis; gene interactions; quantitative genetics; sources and types of mutations and the relationship of mutation to genetic disease and evolution; and genomes.
Exclusion: BID260Y
Prerequisite: [BGYB101H & BGYB111H] or BGYB10Y & [MAT30H or MAT30H or MAT31H or STAB21H]

BGYB171H3 Microbiology: The Bacterial Cell
This course describes bacterial cells and viruses and their roles in infectious disease, in the environment and as parasites for cell and molecular biology. The laboratories illustrate principles and provide training in basic microbial techniques essential to microbiology and to any field where recombinant DNA technology is used.
Exclusion: MGY377H, MBG377H
Prerequisite: [BGYB101H & BGYB111H] or BGYB10Y or [BGYB101H & BGYB111H] or (BGYB10Y) plus one of the following: BGYB121H or BGYB122H or BGYB201H or BGYB202H.
BGVC1983 Animal Developmental Biology

Following a discussion of cellular and molecular events in early embryonic life, the development of several model systems will be analyzed such as Drosophila, Xenopus, and mammalian development. The development of the vertebrate body is an example of this. Particular reference will be given to the concept that regulation of gene expression is fundamental to development. Prerequisite: [BGYB108H & BGYB11H] or BGYB10Y.

BGVC2293 Vertebrate Histology: Cells and Tissue

A study of the structure of cells and the various tissue types which make up the vertebrate body: epithelial, connective, muscular, nervous, blood, and lymphatic. Emphasis is placed on the development and function of the cells and tissues. Exclusion: ANA300Y Prerequisite: [BGYB108H & BGYB11H] or BGYB10Y or [BGYB508H & BGYB31H] or (BGYB30V).

BGVC2293 Vertebrate Histology: Organs

The histological structure of the major organ systems of the vertebrate body: sense, integument, digestive, respiratory, excretory, reproductive. Particular emphasis is placed on functional morphology, evolution, and development. Exclusion: ANA300Y Prerequisite: BGVC21H.

BGVC2393 Practical Approaches to Biochemistry

A lecture and laboratory course that introduces students to experimental approaches used in biochemical research. Topics include practical and theoretical aspects of: spectro-photometry, chromatography, electrophoresis, radioisotopes; enzyme assay and protein purification. Students will be expected to solve numerical problems involving these and related procedures. Exclusion: BCHO30H, BCHO31H Prerequisite: BGYB21H & BGYC12H Corequisite: BGVC13H.

BGVC3393 Molecular Aspects of Plant Development

A course focused on molecular plant development covering a range of subjects including but not limited to: Embryogenesis, cell development and germination. Plant hormone: hormone perception, signal transduction pathways and mutant analysis. Molecular control of vegetative development: meristem identity, function and regulation. Flowering time: the floral model and homeotic mutations. Exclusion: BGVC340H Prerequisite: BGYB10H & BGYB11H & BGYB11H.

BGVC3393 Mammalian Physiology I: Lecture and Laboratory

A course dealing with the physiology of the human respiratory, cardiovascular, renal, and digestive systems. Limited enrollment: Priority will be given to students enrolled in the Human Biology and Pharmacology Programs. Additional students will be admitted only if space permits. Exclusion: BGYC13H, PSL20V, PSL30H, PSL30Y Prerequisite: [BGYB508H or BGYB509H] & BGYB33H.

BGVC3393 Mammalian Physiology II: Lab

The lecture component of BGVC33H is identical to that described above for BGVC33H. Students will complete a series of computer-simulated laboratory exercises (on their own time) instead of practical lab sessions. Exclusion: BGYB10H, PSL20Y, PSL30H, PSL30Y Prerequisite: [BGYB50H or BGYB50Y] & BGYB33H.

BGVC3393 Ecology Field Course

Coverage of basic principles and selected techniques of animal and plant ecology. Students will study a variety of techniques related to population ecology, community ecology, behavioural ecology, and physiological ecology. Both aquatic and terrestrial environments will be the "field" laboratories. Occasional weekend field trips are mandatory (e.g., Siskin Hill). Offered in alternate years. Limited enrollment: 15 Exclusion: BCHO30H Prerequisite: [BGYB508H & BGYB51H] or (BGYB50Y).

BGVC3593 Marine Biology

A field course on selected topics of marine biology with particular emphasis on tropical waters. This course will be held during mid-February at a field station in the Caribbean and will have a considerable practical component. Prior to fieldwork, there will be a series of lectures at UTSC. On site, students will study three main habitat types: rocky shore, open ocean, and coral reef. In addition, students will work on individual field projects. Limited enrollment: 15 Exclusion: BGYB10H Prerequisite: [BGYB509H or BGYB51H] or (BGYB30Y) or EESC34H or permission of instructor.

BGVC3593 Animal Behaviour

Survey of the study of animal behaviour, emphasising on understanding, behavioral patterns in the context of evolutionary theory. Topics include sexual selection, parental care, social behaviour, conflict and hypothesis testing in behavioural research. Exclusion: ZOOG22H Prerequisite: [BGYB508H or BGYB51H] or (BGYB50Y).

BGVC3593 Evolutionary and Applied Biology of Insects

An exploration of the origins of insects, their modern diversity, and their impact on mankind. This will be followed by an examination of the evolutionary history of the group, which extends back over 400 million years, together with its diversity and morphology. Exclusion: ZOOG22H Prerequisite: [BGYB508H or BGYB51H] or (BGYB50Y).

BGVC3593 Consequences of Global Change

A lecture and tutorial course that addresses one of the most important events in the history of our planet - focusing on organizational, population, and ecosystem responses to predicted, rapid, global temperature increases. Ecological changes induced by human activities will be examined in the light of shifts in global and regional climates, and perturbations to the hydrological, carbon, and nitrogen cycles. Exclusion: BIOA24H, GGRI34H Prerequisite: [BGYB50H or BGYB51H].

BGVC3593 Advanced Population Ecology

The study of the interactions that determine the distribution and abundance of populations. Emphasis is placed on discussion of experimental studies from current literature. Topics include limitation of population growth, demography, reproduction, population regulation, coexistence and competition, and responses to disturbance and stress. Offered in alternate years. Exclusion: BIO31H Prerequisite: [BGYB50H & BGYB51H] or (BGYB50Y) & BGYS32H.

BGVC3593 Restoration Ecology

A lecture and tutorial course that introduces students to the principles and practice of restoring disturbed or damaged ecosystems. Knowledge from stress physiology and community ecology, and reviews of case studies in restoration ecology are combined to examine how compromised ecosystems can be restored. Students will have the opportunity to work in teams to design and present projects on the restoration of a variety of terrestrial and aquatic systems. Prerequisite: [BGYB508H & BGYB51H].
BOGY659H3 Community Ecology and Environmental Biology
An examination of the theory and methodology of community analysis, with an emphasis on the factors regulating the development of ecosystems. The application of ecological theory to environmental problems is emphasized.
Topics include: succession, primary productivity, nutrient supply, predation, competition, trophic dynamics, stability and disturbance, and effects of global change.
Exclusion: BOZ21H1
Prerequisite: [BGYSB59H1 & BGYSB51H1] or [BGYSB50Y]

BOGY629H3 Role of Zoos in Conservation
A lecture course that examines the changing role of zoos through time, but emphasizing contemporary topics such as captive breeding and re-introduction of species vs. new technologies to assist reproduction in wild populations; the importance of nutrition and behavioral enrichment in captive animals; zoos and public involvement/education; endangered species in Canada; and habitat restoration.
Priority will be given to students in the Specialist Program in Conservation Biology and Conservation Biology Co-op Programs.
Limited enrolment: 50
Prerequisite: [BGYSB59H1 & BGYSB51H1]

BGYS636H3 Conservation Biology
A lecture and tutorial course on the scientific principles of biological conservation. Topics will include biodiversity, habitat loss and fragmentation, extinction rates, conservation planning, invasive species, and ecosystem services of diversity.
Students will use one summer.
Exclusion: BG635H1
Prerequisite: [BGYSB59H1 & BGYSB51H1] or [BGYSB50Y]

BGYS660H3 Environmental Toxicology
An introduction to the scientific study of the effects of toxic chemicals on biological organisms. Standard methods of assessing toxicant effects on individuals, populations, and communities are discussed. Special emphasis is placed on the chemistry of major toxicant classes, and on how toxicants are processed by the human body.
Prerequisite: [BGYSB59H1 & BGYSB51H1] or [BGYSB50Y] or [CHIM10H1 & CHIM11H1] or [CHIM11Y]

BGYC679H3 Advanced Field Course in Ecology
Late-summer selections from a variety of field courses offered by the Ontario Universities Program in Field Biology, a co-operative arrangement among universities in Ontario. Courses, of one or two weeks' duration at a wide variety of field sites usually from late April through mid-September. A fee for room and board is charged over and above tuition. Courses of available are posted early in January. Sign-up is on a first-come, first-served basis. Students register in the fall after the course has been completed.
See the U of T Scarborough co-ordinator, Professor D.D. Williams for further details.
Prerequisite: [BGYSB59H1 & BGYSB51H1] or [BGYSB50Y] & permission of the instructor.

BGYD01Y3 Directed Research in Biology
A course designed to permit laboratory or field research or intensive examination of a selected topic in biology. Supervision of the work is arranged by mutual agreement between student and instructor.
Students must obtain a permission form from the Life Sciences Office (SS217) that is to be completed and signed by the intended supervisor, and returned to the Life Sciences Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course.
Exclusion: BOT4640Y, ZOO490Y
Prerequisite: Satisfactory completion of 15.5 full credit equivalents, of which at least four must be Biology B- or C-level courses and permission of the instructor.

BGYD02Y3 Directed Research in Biology
Preparation to BGYD01Y but intended as a second research experience. In order to be eligible for BGYD02Y, the same instructor, the student, and the instructor will have to provide a plan of study that goes beyond the work of BGYD01Y.
Exclusion: BOT4640Y, ZOO490Y
Prerequisite: Satisfactory completion of 15.5 full credit equivalents, of which at least four must be Biology B- or C-level courses and permission of the instructor.

BGYD03H3 Supervised Study in Biology
This course is designed to permit intensive examination of the primary literature of a select topic. It is not intended as a substitute for required C/D level coursework. Frequent consultation with the supervisor is necessary and extensive library research is required. The project will culminate in a written report.
Students must obtain a permission form from the Life Sciences Office (SS217) that is to be completed and signed by the intended supervisor, and returned to the Life Sciences Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course.
Prerequisite: Satisfactory completion of 15.5 full credit equivalents, of which at least four must be Biology B- or C-level courses. Students must have permission of the instructor. In order to be eligible for BGYD03H, the same instructor as for BGYD01Y or BGYD02Y, the student and instructor must provide a plan that goes beyond the work of these courses.

BGYD21H3 Molecular Biology Laboratory I: Host, Vectors and Cloning
Applications of molecular technology continue to revolutionize our understanding of all areas of life sciences from biotechnology to human disease. This intensive laboratory, lecture/tutorial course provides students with essential information and practical experience in recombinant DNA technology, molecular biology and bio-informatics.
Limited enrolment: 24
*Priority will be given to students enrolled in the Specialist Programs in Cell and Molecular Biology (Co-op and non-Co-op). Additional students will be admitted only if space permits.
Prerequisite: [BGYSB12H & BGYSB15H] or [BGYCB17H or IMCB01H & IMCB02H (9 Industrial Microbiology students only)]
Corequisite: [BGCY12H] (Note: Although listed as a corequisite, it is recommended that BGCY12H be taken in advance of BGYD21H)

BGYD22H3 Molecular Biology Laboratory II: Nucleic Acids & Proteins
A laboratory course offering 'hands on' experience in a range of molecular techniques.
The course will be organized around a central theme, namely the expression of heat shock (stress) genes that encode proteins important in cellular repair and protective mechanisms.
Limited enrolment: 24
*Priority will be given to students enrolled in the Specialist Program in Cell and Molecular Biology (Co-op and non-Co-op). Additional students will be admitted only if space permits.
Corequisite: BGYD21H

BGYD23H3 Special Topics in Cell Biology and Molecular Genetics
A lecture/seminar/discussion class on contemporary topics in Cell Biology and Molecular Genetics.
Students will explore the primary literature becoming familiar with experimental design and methodologies used to decipher cellular biological phenomena. Student seminars will follow a series of lectures and guest speakers.
Limited enrolment: 24
Priority will be given to students enrolled in the Specialist Programs in Cell and Molecular Biology (Co-op and non-Co-op). Additional students will be admitted only if space permits.
Prerequisite: [BGCY12H or [IMCB01H plus IMCB02H for Industrial Microbiology students only]]

BGYD23H3 Genomics
A course considering the principles of genome organization and the utilization of genome approaches to studying a wide range of problems in biology. Topics to be presented will include innovations in instrumentation and automation, functional genomics, transcription profiling (microarrays), database mining and extensions to human and animal health and biotechnology.
Limited enrolment: 60
Prerequisite: [BGCY12H]
Corequisite: [BGCY13H]. Note: Although listed as a corequisite, it is recommended that BGYC12H be taken in advance of BGYD23H.
BGYD27H3 Molecular Endocrinology
A lecture-discussion class on contemporary topics in endocrinology. The course provides a basic knowledge of endocrine systems encompassing hormone biosynthesis, metabolism, and physiological actions. Signal transduction from growth factors and their receptors will be emphasized. Specific topics and advances in hormone and growth factor research will be examined. Limited enrolment: 30
Prerequisite: BGYC12H & [BGYC33H or BGYC34H]

BGYD33H3 Comparative Environmental Physiology
This course will focus on the comparative aspects of animal physiology and address how various physiological systems are specialized to meet many of the environmental challenges encountered by terrestrial and aquatic environments.
Prerequisite: BGYC33H or BGYC34H

BGYD37H3 Biology of Plant Stress
This course examines resistance mechanisms (anatomical, cellular, biochemical, molecular) allowing plants to avoid or tolerate diverse abiotic and biotic stresses. Topics include: pathogen defence; responses to temperature, light, water and nutrient availability, salinity, and oxygen deficit; stress perception and signal transduction; methods to study stress responses; and strategies to improve stress resistance.
Limited enrolment: 35
Prerequisite: [BGYB10H & BGYB11H] or BGYB10Y & [BGYB11H or BGYB10Y]

BGYD45H3 Animal Communication
Behavioral ecology of signal evolution; decision-making and signal design; the physics and physiology of transmitting signals.
Prerequisite: [BGYD30H or BGYD30Y] or [N5R03BB0H] & [BGYB30H & BGYB31H] or [BGYB30Y] & BGYC34H
Corequisite: MATA35H or MATA36H or MATA37H

BGYD51H3 River Ecology
The course will begin with an introduction to stream hydromorphology and sediments, and the adaptations of plants and animals to life in a dynamic habitat. Later topics will cover micro- and macro-distribution of stream fauna and the problems of quantitatively sampling them; biotic interactions; community structure and stability; colonization patterns following disturbance; energy transformations; estimates of production; and man's effects on rivers. There is a considerable field and laboratory component which assesses the impact of human activity on three local rivers.
Limited enrolment: 20
Exclusion: BIBD40Y
Prerequisite: [BGYB31H or BGYB31Y] or [BGYB50Y]

BGYD52H3 Senior Seminar in Conservation Biology
A senior-level seminar course to further students' exposure to conservation biology in scientific literature. Students will read assigned papers from the conservation literature, then present them to the class and participate in discussions.
Limited enrolment: 40
Prerequisite: BGYC63H & GGRA42H

BGYD65H3 Landscape Ecology
The study of large-scale ecological patterns and processes, emphasis on when and how to integrate large-scale perspective into ecological questions. Topics include: species-area relationships, island biogeography, metapopulation theory, individual-based models, cellular automata, models of biodiversity with applications to species viability, ecosystem management, design of nature reserves. Project and paper required.
Priority will be given to students enrolled in the Specialist Program in Conservation Biology.
Prerequisite: BGYB50H & BGYB51H & STAR22H & STAR27H
Corequisite: MATA35H or MATA36H or MATA37H

SCIB13H3 Science Engagement Outreach
SCIB23H3 Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)
Guidelines for course selection

While courses in Physics do not appear among the prerequisites or co-requisites of most courses in Chemistry, students are urged to take PHYA10H & [PHYA21H or PHYA22H] early in their programs. Thus, the suggested first-year Program in Chemistry includes CHMA11H, CHMA11H MAT43H6, [MATA36H1 or MATA37H3], PHYA10H & [PHYA21H or PHYA22H]. Students interested in Biological Chemistry or Biochemistry should also include BGYA01H & BGYA02H.

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

The Specialist Programs in Chemistry, Biological Chemistry and the Major Programs in Biochemistry and Chemistry are eligible for inclusion in the Co-operative Program in Physical Sciences and in the Concurrent Teacher Education Program (CTEP). Please refer to the Physical Sciences section, the Co-operative Programs section and the Concurrent Teacher Education section of this Calendar for further information.

Science Engagement Courses

For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN BIOLOGICAL CHEMISTRY

Supervisor: W. Restivo (416-287-7220) Email: restivo@utsc.utoronto.ca

This program is intended for students who want to specialize in Chemistry, but who are also interested in the chemistry of living systems.

Program Requirements

The program requires the completion of the following 15.0 FCEs (full credits equivalents):

First Year:
- BGYA01H Introductory Biology: Part I
- BGYA02H Introductory Biology: Part II
- CHMA10H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms
- MATA36H1 Calculus I [MATA36H1 Calculus II for Biological Sciences is an alternative]
- MATA36H2 Calculus II for Physical Sciences or MATA37H1 Calculus II for Mathematical Sciences]
- PHYA10H Introduction to Physics I [PHYA21H Introduction to Physics IIA or PHYA22H Introduction to Physics IIB]

Note: MATH41H is a prerequisite for CHM211H and MATA36H1/MATA37H1 is a prerequisite for MATH11H. MATH25H1/MATA23H1 is strongly recommended over MATA25H in order that future course selection is not compromised.

Second Year:
- BGYB10H Cell Biology
- BGYB11H Molecular Aspects of Cellular and Genetic Processes
- BGYB12H Laboratory for Cell and Molecular Biology
- CHMB33H1 Introduction to Inorganic Chemistry
- CHMB41H Organic Chemistry I
- CHMB42H Organic Chemistry II

Second or Third Year:
- CHM316H Techniques in Analytical Chemistry
- CHM330H Chemical Thermodynamics and Elementary Kinetics
- CHM321H Chemical Structure and Spectroscopy

Third Year:
- BGYC12H Biochemistry I: Proteins and Enzymes
- BGYC13H Biochemistry II: Bioenergetics and Metabolism
- BGYC22H Practical Approaches to Biochemistry
- CHM47H Bio-Organoic Chemistry

Third or Fourth Year:
- CHM311H Principles of Analytical Instrumentation
- CHM321Y Intermediate Inorganic Chemistry
- CHM41H Organic Reaction Mechanisms or CHM42H Organic Synthesis

Fourth Year:
- PSCD02H Current Questions in Mathematics and Science
- At least 0.5 FCE from the following:
  - BGYD01Y Directed Research in Biology
  - BGYD02Y Directed Research in Biology
  - BGYD03H Supervised Study in Biology
  - CHM99Y Directed Research
  - CHM99H Directed Research
  - PSCD10H Physical Sciences Project

And, in appropriate years 1.0 FCE (1.5 FCE if BGYD03H, CHM99H or PSCD10H is taken) from the following list:
- MATH41H Techniques of Calculus of Several Variables I
- CHMB55H Environmental Chemistry
- PSCB57H Introduction to Scientific Computing
  - Or any other C- and D- level Chemistry or PSC courses, and C- or D- level BGY courses for which [BGYB10H & BGYB11H] is a prerequisite.

SPECIALIST PROGRAM IN CHEMISTRY

Supervisor: A. Simpson (416-287-7547) Email: asimpson@utsc.utoronto.ca

This Program is meant for students who are interested in obtaining a strong background in all aspects of modern chemistry.

Program Requirements

The Program requires completion of 14.0 FCEs (full credit equivalents) as follows:

First Year:
- CHMA11H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms
- MATA36H1 Calculus I [MATA36H2 Calculus II for Physical Sciences or MATA37H1 Calculus II for Mathematical Sciences]
- PHYA10H Introduction to Physics I [PHYA21H Introduction to Physics IIA or PHYA22H Introduction to Physics IIB]

and
MAJOR PROGRAM IN CHEMISTRY

Supervisor: L. Too (416-287-7220) Email: too@utsc.utoronto.ca

This Program offers the possibility of obtaining an introduction to all of the sub-disciplines of Chemistry.

Program Requirements

Students should complete the following 7.5 FCEs (full credit equivalents).

First Year:

CHMA10H1 Introductory Chemistry I: Structure and Bonding
CHMA11H1 Introductory Chemistry II: Reactions and Mechanisms

or

MATA3XH1 Calculus I

[PHYA10H1 Calculus II for Biological Sciences]

or

MATA36H1 Calculus II for Physical Sciences

or

MATA35H1 Calculus II for Mathematical Sciences]

PHYA10H1 Introduction to Physics I

[PHYA21H1 Introduction to Physics IA]

or

PHYA22H1 Introduction to Physics IB]

Note: PHY110Y is not an acceptable substitute for [PHYA10H1 & PHYA21H1/PHYA22H1]

Second and Later Years:

4.5 FCE in Chemistry, including at least one C-level half credit course with a laboratory.**

** Students should note that if they are going to select CHMB20H1/CHMB21H1, then MATA39H1, MATA36H1/MATA37H1, PHYA10H1 & PHYA21H1 are prerequisites; if CHMC21H1 is chosen, CHMB20H1, CHMB21H1 and MATA41H1 are prerequisites.

MAJOR PROGRAM IN BIOCHEMISTRY

Supervisor: J. Potter (416-287-7222) Email: potter@utsc.utoronto.ca

This Program places a greater emphasis on the biological aspects of chemistry than does the general Chemistry Major Program. It is offered for students who are primarily interested in chemistry but also want to study the chemistry of living systems.

Program Requirements

Students should complete the following 8.0 FCEs (full credit equivalents).

First Year:

BGYA01H1 Introductory Biology: Part I
BGYA02H1 Introductory Biology: Part II

CHMA10H1 Introductory Chemistry I: Structure and Bonding

CHMA11H1 Introductory Chemistry II: Reactions and Mechanisms

Second and Later Years:

BGYB10H1 Cell Biology
BGYB11H1 Molecular Aspects of Cellular and Genetic Processes
BGYB12H1 Cell & Molecular Biology Laboratory
BGYC12H1 Biochemistry I: Proteins & Enzymes
BGYC13H1 Biochemistry II: Bioenergetics & Metabolism
BGYD21H1 Practical Approaches to Biochemistry

CHMB10H1 Techniques in Analytical Chemistry

CHMB41H1 Organic Chemistry I

CHMB42H1 Organic Chemistry II

or

CHMC41H1 Organic Reaction Mechanisms

and

1.0 FCE chosen from:

CHMD39H1 Directed Research

and

2.0 FCEs chosen from:

CHMC31H1 Principles of Analytical Instrumentation

or

CHCM16H1 Analytical Instrumentation

or

CHCM21H1 Topics in Biophysical Chemistry

or

CHCM21Y1 Intermediate Inorganic Chemistry

[CHMC41H1 Organic Reaction Mechanisms]

or

CHMC42H1 Organic Synthesis

any D-level or 600-level CHM course.

Other D-level courses upon approval of Program Supervisor.

and

1.0 FCE chosen from:

CHMDW9Y Directed Research

and

PGCD11H Physical Sciences Project
CHIM421H Organic Synthesis
CHIM471H Bio-Org. Organic Chemistry
And 0.5 FCE from the following:
CHIM321H Chemical Thermodynamics and Elementary Kinetics
CHIM321H Chemical Structure and Spectroscopy
CHIM331H Introduction to Inorganic Chemistry
CHIM351H Environmental Chemistry
CHIM311H Principles of Analytical Instrumentation
CHIM141H Analytical Instrumentation
CHIM212H Topics in Biophysical Chemistry
CHIM311Y Intermediate Inorganic Chemistry [CHIM421H Organic Synthesis
or
CHIM410H Organic Reaction Mechanisms]
* If CHIM321H/CHIM321H are chosen, MATA31H, MATA35H/MATA36H/MATA37H, PHYA10H & [PHYA21H or PHYA22H] are required.

**SPECIALIST PROGRAM IN ENVIRONMENTAL CHEMISTRY**
(See the Environmental Science section of this Calendar.)

**SPECIALIST PROGRAM IN NATURAL SCIENCES**
(See the Physical Sciences section of this Calendar.)

CHMA101H Introductory Chemistry I: Structure and Bonding
This course will introduce the study of chemical transformations of matter, from a macroscopic and microscopic perspective. It starts with a quantitative description of gases, solids and solutions and develops ideas of bonding and structure in chemical compounds and molecules. This course includes a three-hour laboratory every other week. Exclusion: CHIM131H, CHIM139H, CHIM140Y, CHIM151Y, (CHMA102Y, (CHMA102Y).
Prerequisite: Grade 12 or OAC Chemistry, or Grade 12 or OAC Calculus.
Corequisite: None, but [MATA31H or MATA31H]) & [MATA35H or MATA36H or MATA37H or MATA39H] are strongly recommended. (MATA31H or MATA31H]) & [MATA36H or MATA37H] are required for some higher level and other Physical and Environmental Sciences courses.

**CHMA111H Introductory Chemistry II: Reactions and Mechanisms**
In this course reactions and equilibria in chemical systems are explored through their thermodynamic properties and chemical kinetics. Acid/base and reduct

CHMB204H Chemical Thermodynamics and Elementary Kinetics
The concept of chemical potential; phase equilibria; solutions; chemical equilibria (including electrochemical applications); elementary reactions; multi-step and coupled reactions (with biochemical applications); elementary collision theory and TST. Exclusion: (CHMB22Y, CHMB23H, CHMB25Y.
Prerequisite: (CHMA101H & CHMA111H) & (MATA31H) or (MATA31H)) & (MATA36H or MATA37H) & PHYA10H. Note that PHYA11H and MATA41H are prerequisites for the C-level physical chemistry courses.

**CHMB212H Chemical Structure and Spectroscopy**
Atomic structure and spectra; term symbols and their meaning; valence bond theory; LCAS-MO molecular spectroscopies. Exclusion: (CHMB22Y, CHMB23H, CHMB25Y.
Prerequisite: CHIM202H. Note that this implies all the prerequisites for that course as well.

**CHMB311H Introduction to Inorganic Chemistry**
Fundamentals of coordination, solid state and descriptive inorganic Chemistry. Structures, bonding and reactivity of transition metal coordination compounds; solid state structures and energetics; selected chemistry of non-transition elements. Examples will be taken from environmentally and biologically important inorganic compounds.
Prerequisite: CHMA101H & CHMA111H.

**CHMB141H Organic Chemistry I**
Chemical bonding and an introduction to aliphatic and aromatic compounds. Conformational analysis and stereochemistry. Free radical reactions of alkenes. Chemistry of alkenes, dienes, and alkynes. Substitution and elimination reactions. This course includes a four-hour laboratory every other week. Exclusion: (CHMB44Y, CHIM31H, CHIM35Y, (CHMB20Y), (CHMB49H.
Prerequisite: CHMA101Y or (CHMA10Y, (CHMA101Y).

**CHMB424H Organic Chemistry II**
Spectroscopy of organic compounds. Aromatic substitution. Chemistry of carbonyl compounds. An introduction to the chemistry of biologically important compounds, including heterocycles, carbohydrates, amino acids, and nucleic acids. This course includes a four-hour laboratory every other week. Exclusion: (CHMB44Y, CHIM31Y, (CHMB40Y, (CHMB40Y, (CHMB40Y.
Prerequisite: CHMB41H.

**CHMB594H Environmental Chemistry**
An investigation of aspects of chemical substances and processes as they occur in the environment; including both naturally occurring and synthetic chemicals. This course will include an introduction to atmospheric chemistry; aquatic chemistry, some agricultural and industrial chemistry, and chemical analysis of contaminants and pollutants. Exclusion: CHIM310H.
Prerequisite: CHMA101H & CHMA111H.

**CHMC111H Principles of Analytical Instrumentation**
An introduction to the workings of modern analytical instrumentation. Principles of measurement, detection of photons, electrons and ions; instrument and experiment design; amplification methods; noise reduction techniques and signal-to-noise optimization. Emission and absorption spectroscopy, electrochemical methods and separation techniques to be covered. Exclusion: CHIM314Y.
Prerequisite: CHMB11OH. Recommended: CHMB201H & CHMB212H.

**CHMC161H Analytical Chemistry**
A laboratory course to complement CHMC111H, Principles of Analytical Instrumentation.
This course provides a practical introduction and experience in the use of modern analytical instrumentation with a focus on the sampling, sample preparation (extraction, clean-up, concentration, derivatization), instrumental trace analysis and data interpretation of various pharmaceutical, biological and environmental samples. This course includes a four-hour laboratory every week. Exclusion: CHIM314Y.
Prerequisite: CHMC111H.
CMC2013 Intermediate Physical Chemistry
Basic statistical mechanics and applications to thermodynamics and kinetics; intermolecular interactions; concepts in reaction dynamics.
Prerequisites: CMB201H & CMB213H & MATB44H & PHYA21H

CMC211H Topics in Biophysical Chemistry
Advanced topics in Physical Chemistry with emphasis on biochemical systems. Spectroscopic methods for (bio)molecular structure determination, including IR, NMR, UV/Vis, collod chemistry, polymers and bio-polymers, bonding structure and statistical mechanics; physical chemistry of membranes, ionic transport and diffusion; oscillatory (biocatalytic) reactions.
Prerequisites: CMB229H & CMB231H & MATB41H

CMC311Y3 Intermediate Inorganic Chemistry
A more detailed discussion (than in CMB311H) of the structure, bonding, spectroscopy and reactivity of main group, transition metal and organo-metallic compounds. Special topics may include inorganic solids and materials, biologically and environmentally important inorganic compounds, and catalysis. The laboratory will introduce a variety of synthetic techniques, with characterization of products by both classical and instrumental methods.
This laboratory is six hours in duration and occurs every week.
Prerequisites: CMB214H, CMB216H, CMB221H, CMB231H, CMB411H & CMB424H

CMC413H Organic Reaction Mechanisms
Theory and mechanisms of organic reactions; principles of structure, introduction to aromatics, spectroscopy and polymers. Theorized bonding. The laboratory experiments are designed to complement the topics covered in lectures. Offered in alternate years with CMC242H.
This course includes a three hour laboratory every week.
Exclusion: CMB348H
Prerequisites: CMB241H & CMB424H

CMC423H Organic Synthesis
Principles of synthesis organic and functional group transformations; compound stereochemistry, spectroscopy and structure elucidation. Offered in alternate years in rotation with CMB341H.
This course includes a three hour laboratory every week.
Exclusion: CMB346H
Prerequisites: CMB341H & CMB424H

CMC474H Inorganic Chemistry
The chemistry of the transition (main group) elements, d- and f-block elements; organic chemistry; and the chemistry of the lanthanides and actinides. Applications will be made of the chemical concepts to the design of new materials and to the understanding of the chemical processes occurring in the natural world.
Prerequisites: CMB241H & CMB424H

CMC529H Topics in Physical Chemistry
Advanced topics in physical chemistry will be covered at a modern research level. The exact topic will be announced in the Winter Session prior to the course being offered.
Prerequisite: Permission of the instructor.
Normaly only for individuals who have completed fifteen full-credit equivalents at least two C-level Chemistry courses, and are pursuing one of the Chemistry Programs.

CMC535H3 Symmetry in Chemistry
An essentially non-mathematical approach to the applications of symmetry and group theory in chemistry.
The course will cover areas such as structure and bonding, electronic and vibrational spectra, and reactivity. Examples will be taken from both organic and inorganic chemistry.
Prerequisites: CMB313Y or CMB411Y or permission of the instructor

CMC536H3 Topics in Inorganic Chemistry
Advanced topics in inorganic chemistry will be covered at a modern research level. The exact topic will be announced in the Winter Session prior to the course being offered.
Prerequisite: Permission of the instructor.
Normaly only for individuals who have completed fifteen full-credit equivalents at least two C-level Chemistry courses, and are pursuing one of the Chemistry Programs.

CMC554H3 Advanced Topics in Organic Chemistry
Advanced topics in organic chemistry will be covered at a modern research level. The exact topic will be announced in the Winter Session prior to the course being offered.
Prerequisite: Permission of the instructor.
Normaly only for individuals who have completed fifteen full-credit equivalents at least two C-level Chemistry courses, and are pursuing one of the Chemistry Programs.

CMC569H3 Topics in Biological Chemistry
Advanced topics in biological chemistry will be covered at a modern research level. The exact topic will be announced in the Winter Session prior to the course being offered.
Prerequisite: Permission of the instructor.
Normaly recommended for individuals who have completed fifteen full-credit equivalents at least two C-level Chemistry courses, and are pursuing one of the Chemistry Programs.

CMC578H3 Directed Research
Participation in a research project under the direction of a faculty member. This project may involve original research, or may involve a thorough literature review and report on a topic of current interest. Approximately 260 hours of work are expected in CMB490Y and 130 hours in CMB491H. The topic will be selected in conference with a member of the chemistry staff. Progress will be monitored during periodic consultations with the staff member.
Please see the note below on registration for both courses.
Exclusion: Students may take either CMB490Y or CMB491H but not both.
Prerequisite: Permission of the instructor.

Note for students planning to register in CMB590Y or CMB591H
Students should apply to the Program Supervisor of Studies by June 20th to be admitted into the course. The Program Supervisor of Studies (or designate) is the only person permitted to give "permission of instructor". Application will consist of:
• The name of the proposed supervisor, with his/her signature indicating approval
• A brief description of the planned research
• A list of relevant courses already passed and to be taken during the current session.

Generally, only students who have completed 15 credits in total including at least 1.0 FCE of C-level CHM courses containing a lab component (i.e. CMC316H, CMC31Y, CMC411H/CHM421H, BGY223H) will be accepted into the course. Research supervisors should normally be members of the CHM group at U of T Scarborough. Potential supervisors outside these groups must identify a co-supervisor who is a member of the CHM group at U of T Scarborough. Students doing research at the St. George campus will be graded with the cohort of 4th year research students in the Chemistry department; those pursuing their research at U of T Scarborough will be graded with the U of T Scarborough cohort.

SCIB01H3 Science Engagement Outreach
SCIB203H3 Science Engagement In-Reach (See the Science Engagement section of this Calendar for full course descriptions.)
City Studies

Faculty List
N. Eyles, B.Sc., M.Sc. (Leicester), M.Sc. (Memorial University Newfoundland), Ph.D. (East Anglia), D.Sc. (Leicester), P.Geo., Professor
J. Harries, B.A., M.A. (Western Ontario), Ph.D. (Ohio State), Professor
J.R. Maron, B.A., B.A. (Queen's), M.A. (Penn State), Ph.D. (Toronto), Professor
E. C. Ralph, B.A., M. Phil. (London), Ph.D. (Toronto), Professor
M. F. Bunce, B.A., Ph.D. (Sheffield), Associate Professor
D.E. Bender, M.A., Ph.D. (New York), Assistant Professor

Supervisor of Studies: TBA

A pre-professional Major Program for students interested in career paths that may be city-related, e.g., architecture, city planning, real estate brokerage, real estate development, housing, law, property real estate appraisal, property management, social work, social and city public policy, city environmental management, and city transportation policy. The Program equips students with the background knowledge and skills needed to think broadly about the relationships between their intended professions and the growth, sustainability, and liveability of cities. The Major Program in City Studies is multidisciplinary; it is designed to give students the opportunity to see how they might apply ideas about cities from the social sciences and kindred disciplines in their field of professional interest.

Guidelines for 1st year course selection
Students intending to complete a program in City Studies should take at least one of [ANTA10H & ANTA20H], [GGRAA01H & GGRAA03H], [SOC601H & SOC602H] or [1.0 A-level credit in Political Science] within their first 4.0 credits

Note: It is Department policy that students without the prerequisites will be removed from the course. Students should check carefully the prerequisites required for particular B- and C-level courses. Note that some upper-level courses (e.g., SOC and ECM) are part of limited enrolment programs, with first preference in these courses going to students enrolled in those programs.

MAJOR PROGRAM IN CITY STUDIES

Program Requirements
This program requires at least 72 full credits.

1. Introduction to Social Science Thought (2 full credits from among the following):
   - ANTA10H Introduction to Anthropology: Becoming Human
   - ANTA20H Introduction to Anthropology: Culture, Society and Language
   - HLT601H Plagues and Peoples
   - POLA50H Critical Issues of Canadian Democracy
   or
   - POLB50H Canada's Political Institutions
   One other A-level half-course in Political Science
   - SOC401H Introduction to Sociology I
   - SOC402H Introduction to Sociology II
   - GGRAA02H The Geography of Global Processes
   - GGRAA03H Cities and Environments
   - [ECMA10H Introduction to Microeconomics]
   - ECMA84H Introduction to Microeconomics: A Mathematical Approach
   - [ECMA65H Introduction to Macroeconomics]
   or
   - ECMA96H Introduction to Macroeconomics: A Mathematical Approach

2. Fundamentals of City Studies (at least 2 full credits from among the following):
   - ANTB50H Health and the Urban Environment
   - DSB301H Introduction to Diaspora and Transnational Studies I
   - DSB303H Introduction to Diaspora and Transnational Studies II
   - [EEAA05H Environmental Hazards]
   or
   - EEAA06H Introduction to Planetary Earth
   - GGRD10H Urban Geography
   - GGRD101H Real Estate and the City
   - GGRD13H Social Geography
   - GGRD28H Geographies of Disease
   - GGRD27H Location and Spatial Development
   - SOCB44H Urban Sociology: Macro-Analysis
   - SOCB54H Urban Sociology: Micro-Analysis
   - WSTB12H Women: Issues of Violence and Safety

3. Methods (at least 1 full credit from among the following):
   - [SOC200H Social Statistics]
   or
   - STA22H Statistics I
   - GGRAA01H GIS and Empirical Reasoning
   or
   - [EEAA08H GIS for the Beginning Student]
   or
   - EESC20H Geographic Information Systems and Remote Sensing
   - SOCC23H Qualitative Methods in Social Research
   - SOCC31H Quantitative Methods in Social Research

4. Applications (at least 1.5 full credits from among the following):
   - ANTC40H Foundations and Theoretical Issues in Anthropological Demography
   - ANTC40H Methods and Analysis in Anthropological Demography
   - CITD51H City Issues and Strategies
   - EESC21H Urban Environmental Problems of the Greater Toronto Area
   - ENGD90H Studies in the Victorian Period
   - GGRG02H Population Geography
   - GGRG04H Urban Residential Geography
   - GGRG13H Urban Political Geography
   - GGRG18H Urban Transportation Policy Analysis
   - GGRG33H Greater Toronto Area
   - GGRG99H Feminist Geographies
   - HISC22H The Emergence of Modern America, 1877-1933
   - HISC35H People in Motion: Immigrants and Migrants in U.S. History
   - HIDD30H Topics in American Urban History: New York City
   - POLC53H Canadian Environmental Politics
   - POLC54H Public Policy Making
   - POLC72H Public Policy in Canada
   - SOCC20H Collective Behaviour
   - SOCC40H Social Movements
   - SOCC58H Sociology of Urban Growth
   - WSTC14H Women, Community, and Policy Change
   - WSTC25H Women and Environments

5. Core course (0.5 full credits)
   - CITT10H Canadian Cities and Planning

Students are reminded that many of the courses above have prerequisites and that it is the responsibility of the student to ensure that they satisfy these requirements. Note that some upper-level courses (e.g., SOC) are part of limited enrolment programs, with first preference in these courses going to students enrolled in those programs.
MAJOR (CO-OPERATIVE) PROGRAM IN CITY STUDIES

Supervisor of Studies: TBA

Adviser: TBA

Co-op Contact: TBA

Email: askcoe@utsc.utoronto.ca

Graduates will receive an Honours B.A. degree wherein they must combine the Major (Co-operative) Program in City Studies with one of the following:

- Major Program in Anthropology
- Major Program in Economics for Management
- Major Program in Environmental Science
- Major Program in History
- Major Program in Human Geography
- Major Program in Political Science
- Major Program in Sociology
- Major Program in Studio
- Major Program in Women’s Studies

The Program is intended to complement the chosen academic discipline and to give students the opportunity to see how they might apply ideas from that discipline in their field of professional interest.

For information on admissions, fees, work terms and standing in the Program, please see the Co-operative Programs section of this Calendar.

Program Administration

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to UTSC from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.utsc.utoronto.ca registrar. The minimum qualifications for entry are 4.0 credits including 1.0 from [ANTA10H1 & ANTA20H1], [GGRA03H1 & GGRA04H1], [GSOA10H1 & GSOA20H1] or [1.0 A-level credit in Political Science] plus a cumulative GPA of at least 2.5.

Program Requirements

The Major (Co-operative) Program in City Studies combines academic studies in various disciplines with work terms in private enterprise, the public sector, or non-governmental organizations. It includes all of the requirements of the Major Program listed above, viz., 7 full credits as specified. In addition, students must successfully complete the non-credit Arts & Science Co-op Work Term Preparation course and two work terms.

Work Terms

Students must satisfactorily complete two work terms, each of four-months duration. To be eligible for the first work term, students must have completed at least 10 full credits, including 5 full credits as a U of T Scarborough student. These must include at least one full credit drawn from each of terms I (Introduction to Social Thought), II (Fundamentals of City Studies), and III (Methods). They must also have completed the Arts & Science Co-op Work Term Preparation course. Students are advised that being available for work terms during fall and winter may increase the variety of work available, and this in turn requires students to take courses during at least one summer session.

CLASSICAL STUDIES

CLA400H3 Classical Mythology I: Myths of the Gods
An introduction to the beliefs and story patterns surrounding the divinities of the ancient Greek and Roman world. How divine myths reflect such universal concerns as creation, transformation and death. Some consideration of ancient and modern theories of myth and representations of divine mythology in ancient and modern art.
Exclusion: CLAA402Y, CLA204H, CLA205Y

CLA403H3 Classical Mythology II: Myths of the Heroes
The stories of the heroes of the ancient Greek and Roman world. How heroic myths reveal the thinking of Greco-Roman civilization on the world and what it means to be human, focusing on such concerns as power, sex, gender and identity and on such values as love, hate, revenge and honour.
Exclusion: CLAA402Y, CLA204H, CLA205Y
Recommended preparation: CLAA402H

CLA605H3 The Mediterranean World I: Greece
A survey of the history of the near east and Greece in the classical period (600-200 B.C.). Emphasis on the Mediterranean region in relation to Africa, the Middle East and Europe, its distinctive environment and the natural processes which shaped the societies which flourished there.
Exclusion: CLAB805Y, CLA231H

CLA606H3 The Mediterranean World II: Rome
A survey of the history of the ancient Roman world, focusing primarily on the Roman Empire at its height (from Caesar to Constantine) Extensive use of literary sources (all read in English translation) and archaeological evidence.
Exclusion: CLAB805Y, CLA231H
Recommended preparation: CLAB805H
CLAS150H Greek and Latin for Scientists
The role of classical Greek and Latin in the formulation of technical scientific terms. Primary focus is on the biological and medical sciences. Particular emphasis on word analysis and structure, the principles of scientific word formation, and the characteristics, rules, and codes of scientific nomenclature. Exclusion: CLAS300H, CLAS300Y
Prerequisite: One full credit in Classics or in English or another literature

CLAS203H The Classical World in Film
The representation of the classical world and historical events in film. How the Greek and Roman world is reconstructed by filmmakers, their use of spectacle, costume and furnishings, and the influence of archaeology on their portrayals. Films will be studied critically for historical accuracy and faithfulness to classical sources.
Exclusion: CLAS308H
Recommended preparation: CLAS202Y or CLAA202H or CLAA203H

CLAS242H Army and Empire in the Roman World
An introduction to the military organization of the Roman Empire.
The development of the Roman army as a fundamental social institution within the Roman state and as an agent of conquest and Romanization.
Emphasis on the army’s role in conquest and urbanization, communications, logistics and engineering in three major phases of Roman military history.
Prerequisite: CLAA202Y or CLAA203H or CLAA203Y or CLAA200H or HIS201H or HIS202H or HIS203Y

CLAS259H Selected Topics in Classical Literature
A detailed study of an author or a genre in Classical Literature in Translation.
Topics will vary from session to session and will alternate between Greek and Roman Epic, Greek and Roman Tragedy and Greek and Roman Comedy.
Exclusion: CLAS300H, CLAS300Y
Prerequisite: One full credit in Classics or in English or another literature

CLAS320H Selected Topics in Classical Civilization
A detailed study of a theme in Classical Civilization.
Topics will vary from session to session and may be drawn from such areas as the archaeological history of the Roman world, Greek and Roman religion, ancient education or Roman law.
Prerequisite: One full credit in Classics or History

CLAS320D Classics and the Computer
An independent research project using the resources of the computer program and the internet.
Under the supervision of a member of faculty, the student will create a web page or a variety of "pathways" on a topic to be selected in consultation with the supervisor.
Prerequisite: 2 full credits in Classics or permission of the instructor

CLAC411H Slavery in the Roman Economy
The essential features of Roman economic organization (agriculture, manufacturing and trade) and the role of slavery within that economy.
The rise of slavery at Rome, the role of slaves in agriculture and pastoralism, literary images of slavery, slave revolts and resistance, the "accommodation" of Roman society to slavery.
Prerequisite: CLAS305Y or CLAS200H or HIS201H or HIS202H or HIS203Y

LGG005H Introduction Latin I
LGG006H Introduction Latin II
(See the Languages section of this Calendar for full course descriptions.)
3. Philosophy and Theoretical Psychology
One half credit chosen from the following:
   COG100H Supervised Study in Cognitive Science
   PHIL580H Symbolic Logic I
   PHIL780H Philosophy of Science
   PHIL880H Philosophy of Language
   PSYC32H Theoretical Psychology
   PSYD52H Fundamental Issues in Cognitive Science

4. Cognitive Courses
One full credit equivalent chosen from the following:
   MATA23H Linear Algebra I
   MATA36H Calculus I
   MATA35H Calculus II for Biological Sciences or
   MATA36H Calculus II for Physical Sciences or
   MATA37H Calculus II for Mathematical Sciences
   MATH24H Linear Algebra II
   MATH25H Introduction to Mathematical Logic
   CSCB38H Discrete Mathematics for Computer Science
   CSCI43H Computer Organization
   CSCI70H Fundamental Data Structures and Techniques
   One-half course in Anthropology at the 300-level or higher.

Note: It is expected that most students will take MATA36H and
MATA35H for the Psychology bin.

MAJOR PROGRAM IN COGNITIVE SCIENCE
Email: seager@uwo.ca, From July 1: S. Joordens Email: joordens@uwo.ca

Program Requirements
The Major Program consists of 7.5 FCEs (full credit equivalents). Seven are specified courses.
One-half FCE to be selected from the Psychology bin.

Specified Courses:
Seven full credit equivalents:
   PSY300H Introductory Psychology: Part I
   PSY301H Introductory Psychology: Part II
   LIN14H General Linguistics I
   LIN14H General Linguistics II
   LIN20H Phonology I
   LIN20H Phonology II
   LIN20H Phonology II
   PSYB31H Perception and Cognition
   PSYB31H Memory and Cognition
   PSYB31H Psycholinguistics
   PSYC32H Theoretical Psychology
   PSYC32H Theoretical Psychology
   PSYC32H Theoretical Psychology
   PSYC32H Theoretical Psychology
Associate Chair: M. Molloy (416-287-7255)

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

Theoretical computer science is concerned with the inherent difficulty of problems that can make them intractable by computers. Numerical analysis, data management systems, computer graphics, and artificial intelligence are concerned with the applications of computers to specific problem areas.

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

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

Note on Admission to CSC Courses

All CSC courses beyond the A-level, except for CSC2807H, are limited enrolment with preference being given to students admitted to and enrolled in CSC programs. If towards the end of the registration period, spaces become available in CSC courses, registration may be opened up and some non-program students may be admitted on a first-come first-served basis. The following rules will apply:

- All prerequisites for the course(s) must be satisfied
- A student who is not in a CSC program and does not have a cumulative GPA of at least 2.5 may not take any B-level CSC course, except CSC2807H
- A student who is not in a CSC program and does not have a cumulative GPA of at least 3.0 may not take any C- or D-level CSC course
- Permission to enrol must be confirmed by the Supervisor of Studies. Details will be posted on web sites during registration.

Science Engagement Courses

For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN COMPUTER SCIENCE

This program has six streams:

1. Comprehensive Stream
2. Information Systems Stream
3. Software Engineering Stream
4. Joint Mathematics Stream
5. Joint Physics Stream
6. Joint Statistics Stream
Program Admission
Each year, 80 students are admitted to the six streams of the Specialist Program in addition to those admitted to the Specialist Co-operative Program. There are three ways to be admitted:

1. Directly from Secondary School: Up to 40 students will be admitted directly from high school on the basis of academic performance. Applicants must have completed Grade 12 Mathematics and one other Grade 12 mathematics course, or OAC Calculus and OAC Algebra and Geometry.

2. At the end of 1st Year: Applicants must have completed all A-level courses required in their stream of the Specialist Program. Students applying for admission on completion of their first year (at least 4 full credit equivalents) will be accepted on the basis of their first year GPA and their marks in Computer Science and Mathematics courses. The minimum GPA to guarantee acceptance is calculated annually. It is never less than 2.00 for this year and it will not be greater than 2.80.

3. After 2nd Year: Admission of students after second year will also be on the basis of the grades they have received in Computer Science and Mathematics courses.

Students applying at the end of their first year or later will be considered together for a total of approximately 60 places in the Specialist Program. As noted above, a GPA of 2.80 and above will guarantee acceptance (provided all required A-level courses have been satisfactorily completed).

Program Requirements
In order to remain in the Program, a student must maintain a cumulative GPA of 2.0 or higher throughout the Program. The courses may be taken in any order as long as the prerequisites and corequisites are satisfied.

Many Computer Science courses are offered both at U of T Scarborough and at the St. George campus. U of T Scarborough students are expected to take courses that are offered on both campuses at U of T Scarborough. Due to current high demand for Computer Science courses, the Department of Computer Science at the St. George campus cannot guarantee space for U of T Scarborough students in their courses, especially those offered at U of T Scarborough. This means that it may not be possible for a U of T Scarborough Computer Science student to enrol in the St. George section of a course that is offered at U of T Scarborough, even in a session when that course is not offered at U of T Scarborough.

1. Comprehensive Stream

Supervisor of Studies: R. Pancer (416-287-7679) Email: panee@ustc.utoronto.ca

This stream requires 14.5 FCEs.

Writing requirement
(Should be completed by the end of second year.)

One of:

ANTA001H Introduction to Anthropology: Becoming Human
ANTA002H Introduction to Anthropology: Society, Culture and Language
CLAS10H Classical Mythology I: Myths of the Gods
ENGA10H Introduction to Literary Study: 1800 to World War II
ENGA11H Introduction to Literary Study: 1945 to Today
ENGB00H Canadian Literary Traditions
ENGB00H Nation in Canadian Writing
ENGB00H Collisions of Culture and the Emergence of a Liberal Nation
ENGB00H American Literature from the Civil War to the Present
ENGB10H Contemporary Literature from the Caribbean
ENGB10H Contemporary Literature from South Asia
ENGB10H Women and Literature: Forging a Tradition
ENGR10H Gender and Genre
CSCD34H1 Database System Technology
CSCD58H1 Computer Networks
CSC321H Introduction to Neural Networks and Machine Learning
CSC372H Microprocessor Software
CSC384H1 Introduction to Artificial Intelligence
CSC425H1 Human-Computer Interaction
CSC454H1 The Business of Software
CSC469H Operating Systems Design and Implementation
CSC485H1 Computational Linguistics
CSC488H1 Compilers and Interpreters

Two of (additional fundamental Mathematics courses):
MATB43H1 Introduction to Analysis
MATB44H1 Differential Equations I
MATC93H1 Groups and Symmetry
MATC92H1 Fields and Groups
MATC33H1 Introduction to Number Theory
MATC34H1 Complex Variables
MATC35H1 Chaos, Fractals and Dynamics

One of (additional courses related to the theory of computing):
MATB64H1 Linear Programming and Optimization
MATC99H1 Introduction to Mathematical Logic
MATC16H1 Coding Theory and Cryptography
MATC32H1 Graph Theory and Algorithms for its Applications
MATC44H1 Introduction to Combinatorics
CSC334H1 Computability and Logic
CSC446H1 Computational Methods for Partial Differential Equations
CSC448H1 Formal Languages and Automata
CSC450H1 High-Performance Scientific Computing
CSC465H1 Formal Methods in Software Design

2. Information Systems Stream

Supervisor of Studies: R. Pancer (416-287-7679) Email: pancec@utsc.utoronto.ca

Note: Due to enrolment restrictions in required Management courses, registration in this stream is limited. A maximum of 20 students will be admitted annually to the second year of the Program. Selection will be based on grades in A-level courses specified for the Program with a minimum GPA of 2.5.

This stream requires 16.5 FECs.

Writing requirement
(Should be completed by the end of second year.)
See Comprehensive Stream.

A-level courses
CSCA04H1 Introduction to Computer Programming
CSCA14H1 Introduction to Computer Science
CSCA55H1 Mathematical Expression and Reasoning for Computer Science
MATA23H1 Linear Algebra I
MATA35H1 Calculus II for Mathematical Sciences
MGA05H1 Introduction to Management I
MGA06H1 Introduction to Management II

B-level courses
CSCB07H1 Software Design
CSCB09H1 Software Tools and Systems Programming
CSCB34H1 Introduction to the Theory of Computation
CSCB58H1 Computer Organization
CSCB63H1 Design and Analysis of Data Structures
MATC24H1 Linear Algebra II
MATB41H1 Techniques of the Calculus of Several Variables I
MATB42H1 Techniques of the Calculus of Several Variables II
STAB52H1 Introduction to Probability
MGTB23H1 Managing People in Organizations
MGTB29H1 Managing Groups and Organizations

C-level courses
CSCC24H1 Principles of Programming Languages
CSCC40H1 Analysis and Design of Information Systems
CSCC41H1 Introduction to Databases
CSCC63H1 Computability and Computational Complexity
CSCC69H1 Operating Systems
CSCC73H1 Algorithm Design and Analysis

D-level courses
CSCD03H1 Social Impact of Information Technology
CSCD08H1 Software Engineering
CSCD43H1 Database System Technology

Elective courses, all levels
One of (additional courses in scientific computing):
CSCC36H1 Numerical Methods
CSCC50H1 Numerical Algebra and Optimization

Two of (additional courses related to the practice of computing):
CSCC59H1 Programming on the Web
CSCC58H1 Microprocessor Systems
CSCD11H1 Computer Graphics
CSCD58H1 Computer Networks
CSCC72H1 Introduction to Neural Networks and Machine Learning
CSCC35H1 Microprocessor Hardware
CSCC84H1 Introduction to Artificial Intelligence
CSCC65H1 Formal Methods in Software Design
CSCC69H1 Operating Systems Design and Implementation
CSCC48H1 Computational Linguistics
CSCC48H1 Compilers and Interpreters

One of (additional courses related to business and computing):
MATB61H1 Linear Programming and Optimization
MATC63H1 Introduction to Mathematical Finance
MGTB74H1 Analysis for Decision-Making
CSCC45H1 The Business of Software
4. Joint Mathematics Stream

Supervisor of Studies: R. Pancer (416-287-7679) Email: pancer@utsc.utoronto.ca
This stream requires 15.5 FCEs

Writing requirement
(Should be completed by the end of second year.)
See Comprehensive Stream.

A-level courses
CSCA08H Introduction to Computer Programming
CSCA44H Introduction to Computer Science
CSCA65H Mathematical Expression and Reasoning for Computer Science
MAT2A3H Linear Algebra I
MAT2A3H Calculus I
MAT3A7H Calculus II for Mathematical Sciences

B-level courses
CSCB07H Software Design
CSCB09H Software Tools and Systems Programming
CSCB09H Introduction to the Theory of Computation
CSCB53H Computer Organization
CSCB53H Design and Analysis of Data Structures
MATB2H Linear Algebra II
MATB41H Techniques of the Calculus of Several Variables I
MATB42H Techniques of the Calculus of Several Variables II
STAB52H Introduction to Probability

C-level courses
CSCC24H Principles of Programming Languages
CSCC54H Analysis and Design of Information Systems
CSCC54H Introduction to Databases
CSCC54H Computability and Computational Complexity
CSCC54H Operating Systems
CSCC73H Algorithm Design and Analysis

D-level courses
CSCD03H Social Impact of Information Technology
CSCD09H Software Engineering

Elective courses, all levels
One of (additional courses in scientific computing):
CSCC36H Numerical Methods
CSCC36H Numerical Algebra and Optimization

Four of (additional courses in the practice of computing):
CSCC09H Programming on the Web
CSCC83H Microprocessor Systems
CSCD03H Computer Graphics
CSCD43H Database System Technology
CSCD59H Computer Networks
CSC469H Operating Systems Design and Implementation
CSC488H Compilers and Interpreters

B-level courses
CSCB07H Software Design
CSCB36H Introduction to the Theory of Computation
CSCB53H Computer Organization
CSCB53H Design and Analysis of Data Structures
MATB2H Linear Algebra II
MATB41H Techniques of the Calculus of Several Variables I
MATB42H Techniques of the Calculus of Several Variables II
STAB52H Introduction to Probability

C-level courses
CSCC24H Principles of Programming Languages
CSCC54H Introduction to Databases
CSCC54H Operating Systems

Four of (mathematics courses with applications in theory of computing):
MATC02H Fields and Groups
MATC09H Introduction to Mathematical Logic
MATC15H Introduction to Number Theory
MATC16H Coding Theory and Cryptography
MATC32H Graph Theory and Algorithms for its Applications
MATC44H Introduction to Combinatorics

Three of (additional courses in analysis -- numerical, real and complex):
CSCS51H Numerical Approximation, Integration and Ordinary Differential Equations
MATC55H Chaos, Fractals and Dynamics
MATC73H Introduction to Real Analysis
MATC466H Differential Equations II
MATC455H Complex Analysis II

One of (courses in the relationship of science and society):
PSCD02H Current Questions in Mathematics and Science
CSCD03H Social Impact of Information Technology
A-level courses
CSCA08H1 Introduction to Computer Programming
CSCA48H1 Introduction to Computer Science
CSCA65H1 Mathematical Expression and Reasoning for Computer Science
MATA23H1 Linear Algebra I
MATA30H1 Calculus I
MATA37H1 Calculus II for Mathematics Sciences
PHYA10H1 Introduction to Physics I
PHYA21H4 Introduction to Physics HA

B-level courses
CSCB07H1 Software Design
CSCB09H1 Software Tools and Systems Programming
CSCB36H1 Introduction to the Theory of Computation
CSCB58H1 Computer Organization
CSCB63H1 Design and Analysis of Data Structures
MATB24H1 Linear Algebra II
MATB41H4 Techniques of the Calculus of Several Variables I
MATB42H1 Techniques of the Calculus of Several Variables II
MATB44H1 Differential Equations I
STAB25H1 Introduction to Probability Theory
PHYB10H1 Intermediate Physics Laboratory I
PHYB20H1 Vibrations and Waves
PHYB21H1 Electricity and Magnetism
PHYB25H1 Foundation of Modern Physics
PHL270H1 Philosophy of Science
[PHYB11H1 Intermediate Physics Laboratory I or PSCB01H1 The Instrumentation of Science]

C-level courses
CSCC50H1 Numerical Algebra and Optimization
CSCC51H1 Numerical Approximation, Integration and Ordinary Differential Equations
CSCC63H1 Computability and Computational Complexity
CSCS73H1 Algorithm Design and Analysis
CSCS83H1 Microprocessor Systems
PHYC24H1 Quantum Physics I

Elective courses, all levels
One of (additional courses in computer systems):
CSCC24H1 Principles of Programming Languages
CSCC43H1 Introduction to Databases
CSCS69H1 Operating Systems
One of (additional courses in the relationship between science and society):
PSCD20H3 Current Questions in Mathematics and Science
CSCD30H3 Social Impact of Information Technology

A-level courses
CSCA08H1 Introduction to Computer Programming
CSCA48H1 Introduction to Computer Science
CSCA65H1 Mathematical Expression and Reasoning for Computer Science
MATA23H1 Linear Algebra I
MATA30H1 Calculus I
MATA37H1 Calculus II for Mathematics Sciences

B-level courses
CSCB07H1 Software Design
CSCB09H1 Software Tools and Systems Programming
CSCB36H1 Introduction to the Theory of Computation
CSCB58H1 Computer Organization
CSCB63H1 Design and Analysis of Data Structures
MATB24H1 Linear Algebra II
MATB41H4 Techniques of the Calculus of Several Variables I
MATB42H1 Techniques of the Calculus of Several Variables II
STAB25H1 Introduction to Probability
STAB57H1 Introduction to Statistics

C-level courses
CSCC50H1 Numerical Algebra and Optimization
CSCC51H1 Numerical Approximation, Integration and Ordinary Differential Equations
CSCC63H1 Computability and Computational Complexity
CSCC73H1 Algorithm Design and Analysis

Elective courses, all levels
One of (additional Mathematics courses):
MATB43H1 Introduction to Analysis
MATB44H1 Differential Equations I
MATB61H1 Linear Programming and Optimization
MATC03H1 Groups and Symmetry
MATC15H1 Introduction to Number Theory
MATC34H1 Complex Variables
MATC35H1 Chaos, Fractals and Dynamics
One of (additional courses in computer systems):
CSCC24H1 Principles of Programming Languages
CSCC43H1 Introduction to Databases
CSCS69H1 Operating Systems
Four of (additional courses in statistics and related topics):
ACTB47H4 Introductory Life Contingencies
Any C-level STA course
Any 300- or 400- STA course on the St. George campus
(MATC61H1) Introduction to Mathematical Finance
One of (additional courses in the relationship between science and society):
PSCD20H3 Current Questions in Mathematics and Science
CSCD30H3 Social Impact of Information Technology
Note: 300-series and 400-series must be completed at the St. George campus. Consult the Department of Computer Science Undergraduate Handbook or consult the web site http://www.cs.utoronto.ca.
MAJOR PROGRAM IN COMPUTER SCIENCE
Supervisor of Studies: R. Pancer (416-287-7679) Email: pancer@ustc.utoronto.ca

Program Admission
Each year up to 30 students are admitted to the second year of the Program, based on their first year GPA and marks in first-year courses in Computer Science and Mathematics. The minimum GPA to guarantee admission is calculated annually. It is never less than 2.00 and this year it will not be greater than 2.80.

Program Requirements
This program requires 8 FCEs. The courses may be taken in any order as long as the prerequisites and co-requisites are satisfied.

Many Computer Science courses are offered both at U of T Scarborough and at the St. George campus. U of T Scarborough students are expected to take courses that are offered on both campuses at U of T Scarborough. Due to current high demand for Computer Science courses, the Department of Computer Science at the St. George campus cannot guarantee space for U of T Scarborough students in their courses, especially those offered at U of T Scarborough. This means that it may not be possible for a U of T Scarborough Computer Science student to enrol in the St. George section of a course that is offered at U of T Scarborough, even in a session when that course is not offered at U of T Scarborough.

Writing recommendation:
Students in the Major program are strongly advised to take at least one of the following courses by the end of their second year:


A-level courses
CSC401H Introduction to Computer Programming
CSC401H Introduction to Computer Science
CSC401H Mathematical Expression and Reasoning for Computer Science
MAT421H Linear Algebra I
MAT435H Calculus II
MAT437H Calculus II for Mathematical Sciences

B-level courses
CSC347H Software Design
CSC355H Introduction to the Theory of Computation
CSC355H Computer Organization
CSC355H Design and Analysis of Data Structures
MAT324H Linear Algebra II
STA325H Introduction to Probability

Elective courses, all levels
One of (additional courses in the practice of computing):
CSC399H Programming on the Web
CSC241H Principles of Programming Languages
CSC241H Analysis and Design of Information Systems
CSC241H Introduction to Databases
CSC241H Operating Systems
CSC241H Microprocessor Systems
CSC241H Computer Graphics
CSC241H The Business of Software
One of (additional courses in scientific computing):
CSCC43H8 Numerical Methods
CSCC48H8 Numerical Algebra and Optimization

One of (additional courses in the theory of computing):
CSCC38H3 Acceptability and Computational Complexity
CSCC73H8 Algorithm Design and Analysis
CSCC46H5 Formal Methods in Software Design
CSCC44H8 Formal Languages and Automata

One of (additional courses in mathematics):
MATH48H4 Techniques of the Calculus of Several Variables I
MATH68H4 Linear Programming and Optimization
MATH39H4 Introduction to Mathematical Logic
MATC32H4 Graph Theory and Algorithms for its Applications
MATC38H4 Coding Theory and Cryptography
MATC44H4 Introduction to Combinatorics

SPECIALIST PROGRAM IN MANAGEMENT AND INFORMATION TECHNOLOGY
(See the Management section of this Calendar.)

CSCA10H3 NON-CREDIT: Computing Skills for Co-op
This course offers practical training in using several widely-accepted software tools such as Excel, Access, Visual Basic, PowerPoint, Word, as well as image-editing and web design tools.

Note: This is a non-credit course, limited to students enrolled in co-op programs.

CSCA20H3 The Why and How of Computing
An introduction to computers and their use. System operations (commands, files, security), common applications (data bases, word processing, spreadsheets) and basic programming concepts. Other topics include: data organization, communications, office automation, electronic mail, and internet tools. This course is intended for non-science students.

Note: This course will be offered for the last time in the 2007 Summer Session after which it will be withdrawn from the curriculum.
Exclusion: CSC104H8. This course may not be taken after or concurrently with any other CSC course.

CSCA34H3 Introduction to Computer Programming
Structure of computers; the computing environment. Programming in an object-oriented language such as Python. Program structure: elementary data types, statements, control flow, functions, classes, objects, methods, fields, lists, searching, sorting and complexity. Exclusion: CSCA20H8, (CSC107H), CSC108H8, CSC120H8, (CSCA48H8).

CSCA48H8 may not be taken after or concurrently with CSCA44H8 or (CSCA58H8).
Prerequisite: Grade 12 Mathematics

Note: This course is intended for students with no prior exposure to computing programming. Students who have sufficient programming experience may enrol directly in CSCA48H; consult the instructor or the Supervisor of Studies for guidance.

CSCA20H3 Computer Science for the Sciences
An introduction to computer science for students in other sciences, with an emphasis on gaining practical skills. Introduction to programming; web programming; database design; software tools; examples and exercises taken from the sciences. At the end of this course you will be able to develop computer tools for scientific applications, such as the structuring and analysis of experimental data. Exclusion: CSCA48H8, CSC120H8

CSCA48H3 Introduction to Computer Science
Exclusion: CSCA48H8 (CSCA58H8)
Prerequisite: [CSCA40H8 or (CSCA48H8) plus two GAC mathematics courses or [Grade 12 Geometry and Discrete Mathematics & one other Grade 12 mathematics course]]

Note: This course assumes programming experience in an object-oriented language such as Python, C++ or Java, as provided by CSCA40H8. Students who already have this background may consult the instructor or Supervisor of Studies for advice about skipping CSCA40H8. Students who enrol in CSCA40H8 may find the course too difficult and may "drop down" to CSCA48H8 in sessions when CSCA40H8 is offered. The deadline for "dropping down" is the end of the fifth week of classes.

CSCA50H3 Mathematical Expression and Reasoning for Computer Science
Introduction to abstraction and rigor. Understanding, using and developing precise expressions of mathematical ideas, including definitions and theorems. Informal introduction to logical notation and reasoning. Representation of floating point numbers and introduction to numerical computations. Exclusion: CSC105H8, CSC240H
Prerequisite: [CSCA10H1 or CSCA26H8] plus two OACs from Calculus, Algebra & Geometry, Finite Mathematics or [Grade 12 Geometry and Discrete Mathematics & one other Grade 12 mathematics course]
Corequisite: CSCA44H8

CSCA58H3 Software Design
An introduction to software design and development concepts, methods, and tools, using a strictly-typed object-oriented language such as Java. Topics from: version control, build management, unit testing, re-factor, design patterns, advanced IDE usage, regular expressions, markup languages, parsing using finite state machines, and reflection. Exclusion: [CSC101H8, CSC207H]
Prerequisite: CSCA48H8 or (CSCA58H8)
Corequisite: CSCA58H8

CSCB80H3 Software Tools and Systems Programming
Software techniques in a Unix-style environment, using scripting languages and a machine-oriented programming language (typically C). What goes on in the system when programs are executed.
Core topics: creating and using software tools, pipes and filters, file processing, shell programming, processes, system calls, signals, basic network programming. Exclusion: CSC209H
Prerequisite: [CSCB80H1 or (CSCB81H1)] & [CGPA 2.5 or enrolment in a CSC subject POS]

CSCB29H3 Concepts in Elementary Computer Science
A course specifically for students intending to become elementary or high school teachers. Computer science concepts will be discussed at a fundamental level. Topics covered: problem solving, algorithms, recursion, applications, connections to mathematics, connections to society. Throughout the course, students will apply these concepts to fit the current Ministry's Guidelines for the various grade levels. Students may be required to teach some one-hour classes to various grade levels in an approved school. This is a "teaching friendly" course. The course will be broken up into three distinct topics: elementary level (grades K-5), intermediate (grades 6-9), senior (grades 10-12). Exclusion: This course may not be taken after or concurrently with any C- or D-level Computer Science course.
Prerequisite: [CSCA10H1 or CSCA26H8] or [CSC58H7] & 3 other FCEs & a cumulative CGPA of at least 2.5. Note: Priority will be given to ETPC/CTEP students.

Note: This course assumes programming experience in a language such as Python, C++ or Java as provided by CSCA40H8. Students who already have this background may consult the instructor or Supervisor of Studies for advice about skipping CSCA40H8/CSC250H1/PSCI57H.
CSC339H3 Introduction to the Theory of Computation
Mathematical induction with emphasis on applications relevant to computer science. Aspects of mathematical logic, correctness proofs for iterative and recursive algorithms, study of linear and divide-and-conquer recurrences, introduction to automata and formal languages.
Exclusion: (CSC338H1, CSC338H1) or (CSC338H1, CSC338H1) or [COPA 3.0 or enrolment in a CSC subject POS]

CSC244H3 Principles of Programming Languages
Major topics in the development of modern programming languages. Syntax specification, type systems, type inference, exception handling, information hiding, structural recursion, non-time storage management, and programming paradigms. Two non-procedural programming paradigms: functional programming (e.g., Lisp, Scheme, ML or Haskell) and logic programming (e.g., Prolog, XSB or Coral).
Exclusion: CSC324H
Prerequisite: [CSC307H1 or (CSC307H1) & (CSC363H1 or [CSC363H1] & [COPA 3.0 or enrolment in a CSC subject POS])]

CSC336H3 Numerical Methods
The study of computational methods for solving problems in linear algebra, non-linear equations, approximation, integration, and ordinary differential equations. The aim is to give students both a basic understanding of floating-point arithmetic and the methods used to solve numerical problems as well as a familiarity with the types of subroutines found in typical software packages.
Exclusion: CSC350H1, CSC351H, CSC354H, CSC355H, CSC358H1
Prerequisite: [CSC375H1 or (CSC357H1) or (CSC357H1) & [MATA17H1 or [MATA25Y1] & MATA23H1] & [COPA 3.0 or enrolment in a CSC subject POS]]

CSC440H3 Analysis and Design of Information Systems
Theory, tools and techniques of information systems analysis and design. Topics include: theory of systems and organizations, structured analysis and design, user interface design.
Exclusion: CSC440H
Prerequisite: [(CSC361H or [CSC378H1]) & [COPA 3.0 or enrolment in a CSC subject POS]]

CSC243H3 Introduction to Databases
Introduction to database management systems. The relational data model, relational algebra, querying and updating databases: the SQL query language, Application programming with SQL, Integrity constraints, normal forms, and database design. Elements of database system technology: query processing, transaction management.
Exclusion: CSC341H, (CSC341H, CSC344H, Prerequisite: [(CSC361H or [CSC378H1]) & [COPA 3.0 or enrolment in a CSC subject POS]]

CSC383H3 Numerical Algebra and Optimization
The efficiency and stability of solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Algorithms for optimization problems, including linear programming, and for systems of nonlinear equations.
Exclusion: CSC336H1, CSC338H1, CSC355H1
Prerequisite: [CSC375H1 or (CSC357H1) or (CSC357H1) & MATA24H] & [COPA 3.0 or enrolment in a CSC subject POS]

CSC311H3 Numerical Approximation, Integration and Ordinary Differential Equations
Exclusion: CSC361H, (ACT323H1), CSC334H, CSC351H
Prerequisite: [CSC350H1 & [COPA 3.0 or enrolment in a CSC subject POS]]

CSC363H3 Computability and Computational Complexity
SCSD4H3 Social impact of Information Technology
The trade-offs between benefits and risks to society of information systems, and related issues in ethics and public policy. Topics will include safety-critical software, computational intrusion of privacy, computer-based crime, and professional ethics in the software industry. There will be an emphasis on current events relating to these topics.
Limited enrolment: 25
Exclusion: CSC300H1 (PSC3D0H3)
Prerequisite: Functions full-credit equivalents including (CSCA4H4) or CSCA3H8 or PSC3B7H1 or (CSCA57H3) or CSCA4H3 or CSCA55H0 or (in special cases, CSCA2D1 and permission of the instructor)

SCSD6H3 Software Engineering
The structure and unique characteristics of large software systems. Concepts and techniques in the design and implementation of large software systems. Requirements definition and specification. Software modularity and programming languages for system implementation. Debugging, testing and software quality assurance. Software project management. Formal methods in software engineering. A course project is used to illustrate software engineering techniques.
Exclusion: CSC409H1
Prerequisite: CSCA6H8 or CSCA69H or proficiency in C [or [CPGA 3.0 or enrolment in a CSC subject POS]]

SCSD1H3 Computer Graphics
Identification and characterization of objects manipulated in computer graphics, operations on these objects, efficient algorithms to perform these operations, and interfaces to transform objects to type of object to another. Display devices, display data structures and procedures, graphical input, object modeling, transformations, illumination models, light effects; graphics packages and systems.
Exclusion: CSC14H3
Prerequisite: MAT24H4 and MAT242H6 or [CSC1B3H0 or proficiency in C] or [CSC6B3H1 or CSCI27B1] or [CSCI3H1 or CSCI31H1] or [CSCI32H1 or CSCI35H0] or [CPGA 3.0 or enrolment in a CSC subject POS]

SCSD4H3 Database System Technology
Exclusion: CSC44H1
Prerequisite: [CSCI4H3 or (CSCI3H4)] or [CSCI6H9 or [CSCI2H1 or (CSCI3H5) or (CSCI3H7) or (CSCI3H8) or (CPGA 3.0 or enrolment in a CSC subject POS]]

SCSD5H3 The Business of Software
Overview of the software industry, and principles of operation for successful software enterprises. Software business definitions and planning; market and product planning; management of innovation, research and software development; software marketing and sales management; software manufacturing and support; financial management of high-technology ventures; human resource management and development in high-technology industries.
Exclusion: CSCS4H1
Prerequisite: 2.5 FCs in Computer Science at the B-Level or higher [or [CPGA 3.0 or enrolment in a CSC subject POS]]

SCSD3H3 Computer Networks
Computer communication network principles and practice: The OSI protocol-layer model; Internet application layer and naming; transport layer and congestion avoidance; network layer and routing; link layer with local area networks, connection-oriented protocols and error detection and recovery; multimedia networking with quality of service and multicasting: Principles in the context of the working-coding model implemented in the Internet.
Exclusion: CSCA4H1
Prerequisite: [CSCI1H1 or (CSCI5H3) or (CSCI7B1) or (CSCI2B4H1) and (CPGA 3.0 or enrolment in a CSC subject POS]]

SCSD9H3 Computer Science Project
A significant project in any area of computer science. The project may be undertaken individually or in small groups. This course is offered by arrangement with a computer science faculty member, at U of T Scarborough or the St. George campus. This course may be taken in any session and the project must be completed by the last day of classes in the session in which it is taken. Students must obtain consent from the Supervisor of Studies before registering for this course.
Exclusion: CSC49H4
Prerequisite: [Three-C level computer science half-credit] and [permission of the Supervisor of Studies] [or [CPGA 3.0 or enrolment in a CSC subject POS]]
Enrolment procedure: Project supervisor's note of agreement must be presented to the Supervisor of Studies, who must issue permission for registration.

SCSD9H3 Computer Science Project
Same description as SCSD9H4. Normally a student may not take two projects half-credit courses on closely related topics or with the same supervisor.
If an exception is made allowing a second project on a topic closely related to the topic of an earlier project, higher standards will be applied in judging it. We expect that a student with the experience of a first project completed will be able to perform almost at the level of a graduate student.
Exclusion: CSC49H1
Prerequisite: SCSD4H3
Note: Students must obtain consent from the Supervisor of Studies before registering for this course.

SCIB0H3 Science Engagement Outreach
SCIB0H3 Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)

Concurrent Teacher Education
(B.A.B.Sc. & B.Ed.)
CTEP Coordinator: L. Lewis Email: llewis@utsc.utoronto.ca
Academic Advisor (French): C. Beaques Email: beaques@utsc.utoronto.ca
Academic Advisor (Mathematical & Physical Sciences): C. Dyer Email: dyer@attra.utoronto.ca
The Concurrent Teacher Education Program (CTEP) is in partnership with the Ontario Institute for Studies in Education (OISE/UT) and six other academic units of the University of Toronto, including the University of Toronto Scarborough, which allows students interested in a career in teaching to complete two undergraduate degrees at the same time during five years of full-time study. Upon successful completion of the program, U of T Scarborough students will earn both a Bachelor of Education and either an Honours Bachelor of Arts or an Honours Bachelor of Science and will be recommended for certification as elementary or secondary teachers in Ontario.

There are two CTEP options at U of T Scarborough:
• CTEP/Arts - French: This program prepares students to become teachers at the primary-junior (Kindergarten to Grade 6) or the intermediate-secondary level (Grades 7 to 12).
• CTEP/Science - Mathematical & Physical Sciences: This program prepares students to become teachers at the primary-junior (Kindergarten to Grade 6) or the intermediate-secondary level (Grades 7 to 12)

Teaching Subjects
Intermediate/Secondary (6-12): Students must have two teaching subjects, one of which must be the CTEP area of study for which they have been admitted (e.g. French or Chemistry).
Primary/Junior (0-6): Students do not need a second teaching subject. As teachers, they will cover many topics in the curriculum and should have knowledge of a range of areas.

Students declare their main teaching subject (specialist or major program) and level (primary/junior or intermediate/secondary) in the session following attainment of their 4th credit.
Students must maintain a cumulative GPA of at least 2.5 to remain in the program.

Students who choose, or are required, to withdraw from CTEP may be allowed to transfer to a non-CTEP Honours Bachelor of Arts or Honours Bachelor of Science, retaining credit for all courses except the internship in (c) above and the Bachelor of Education courses listed below.

• A Bachelor of Education degree which requires completion of 5.0 full credits as follows:
  a. 0.5 credit in Principles of Teaching: Legal, Ethical and Professional to be taken within Years 3 or 4.
  b. 0.5 credit in Inclusive Education: ESL and Exceptional Learners which includes 20-hour field experience focused on observation/teaching to be taken within Years 3 or 4.
  c. 0.5 credit in Psychological Foundations of Learning to be taken within Years 3 or 4.
  d. 0.5 credit in Social Foundations of Teaching and Schooling to be taken within Years 3 or 4.
  e. 0.25 credit in Mentored Inquiry and Teaching with 10-15 days spent in school to be taken in Year 4.
  f. 1.0 credit in Curriculum, Instruction and Assessment #1 to be taken in Year 4.
  g. 0.25 credit in Practicum placement in schools (0.25 credit), 35-40 days, 3-5 days per week, Winter session to be taken in Year 4.
  h. 0.25 credit in Mentored Inquiry and Teaching (0.25 credit) with 10-15 days spent in school to be taken in Year 5.
  i. 1.0 credit in Curriculum, Instruction and Assessment #2 (1.0 credit) to be taken in Year 5.
  j. 0.25 credit in Practicum placement in schools (0.25 credit), 25 days, 5 days per week, month of May to be taken in Year 5.

Over the course of the program, CTEP students will also develop a Portfolio (a collection of artifacts, assignments and reflective activities) that mirrors their growth as CTEP candidates from students to professionals.

(For more information on these courses and OISE/UT related CTEP requirements, see the OISE/UT Calendar.)

Diaspora and Transnational Studies (B.A.)

Faculty List
M. Lantock, B.A. (McGill), M.A., Ph.D. (Michigan), F.R.S.C., Professor
M.B. Goldman, M.A., (Victoria), Ph.D. (Toronto), Associate Professor
N. ten Kortenaar, M.A., Ph.D. (Toronto), Associate Professor
E.A. Harvey, M.Phil., Ph.D. (London, U.K.), Assistant Professor
K. MacDonald, B.A., M.A., Ph.D. (Waterloo), Assistant Professor

Supervisor of Studies: K. MacDonald (416-287-7294), Email: kmacd@utoronto.ca

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.
Major Program in Diaspora and Transnational Studies

Program Requirements

Students must complete 7.0 full credits (FCEs) as follows:

1. DTSS001H Introduction to Diaspora and Transnational Studies I
2. DTSS002H Introduction to Diaspora and Transnational Studies II
3. 2.0 FCEs from Group A and Group B courses (below) with at least 2.0 FCEs from each group. Coverage must include at least two diasporic communities or regions, to be identified in consultation with the program advisor. At least 1.0 FCE must be at the C-level or above.
4. DTSS003H Advanced Topics in Diaspora and Transnationalism I: Postcolonialism and Diaspora
5. DTSS004H Advanced Topics in Diaspora and Transnationalism II: Critical Approaches to Diaspora Studies

Group A (Humanities) courses

- ENG317H Contemporary Literature from the Caribbean
- ENG318H Ethic Traditions in American Literature
- ENG370H The Immigrant Experience to 1900
- ENG371H The Immigrant Experience in Literature since 1980
- ENG372H Between Traditions and Freedoms: Writing by Canadians of Asian Descent
- FRE328H The Francophone World
- FRE335H Francophone Literature
- FRE470H Cinema of the Francophone World
- FRE471H Special Topics in Linguistics: Polyn and Creole Languages
- HISC148H Edible History: History of Global Foodways
- HISC360H People in Motion: Immigrants and Migrants in U.S. History
- HISC361H Immigrants and Race Relations in Canadian History
- HISD311H Thinking of Diversity: Perspectives on American Pluralisms
- HISD351H The Politics of American Immigration, 1865 present
- VAPA309H Dialogues in the Diaspora
- VPH355H Africa through the Photographic Lens
- VPH356H Issues in Contemporary Global Arts
- VMPH99H Popular Music in a Cross-Cultural Context

Plus any course identified by the Faculty of Arts & Science or by the University of Toronto Mississauga as a Group A course.

Group B (Social Sciences) courses

- ANTI308H The Chinese Diaspora
- ANTI340H The Anthropology of Transnationalism
- GGG870H Spaces of Multiculturality: Critical Mixed Race Theory
- GGG871H Local Geographies of Globalization
- POLA871H Leaving Home: Politics and Emigration
- SACC258H Comparative Ethnic and Race Relations
- SACC341H Globalization: Causes, Consequences and Critique

Plus any course identified by the Faculty of Arts & Science or by the University of Toronto Mississauga as a Group B course.

Faculty of Arts & Science and University of Toronto Mississauga courses that can be applied to the program:

Arts & Science Courses

Anthropology
- ANTI347H Metropolics: Global Cities
- ANTI426H Orientalism: Western Views of the Other
- ANTI440H Society in Transition

East Asian Studies
- EAS202Y Modern East Asian History
- EAS271H 20th Century Korean History

English
- ENG256Y Twentieth-Century North-American Jewish Literature
- ENG268H Asian North American Literature
- ENG277Y Jewish Literature in English
- ENG277Y Introduction to African Canadian Literature
- ENG279Y Chinese North American Literature in English
- ENG282H The English Language in the World
- ENG368H Asian North American Poetry and Prose
- ENG370H Post-Colonial and Transnational Discourses

Fine Art History
- FAH460H Contemporary South Asian Art

Firm-Logic Studies
- FIN320H The Finnish Canadian Immigrant Experience

French
- FRE332H Francophone Literature I
- FRE431H Francophone Literature II

Geography
- GRG21E0 Global Cities
- GRG21EL Urbanization & Global Change
- GRG255H Recreation and Tourism
- GRG331H Urban Historical Geography of North America
- GRG368H The Urban Planning Process
- GRG35H Canada in a Global Context
- GRG361H Understanding the Urban Landscape
- GRG362H Cities of Difference
- GRG363H Critical Geographies: An Introduction to Radical Ideas on Space, Society and Culture
- GRG366H Historical Toronto
- GRG368H Geography of Language
- GRG421H Technology, Toronto and Global Warming
- GRG452H Space, Power, Geography: Understanding Spatiality
- GRG459H Urban Form, Structure and Growth

German
- GER362H Soviet and Kosher: Jewish Culture in the Soviet Union
- GER364H Introduction to the History of Yiddish Cinema

History
- HIS202H Gender, Race and Science
- HIS206H Medieval History of the Jewish People
- HIS208Y History of the Jewish People
- HIS822Y The British Imperial Experience
- HIS824Y Caribbean History and Culture
- HIS826Y Black Freedom
- HIS835Y The Mediterranean, 600-1700: Crusade, Colonialism, Diaspora
- HIS835Y Popular Culture and Politics in the Modern Caribbean
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIS324H</td>
<td>Science, Technology and the Development of Modern Culture</td>
</tr>
<tr>
<td>HIS325Y</td>
<td>Chinese Migration</td>
</tr>
<tr>
<td>HIS338Y</td>
<td>The Holocaust: Nazi-Germany, Occupied Europe &amp; the Destruction of European Jewry</td>
</tr>
<tr>
<td>HIS345H</td>
<td>History and Film</td>
</tr>
<tr>
<td>HIS356H</td>
<td>Zionism and Israel</td>
</tr>
<tr>
<td>HIS359H</td>
<td>Regional Politics and Radical Movements in the 20th Century Caribbean</td>
</tr>
<tr>
<td>HIS360H</td>
<td>African-Canadian History, 1600s- Present</td>
</tr>
<tr>
<td>HIS366Y</td>
<td>Black Canadian Women's History</td>
</tr>
<tr>
<td>HIS367H</td>
<td>History of Images</td>
</tr>
<tr>
<td>HIS369Y</td>
<td>Aboriginal Peoples of the Great Lakes from 1500</td>
</tr>
<tr>
<td>HIS370H</td>
<td>The Black Experience in the United States Since the Civil War</td>
</tr>
<tr>
<td>HIS384H</td>
<td>Colonial Canada: the East</td>
</tr>
<tr>
<td>HIS386H</td>
<td>Muslims in India and Pakistan</td>
</tr>
<tr>
<td>HIS393H</td>
<td>Slavery and the American South</td>
</tr>
<tr>
<td>HIS494H</td>
<td>South Asian Migration and Settlement</td>
</tr>
<tr>
<td>HIS403Y</td>
<td>Jews and Christians in Medieval and Renaissance Europe</td>
</tr>
<tr>
<td>HIS408Y</td>
<td>History of Race Relations in America</td>
</tr>
<tr>
<td>HIS417H</td>
<td>Globalization, Science, and Technology</td>
</tr>
<tr>
<td>HIS433H</td>
<td>Polish Jews Since the Partition of Poland</td>
</tr>
<tr>
<td>JPH435Y</td>
<td>Linguistics and Cultural Minorities in Europe</td>
</tr>
<tr>
<td>HIS437H</td>
<td>A History of the Black Autobiographical Tradition in North America</td>
</tr>
<tr>
<td>HIS444H</td>
<td>Topics in Jewish History: Jewish Identity in the Modern World</td>
</tr>
<tr>
<td>HIS445H</td>
<td>Nationalism</td>
</tr>
<tr>
<td>HIS466Y</td>
<td>Gender and Slavery in the Atlantic World</td>
</tr>
<tr>
<td>HIS465Y</td>
<td>Black Slavery in Latin America</td>
</tr>
<tr>
<td>HIS473H</td>
<td>Topics in Canadian Aboriginal/Non-Aboriginal Relations</td>
</tr>
<tr>
<td>HIS474H</td>
<td>Voices From Black America</td>
</tr>
<tr>
<td>HIS480H</td>
<td>Modernity and its Others: History and Postcolonial Critique</td>
</tr>
<tr>
<td>HIS484H</td>
<td>The Car in History: Business, Space and Culture in North America</td>
</tr>
<tr>
<td>HIS487H</td>
<td>Travelers and Scholars East/West</td>
</tr>
</tbody>
</table>

**Innis College**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>INI127Y</td>
<td>Race and Representation</td>
</tr>
<tr>
<td>IN380Y</td>
<td>Contemporary World Cinema</td>
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</table>

**Italian Studies**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITA231Y</td>
<td>Ethnicity and Mainstream Italian Canadian Culture</td>
</tr>
<tr>
<td>ITA341H</td>
<td>Italian Canadian Literature I: Life in a New World</td>
</tr>
<tr>
<td>ITA493H</td>
<td>Italian Canadian Literature II: Identity and Voice</td>
</tr>
</tbody>
</table>

**Near and Middle Eastern Civilizations**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>NMC24H</td>
<td>The Steep Frontier in Islamic History</td>
</tr>
<tr>
<td>NMC35H</td>
<td>Mass Media and the Middle East</td>
</tr>
<tr>
<td>NMC370Y</td>
<td>Ancient Israel</td>
</tr>
<tr>
<td>NMC475H</td>
<td>Orientalism and Occidentalism</td>
</tr>
</tbody>
</table>

**New College - African Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NEW222Y</td>
<td>Caribbean Literature and Society</td>
</tr>
<tr>
<td>NEW234Y</td>
<td>Caribbean Thought I</td>
</tr>
<tr>
<td>NEW324Y</td>
<td>Caribbean Thought II</td>
</tr>
<tr>
<td>NEW325H</td>
<td>Caribbean Women Thinkers</td>
</tr>
<tr>
<td>NEW326Y</td>
<td>Identity, Survival, Change</td>
</tr>
<tr>
<td>NEW327Y</td>
<td>The Hispanic Caribbean: Insights and Images of Cuba</td>
</tr>
</tbody>
</table>

**New College - Equity Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NEW343H</td>
<td>The Roma Diaspora in Canada</td>
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</tbody>
</table>

**Political Science**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>POL215Y</td>
<td>Politics and Transformation of the Asia-Pacific</td>
</tr>
<tr>
<td>POL344H</td>
<td>Ethnicity and Politics in Canada</td>
</tr>
<tr>
<td>POL351H</td>
<td>Ethnic Politics in Comparative Perspective</td>
</tr>
<tr>
<td>POL349Y</td>
<td>Globalization and Urban Politics</td>
</tr>
<tr>
<td>POL358Y</td>
<td>Post-Colonial Questions: Politics, Knowledge, Power</td>
</tr>
<tr>
<td>POL364H</td>
<td>Religion and Politics</td>
</tr>
<tr>
<td>POL403H</td>
<td>Colonialism/Post-Colonialism: The Colonial State and its Forms of Power</td>
</tr>
<tr>
<td>POL405Y</td>
<td>Marxism</td>
</tr>
<tr>
<td>POL425Y</td>
<td>Multiculturalism in Canada</td>
</tr>
<tr>
<td>POL429Y</td>
<td>Nationalism, Ethnic Conflict and Democracy</td>
</tr>
<tr>
<td>POL430Y</td>
<td>Comparative Studies in Jewish and Non-Jewish Political Thought</td>
</tr>
<tr>
<td>JPH435Y</td>
<td>Linguistic and Cultural Minorities in Europe</td>
</tr>
<tr>
<td>POL436H</td>
<td>Problems of Political Community</td>
</tr>
<tr>
<td>POL439H</td>
<td>The Canadian Welfare State in Comparative Perspective</td>
</tr>
<tr>
<td>POL443H</td>
<td>Canada and the Third World</td>
</tr>
<tr>
<td>JPH455Y</td>
<td>Cities</td>
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</tbody>
</table>

Depending on the topic, the following course may also count:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>POL443H</td>
<td>Topics in Comparative Politics II</td>
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</tbody>
</table>

**Religious Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>RLG242H</td>
<td>Diasporic Religions</td>
</tr>
<tr>
<td>RLG341H</td>
<td>Dreaming of Zion: Exile and Return in Jewish Thought</td>
</tr>
</tbody>
</table>

Depending on the topic, the following course may also count:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>RLG430H</td>
<td>Advanced Topics in Judaism</td>
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**St. Michael's College**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SMCA11H</td>
<td>The Irish in Canada</td>
</tr>
<tr>
<td>SMCA14H</td>
<td>The Scots in Canada</td>
</tr>
<tr>
<td>SMCA41H</td>
<td>Irish Nationalism in Canada and the United States</td>
</tr>
</tbody>
</table>

**Slavic Languages and Literature**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SLA230H</td>
<td>Literature of the Ukrainian-Canadian Experience</td>
</tr>
<tr>
<td>SLA302H</td>
<td>The Imaginary Jew</td>
</tr>
</tbody>
</table>

**Sociology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SOC215Y</td>
<td>Asian Communities in Canada</td>
</tr>
<tr>
<td>SOC341Y</td>
<td>The Jewish Community in Europe and North America</td>
</tr>
<tr>
<td>SOC444H</td>
<td>Contemporary International Migration</td>
</tr>
<tr>
<td>SOC483H</td>
<td>The Sociology of Women and International Migration</td>
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</tbody>
</table>

**Spanish and Portuguese**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SPA466H</td>
<td>Literature of Culture in Latin America</td>
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</table>

**Victoria College**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>VICT305Y</td>
<td>Creative Writing: A Multicultural Approach</td>
</tr>
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**Women's and Gender Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WGS560H</td>
<td>Gender and Cultural Difference: Transnational Perspectives</td>
</tr>
<tr>
<td>WGS569H</td>
<td>Studies in Post-Colonialism</td>
</tr>
<tr>
<td>WGS544H</td>
<td>Gender and the Sacred</td>
</tr>
</tbody>
</table>
Drama

See the Visual and Performing Arts section of this Calendar.

Economics For Management Studies

(B.B.A./B.A.)

Faculty List

M. Kredelinsky, S.B. (M.I.T.), M. Phil., Ph.D. (Yale), Professor
M. Cangelosi, B.Sc., M.A., Ph.D. (Toronto), Associate Professor
W. Hojat, B.A. (Western Ontario), M.A., Ph.D. (Toronto), Associate Professor
I.C. Parker, B.A. (Manitoba), M.A. (Toronto), Ph.D. (Yale), Associate Professor
G. Frazer, B.Math (Waterloo), B.Ed. (Western), M.A. (Toronto), M.Phil., Ph.D. (Yale), Assistant Professor
H. Krashinsky, B.A. (Queen's), M.A., Ph.D. (Princeton), Assistant Professor
H. Tan, B.Sc. (Xinjiang), M.Sc., Ph.D. (McGill), Assistant Professor
G. Cleveland, B.A. (Dalhousie), M.A., Ph.D. (Toronto), Senior Lecturer
J.M.S. Au, B.A., M.A., Ph.D. (Simon Fraser), Lecturer
J. Parkinson, B.A. (Western), M.A., Ph.D. (Toronto), Lecturer
M.A. Sillanpaa, B.Sc., M.A.Sc., M.B.A. (Toronto), Ph.D. (McMaster), Lecturer
Economics studies how consumers and producers interact in a market economy to provide goods and services. Economics also studies how this process grows and changes over time, and under what circumstances it may fail to function in an optimal fashion. Economic policies to remedy these failures are also examined.

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

The curriculum provides an excellent background for careers in business, government, and the professions, and may be of considerable interest to students specializing in other disciplines as well. Students may focus their study of economics in the specialist or specialist co-op Program in Economics for Management Studies as part of the B.B.A., or may either major or minor in economics as part of the B.A. degree. Students may also choose economics as a stream in the B.A. Program. There is also a joint specialist Program with political science. Finally, economics plays a significant role within the general B.B.A. Program.

Students wishing to pursue a graduate program in Economics will require some additional courses not offered at UTSC. As soon as possible, such students should consult with the Supervisor of Studies in Economics at U of T Scarborough for advice on the courses that may be most helpful.

**Programs in Economics for Management Studies**

Although a group of students are directly admitted from high school, students generally apply to enter a program at the end of their first year. Later admission is also possible. Students should consult the detailed discussion below. The following Programs are offered:

1. Specialist (Co-op) in Economics for Management Studies - a specialist program in Economics in the context of a Management degree, and including Co-op work terms. This Program leads to a B.B.A. Described in detail below.

2. Specialist in Economics for Management Studies - a specialist program in Economics in the context of a Management degree. This Program leads to a B.B.A. Described in detail below.

3. Specialist in Political Science & Economics for Management Studies - a specialist degree with equal amounts of Economics and Political Science (6 FCEs each). This program leads to a B.A. degree. Described in detail below.

4. Major in Economics for Management Studies - program of six FCEs of Economics for Management Studies, one half FCE in Mathematics and one in Humanities. This is an arts program. (See the Degrees section of this Calendar for information on B.A. and B.Sc. degrees.) Described in detail below.

**Note:** Students may not be jointly enrolled in a program leading to a B.B.A. and in the Major Program in Economics for Management Studies.

5. Minor in Economics for Management Studies - program of four FCEs of Economics for Management Studies. This is an arts program. (See the Degrees section of this Calendar for information on B.A. and B.Sc. degrees.) Described in detail below.

**Note:** Students may not be jointly enrolled in a program leading to a B.B.A. and in the Minor Program in Economics for Management Studies.

**Other Programs with a substantial component of Economics for Management Studies**

6. Specialist in Management (B.B.A.) - a program emphasizing Management but including four FCEs in Economics for Management Studies, leading to a B.B.A. degree. Students may elect to take additional specified courses in Economics for Management Studies to qualify for specialization within the Economic Data Analysis stream. Described in detail in the Management section of this Calendar.

7. Specialist (Co-op) in Management (B.B.A.) - same as 6 above, but also includes Co-op work terms.

8. Specialist or Major in International Development Studies or Major in Public Policy or Major in International Studies or Major in Health Studies within which students may choose to include a significant component from Economics for Management Studies. Described in detail elsewhere in this Calendar.

**Admission to Programs in Economics for Management Studies and in Management**

1. All students, both those who have been directly admitted into the Department from high school (and who are guaranteed admission into programs in the Department) and those admitted into pre-program (therefore not guaranteed admission into programs in the Department) must formally apply to specific programs after four credits have been completed. Decisions are made on program admissions by the Supervisor of Studies only twice a year, in May and in August. These decisions are based on program requests which students submit to the Registrar (see the Registration Guide which is provided by the Registrar). Only transfer students are considered at other times. Students should have ten FCEs or less when they seek admission to programs in the Department of Management. Note that enrollment in ECMB201H, ECMB204H, ECMB211H, ECMB212H, ECMC203H, ECMC206H, ECMC211H, ECMC212H, ECMC213H and ECMC241H will be strictly limited to students enrolled in Specialist or Major programs in the Department of Management and, where possible, other students who meet criteria of academic merit.

2. Those students directly admitted into the Department from high school are guaranteed entry into a program in the Department (only a limited number of students not directly admitted in Co-op Programs will be accepted into Co-op programs after first year). Directly admitted students must maintain a GPA of 2.0 or greater after completing eight credits to continue in these programs.

3. Admission to the Minor Program in Economics for Management Studies is not limited. All students who apply for this program will be admitted. However, students are warned that they are not guaranteed admission to B-level and C-level courses, and thus will be accommodated only after other program students have been admitted to these courses. Thus many courses may be unavailable.

**Economics for Management Studies Courses with Limited Enrolment**

Students who have been admitted to Specialist and Major programs in the Department of Management are guaranteed access to enough courses in Economics for Management Studies to complete their programs. To protect that access, students must register early in the registration process. After a period in which program students are given priority, access to Economics for Management Studies courses will be allocated on the basis of academic merit. Students not formally admitted to a Specialist or Major program in the Management Department will likely experience difficulty in gaining access to enough courses to complete an Economics for Management Studies program.

**SPECIALIST (CO-OPERATIVE) PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES (B.B.A.)**

**Supervisor of Studies:** J. Peckham
**E-mail:** economics-supervisor-studies@tse.utoronto.ca

The Specialist Co-operative program in Economics for Management Studies (B.B.A.) is a work-study program which combines academic studies in economics and management with work experience in public and private enterprises. This degree is designed to allow students to learn practical skills of data analysis and to combine them with the interpretive skills given by knowledge of economic theory. For information on admission, fees, work placements, and standing in the Program, please see the Co-operative Programs section of this Calendar, and the admission discussion below.

**Program Admission**

Minimum qualifications for entry following first year: 4 full credits including: ECMA244H & ECMA245H; MGMT203H & MGMT206H or MGMT207; MAT224H1 or [MAT224H1 & MAT224H2] or [MAT224H5 & MAT235H1]; a cumulative GPA of at least 3.0.
Program Requirements
The Specialist Co-operative Program in Economics for Management Studies requires the completion of the following minimum requirements as part of a twenty-credit degree (B.B.A.).

1. 8.5 FCEs (full credit equivalents) in Economics for Management Studies, including: ECON204H, ECON206H, ECON208H, ECON210H, ECON212H (no exam of equivalent), ECON213H, ECON215H, and ECON216H and two additional FCEs in Economics for Management Studies at least one at the C-level (not including ECONC201H/ECMC202H).

2. MATA32H & MATA33H.

3. MGT203H, MGT204H, MGT210H, MGT215H, MGT216H, MGT218H, MGT229H, MGT233H, MGT274H, MGT274H and 0.5 FCE from the strategic management options as described in the B.B.A. Program in the Management section of this Calendar.

4. At least 1.0 FCE from courses within the Department of Humanities.

Note related to Requirement 2 above: The introduction of MATA23H & MATA33H is effective as of 2007 Fall and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed (MATA27H) and (CSCA202H). These courses will be offered for the last time in 2007 Summer.

Students should be aware that the mathematics requirement implies that Grade 12 or OAC Calculus is a prerequisite for entry to this Program. Further, students who are considering graduate work in Economics should be aware that they should accumulate considerably more mathematics than the minimum required; they should consult the Supervisor of Studies in Economics for details.

Academic Assessment
Please refer to the Management section of this Calendar for rules on academic assessment for programs leading to the B.B.A. Students in this program will be assessed as per those rules.

Work Terms
This program requires three work terms, the first one of which may be combined with course work. While some students will work at regular co-op placements arranged through the B.B.A. co-op office, a select group of students in this program may obtain placements working with faculty in the Department of Management during the 2nd year of courses. There will be two further work terms, outside the University, on a full-time basis. These will normally be scheduled during the summer. These will generally be placements with professional economists working for financial institutions, government organizations, or elsewhere. Students must maintain a 2.5 GPA in order to go on these work terms. Students must complete the Introduction to Management Co-op Tutorial before undertaking a work term.

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

First Year: ECON204H, ECON206H, MGT203H, MGT204H, MGT210H, MGT215H, MGT216H, MATA32H, MATA33H.

First Summer: ECON208H, ECON210H, [ECON212H & ECON215H] or ECON209H.

SPECIALIST PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES (B.B.A.)
Supervisor of Studies: J. Parkinson E-mail: economics-supervisor-studies@utsc.utoronto.ca

This program provides a specialization for those wishing to study a substantial component of Economics in a Management degree (B.B.A.) and/or seeking to prepare themselves for studies at the Masters' level.

Program Admission
Note: Registration in this program is limited. Students must have completed a minimum of four credits to be considered for this program. Students with between 4-10 credits will be considered on the basis of GPA and completion of 1 FCE (full credit equivalent) in Economics at the introductory level.

Note related to Requirement 2 above: The introduction of MATA23H & MATA33H is effective as of 2007 Fall and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed (MATA27H) and (CSCA202H). These courses will be offered for the last time in 2007 Summer.

Students should be aware that the mathematics requirement implies that Grade 12 or OAC Calculus is a prerequisite for entry to this Program. Further, students who are considering graduate work in Economics should be aware that they should accumulate considerably more mathematics than the minimum required; they should consult the Supervisor of Studies in Economics for details.

Academic Assessment
Please refer to the Management section of this Calendar for rules on academic assessment for degrees leading to the B.B.A. All students pursuing a BBA are assessed based on those rules.

SPECIALIST PROGRAM IN POLITICAL SCIENCE AND ECONOMICS FOR MANAGEMENT STUDIES (B.A.)
Supervisor of Studies: J. Parkinson E-mail: economics-supervisor-studies@utsc.utoronto.ca

Program Admission
Note: Registration in this Program is limited. Students must have completed a minimum of four FCEs to be considered for this Program. Students with between 4-10 FCEs will be considered on the basis of GPA and completion of 1 FCE (full credit equivalent) in Economics at the introductory level.
Program Requirements
Six full-credit equivalents are required in each of the two disciplines, as specified below. Students must also complete at least four FCEs in disciplines other than Political Science & Economics for Management Studies.

Required Courses in Economics for Management Studies
Six FCEs, made up of the following:
- [ECMA304H & ECMA306H] or [ECMA301H & ECMA305H]
- ECMB301H or ECMB302H
- ECMB305H or ECMB306H
- ECMC311H & ECMC321H
- ECMB321H or ECMB306H or ECMC311H or ECMB346H or ECMC306H
- ECMC212H or ECMC306H

Plus two more FCEs in ECM, including at least one at the C-level.

Required Courses in Political Science
Six FCEs, including the following:
- [POLG505H & POLG521H]
- and
- [POLB751H & POLB751H]

One FCE from each of any three of the following fields:


Noted: The six full-credit equivalents in Political Science must include at least one full credit at the C- or D-level and no more than one full credit at the A-level.

MAJOR PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES (B.A.)

Supervisor of Studies: J. Parkinson E-mail: economics-supervisor-studies@utsa.utoronto.ca

This program is designed to give a coordinated exposure to the subject matter of Economics for Management Studies to students pursuing the four-year degree with more than a single area of concentration.

Program Admission
Note: Registration in this program is limited.

Students must have completed a minimum of four FCEs to be considered for this program. Students with 4-6 FCEs will be considered on the basis of cumulative GPA including:
- ECMC306H, ECMA304H, or [MAT325H & MAT335H] and [MAT322H & MAT338H] or [MAT321H & MAT339H] and one of ECMB302H and ECMB306H. Students should be aware that the MAT requirement implies that Grade 12 or OAC calculus is a requirement for entry into this program.

Note: Students in the B.B.A. may not jointly enrol in the Major Program in Economics for Management Studies.

Program Requirements
The program consists of six full-credit equivalents in Economics for Management Studies, one full-credit equivalent in Mathematics, and one full-credit equivalent in Humanities. The Economics courses must include:
- ECMA401H & ECMA406H
- ECMB321H & ECMB326H
- [ECMB311H & ECMB312H] or ECMB309Y
- ECMC302H & ECMC306H
- ECMC11H

Plus 1.5 FCEs chosen from the courses in Economics for Management Studies including at least one at the C-level (not including ECMC301H, ECMC302H, ECMC303H). Students must also complete MAT322H & MAT335H (or equivalents) and one FCE in Humanities.

Note: The introduction of MAT322H & MAT335H is effective as of 2007 Fall and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed MAT271H & CSIC202H. These courses will be offered for the last time in 2007 Summer.

Note: Students who take ECMA301H and ECMA305H and then decide to apply for this program will be permitted to substitute [ECMA301H & ECMA305H] for [ECMA401H & ECMA406H]. However, these students will be required to complete MAT322H and MAT335H before registering for ECMB321H and ECMB306H.

MINOR PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES (B.A.)

Supervisor of Studies: J. Parkinson E-mail: economics-supervisor-studies@utsa.utoronto.ca

This program is designed to give exposure to the subject matter in some areas of Economics to students who will combine this minor with other minors or majors in order to graduate. (See the Degree section of this Calendar for information.) Students need not have completed Grade 12 or OAC calculus in order to enter this program.

Program Admission
Note: Registration in this program is not limited and does not require training in calculus.

Students will note that some of the B and C level courses in Economics for Management Studies do require calculus. Therefore, students signed up for the Minor Program must choose their courses carefully, ensuring that they have the necessary prerequisites.

Note: Students in the B.B.A. may not jointly enrol in the Minor Program in Economics for Management Studies.

Program Requirements
The program consists of four FCEs in Economics for Management Studies as follows:
- ECMC301H or ECMC306H
- ECMC305H or ECMC306H
- ECMB302H or ECMB306H
- ECMB311H or ECMB321H

Plus two more FCEs in Economics for Management Studies, including at least one at the C-level.

Note: Students are warned that they are not guaranteed admission to all B-level and C-level courses. New C-level courses have been developed (ECMC311H, ECMC321H, and ECMC303H) and will be available to students in the minor program. Future additions available to students in the minor program are anticipated.

Note: Students may only be considered for admission if they are currently enrolled in the Minor Program in Economics for Management Studies. While not required, students are strongly encouraged to include a statistics course in the program.
ECMA803H Price Theory
Intermediate level development of the
principles of microeconomic theory. The
emphasis is on static partial equilibrium
analysis. Topics covered include: consumer	heory, theory of production, theory of the
firm, perfect competition. This course does
not qualify as a credit for either the Major in
Economics for Management Studies or
for the B.B.A.
Limited enrolment: 120 per section.
Exclusion: ECMB202H, ECDO20Y, ECDO20Y
Prerequisite: Grade 12 or OAC Calculus
Conquisite: It is strongly recommended that
MAT2A2H & MAT2A3H be taken
simultaneously with ECMA804H & ECMA806H

ECMA804H Introduction to
Microeconomics
Economic theory of the firm and the
consumer. Calculus, algebra and graphs are
used extensively. The course is oriented
towards students interested in the Specialist
Program in Management, the Specialist
program in Economics for Management
Studies, and the Major Program in Economics
for Management Studies.
Exclusion: ECMA801H, ECMA802Y, ECMA803Y, ECMA804Y, ECMA805Y
Prerequisite: Grade 12 or OAC Calculus
Conquisite: It is strongly recommended that
MAT2A2H & MAT2A3H be taken
simultaneously with ECMA804H & ECMA806H

ECMA805H Introduction to
Macroeconomics
Topics include output, employment, prices,
interest rates and exchange rates. Although
calculus is not used in this course, algebra and
graphs are used extensively to illustrate
economic analysis.
Exclusion: ECMA802Y, ECMA804Y, ECMA806Y, ECMA801Y, ECMA802Y
Prerequisite: Grade 12 or OAC Calculus

ECMA806H Introduction to Macroeconomics: A Mathematical Approach
Study of the determinants of output,
unemployment, prices, interest rates and
exchange rates. Calculus, algebra and graphs
are used extensively. The course is oriented
towards students interested in the Specialist
Program in Management, the Specialist
program in Economics for Management
Studies, and the Major Program in Economics
for Management Studies.
Exclusion: ECMA802Y, ECMA803Y, ECMA805Y, ECMA801Y, ECMA802Y
Prerequisite: Grade 12 or OAC Calculus
Conquisite: It is strongly recommended that
MAT2A2H & MAT2A3H be taken
simultaneously with ECMA804H & ECMA806H

ECMB803H Macroeconomic Theory and
Policy: A Mathematical Approach
Intermediate level development of the
principles of macroeconomic theory. The
course will cover the same topics as
ECMB805H, but will employ techniques
involving calculus so as to make the theory
clearer to students. Enrolment is limited to
students registered in programs requiring
this course.
Limited enrolment: 80 per section.
Exclusion: ECMB800H, ECDO20Y, ECDO20Y
Prerequisite: [ECMA804H & ECMA806H] or [ECMA802Y] & [ECMA601H &
ECMA805Y] or [ECMA803Y]

ECMB802H Price Theory: A Mathematical
Approach
Intermediate level development of the
principles of microeconomic theory. The
course will cover the same topics as
ECMB801H, but will employ techniques
involving calculus so as to make the theory
clearer to students. Enrolment is limited to
students registered in programs requiring
this course.
Limited enrolment: 80 per section.
Exclusion: ECMB800H, ECDO20Y, ECDO20Y
Prerequisite: [ECMA804H & ECMA806H] or [ECMA802Y] & [MAT2A2H &
MAT2A3H]

ECMB804H Quantitative Methods in
Economics
An introduction to probability and
statistics as used in economic analysis.
Topics to be covered include: descriptive
statistics, probability, special probability
distributions, sampling theory, confidence
intervals. Enrolment is limited to students
registered in programs requiring this
course.
Limited enrolment: 120 per section
Exclusion: ECMB809Y, ANT1C3Y, ECDO20Y, ECDO22Y, ECDO20Y, SOCB601H, STAB22H, STA847Y
STAB2H, STA85Y
Prerequisite: [ECMA804H & ECMA806H] or [ECMA802Y] & [MAT2A2H or
MAT2A3H & MAT2A3H]

ECMB805H Public Decision Making
A study of decision making by
governments from an economic
perspective. The course begins by
examining various rationales for public
involvement in the economy and then
takes up a number of theories explaining
the way decisions are actually made in the
public sector. The course concludes with
a number of case studies of Canadian public
policy making.
Limited enrolment: 60
Prerequisite: [ECMA801Y & ECMA806H] or [ECMA802Y] or [ECMA804Y &
ECMA805Y] or [ECMA803Y]
ECMB206H3 Topics in Macroeconomic Theory
This course will build on the theory developed in ECMB206H3. Topics will be chosen from a list including consumption theory, investment, exchange rates, rational expectations, inflation, neo-Keynesian economics, monetary and fiscal policy. Enrollment is limited to students registered in programs requiring this course.
Limited enrolment: 40
Prerequisite: [ECMA60H1 & ECMA606H1] or [ECMA60Y2] or [ECMA60Y1 & ECMA605H1] or [ECMA60Y3]
Corequisite: ECMB201H or ECMB22H

ECMB207H3 Advanced Microeconomic Theory
This course will review recent developments in microeconomics, including new classical and new Keynesian theories of inflation, unemployment and business cycles. Enrollment is limited to students registered in programs requiring this course.
Limited enrolment: 35
Exclusion: EC202H1
Prerequisite: [ECMB209H1 or ECMB212H1] & ECMB202H

ECMC11H3 Advanced Macroeconomics
This course will review recent developments in macroeconomics, including new classical and new Keynesian theories of inflation, unemployment, and business cycles. Enrollment is limited to students registered in programs requiring this course.
Limited enrolment: 35
Exclusion: EC202H1
Prerequisite: [ECMB209H1 or ECMB212H1] & ECMB202H

ECMC203H3 Economics of the Media
An examination of the role and importance of communications media in the economy. Topics to be covered include: the challenges media pose for constitutional economic theory, historical and contemporary issues in media development, and basic media-research techniques. The course is research-oriented, involving empirical assignments and a research essay.
Limited enrolment: 30
Exclusion: ECMC200H1
Prerequisite: [ECMB201H1 or ECMB212H] & ECMC11H3

ECMC204H3 Law and Economics
A study of the role of the law in the development of economic theory and in the regulation of economic activity. Topics to be covered include: the legal basis of property rights, contracts, torts, product liability, and consumer protection.
Limited enrolment: 30
Exclusion: EC202H1
Prerequisite: [ECMB201H1 or ECMB212H] & ECMC11H3
ECCM484H3 The Economics of Canadian Public Policy
This course provides a comprehensive study of selected Canadian public policies from an economic point of view; topics may include environmental policy, competition policy, inflation and monetary policy, trade policy and others. We will study Canadian institutions, decision-making mechanisms, implementation procedures, policy rationales, and related issues.
Limited enrolment: 60
Exclusions: [ECO230H1, ECO230Y1, ECO336Y]
Prerequisites: [ECMB10H1 or ECOM201H1] & [ECMB20H1 or ECOM301H1]

ECCM484H3 Economics of Organization and Management
Covers economics of the internal organization of the firm. Emphasis will be on economic relationships between various parts involved in running a business: managers, shareholders, workers, banks, and government.
Topics include the role of organizations in market economies, contractual theory, risk sharing, property rights, corporate financial structure and vertical integration.
Limited enrolment: 60
Exclusions: ECOM201H1, ECO310Y1, ECO335Y, ECO336Y, ECO426Y
Prerequisite: ECOM201H1 or ECOM202H

ECCM484H3 Industrial Organization
The economics of the firm in a market environment. The aim is to study business behaviour and market performance as influenced by concentration, entry barriers, product differentiation, diversification, research and development, and international trade. There will be some use of calculus in this course.
Limited enrolment: 60
Exclusion: ECOM392H1, ECO310Y
Prerequisite: ECOM202H

ECCM484H3 The Economics of the Internet and E-Commerce
The internet is radically changing communications, access to information, and commerce. This course will explore key issues associated with the development of the Internet and E-commerce, including business strategy, pricing, intellectual property rights, government regulation and taxation. Students are advised that there is a substantial amount of reading required for this course.
Limited enrolment: 60
Prerequisite: ECOM211H or ECOM212H

ECCM484H3 Money and Banking
There will be a focus on basic economic theory underlying financial intermediation and its importance to growth in the overall economy. The interaction between domestic and global financial markets, the private sector, the government will be considered.
Limited enrolment: 60 per section
Prerequisite: ECOM201H or ECOM301H

ECCM484H3 Financial Economics
This course introduces students to the theoretical underpinnings of financial economics. Topics covered include: intertemporal choice, expected utility, the CAPM, cost of capital, use of debt by the firm and dividend policy, market efficiency, the term structure of interest rates, and option pricing models. Key empirical tests are also reviewed.
Limited enrolment: 60
Exclusion: ECO335H8
Prerequisites: [ECOM201H1] & [ECMB201H1] & [ECMB202H1]

ECCM484H3 Labour Economics I
Applications of the tools of microeconomics to various labor market issues. The topics covered will include: labor supply, labor demand; equilibrium in competitive and non-competitive markets; labor-market unemployment. Policy applications will include: income maintenance programs; minimum wages; unemployment.
Limited enrolment: 60
Exclusion: ECO335V, ECO335Y, ECOM36Y
Prerequisite: ECOM202H

ECCM484H3 Labour Economics II
A continuation of ECOM211H. Topics covered will include: unions; wage structures, sex and race discrimination; human capital theory; investment in education. Policy issues discussed will include: pay equity; affirmative action; training initiatives; migration.
Limited enrolment: 60
Exclusion: ECO335V, ECO335Y, ECOM36Y
Prerequisites: ECOM311H or ECOM312H or [ECMB201H1 or ECOM211H]

ECCM484H3 Economics of the Family
This course studies the economic aspects of how families make decisions - about employment, child care, housing, children. In particular, we study how women's decisions are affected by children and the need to care for them. We study how public policies affect the decisions of family members, and discuss how family policy can be improved.
Limited enrolment: 60
Exclusion: ECOM332H
Prerequisite: ECOM202H

ECCM484H3 International Economics: Finance
Macroeconomic theories of the balance of payments and the exchange rate in a small open economy. Recent theories of exchange rate determination in a world of floating exchange rates. The international monetary system; fixed "sterling" flexible exchange rates; international capital movements, and their implications for monetary policy.
Limited enrolment: 60
Exclusion: ECOM201H1, ECO230Y1, ECO230Y3, ECO360H
Prerequisites: ECOM201H1 or ECOM301H

ECCM484H3 International Economics: Trade Theory
An outline of the theories of international trade that explain why countries trade with each other, and the welfare implications of this trade, as well as empirical tests of these theories. The determination and effects of trade policy instruments (tariffs, quotas, non-tariff barriers) and current policy issues are also discussed.
Limited enrolment: 60
Exclusion: ECOM201H1, ECO230Y1, ECO230Y2, ECO360H
Prerequisites: ECOM201H1 or ECOM202H

ECCM484H3 Financial Crises: Causes, Consequences and Policy Implications
This course studies the causes, consequences and policy implications of recent financial crises. It studies key theoretical concepts of international finance such as exchange-rate regimes, currency board systems, common currency, banking and currency crises. The course will describe and analyze several major episodes of financial crises, such as Latin America in the 1980s; East Asia, Europe, Mexico and Russia in the 1990s, and Turkey and Argentina in recent years.
Limited enrolment: 60
Prerequisite: ECOM211H

ECCM484H3 Economic Development
An introduction to the processes of growth and development in less developed countries and regions. Topics include economic growth, income distribution and inequality, poverty, health, nutrition, population growth, rural and urban issues, and risk in a low-income environment.
Limited enrolment: 60
Exclusion: ECO234Y
Prerequisite: ECOM211H or ECOM212H

ECCM484H3 Development Policy
A consideration of how government policy can affect the pace and nature of development in Third World countries. Emphasis will be on the most important policies including those relating to rural organization, agricultural goods markets, labour markets, credit markets, land rights systems, income distribution and technological change.
Limited enrolment: 60
Exclusion: ECO234Y
Prerequisite: ECOM211H

ECCM484H3 Topics in North American Economic Development
A study of the history of economic development in North America. Students will survey current theoretical approaches in economic history, study particular topics in North American economic history, and develop hands-on practice in data collection and analysis.
Limited enrolment: 60 per section
Exclusion: ECO211Y
Prerequisite: ECOM211H or ECOM212H or ECOM213H or ECOM301H

ECCM484H3 Economics and Government
This course provides an overview of what governments can do to benefit society, as suggested by economic theory and empirical research. It surveys what governments actually do, especially Canadian governments. Efficient methods of taxation and methods of controlling government are also briefly covered.
Note: This course may be applied to the C-level course requirements of the Minor Program in Economics for Management Studies and of the Specialist Program in Political Science and Economics for
Management Studies. It may not, however, be used to meet the requirements of any program that leads to a B.B.A. or of the Major Program in Economics for Management Studies. Exclusion: ECMM31H, ECMM32H, ECMM33Y
Pre-requisite: ECMM30H or ECMB02H
Corequisite: None

ECMM32H Economics of Markets and Pricing
The course builds on ECMB01H (or ECMB02H) by exposing students to the economics of market structure and pricing. How and why certain market structures, such as monopoly, oligopoly, perfect competition, etc., arise. Attention will also be given to how market structure, firm size and performance and pricing relate. Role of government will be discussed.

Note: This course may be applied to the C-level course requirements of the Minor Program in Economics for Management Studies and of the Specialist Program in Political Science and Economics for Management Studies. It may not, however, be used to meet the requirements of any program that leads to a B.B.A. or of the Major Program in Economics for Management Studies. Exclusion: ECMM30H, ECMM40H, ECMM41H, ECMM43Y, ECMM46Y, ECMM51Y
Pre-requisite: ECMM30H or ECMB02H

ECMM33H International Economics
This course provides general understanding on issues related to open economy and studies theories in international trade and international finance. Topics include why countries trade, implications of various trade policies, theories of exchange rate determination, policy implications of different exchange rate regimes and other related topics.

Note: This course may be applied to the C-level course requirements of the Minor Program in Economics for Management Studies and of the Specialist Program in Political Science and Economics for Management Studies. It may not, however, be used to meet the requirements of any program that leads to a B.B.A. or of the Major Program in Economics for Management Studies. Exclusion: ECMM30H, ECMM32H, ECMM33Y
Pre-requisite: ECMB01H or ECMB02H

ECMM34H Research
This course introduces students to the techniques used by economists to define research problems and to do research. Students will choose a research problem and a faculty member with whom to work, write papers on their topic and present their ongoing work to the class.

Pre-requisite: ECMB03H & ECMM32H, [ECMB06H & ECMB06H], [ECMB11H & ECMB12H] or [ECMB09Y] & [ECMB11H]. This course should be taken among the last 5 credits of a twenty-credit degree. Corequisite: ECMM31H

ECMM35H Urban Residential Geography
This course introduces students to the study of urban residential geography. The course will cover topics such as the spatial distribution of population, housing, and land use. The course will also cover the methods used to analyze urban residential patterns.

Note: This course may be applied to the C-level course requirements of the Minor Program in Economics for Management Studies and of the Specialist Program in Political Science and Economics for Management Studies. It may not, however, be used to meet the requirements of any program that leads to a B.B.A. or of the Major Program in Economics for Management Studies. Exclusion: ECMM30H, ECMM32H, ECMM33Y
Pre-requisite: ECMB01H or ECMB02H

ECMM36H Location and Spatial Development
These courses may be counted as B-level credits in ECM programs. (See the Geography section of this Calendar for full descriptions.)

IDSM01H International Development Studies: Political Economy
IDSM05H Economics of Small Enterprise and Microcredit
These courses may be counted for B-level credits in ECM programs. (See the International Development Studies section of this Calendar for full descriptions.)

English

Faculty List
W.J. Howard, M.A., S.T.B. (Toronto), Ph.D. (London), Professor Emeritus
R.M. Brown, M.A., Ph.D. (Binghamton), Professor
M.C. Cuddy-Kream, M.A., Ph.D. (Toronto), Professor
D. Borrini, M.A. (Connecticut), Associate Professor
C. Boloc-Reichert, M.A., Ph.D. (Indiana), Associate Professor
M.B. Goldman, M.A., (Victoria), Ph.D. (Toronto), Associate Professor
S. Lamb, M.A., Ph.D. (Toronto), Associate Professor
G. Leonard, M.A., Ph.D. (Florida), Associate Professor
A.J.G. Pennad, M.A. (McGill), Ph.D. (Birmingham), Associate Professor
N. ten Korteman, M.A., Ph.D. (Toronto), Associate Professor
N. Dulan, M.A., Ph.D. (Harvard), Assistant Professor
A. Delkis, Ph.D. (Harvard), Assistant Professor
A. Maurice, M.A., Ph.D. (Cornell), Assistant Professor
S.D. King, M.A. (Western), Ph.D. (Western), Lecturer

Discipline Representative: S. Lamb (416-287-7144)

Supervisor of Studies:
Until April 30: Russell Brown (416-287-7166); Email: rbowen@chaos.utoronto.ca,
From May 1: A. Maurice (416-287-7180); Email: maurice@uta.utoronto.ca,
The discipline of English involves not only the study of the great works of literature but also training in responding to the complex modes of interpretation and communication that are invaluable in our increasingly media-saturated world. At UTSC, the curriculum offers courses in the English-language literatures of Britain, Canada, America, and other areas of the world. All courses place emphasis on close responsive reading, critical thinking, and clarity of expression. A-level courses introduce students to the study of English at the university level. ENGA1H and ENGA1HH are designed both for students wanting an introductory course in the Specialist, Major, or Minor Program in English and for students having a general interest in literature or the Twentieth-century. ENGB3H, ENGB4H, and ENGB5H are required for all English Programs. B-level courses have no prerequisites and are available both to beginning and to more advanced students. C-level courses, as their prerequisites indicate, are designed to build upon previous work and presuppose some background in critical skills and some familiarity with the subject matter.

D-level courses provide opportunities for more specialized study and require some independent work on the part of the student. These courses are generally restricted in enrollment and may involve the presentation of seminars.

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

Students planning to pursue graduate studies in English are advised to consult the Supervisor of Studies about appropriate programs of study.

The English Study Guide is available at:
http://www.uwc.utoronto.ca/7%7bthumb%7d/

Guidelines for 1st-year course selection:
First-year students often take ENGA1H or ENGA1HH (or both) as an introduction to university-level English studies. Students intending to complete the Specialist or Major Program in English should plan to take at least two of ENGB3H, ENGB4H & ENGB5H early in their university career. They may, if they so choose, begin satisfying these B-level English requirements in their first year.

Note: For Co-op opportunities related to the Specialist and Major Programs in English, please see the Humanities section of this Calendar.
SPECIALIST PROGRAM IN ENGLISH

Supervisor of Studies:
Until April 30: Russell Brown (416-287-7166), Email: rbrown@chas.utoronto.ca
From May 1: A. Maurice (416-287-7180) Email: mauricie@utsc.utoronto.ca

Program Requirements:
10.5 credits in English are required. They should be selected as follows:
1. ENGB03H Critical Thinking About Narrative
2. ENGB04H Critical Thinking About Poetry
3. ENGB05H Critical Writing about Literature
4. 2.2 credits from courses whose content is pre-1900
5. 0.5 credits in Canadian Literature
6. 6.0 additional credits in English
Among the 10.5 credits required for the Specialist, at least 3 full credits must be at the C-level and 1 full credit at the D-level

Note: Students may count no more than one of the following courses towards the Specialist requirements:
ENGB05H Children’s Literature
ENGB05H Detective Fiction
ENGB04H Science Fiction

Students may count no more than one full credit of advanced creative writing (ENGC66Y, ENGC67H, ENGC68H) and no more than one full credit of D-level independent study (ENGD97H, ENGD98H, ENGD99H) towards an English program.
The following courses do not count towards any English programs: ENGL100H, ENGL185Y.

MAJOR PROGRAM IN ENGLISH

Supervisor of Studies:
Until April 30: Russell Brown (416-287-7166), Email: rbrown@chas.utoronto.ca
From May 1: A. Maurice (416-287-7180) Email: mauricie@utsc.utoronto.ca

Program Requirements:
7.5 credits in English are required. They should be selected as follows:
1. ENGB03H Critical Thinking About Narrative
2. ENGB04H Critical Thinking About Poetry
3. ENGB05H Critical Writing about Literature
4. 2.0 credits from courses whose content is pre-1900
5. 4.0 additional credits in English
Among the 7.5 credits required for the Major, as outlined above, at least two full credits must be at the C- or D-level.

Note: Students may count no more than one of the following courses towards the Major requirements:
ENGB05H Children’s Literature
ENGB05H Detective Fiction
ENGB04H Science Fiction

Students may count no more than one full credit of advanced creative writing (ENGC66Y, ENGC67H, ENGC68H) and no more than one full credit of D-level independent study (ENGD97H, ENGD98H, ENGD99H) towards an English program.
The following courses do not count towards any English programs: ENGL100H, ENGL185Y.

MINOR PROGRAM IN ENGLISH LITERATURE

Supervisor of Studies:
Until April 30: Russell Brown (416-287-7166), Email: rbrown@chas.utoronto.ca
From May 1: A. Maurice (416-287-7180) Email: mauricie@utsc.utoronto.ca

Program Requirements:
Four credits in English are required. They should be selected as follows:
1. ENGB03H Critical Thinking About Narrative
2. ENGB04H Critical Thinking About Poetry
3. ENGB05H Critical Writing about Literature
4. 1.0 credits at the C-level
5. 1.5 additional credits in English.

Students may count no more than one full credit of advanced creative writing (ENGC66Y, ENGC67H, ENGC68H) and no more than one full credit of D-level independent study (ENGD97H, ENGD98H, ENGD99H) towards an English program.
The following courses do not count towards any English programs: ENGL100H, ENGL185Y.

ENGA10H3 Introduction to Literary Study: 1900 to World War II
An exploration of how literature reflects the artistic and cultural concerns that shaped the first part of the twentieth century. An introduction to university-level critical reading and interpretation; this course will analyse the writing of early twentieth-century men and women.
Exclusion: ENGL140Y, (ENGA11Y)

ENGA11H3 Introduction to Literary Study: 1945 to Today
An exploration of how literature reflects the artistic and cultural concerns that shaped the world after the Second World War. An introduction to university-level critical reading and interpretation; this course will analyse the writing of late twentieth-century men and women from a range of backgrounds and nationalities.
Exclusion: ENGL140Y, (ENGA11Y)

ENGB03H2 Critical Thinking About Narrative
An introduction to the literary analysis of narrative. This course will study closely a small number of narratives and narrative genres from different periods in order to develop the critical skills to analyse narratives.
Exclusion: ENGB01Y, ENG110Y

ENGB04H3 Critical Thinking About Poetry
An introduction to the literary analysis of poetry. This course will study closely a small number of poems and poetic forms from different

periods in order to develop the critical skills to analyse poetry.
Exclusion: (ENGB01Y), ENG201Y

ENGB05H3 Critical Writing about Literature
Intensive training in critical writing about literature. Essay-writing skills (organization and argumentation; tone and voice; bibliographic style) for the study of English at the university level through group workshops and weekly writing assignments that culminate in two term papers.
Limited enrolment: 25 per section
Exclusion: ENGB01H, (ENGB02H) Corequisite: ENGB03H or ENGB04H

ENGB06H3 Canadian Literary Traditions
An examination of large issues and themes that have shaped Canadian literature. Focusing on the development and emergence of a Canadian literary tradition, this course examines the problems of writing in a New World nation, the emergence and definition of an indigenous tradition, and the challenges such a tradition faces.
Exclusion: (ENGB07Y), ENG252Y

ENGB07H3 Nation in Canadian Writing
An examination of the formation of identity, of a sense of belonging, and of the problematic of nationhood in Canadian writing.
Exclusion: (ENGB07Y), ENG252Y
ENG808H3 Collisions of Culture and the Emergence of a Literary Tradition
An examination of Early American literature in historical context from colonization to the Civil War. This introductory survey places a wide variety of genres - including connotated and captivity narratives, theological tracts, sermons, and diaries, as well as classic novels and poems - in relation to the multiple subcultures of the period.
Pre-1900 course
Exclusion: (ENG808Y), ENG250Y

ENG809H3 American Literature from the Civil War to the Present
An introductory survey of major novels, short fiction, poetry, and drama. An introductory survey of major novels, short fiction, poetry, and drama from The Adventures of Huckleberry Finn and The Sound and the Fury. An emphasis on themes of immigration, ethnicity, modernism, individualism, class, and community.
Exclusion: (ENG808Y), ENG250Y
Prequisite: ENG808H

ENG810H3 Introduction to Shakespeare
An introduction to Shakespeare's comedies and tragedies. Through the study of A Midsummer Night's Dream, Twelfth Night, As You Like It, Hamlet, Macbeth, Antony and Cleopatra, Othello, The Tempest, and Romeo and Juliet, this course provides an introduction to the Elizabethan playhouse, the acting companies, and the development of drama.
Pre-1900 course
Exclusion: (ENG810Y), ENG220Y

ENG811H3 The Beginnings of Modern Drama
A reading of plays from 1879 to the 1930s and after. Taking The Doll's House as the starting point, the course looks at drama by Pinero, Shaw, Wilde, and other authors, such as David Belasco, Harley Granville-Barker, Stanley Houghton, John Galsworthy, Eugene O'Neill and Terence Rattigan. Exclusion: (ENG811Y), ENG238Y

ENG812H3 Life Writing
Life-writing, whether formal biography, charity memoir, postmodern biography, or published personal journal, is popular with writers and readers alike. This course introduces students to life-writing as a literary genre and explores major issues such as life-writing and fiction, life-writing and history, the contract between writer and reader, and gender and life-writing.

ENG813H3 Drama after 1900
An exploration of drama in English since 1940. Authors studied include playwrights such as Harold Pinter, Brian Friel, Caryl Churchill, August Wilson, Timberlake Wertenbaker, Tom Stoppard, Beth Henley, and others. Exclusion: (ENG811Y), ENG239Y

ENG817H3 Contemporary Literature from the Caribbean
A study of fiction, drama, and poetry from the West Indies. The course will examine the relation of standard English to the spoken language; the problem of narrating a history of slavery and colonialism; the issues of race, gender, and nation; and the task of making West Indian literary forms.
Exclusion: ENG235Y, ENG233Y, NEW223Y

ENG819H3 Contemporary Literature from South Asia
A study of literature in English from South Asia, with emphasis on fiction from India. The course will examine the relation of English-language writing to indigenous South Asian traditions; the problem of narrating a history of colonialism and Partition, and the task of making the novel South Asian.
Exclusion: ENG235Y

ENG824H3 Courtship in Literature
A variety of literary works that portray courtship. An examination of the treatment of courtship in literature and the way it has been affected by shifts in gender definition and in the nature of the family. We will consider the large issues and anxieties that courtship literature addresses or responds to.
Pre-1900 course

ENG825H3 The Canadian Short Story
A study of the Canadian short story. The Canadian short story has been vital to the Canadian literary tradition and has produced writers of international stature, including Munro, Atwood, LaRocque, and Gallant. Exclusion: ENG125Y

ENG834H3 The Short Story
An introduction to the short story as a literary form. This course examines the origins and recent development of the short story, its special appeal for writers and readers, and the particular effects it is able to produce.
Exclusion: ENG213H

ENG835H3 Children's Literature
An introduction to children's literature. This course will locate children's literature within the history of social attitudes to children and in terms of such topics as intellectual creativity, race, class, gender, and nationhood.
Exclusion: ENG223H

ENG836H3 Detective Fiction
A study of the evolution and forms of detective fiction. This course examines the formal rules that govern detective fiction - a mainstay of mass media and a genre that has influenced literature - and the social contexts that make this a genre that has cut across classes, cultures, and continents.
Exclusion: ENG236H

ENG841H3 Science Fiction
An examination of the genre of science fiction. This course will look at different forms of this genre (novels, short stories, and films), emphasizing the way a popular genre comes into being, the effect on the form of innovation, and the interaction that exists between science fiction and literary writing.
Exclusion: ENG237H

ENG850H3 Women and Literature: Forging a Tradition
An examination of the development of a women's tradition of writing. This course considers the legacy and impact of writers such as Mary Wollstonecraft, Mary Shelley, Jane Austen, Charlotte Bronte, and Virginia Woolf.
Exclusion: (ENG850Y), ENG233Y

ENG851H3 Gender and Genre
An analysis of the role of gender in fiction, poetry, and drama. This course will examine such things as the genres women have gravitated toward and excelled at in the light of Woolf's claim that the novel was the genre most accessible to women because it was not entirely formed.
Exclusion: (ENG850Y)

ENG860H3 Creative Writing: Poetry
An introduction to the writing of poetry. This course will provide an introduction to the writing of poetry through workshop sessions. Admission by portfolio. Portfolios for students seeking admission should be left with the Humanities departmental assistant in H325A no later than the first Monday of October. They should contain a selected sample (5-15 pp.) of your strongest writing, which could include fiction, poems, or essays. Do not include originals.
Exclusion: (ENG860Y), ENG369Y

ENG861H3 Creative Writing: Fiction
An introduction to the writing of fiction. This course will provide an introduction to the writing of short fiction through workshop sessions. Admission by portfolio. Portfolios for students seeking admission should be left with the Humanities departmental assistant in H325A no later than the first Monday of October. They should contain a selected sample (5-15 pp.) of your strongest writing, which could include fiction, poems, or essays. Do not include originals.
Exclusion: (ENG860Y), ENG369Y

ENG862H3 Creative Writing: Scripts and Drama
This course provides an introduction to script-writing through intensive workshop sessions. Admission by portfolio. Portfolios for students seeking admission should be left with the Humanities departmental assistant in H325A no later than the first Monday of October. They should contain a selected sample (5-15 pp.) of your strongest writing, which could include fiction, poems, or essays. Do not include originals.
Limited enrolment: 20
ENG1513H The Bible and Literature I

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ENG604H3 Native North American Literature
An introduction to Native North American writing with an emphasis on First Nations literature and culture of the last 30 years. Describing with the literatures of a broad range of peoples and a wide variety of genres and styles, students will explore such issues as identity, representation, transmission, and translation.
Exclusion: ENG254Y

ENG8703H Introduction to Cinema
An introduction to the critical study of cinema, including films from a broad range of genres, countries, and eras, as well as readings representing the major critical approaches to cinema that have developed over the past century.
Exclusion: IN3111Y

ENG8715H Cinema & Modernity I
An investigation of film genres such as melodrama, film noir, and the western from 1895 to the present. We will look at the creation of an ideological space and of new mythologies that helped organize the experience of modern life. Works of twentieth-century prose and poetry will also be studied.

ENG8716H Cinema & Modernity II
An investigation of film genres such as romance, gothic, and science fiction from 1895 to the present. We will look at the way cinema developed and created new mythologies that helped people organize the experience of modern life. Works of twentieth-century prose and poetry will also be studied.
Exclusion: ENG333H

ENG8729H Major Canadian Authors
An examination of three or more Canadian writers. This course will draw together selected major writers of Canadian fiction or of other forms.
Limited enrollment: 30
Prerequisite: ENG803H & ENG404H & one of ENG805H or (ENG801H) or (ENG802H) or (ENG804H)

ENG803H Studies in Canadian Fiction
An analysis of Canadian fiction with regard to the problems of representation. Topics considered may include how Canadian fiction writers have responded and documented the local, social, political, and historical transformative strategies, and the problematics of representation for marginalized societies, groups, and identities.
Limited enrollment: 50
Exclusion: ENG216Y
Prerequisite: [ENG803H & ENG804H & one of ENG805H or (ENG801H) or (ENG802H) or (ENG804H) or (ENG807H)]

ENG8016H Studies in Shakespeare
Four chronicle history plays, and three "historical" tragedies of Shakespeare. Through study of Shakespeare's Edward II, Richard II, and Shakespeare's Henry VI parts III, Richard III, Richard II, Julius Caesar, King Lear, and Antony and Cleopatra, this course explores the Elizabethan and Jacobean preoccupation with history in the political and social contexts of the time.
Pre-1900 course
Limited enrollment: 50
Exclusion: ENG801Y, ENG220Y
Prerequisite: [ENG803H & ENG804H & one of ENG805H or (ENG801H) or (ENG802H) or (ENG807H)]

ENG8021H Individualism and Community in Classic American Literature
An exploration of the tension in American literature between two conflicting concepts of self. We will examine the influence on American literature of the opposition between an abstract, "rights-based," liberal-individual concept of the self and a more traditional, communalist sense of the self as determined by inherited social, familial, and social bonds.
Limited enrollment: 50
Exclusion: ENG801Y
Prerequisite: [ENG803H & ENG804H & one of ENG805H or (ENG801H) or (ENG802H)]

ENG8015H Concepts in Literary Criticism
A study of selected topics in literary criticism.
Limited enrollment: 50
Exclusion: ENG267H
Prerequisite: [ENG803H & ENG804H & one of ENG805H or (ENG801H) or (ENG802H)]

ENG8207H The Bible and Literature I
Literary analysis of the first five books of the Bible and consideration of their profound influence on literature. This course considers both the literary nature of and the influence on literature of such narratives as the fall of Adam and Eve, Noah's flood, Abraham's binding of Isaac, and the story of Moses.
Pre-1900 course
Limited enrollment: 50
Exclusion: ENG320Y, ENG324Y, ENG325H
Prerequisite: [ENG803H & ENG804H & one of ENG805H or (ENG801H) or (ENG802H)]
ENG232H3 The Victorian Novel after 1860
A study of major works of Victorian fiction, 1860-1900. This course examines the emergence of the sensation novel, fantasy literature, and high Victorian realism. Authors studied might include Wilkie Collins, Lewis Carroll, George Eliot, Thomas Hardy, George Gissing, and Rudyard Kipling.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG232Y, ENG234Y
Prerequisite: ENG203H & ENG240H & [one of ENG205H or ENG210H] or [ENG202H]

ENG330H3 Topics in Medieval Literature
A study of selected medieval texts by one or more authors.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG308H
Prerequisite: ENG301H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG330H3 The Romance: In Quest of the Marvelous
A study of the romance as genre. The romance as episodic tale of marvellous adventures and questing heroes has been both criticized and celebrated. This course looks at the range of a form stretching from Malory and Spenser through Walter Scott and the Brontës to post-modern writers such as Pynchon.
Pre-1900 course
Limited enrolment: 50
Prerequisite: ENG305H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG331H3 The Golden Age: Elizabethan Literature
Poetry, and drama from the Age of Queen Elizabeth. Texts include More's Utopia, Sidney's Defence of Poesy, Spenser's The Faerie Queene (Book II) and Mamillius Cantos), Shakespeare's Love's Labour's Lost and The Merchant of Venice, and Lyly's Galatia, plus selections from such authors as Ascham, Croone, Hooker, Wyatt, Surrey, and Dryden.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG332Y, ENG302Y
Prerequisite: ENG301H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG333H3 Literature of Deceit and Dissent: 1603-1660
A reading of literature from the early Stuart period of political and intellectual turmoil. Core authors include Bacon, Donne, Milton, as well as drama by Webster, Jonson, Massinger and Ford. Texts might also include selections from Bacon, Essex and Nonsuch Ormament, Browne, Religio Medici, Andrews, Sermon; poetry of Herbert, Vaughan, Quarles and Marvell.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG332Y, ENG303Y
Prerequisite: ENG303H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG334H3 Literature and Culture 1660-1760
Studies in literature and literary culture during this turbulent era that was marked by extraordinary cultural ferment and literary experimentation. This period saw the rise of the novel as a new genre, as well as new forms of poetry and drama.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG333Y, ENG332Y
Prerequisite: ENG303H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG335H3 The Early Novel in Context, 1740-1830
A contextual study of the early novel as a genre.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG334Y, ENG332Y
Prerequisite: ENG303H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]

ENG336H3 Romanticism
A study of the Romantic Movement in European literature, 1750-1850. This course investigates the cultural and historical origins of the Romantic Movement, its complex definitions and varieties of expression, and the responses it provoked in the wider culture. Examination of representative authors such as Goethe, Rousseau, Wolfenortz, Wordsworth, Coleridge, Blake, P. B. Shelley, Keats, Byron, and M. Shelley will be combined with study of the philosophical and historical backgrounds of Romanticism.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG334Y, ENG336Y
Prerequisite: ENG303H & ENG304H & [one of ENG305H or ENG311H] or [ENG302H]
ENGC4793 Modern Poetry
A study of poetry written roughly between the World Wars. Poets from several nations may be considered. Topics to be treated include Modernist difficulty, formal experimentation, and the politics of verse. Literary traditions from which Modernist poets draw will be discussed, as well as the influence of Modernism on postmodern writing.
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENG805H or ENG810H or (ENG822H)]

ENGC4893 The American Renaissance
Study of the works of the remarkable literary efflorescence in the U.S. running from the publication of Emerson's "Nature" in 1836 to the outbreak of the Civil War in 1860. Authors to be considered include Emerson, Thoreau, Whitman, Melville, Hawthorne, Dickinson, Stowe, Douglass, and Lincoln.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENG589Y
Prerequisite: [ENGB03H & ENGB04H & one of ENG805H or ENG810H) or (ENG822H)] or [ENG809H or ENG810H]

ENGC5093 Studies in Contemporary African Fiction
Developments in American fiction from the end of the 1950s to the present. A study of fiction from the period that produced James Baldwin, Saul Bellow, Philip Roth, John Updike, Norman Mailer, Anna Beatty, Raymond Carver, Don DeLillo, Toni Morrison, Maxine Hong Kingston, and Leslie Marmon Silko. The course may be organized around themes or movements.
Limited enrolment: 50
Exclusion: ENG589Y
Prerequisite: [ENGB03H & ENGB04H & one of ENG805H or ENG810H) or (ENG822H)] or [ENG809H or ENG810H]

ENGC5593 Literature and Media: The Spoken Word and the Visual Page
The ways media shape literature. Literary works have existed in oral forms (from early epic to contemporary sound poetry and literature written for radio) shaped by auditory techniques and limitations, as well as in the visual medium of print on the page and of images integrated into the text (medieval manuscripts, Blake, graphic novels).
Limited enrolment: 50
Exclusion: ENGC559Y
Prerequisite: ENGB03H & ENGB04H & [one of ENG805H or (ENG810H) or (ENG822H)]

ENGC5593A Literature and Media: From Page to Screen
Written literature and film and television. What happens when literature influences film and vice versa, and when literary works are recast as visual media (including the effects of rewriting, reproduction, adaptation, serialization, and sequentialization).
Limited enrolment: 50
Exclusion: ENGC559Y
Prerequisite: ENGB03H & ENGB04H & [one of ENG805H or (ENG810H) or (ENG822H)]

ENGC5593B The West in American Literature
The "West" as myth and a metaphor in the shaping of American identity. This examination of written narratives and films will focus on the construction of the American West, the relationships of the "Indian" to Native writers, and contemporary efforts to de-mystify the West.
Limited enrolment: 50
Exclusion: ENGB03H & ENGB04H & [one of ENG805H or (ENG810H) or (ENG822H)]

ENGC6293 Mythic Backgrounds to Literature: The Hero
The mythic hero in literature. Beginning with examples of the hero in The Epic of Gilgamesh, The Odyssey, and the Arthurian cycle, this course examines the idea of the epic and the romance hero in English literary works such as Sir Gawain and the Green Knight, Book III of The Faerie Queene, and Henry V.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENGC629Y
Prerequisite: ENGB03H & ENGB04H & [one of ENG805H or (ENG810H) or (ENG822H)]

ENGC5193 Mythic Backgrounds to Literature: The Gods and Humanity
An analysis of the relationship between myth and literature. Drawing on early texts by Sophocles, Hesiod, Ovid, and others, this course examines the myths of gods and their relationships with human beings as used by writers such as Yeats, Atwood, and Ilytis and in the theories of Freud, Jung, Frazer, and Frye.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENGC629Y
Prerequisite: [ENGB03H & ENGB04H & one of ENG805H or (ENG810H) or (ENG822H)] or [ENG842H or ENG843H]

ENGC5593 Studies in Travel Literature before 1830
An examination of the genre of travel literature before 1830. Focus may change yearly and will include travel literature by women or other marginalized groups such as servants and slaves; exploration literature; literature of imperial or colonial travel; travel literature for the masses; pilgrimage; fictional travel.
Pre-1900 course
Limited enrolment: 50
Exclusion: ENGB03H & ENGB04H & [one of ENG805H or (ENG810H) or (ENG822H)]

ENGC5693 Independent Studies: Creative Writing
An opportunity for students who have excelled in introductory creative writing to pursue independent study. Students should discuss their interests in advance with an appropriate faculty member. Note: Students may count no more than 1 FCE of independent study in creative writing towards an English program.
Exclusion: ENGC991Y
Prerequisite: [ENGB06H, ENGB061H or ENGB062H]

ENGC5893 Independent Studies: Creative Writing
An opportunity for students who have excelled in introductory creative writing to pursue independent study. Students should discuss their interests in advance with an appropriate faculty member. Note: Students may count no more than 1 FCE of independent study in creative writing towards an English program.
Exclusion: ENGC991Y
Prerequisite: [ENGB06H, ENGB061H or ENGB062H]

ENGC6893 Gothic Literature
A study of the Gothic tradition in literature since 1760. "Gothic" is a dark style in the arts, a language of terror, recognizable by allusions to named castles, graveyards, sublime landscapes, religious superstition, and plots involving imprisonment and torture, nightmares of the unconscious mind, and monstrous deformities of the human body.
Pre-1900 course
Limited enrolment: 50
Exclusion: [ENGB03H & ENGB04H & one of ENG805H or (ENG810H) or (ENG822H)]

ENGC7093 The Immigrant Experience to 1880
An examination of sixteenth-century literature, especially fiction, written out of the experience of people who leave one society to come to another already made by others. We will compare the literatures of several ethnic communities in at least three nations, the United States, Britain, and Canada.
Limited enrolment: 50
Exclusion: [ENGC711Y]
Prerequisite: [ENGB03H & ENGB04H & one of ENG805H or (ENG810H) or (ENG822H)]
ENGCH7103 The Immigrant Experience in Literature since 1980
A continuation of ENGCH701, focusing on text written since 1980.
Limited enrolment: 50
Exclusion: ENGCH711Y
Prerequisites: ENGBO3H & ENGBO4H & [one of ENGBO5H or (ENGBO1H) or (ENGBO2H)] & ENGCH701

ENGCH7203 Contemporary Literature from Sub-Saharan Africa
A study of fiction, drama, and poetry from English-speaking Africa. The course will examine the relation of English-language writing to indigenous languages, to slavery, and to audiences, as well as the issues of creating art in a world of suffering and of de-colonizing the narrative of history.
Limited enrolment: 50
Exclusion: ENG253Y, (ENGJ10H)
Prerequisite: ENGBO3H & ENGBO4H & [one of ENGBO5H or (ENGBO1H) or (ENGBO2H)]

ENGCH7403 Comedy, Satire, and Humour, 1660-1820
A study of literary works meant to provoke laughter, ridicule, or amusement. We will examine works emerging from a culture that had yet to equate forms that induced laughter with levity and that therefore seriously played in the no man's land between pain and terror and pleasure and delight.
Pre-1900 course
Limited enrolment: 50
Prerequisite: ENGBO3H & ENGBO4H & [one of ENGBO5H or (ENGBO1H) or (ENGBO2H)]

ENGCH7603 The Body in Modernity: Theories and Representations
An interdisciplinary course about the body in art, film, photography, narrative and popular culture. How bodies are written or visualized as "feminine" or "masculine", as heroic, as representing normality or perversion, beauty or monstrosity, legitimacy or illegitimacy, nature or culture. Same as VPAC47H.
Limited enrolment: 45
Exclusion: VPAC47H, (VPHC47H)

ENGCH8103 Modernity II: Post-modernism and Other Developments in Literature 1950 to the Present
An introduction to post-colonial theory that looks at the problem of narrating the past when that past includes conquest, slavery, and colonization. We will look at works of historiography, theory, fiction, and epic poetry, primarily from Latin America and the Caribbean, to explore the problem of telling the history of the Americas.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGCH8203 Topics in Contemporary Literary Theory
A study of selected topics in recent literary theory.
Limited enrolment: 22
Prerequisite: ENGUC1H or 2 C-level courses in English.

ENGCH8403 Gulliver's Travels and Other Works
An examination of Swift's Gulliver's Travels (originally titled Travels into Several Remote Nations of the World) through material Swift drew from (such as More's Utopia and Montaigne's essay on cannibals), movements the work responded to (such as the New Science, medieval and Early Modern travel narratives, stories of monsters, ideas and theories about nature), and the responses the text provoked (such as children's versions, Nazi and other racist uses of the problematic Voyage 4, and film versions).
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGCH8603 Poetry and Christianity
An exploration of Christian and anti-Christian poetry in English from the Bible to the present, with an emphasis on the themes of faith and doubt, love and hate, and the erotic. Writers studied might include Donne, Herbert, Milton, Cowper, the Rosetti, Tennyson, Hopkins, Eliot, and Stevens.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.
ENGD09H3 Studies in Postmodern Poetry
The study of a poet or poets writing in English after 1950. Topics may include the use and abuse of tradition, the art and politics of form, the transformations of an omen, and the relationship of poetry to the individual person and to the culture at large.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD06H3 South African Literature
A study of South African literature. In this course we will look at fiction, non-fiction, drama, and poetry produced in South Africa in the last fifty years.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD11H3 Salmon Rushdie
A study of four or five of Rushdie's novels, including Midnight's Children, Shame, The Satanic Verses, and Shalimar the Clown. The course will also examine Rushdie's non-fiction essays and what has become known as "The Satanic Verses Affair".
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD10H3 Studies in Life Writing
A detailed study of some aspect or aspects of life-writing. Topics may include life-writing and fiction, theory, criticism, self, and/or gender.
Can count as a pre-1900 course depending on the topic:
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD14H3 Topics in Renaissance Literature
An intensive study of an author, genre, work, issue or aspect of Early Modern literature and culture.
Pre-1900 Course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD15H3 Problems in Early Shakespeare
An examination of five or six Shakespeare plays from the period 1590-1596.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD16H3 Problems in Late Shakespeare
An examination of problems textual and editorial, as well as aesthetic and dramatic, in the later works of Shakespeare.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD17H3 Shakespeare's Contemporaries
A selection of plays by Shakespeare's contemporaries.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD18H3 Studies in Medieval Literature
Topics in the literature and culture of the medieval period. Topics vary from year to year and might include a study of one or more authors.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD25H3 Confessional Poetry
The emergence of the confessional voice in American and British poetry. Authors emphasized will be Robert Lowell, Ann Sexton, Sylvia Plath, and Adrianne Rich.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD24H3 T.S. Eliot
The poems, plays, and essays of T.S. Eliot, one of the founders of literary modernism.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD26H3 James Joyce
A study of Joyce's work and achievements. Texts include Dubliners, A Portrait of the Artist as a Young Man, and Ulysses.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD28H3 Studies in Romanticism, 1750-1850
Topics in the literature and culture of the Romantic movement. Topics vary from year to year and may include Romantic nationalism, the Romantic novel, the British 1790s, or American or Canadian Romanticism.
Pre-1900 course
Limited enrolment: 22
Exclusion: ENG C42Y
Prerequisite: ENG C24H or 2 C-level courses in English.

ENGD29H3 Alice Munro
A study of the short fiction of Alice Munro.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD30H3 Emerson and the Emersonian Tradition in American Poetry
A reading of the "central" tradition of American poetry as originating in the writings of Ralph Waldo Emerson. Major poems by Walt Whitman, Emily Dickinson, Robert Frost, Wallace Stevens, A. R. Ammons, and John Ashbery will be read in relation to Emerson's distinctive formulation of transatlantic currents of Romanticism.
Pre-1900 course
Limited enrolment: 22
Prerequisite: [ENG B04H3 & (ENG B08H3 or ENG B09H3)] & 2 C-level courses in English.

ENGD31H3 The Problem of a Liberal Culture: Emerson and Nineteenth-Century Cultural Prophets
A study of the nineteenth-century construction of theories of identity and culture. We will examine the major works of Emerson along with selected works of Tocqueville, Mill, Arnold, Carlyle, Ruskin, and Nietzsche as efforts to construct a post-enlightenment, post-revolutionary, trans-Atlantic substitute for the feudal-aristocratic Christian culture of the ancien regime.
Pre-1900 course
Limited enrolment: 22
Prerequisite: ENG C12H or 2 C-level courses in English.

ENGD32H3 James Baldwin, the African-American Experience, and the Liberal Imagination
A study of the fiction, drama, and essays of James Baldwin and their cultural context.
Limited enrolment: 22
Prerequisite: ENG C12H or 2 C-level courses in English.

ENGD33H3 Power and Perception:
Imperialism, Colonialism, and Identity in Twentieth-Century Fiction
An exploration of multicultural perspectives on issues of power, perception, and identity as revealed in literary treatments of imperialism and colonialism in the twentieth century.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD34H3 Rap Poetics
An intensive study of form and rhetoric in rap lyrics. We will consider the quarter-century recorded history of this sub-set of African-American poetry in rough chronological order. We will also look for the pre-history of rap in such traditions as minstrelsy, blues, political speech, comic monologues, and lyric poetry proper.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD35H3 Popular American Lyric
A study of two centuries' worth of the favourite poems and songs of the American people, from the Fireside Poets to Rap music. Authors to be studied might include Bryant, Longfellow, Whitman, Holmes, Frost, E.L. Fitzgerald, Billie Holiday, Frank Sinatra, Irving Berlin, Cole Porter, Bing Crosby, Bob Dylan, and twenty years of Rap.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD47H3 Satire
An investigation of the literary and theoretical understanding of the, the, and the provocative. Satire can be conservative or subversive, corrective or anarchic. This course will address a range of satire and its theories. Writers may range from Jonathan Swift, Horace, Lucian, Erasmus, Donne, Johnson, Rochester, Dryden, Swift, Pope, Gay, Haywood, and Behn to Pynchon, Nabokov and Atwood.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENGD43H3 Contemporary Literature by Muslims
An examination of the twentieth-century flowering of secular literature, in particular fiction and poetry, by writers of Muslim background around the world. We will address such themes as the tension between religion and the secular forms of the novel and the need to write the Muslim experience into the modern world.
Limited enrolment: 22
Prerequisite: 2 C-level English courses.
ENG907H3 Knowing the Other: Ethics and Canadian Literature
A study of the connections among literature, literary theory, politics and moral philosophy. In this course, we will turn to Canadian writers to examine their contribution and responses to ongoing ethical debates concerning what it means to engage with the Other, the native, the land, the animal, and the transhuman. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG908H3 Travel and Travellers in Literature
A study of fictional, semi-fictional, and non-fictional accounts of travel. Reading works by such writers as Horner, Lucian, Marlowe Kemp, Sir John Mandeville, Raleigh, Nashe, Lady Montague, Swift, and John Bartram, we will study travel accounts ranging through the forced transportation of slaves, pilgrimage, exploration, and tourism. Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG909H3 The Open Road in North American Narrative
An investigation of the myth of the open road in the North American imagination. From Huckleberry Finn to recent novels, non-fiction accounts, and films, stories about travelling the open road have helped organize the larger American narrative. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG910H3 Women and Canadian Writing
A study of the remarkable contribution of women writers to the development of Canadian writing. Drawing from a variety of authors and genres (including novels, essays, poems, autobiographies, biographies, plays, and travel writings), this course will look at topics in women and Canadian literature in the context of theoretical questions about women's writing. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG911H3 Myth and Canadian Fiction
An examination of Canadian writing in the context provided by myth. The course will examine the significance of myths studied in ENG601H for work by such Canadian writers as Maclean, Watson, Laurence, Ondaatje, Birlinghams, and King. Limited enrolment: 22
Exclusion: [ENG6521Y], [ENG662H]
Prerequisite: 2 C-level courses in English

ENG912H3 Canadian Writing for the New Century
An analysis of features of Canadian writing at the end of the twentieth and the beginning of the twenty-first century. This course will consider such topics as changing themes and sensibilities, canonical challenges, and millennial and apocalyptic themes associated with the end of the twentieth century. Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG913H3 The Image of the Home in North American Fiction
An investigation of the Home as organizing concept and thematic symbol in Canadian and American writing. This course will consider how focusing on home (one of the universal concepts around which narratives get organized) influences the way we read, especially within the context of culture and gender. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG914H3 Between Traditions and Freedoms: Writing by Canadians of Asian Descent
A study of issues of influence or writing by Canadians of Asian descent. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG915H3 Michael Ondaatje
A study of the novels, poems, memoir, and prose of one of Canada's major writers. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG916H3 Studies in the Victorian Period
Topics vary from year to year and might include Victorian children's literature; city and country in Victorian literature; science and nature in Victorian writing; aestheticism and decadence; or Tennison and Browning. Pre-1900 course
Limited enrolment: 22
Exclusion: ENG445Y
Prerequisite: 2 C-level courses in English.

ENG917H3 Avant-Garde Cinema
An exploration of Avant-Garde cinema from the earliest experiments of German Expressionism and Surrealism to our own time. The emphasis will be on cinema as an art form aware of its own uniqueness, and determined to discover new ways to exploit the full potential of the "cinematic". Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG918H3 The Film Musical
An analysis of the Hollywood musical. We will focus on how genres are defined and what they tell us about meaning and cultural norms. How strictly are genre rules and conventions - and what happens when we stretch them? How do genres convey cultural assumptions about race, gender, class, and sexuality? Limited enrolment: 22
Prerequisite: Two C-level courses in English

ENG919H3 Cinema and Spectatorship
An introduction to films, film theory, debates, and critics that address the role of the spectator. What spectacles are assumed or constructed by the movies. How does a film's structure influence our understanding of what we see? How do movies star affect us? How has technology changed spectatorship? Limited enrolment: 22
Prerequisite: Two C-level courses in English

ENG920H3 Stranger Than Fiction: The Documentary Film
The study of films from major movements in the documentary tradition, including ethnography, cinema verite, social documentary, the video diary, and "reality television". The course will examine the tensions between reality and representation, art and politics, technology and narrative, film and audience. Limited enrolment: 22
Prerequisite: 2 courses at the C-level in English

ENG921H3 Narrative and Interactivity
A study of how narratives in various media interact with the reader. We will examine such questions as the degree to which reader response can be termed interactivity; how readers shape the outcome of narratives; and how narratives can be deformed by interactivity and still retain coherence and consistency. Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENG922H3 ENG922H3 Independent Studies in Literature
An opportunity for students to pursue one-term projects of independent literary study under the supervision of a member of the English faculty. Students should discuss their interests in this opportunity with appropriate faculty and the Discipline Representative or Supervisor of Studies one term in advance of the proposed course. These courses are only open to students with a strong record who are completing the last 3 courses of their degree and who have completed 2 FECs in C-level English. This course is contingent on acceptance by a faculty supervisor and the approval of the English group. Depending on subject area, this course can be counted towards the pre-1900 requirement. Note: Students may count no more than 1 FEC of ENG922H3, ENG928Y, and ENG939H1 toward an English program.
Prerequisite: 2 FECs in English at the C-level

ENG923Y Senior Essay
A scholarly project chosen by the student and supervised by a faculty member. Students should discuss their proposals with appropriate faculty and the Discipline Representative or Supervisor of Studies one term in advance of the proposed course. This course is only open to students with a strong record who are completing the last 5 credits of their degree and who have completed 2 FECs in C-level English. This course is contingent on acceptance by a faculty supervisor and approval of the English group. Depending on subject area, this course can be counted towards the pre-1900 requirement. Note: Students may count no more than 1 FEC of ENG923Y, ENG928Y and ENG939H1 toward an English program.
Exclusions: ENG450Y
Prerequisite: 2 C-level courses in English.
Environmental Science

Faculty List
J.A. Westgate, B.Sc. (Reading), Ph.D. (Alberta), Professor Emeritus
N. Eyles, B.Sc. (Leicester), M.Sc. (Memorial University NFLD), Ph.D. (East Anglia), D.Sc. (Leicester), P.G. Cert., Professor
B. Greenwood, B.Sc., Ph.D. (Bradford), D.Phil. (Oxord, Causa, Upsala), Professor
K.W.F. Howard, B.Sc. (Exeter), M.Sc., Ph.D. (Birmingham), P.G. Cert., G.Cert. in GIS, PGH, Professor
D.D. Williams, B.Sc. (North Wales), Dip. Ed. (Liverpool), M.Sc., Ph.D. (Waterloo), D.Sc. (Wales), Professor
R.R. Fullerton, B.Sc., M.Sc., Ph.D. (Toronto), Associate Professor
A.G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill), Associate Professor
A. Wani, B.A. (Kasrin), PH.D. (Toronto), Associate Professor
G.B. Arshambis, B.Sc., M.Sc., Ph.D. (Agricultural Univ of Athens, Greece), Ph.D. (Univ of the Aegean, Corfu), Assistant Professor
A. Simpson, B.Sc., Ph.D. (Birmingham), Assistant Professor
M.J. Simpson, B.Sc., Ph.D. (Alberta), Assistant Professor
M. Wells, B.Sc., Ph.D. (Australian National), Assistant Professor
R.E. Gerber, B.Sc. (Waterloo), M.Sc., Ph.D. (Toronto), P.Geo., Adjunct Assistant Professor

Human activity is a major cause of environmental change. Study of the dynamics of both natural and anthropogenic changes requires knowledge spanning many scientific disciplines. Recent environmental degradation such as surface and subsurface water pollution, air and soil pollution, climate change, depletion of resources, extinction of species and problems of waste disposal are all a result of the lack of understanding of environmental systems and processes. Environmental degradation has an impact not only on human beings but on all species and most natural systems, so that its understanding requires approaches and skills from many disciplines such as biology, chemistry, geology, geography, mathematics, physics, and ecology.

Four Specialised Programs (Environmental Biology, Environmental Chemistry, Environmental Geoscience and Environmental Physics) a Major Program with three streams (General Environmental Science, Environmental Biology and Water Science) and a Minor Program are all available within Environmental Science at UTSC. The streams of the Major Program are designed for students who wish to pursue another Major or Specialist Program in a related discipline. All streams have a common core in the first two years; this reflects the strong interdisciplinary requirements of an integrated approach to the study of the environment and allows students to switch between streams if they wish.

In addition, a Joint Specialist Program in Environmental Science and Technology is offered in collaboration with the School of Engineering Technology and Applied Science of Centennial College. (For more information see the Environmental Science and Technology section of this Calendar.)

The overall purpose of the various programs in Environmental Science is to provide education and training which will produce highly qualified scientists with excellent field and laboratory experience, with a view to future employment in consulting, government, non-governmental organizations and research and teaching.

The Specialist Programs in Environmental Biology, Environmental Chemistry, Environmental Geoscience and Environmental Physics and all three streams of the Major Program are eligible for inclusion in the Co-operative Program in Physical Sciences. Please refer to the Physical Sciences and the Co-operative Program sections of this Calendar for further details.

Science Engagement Courses
For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN ENVIRONMENTAL BIOLOGY
Supervisor of Studies: Until June 30: A.G. Price (416-287-7237) Email: price@utsc.utoronto.ca
From July 1: W.A. Gough (416-298-7245) Email: gough@utsc.utoronto.ca

Adviser: D.D. Williams (416-287-7233)

Program Requirements
Total requirements: 14.5 FCE

First Year:
EESA00H Introduction to Environmental Science
EESA06H Introduction to Planet Earth
BGYA01H Introductory Biology Part I
BGYA02H Introductory Biology-Part II
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms
MATA20H Calculus I
MATA25H Calculus II for Biological Sciences or MATA26H Calculus II for Physical Sciences or MATA27H Calculus II for Mathematical Sciences
PHYA10H Introduction to Physics I

Second Year:
BGYB50H Ecology
BGBYB52H Ecology and Evolutionary Biology
BGBYB52H Ecology and Evolutionary Biology Laboratory
EESB50H Earth History
EESB16H Feeding Humans - The Cost to the Planet
STAB22H Statistics I
PSCB205H Introduction to Scientific Computing or CSCA00H Introduction to Computer Programming
and 1.0 FCE from the following:
EESB05H Principles of Climatology
EESB04H Principles of Hydrology
EESB05H Principles of Soil Science
CHMB55H Environmental Chemistry

Third Year:
EESC03H Geographic Information Systems and Remote Sensing
EESC04H Biodiversity and Biotic Geography
EESC15H Research Seminar in Environmental Science
EESC30H Microbial Biochemistry
BGCY59H Advanced Population Ecology
BGCY56H Community Ecology and Environmental Biology
BGCY56H Conservation Biology
and 0.5 FCE from the following:
BGCY57H Evolutionary and Applied Biology of Insects
BGOC65H Environmental Toxincology
## Environmental Science 137

### Fourth Year:
- EESC31H Environmental Impact Assessment and Auditing
- 0.5 FCE from the following:
  - EESC69H Climate Change Impact Assessment
  - EESC64H Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
  - EESC62H Contaminant Fate in Terrestrial Environments

### Second Year:
- GYOS55H Ecology
- CHMB45H Chemical Thermodynamics and Elementary Kinetics
- CHMB42H Chemical Structure and Spectroscopy
- CHMB44H Organic Chemistry I
- CHMB43H Organic Chemistry II
- CHMB55H Environmental Chemistry
- STAB21H Statistics I

**Strongly recommended:**
- BGYD10Y Directed Research in Biology or EESC10Y Research Project in Environmental Science

### SPECIALIST PROGRAM IN ENVIRONMENTAL CHEMISTRY

**Supervisor of Studies:** Until June 30, A.G. Price
**Adviser:** J. Donaldson

**Email:** price@utsc.utoronto.ca
**Email:** gough@utsc.utoronto.ca

**From July 1:**
**Email:** price@utsc.utoronto.ca
**Email:** gough@utsc.utoronto.ca

### Program Requirements

**Total requirements:** 15.0 FCE

**First Year:**
- EES601H Introduction to Environmental Science
- EES606H Introduction to Planet Earth
- BGYA20H Introductory Biology: Part I
- BGYA20H Introductory Biology: Part II
- CHMA10H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms

**Second Year:**
- GYOS55H Ecology
- CHMB20H Chemical Thermodynamics and Elementary Kinetics
- CHMB21H Chemical Structure and Spectroscopy
- CHMB44H Organic Chemistry I
- CHMB43H Organic Chemistry II
- CHMB55H Environmental Chemistry
- STAB21H Statistics I

**Total FCE:**

**Second Year:**
- EESC603H Principles of Climatology
- EESC604H Principles of Hydrology
- EESC605H Principles of Soil Science
- EESC615H Earth History
- PSB57H Introduction to Scientific Computing

### Fourth Year:
- EESC62H Contaminant Hydrogeology
- EESC64H Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
- EESC62H Contaminant Fate in Terrestrial Environments
- CHMC11H Principles of Analytic Instrumentation

**Supervisor of Studies:** Until June 30, A.G. Price

**From July 1:**
**Email:** price@utsc.utoronto.ca
**Email:** gough@utsc.utoronto.ca

### Program Requirements

**Total requirements:** 15.0 FCE

**First Year:**
- EES601H Introduction to Environmental Science
- EES606H Introduction to Planet Earth
- BGYA20H Introductory Biology: Part I
- BGYA20H Introductory Biology: Part II
- CHMA10H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms

**Second Year:**
- GYOS55H Ecology
- CHMB20H Chemical Thermodynamics and Elementary Kinetics
- CHMB21H Chemical Structure and Spectroscopy
- CHMB44H Organic Chemistry I
- CHMB43H Organic Chemistry II
- CHMB55H Environmental Chemistry
- STAB21H Statistics I

**Total FCE:**

**Second Year:**
- EESC603H Principles of Climatology
- EESC604H Principles of Hydrology
- EESC605H Principles of Soil Science
- EESC615H Earth History
- PSB57H Introduction to Scientific Computing

**STAB21H Statistics I**
Third Year:
- EESC03H Geographic Information Systems and Remote Sensing
- EESC04H Biodiversity and Biogeography
- EESC07H Groundwater
- EESC12H Environmental Impact Assessment and Auditing
- EESC15H Research Seminar in Environmental Science
- EESC16H Principles of Glacial Sedimentology and Stratigraphy
- EESC32H Mineralogy and Petrology
  and
- 0.5 FCEs from the following:
  - EESC18H The Great Lakes: An Introduction to Physical Limnology
  - EESC19H Marine Systems

Fourth Year:
- 1.0 FCE from the following:
  - EESC21H Urban Environmental Problems of the Greater Toronto Area
  - EESS02H Contaminant Hydrogeology
  - EESS06H Climate Change Impact Assessment
  - EESS09H Research Project in Environmental Science
  - EESS10H Research Project in Environmental Science
  - EESS11H Process Hydrology
  - EESS15H Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
  - EESS21H Contaminant Fate in Terrestrial Environments
  and
- 1.0 FCE from any other EES courses
  Strongly recommended: EESC14H, EESS07H or BGYC53H

SPECIALIST PROGRAM IN ENVIRONMENTAL PHYSICS
Supervisor of Studies: Until June 30: A.G. Price (416-287-7327) Email: price@utsc.utoronto.ca
From July 1: W.A. Gough (416-287-7245) Email: gough@utsc.utoronto.ca

Program Requirements:
Total Requirements: 15.0 FCE

First Year:
- PHYS101H Introduction to Physics I
- PHYS11H Introduction to Physics II
- MATA30H Calculus I
- MATA36H Calculus II for Physical Sciences
- CHMA10H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms
- EESA06H Planet Earth
- MATA23H Linear Algebra I

Second Year:
- PHYS20H Waves and Vibrations
- PHYS21H Electricity and Magnetism
- CHMB55H Environmental Chemistry
- EESB02H Principles of Geomorphology
- EESB03H Principles of Climatology
- EESB04H Principles of Hydrology
- EESB05H Principles of Soil Science
- PSCB57H Introduction to Scientific Computing

Third Year:
- PHYB01H Intermediate Physics Laboratory I
- PHYB11H Intermediate Physics Laboratory II
- STAB02H Statistics I
- EESB15H Earth History
- EESC03H Remote Sensing and Geographical Information Systems
- EESC11H Principles of Glacial Sedimentology and Stratigraphy
- EESC15H Research Seminar in Environmental Science
- EESC07H Groundwater
- EESC18H The Great Lakes: An Introduction to Physical Limnology
- EESC19H Marine Systems

Fourth Year:
- EESC12H Environmental Impact Assessment and Auditing
- PSCD01H The Physical Sciences in Contemporary Society
  1.0 FCE from:
  - EESC21H Urban Environmental Problems of the Greater Toronto Area
  - EESS02H Contaminant Hydrogeology
  - EESS06H Climate Change Impact Assessment
  - EESS09H Research Project in Environmental Science
  - EESS10H Research Project in Environmental Science
  - EESS11H Process Hydrology
  - EESS21H Contaminant Fate in Terrestrial Environments

MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE
Supervisor of Studies: Until June 30: A.G. Price (416-287-7327) Email: price@utsc.utoronto.ca
From July 1: W.A. Gough (416-287-7245) Email: gough@utsc.utoronto.ca

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

Program Requirements:
General Environmental Science Stream
Supervisor of Studies: Until June 30: A.G. Price (416-287-7327) Email: price@utsc.utoronto.ca
From July 1: W.A. Gough (416-287-7245) Email: gough@utsc.utoronto.ca

Total requirements: 7.0 FCE

First Year:
- EESA01H Introduction to Environmental Science
- EESA06H Introduction to Planet Earth
- BOYB02H Introductory Biology: Part I
- BOYB02H Introductory Biology: Part II

Second Year:
- EESS02H Principles of Geomorphology
- EESS03H Principles of Climatology
- EESS04H Principles of Hydrology
- EESS05H Principles of Soil Science
- EESB15H Earth History
- and
Third Year:
EESC03H Geographic Information Systems and Remote Sensing
EESC07H Groundwater
EESC13H Environmental Impact Assessment and Auditing
EESC18H The Great Lakes: An Introduction to Physical Limnology or
EESC19H Marine Systems
EESC31H Principles of Glacial Sedimentology and Stratigraphy

1.0 FCE from the following:
BGYC53H Marine Biology
BGYC55H Environmental Toxicology
BGYD51H River Ecology
CLAB05H The Mediterranean World I: Greece
CLAB06H The Mediterranean World II: Rome
EESD02H Contaminant Hydrogeology
EESD11H Process Hydrology

MINOR PROGRAM IN ENVIRONMENTAL SCIENCE

Supervisor of Studies/Advisor:
Until June 30: A.G. Price (416-287-7327) Email: price@ustc.utoronto.ca
From July 1: W.A. Gough (416-287-7245) Email: goughw@ustc.utoronto.ca

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

Program Requirements
Total requirements: 4.0 FCE

First Year:
EESC01H Introduction to Environmental Science
EESC06H Introduction to Planet Earth

Second Year:
Any 1.5 FCE from the following:
EESB01H Principles of Geomorphology
EESB03H Principles of Climatology
EESB04H Principles of Hydrology
EESB05H Principles of Soil Science
EESB15H Earth History

Third Year:
1.5 FCE of any other EES courses of which 1.0 FCE must be at the C- or D-level.

SPECIALIST (JOINT) PROGRAM IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY
(See the Environmental Science and Technology section of this Calendar.)

SPECIALIST PROGRAM IN NATURAL SCIENCES
(See the Physical Sciences section of this Calendar.)
EES09H3 Introduction to Environmental Science

The scientific method and its application to natural systems. The physical and biological processes which drive ecosystem functions. Anthropogenic changes in ecosystem functions at local and global scales. Emphasis on the degradation of the atmosphere, soil, water and biological resources caused by human activity. Renewable and non-renewable resource sustainability.

EES09H3 Environmental Hazards

This course is an investigation of the geological background and possible solutions to major hazards in the environment. Environmental hazards to be studied include: landslides, erosion, earthquakes, volcanic eruptions, asteroid impacts, flooding, glaciation, future climate change, subsidence, and the disposal of toxic wastes. This may be of interest to a wide range of students in the life, social, and physical sciences; an opportunity for the non-specialist to understand headline-making geological events of topical interest. No prior knowledge of the Earth Sciences is required.

Exclusion: GGL010H

EES10H3 Introduction to Planet Earth

This course explores the composition, structure and origin of the Earth and the physical and biological processes that operate in and on it; the history of the Earth as revealed in the rock record. The flows of energy and mass through natural systems, and the impact of human activity on system processes, with particular reference to land use change, soil degradation and atmospheric pollution. Exclusion: GGR101Y, GGL110H

EES10H3 Water

This course consists of a survey of the planet's water resources and the major issues facing the use of water. Topics include: Earth, the watery planet; water, the last great resource; Canada's waters; Ontario's waters; water and man; water contamination; and protecting our waters. Case studies such as the Walkerton tragedy will be studied. No prior knowledge of environmental science is required.

EES20H3 Wind

A survey of the science, history and applications of wind. Topics include storms including hurricanes, tornadoes and midlatitude cyclones, global circulation, local circulations, measurement of winds, impact of winds on land surfaces, wind power, winds and pollution, historical and literary winds, and contemporary wind research. No prior knowledge of environmental science is required.

EES21H3 Human Health and the Environment

Because of pollution, our surroundings are becoming increasingly hazardous to our health. The past century has seen intense industrialization characterized by the widespread production and use of chemicals and the intentional and unintentional disposal of a wide range of waste materials. This course explores the relationship between the incidence of disease in human populations and the environmental pollution. Emphasis will be placed on understanding where and what pollutants are produced, how they are taken up by humans and their long-term effects on health, the role of naturally-occurring carcinogens will also be examined. The course will include a view of risk assessment and toxicology using case studies. No prior knowledge of environmental or medical science is required.

EES21H3 Environmental Pollution

This course illustrates the environmental effects of urban expansion, changing methods of agriculture, industrialization, recreation, resource extraction, energy needs and the devastation of war. Drawing on information from a wide spectrum of topics - such as waste disposal, tourism, the arctic, tropical forests and fisheries - it demonstrates what we know about how pollutants are produced, the pathways they take through the global environment and how we can measure them. The course will conclude with an examination of the state of health of Canada's environments, highlighting those areas where environmental contamination is the subject of public discussion and concern. No prior knowledge of environmental science is required.

EES20H3 Principles of Geomorphology

The physical and chemical processes responsible for the development of regolith at the surface of the earth and the mechanics of entainment, transport and deposition of mass by rivers, wind, glaciers, water waves, gravitational stresses, etc., which control the evolution of surface morphology. Field excursions and laboratory exercises will allow students to apply theory to natural systems and to understand the dynamics of one mass-modified geomorphic system.

Prerequisite: EES09H3 or permission of the instructor

EES20H3 Principles of Climatology

This is an overview of the physical and dynamic nature of meteorology, climatology and related aspects of oceanography. Major topics include: atmospheric composition, nature of atmospheric radiation, atmospheric moisture and cloud development, atmospheric motion including air masses, front formation and upper air circulation, weather forecasting, ocean circulation, climate classification, climate change theory and global warming.

Exclusions: GGR200H, GGR302H

Prerequisite: EES10H3 or EES20H3

EES20H3 Principles of Hydrology

The water and energy balances; fluxes through natural systems. Process at the drainage basin scale: precipitation, evaporation, evapotranspiration and streamflow generation. The measurement of water fluxes, forecasting of rainfall and streamflow events. Human activity and change in hydrologic processes. Exclusion: GGR200H

Prerequisite: EES09H3 or EES20H3 or any B-level EES course

EES20H3 Principles of Soil Science

A study of the processes of pedogenesis and the development of diverse soil profiles, their field relationships and their response to changing environmental conditions. An examination of the fundamental soil properties of importance in soil management. An introduction to the techniques of soil examination in the field, soil analysis in the laboratory and the basic principles of soil classification.

Prerequisite: EES10H3 or EES20H3

EES31H3 Earth History

Planet Earth is at least 4.400 million years old and a geological record exists for at least the last 3.900 million years in the form of igneous, metamorphic and sedimentary rocks. The changing dynamics of convection deep within the Earth's mantle and associated super-continent assembly and breakup along with meteorite impacts, are now recognized at the major controls on development of the planet's atmosphere, oceans, biology, climate and geochemical cycles. This course revises this long history and the methods and techniques used by geologists to identify ancient environments.

Prerequisite: EES20H3 or EES20H3

EES31H3 Feeding Humans - The Cost to the Planet

Examines the origins and systems of production of the major plants and animals on which we depend for food. Interactions between those species and systems and the local ecology will be examined, looking at issues of over grazing, genetic erosion, soil erosion, pesticide use, and impacts of genetically modified strains.

Prerequisite: BGY200H & BGY201H

EES31H3 Integrated Management of Transboundary Waters

Competition for water resources between countries is common; population and economic growth are exacerbating this. The socio-political, environmental and economic aspects of transboundary water transfers are explored; the success of relevant international treaties and conventions, and the potential for integrated management of transboundary waters are assessed. Examples from Asia, Africa and the Middle East are presented.

Prerequisite: EESS10H3 or EES20H3

EES31H3 Geographic Information Systems and Remote Sensing

This course focuses on the use of Geographic Information Systems (GIS) and Remote Sensing (RS) for solving a range of scientific problems in the environmental sciences and describing their relationship with - and applicability to - other fields of study (e.g., geography, computer science, ecology).
EESC0463 Biodiversity and Biogeography
Theoretical and practical aspects of the evolution of organismal diversity in a functional context, examination of species distributions and how these are organized for scientific study. Emphasis will be on the highly diverse invertebrate animals. Topics include biomes, dispersal, adaptation, speciation, extinction, and the influence of climate history and humans. Prerequisite: GYG506H or (GYG507H or permission of the instructor).

EESC151H3 Research Seminar in Environmental Science
Concepts and methods developed in Environmental Science will be applied to practical environmental problems, within the framework of individual or group projects; a research proposal and a research seminar will be produced. The course is also designed to ensure interaction between students from diverse streams of environmental science through participation in joint seminars with faculty and with environmental practitioners from the community at large. Prerequisite: Permission of co-ordinator.

EESC164H3 Field Camp 1
Many environmental problems can only be assessed by collecting geological and other environmental data in the field. This course will provide students with the necessary skills for fieldwork investigation in a range of environments. The camp will be held in Costa Rica in May 2006. Prerequisite: EES301H and permission of the instructors.

EESC153H3 Environmental Impact Assessment and Auditing
To familiarize students with the relevant legislation, qualitative and quantitative approaches and applications for environmental impact assessments and environmental auditing. The focus will be on the assessment of impacts to the natural environment, however, socio-economic impacts will also be discussed. Environmental auditing and environmental certification systems will be discussed in detail. Examples and case studies from forestry, wildlife biology and land use will be used to illustrate the principles and techniques presented in the course. Students will acquire "hands-on" experience in impact assessment and environmental auditing through case studies. Exclusion: GGR393H
Prerequisite: 2.5 FCEs of EES courses or permission of the instructor.

EESC154H3 Marine Systems
The world's oceans constitute more than 70% of the earth's surface environments. This course will introduce students to the dynamics of ocean environments, ranging from the deep ocean basins to marginal seas to the coastal ocean. The large-scale water circulation is examined from an observationally-based water mass analysis and from a theoretical-hydro-dynamical framework. The circulation of marginal seas, the role of tides, waves and other currents are studied in terms of their effects upon the coastal boundary. Prerequisite: EES303H
Recommended Course: EES302H

EESC212H3 Urban Environmental Problems of the Greater Toronto Area
Urban areas such as the GTA are the focus of many acute environmental problems such as the disposal of solid and liquid wastes, and the contamination of soil, air and water by industrial activity. Specific cases of such problems drawn from the GTA will be reviewed, with reference to field investigations, environmental audits, due diligence and liability, and remedial solutions. Students will carry out their own field investigations and will report on specific issues, paying particular regard to government legislation and guidelines issued by regulatory agencies. This course is essential to students in the Environmental Science Program, but is also directly relevant to business and management students. Prerequisite: 10 FCEs in an EES Program, or permission of the instructor.

EESC248H3 Advanced Readings in Environmental Science
An advanced supervised readings course that can be taken in any session. Students will follow structured independent readings in any area of Environmental Science. A description of the objectives and scope of the individual offering must be approved by the Supervisor of Studies. Two papers are required in the course; the supervisor and one other faculty member will grade them. The course may not be used as a substitute for EES Program requirements. Prerequisite: A minimum GPA of 2.5, and 3 FCEs in EES courses. Permission of the Supervisor of Studies.

EESC327H3 Microbial Biogeochemistry
This course examines the diversity of microorganisms, their adaptations to special habitats, and their role in the ecosystem and geochemical cycling. Other topics include microbial physiology, physiological diversity, species interactions and state of the art methods of detection and enumeration. Exclusion: (BGY545H) Prerequisite: (CHMA110H & CHMA111H or (CHMA220Y) and (GYG506H or (GYG507H))

EESC313H3 Principles of Glacial Sedimentology and Stratigraphy
The last 2.5 million years has seen the repeated formation of large continental ice sheets over North America and Europe. The landscape of Ontario is a fossil landscape inherited from the last Laurentide Ice Sheet that disappeared only 10,000 years ago, much of southern Ontario is buried by glacial sediments and the Great Lakes are the direct result of glaciation. The course will review the cause of glaciations and their geological and geomorphological effects paying special regard to the long record of past glacial and interglacial climates preserved in the Toronto region. Prerequisite: EASA68H

EESC322H3 Mineralogy and Petrology
This course provides an overview of common mineral and rock types and the methods for describing and identifying them. The fundamentals of crystal structure will be reviewed and used as a basis for mineralogical classification. Simple microscopic techniques for mineral identification and the mineralogy and origin of the more common sedimentary, igneous and metamorphic rock types are presented. This course is necessary for those students who wish to seek professional registration as a Professional Geoscientist in Ontario. Limited enrolment: 20 Exclusion: GGL200H, EBS201H, EBS301H
Prerequisite: EASA103H & EASA68H
EESD02H3 Contaminant Hydrogeology
Natural hydrochemical processes; the use of major ions, minor ions, trace metals and environmental isotopes in studying the occurrence and nature of ground water flow. Point and non-point sources of ground water contamination and the mechanisms of contaminant transport.
Prerequisite: CMRS115H1 and at least 1.0 FCE in Environmental Science at the C-level.

EESD06H3 Climate Change Impact Assessment
Climate change over the last 150 years is reviewed by examining the climate record using both direct measurements and proxy data. Projection of future climate is reviewed using the results of sophisticated climate modeling. The climate change impact assessment formalism is introduced and applied to several examples. Students will acquire practical experience in climate change impact assessment through case studies.
Prerequisite: EFSB03H1

EESD07H3 Field Camp II
This field camp will familiarize students with several geological settings and modern environments. The camp will be held in Costa Rica in May 2006 in conjunction with EESC161H. Prerequisite: EESCI10H and permission of the instructor.

EESD09H3 EESD10Y3 Research Project in Environmental Science
The design, implementation, and reporting of a substantial research project involving laboratory and/or fieldwork. Existing faculty research allows a broad range of possible topics. The course should be undertaken after the end of the 3rd year, subject to faculty availability. Faculty permission and supervision is required; open only to those students who have either completed or are undertaking specialist courses in the area of intended study. Students having a B+ or higher standing may be eligible for summer financial support from research projects. Permission of the co-ordinator must be obtained.
Exclusion: GLG470Y, GLG471H
Prerequisite: EESC15H

EESD11H3 Process Hydrology
Prerequisite: EESB04H

EESD12H3 Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
This course consists of a study of the ways in which hazardous organic and inorganic materials can be removed or attenuated in natural systems. The theory behind various technologies, with an emphasis on bioremediation techniques and their success in practice. An introduction to the unique challenges associated with the remediation of surface and ground water environments, soils, marine systems, and contaminated sediments.
Prerequisites: BGYA01H & BGYA02H & EESB04H & EEB805H & CHMB53H

EESD12H3 Contaminant Fate in Terrestrial Environments
This course will present fundamental chemical concepts and reactions that occur in soils with emphasis on contaminant behaviour. Students will learn the basics of soil chemistry and how these processes relate to quantities, attenuation, sorption and migration of ions, heavy metals, and organic molecules in terrestrial environments.
Prerequisite: CHMB53H & EESB05H

SCB803H Science Engagement Outreach
SCB803H Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)

Environmental Science and Technology

Faculty List
A.G. Price, B.Sc. (Water), M.Sc., Ph.D. (McGill), Associate Professor

SPECIALIST (JOINT) PROGRAM IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY
Supervisor of Studies: Until June 30, A.G. Price (416-287-7327) Email: price@jason.utoronto.ca
From: July 1: W.A. Gough (416-287-7245) Email: gough@outc.utoronto.ca
This program is offered in collaboration with The School of Engineering Technology and Applied Science at Centennial College. The program may be taken in partial fulfillment of an Honours (Specialist) B.Sc. Degree from UTSC. In addition to completing the requirements for the degree, students will qualify for the Environmental Protection Technician Diploma from Centennial College.

Guidelines for 1st year course selection
Students who intend to complete the program should include BGYA01H, BGYA02H, CHMA11H, CHMA11H, MATA36H, MATA36H & PHYA10H in their 1st year course selection.

Program Admission
Students should request the program through ROSL. Enrolment is limited. Students may apply to the program after completing 4.0 FCEs (full credit equivalents), including 1.0 FCEs in Environmental Sciences, and 0.5 FCE in each of Chemistry, Biology, Mathematics and Physics.

Program Requirements
Students must complete 16.5 full course equivalents (FCE), as follows:

1. Introductory (3.5 FCE):
   a) EESB01H Introduction to Environmental Science
      b) EESA06H Introduction to Planet Earth
      c) CHMA11H Introductory Chemistry I: Structure and Bonding
      d) CHMA11H Introductory Chemistry B: Reactions and Mechanisms
      e) BGYA01H Introductory Biology: Part I
      f) BGYA02H Introductory Biology: Part II
      g) STAD20H Statistics
      h) PSIC15H Introduction to Scientific Computing

2. Fundamentals and Principles (3.5 FCE):
   a) BGYA05H Ecology
   b) PHYA10H Introduction to Physics I
   c) MATA36H Calculus I
   d) MATA36H Calculus II for Physical Sciences
   e) 1.5 FCE of the following:
      EESB02H Principles of Geomorphology
      EESB03H Principles of Climatology
      EESB04H Principles of Hydrology
      EESB05H Principles of Soil Science
      EESB15H Earth History
      EESB16H Feeding Humans - The Cost to the Planet.
1. Applied and Technical (8.0 FCE):
   (These courses are taught at the Centennial HP Science and Technology Centre)
   a) IMCB2H1 Microbiology Basics
   b) STEB3H1 Organic Chemistry and Applications
   c) STEB0H1 Analytical Chemistry and Applications
   d) STEB4H1 Applied Environmental Microbiology
   e) STEC1H1 Applied Microbiological Analysis
   f) STEC3H1 Applied Analytical Instrumentation
   g) STEB42H1 Water Quality Control
   h) STEB43H1 Engineering Equipment and Processes
   i) STEB40H1 Applied Hydrology and Water Management
   j) STEC4H1 Hazardous Wastes and Modern Industrial Processes
   k) STEB44H1 Environmental Legislation and Regulations
   l) STEC3H1 Environmental Audits, Sampling and Data Management

4. Advanced (3.5 FCE):
   a) EESG0H1 Geographic Information Systems and Remote Sensing
   b) EESC0H1 Biodiversity and Biogeography
   c) EESC0H1 Groundwater
   d) EESC1H1 The Great Lakes: An Introduction to Physical Limnology
   e) EESD0H1 Contaminant Hydrogeology
   f) EESD1H1 Process Hydrology
   g) EESD5H1 Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Systems

   * A minimum grade of 60% is required in courses marked with an asterisk, in order to maintain standing in the program.

**STE B07H1 Analytical Chemistry and Applications**
Quantitative analysis with pharmaceutical precision and accuracy to industrial and environmental protocols. Standard wet chemistry and instrumental techniques, data analysis and presentation. Conformity with health, safety and environmental regulatory requirements. Limited to students enrolled in the Joint Specialist Program in Environmental Science and Technology or the Joint Specialist Program in Industrial Microbiology.
Exclusion: CHMC1H1, CHMB2H1.
Prerequisite: IMCB0H1 or CHMA1H1 and permission of instructor.
Note: CHMC1H1 or CHMB2H1 may be taken after STEB07H1, but STEB07H1 cannot be taken after CHMC1H1 or CHMB2H1.

**STE B23H3 Organic Chemistry and Applications**
An introduction to the theory and practical applications of organic chemistry. An introduction to the principles of structure, properties identification and reactions of organic compounds as related to biology and other areas of science. Enrolment is limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Exclusion: CHMB4H1 & CHMB42H1.
Note: CHMB4H1 and CHMB42H1 may be taken after STEB25H1, but STEB25H1 may not be taken after CHMB4H1 or CHMB42H1.
Prerequisite: CHMA1H1.

**STE B42H3 Applied Environmental Microbiology**
The principles of Environmental Biology: water, air and soil testing procedures. Analysis of contaminated and spiked samples using Ministry of Environment and Industry standards procedures and protocols. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Prerequisite: BGYA02H and IMCB0H1.

**STE B424H3 Water Quality Control**
The characteristics of raw water and wastewater, water supply systems, sources of supply, methods of treatment, alternative sources of water and methods of distribution. The disposal of wastewater, the collection system and sewage treatment methods. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.

**STE B43 H3 Engineering Equipment and Processes**
Energy and mass in engineering systems, hydraulics, fluid flow, Bernoulli's theorem. Pumping systems, head losses through hydraulic systems, the efficiency of pumps and motors. Process equipment systems with emphasis on pumps, pipes and valves. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Exclusion: CHMB1H1 and CHMB2H1.
Prerequisite: PHYA10H.

**STE B44 H1 Environmental Legislation and Regulations**
The concepts of law and legal process as they apply in Canada. The Ontario Environmental Protection Act and other environmental legislation. Research on selected Canadian statutes with a written report and oral presentation. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Exclusion: (EESC3H1).

**STE C D3H3 Hazardous Wastes and Modern Industrial Processes**
Each student will be assigned research on a different pollutant, which might be one of the following: heavy metal ions in water, mercury, aromatic solvents, polycyclic amines, PCBs, halogenated solvents, organic acids, formaldehyde and ammonia. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Exclusion: (EESC3H1).
Prerequisite: CHMA1H1 & STEB25H1 & STEB07H1.

**IMC B0 H 3 Microbiology Basics**
(See the Industrial Microbiology section of this Calendar for a full description.)
Geography

(B.A.)

Faculty List
J.R. Morin, B.A. (Queens'), M.A. (Peru), M.Sc., Ph.D. (Toronto), Professor
E. C. Relph, B.A., M. Phil. (London), Ph.D. (Toronto), Visiting Professor
M. F. Bunce, B.A., Ph.D. (Sheffield), Associate Professor
M. Hauser, B.A., (University of Natal), Ph.D. (University of California, Berkeley), Assistant Professor
T. Kepe, B.Agri (Fort Hare Univ., South Africa), M.Sc. (Guelph), Ph.D. (Univ. Western Cape, South Africa), Assistant Professor
K. MacDonald, B.A., M.A., Ph.D. (Waterloo), Assistant Professor
M. Mahlin, B.A. (Dalhousie), Ph.D. (London), Assistant Professor

Discipline Representative/Supervisor of Studies: M. Bunce (416-287-7313)

Email: bunce@arts.toronto.ca

Geography is a broad-ranging subject. As a social science it is concerned with the spatial patterns of human activity and the character of regions and places. It is a subject which is well placed to explore the complex relationships between society and the natural environment as well as the social and economic problems of human land use and settlement. It therefore complements other programs such as: City Studies, Society and Environment, Environmental Science, Political Science, Sociology, Anthropology; Economics for Management Studies and Development Studies.

Geography courses are also listed as options in several U of T Scarborough Programs including Society and Environment and the Co-op Program in International Development.

MAJOR PROGRAM IN HUMAN GEOGRAPHY

A Major Program for students interested in Human Geography as an academic discipline. This Program equips students with the knowledge and skills needed to understand contemporary social science thought in the context of the communities, societies, and economies formed by human populations, and the ways in which location, landscape, and spatial context shape (and are shaped by) social structures, functioning, and behaviour.

Guidelines for 1st year course selection:
- Students intending to complete the Major Program in Human Geography should take GGRA02H1 & GGRA10H1 in first year. They might also want to take GGRA30H1.

Program Requirements

1. Introduction (1 FCE)
   - GGRA02H1 The Geography of Global Processes
   - GGRA10H1 People and Environments

2. Theory and concepts in Human Geography (at least 2 FCE from among the following):
   - GGRB05H3 Urban Geography
   - CITT01H3 Canadian Cities and Planning
   - GGRB10H3 Real Estate and the City
   - GGRB31H3 Social Geography
   - GGRB20H1 Environmental Conservation and Sustainable Development
   - GGRB20H3 Geographies of Disease

3. Methods (1 FCE)
   - GGRA30H3 GIS and Empirical Reasoning
   - ANTIC35H5 Quantitative Methods in Anthropology
   - ECBM91Y1 Quantitative Methods in Economics

ECMB11H Quantitative Methods in Economics
GGR210H1 Introductory Analytical Methods
GGR211H Social Research Methods
PSYB07H Data Analysis in Psychology
SOCB01H Social Statistics
STARB2H Statistics 1

4. Applications (at least 2 FCE from among the following):
   - GGRC01H3 Supervised Readings in Human Geography
   - GGRC02H3 Population Geography
   - GGRC04H3 Urban Residential Geography
   - GGRC13H3 Urban Political Geography
   - GGRC18H1 Urban Transportation Policy Analysis
   - GGRC19H1 Spaces of Multiculturality: Critical Mixed Race Theory
   - GGRC20H3 Issues in Rural Development
   - GGRC27H1 Location and Spatial Development
   - GGRC29H1 Agriculture, Environment, and Development
   - GGRC33H3 Greater Toronto Area
   - GGRC41H1 Current Topics in Human Geography
   - GGRC45H3 Local Geographies of Globalization
   - GGRC46H1 Tourism, Environment and Development
   - GGRD07H1 Countryside Conservation
   - GGRD09H3 Feminist Geographies
   - GGRD10H1 Human Geography Case Study
   - GGRD10H3 Health and Sexuality

5. Core courses (0.5 FCE)
   - GGRG47H1 Introduction to Research in Human Geography

MINOR PROGRAM IN HUMAN GEOGRAPHY

Program Requirements

The requirements for this Program are four full-credit equivalents in Geography which must include one full-credit equivalent at the C-level or D-level.

MAJOR PROGRAM IN PHYSICAL AND HUMAN GEOGRAPHY

This is an interdepartmental program leading to a B.A. degree in which students combine courses in human geography (GGR prefix) with courses in physical geography (EES prefix).

Guidelines for 1st year course selection:

- EES courses are a prerequisite in physical sciences and mathematics. It is recommended that first year students take EESA11H, EESA16H, GGRA02H and GGRA30H and at least 1 FCE from among [BGYA01H & BGYA02H], [CHMA01H & CHMA11H], PHYA01H, [MAT22H & MAT23H] & [ASH03H & ASH04H].

Program Requirements

The Major Program in Physical and Human Geography requires the completion of a total of 8 full credit equivalents of which 4 FCE are to be EES courses, and 4 FCE are to be GGR courses. Among these 8 FCE, the student must include:

1. EESA01H, EESA04H, GGRA01H & GGRA03H
2. At least 1 FCE from among EESB01H, EESB02H, EESB03H, & EESB15H
3. At least 1.5 FCE from among CITT01H, CITT06H, GGRB10H, GGRB13H, GGRB20H, GGRB20H & GGRG27H
4. At least 1.5 FCE in the C- or D-level from among EES courses
5. At least 1 FCE at the C- or D-level from among GGR courses
6. At least one additional 0.5 FCE with a GGR prefix
7. At least one additional 0.5 FCE with an EES prefix.
GGRA203H3 The Geography of Global Processes
Globalization from the perspective of human geography. The course examines how the economic, social, political, and environmental changes that flow from the increasingly global scale of human activities affect spatial patterns and relationships, the character of regions and places, and the quality of life of those who live in them.
Exclusion: (GGRA101Y, SOEA01Y), GGR107Y

GGRA203H3 Cities and Environments
An introduction to the characteristics of modern cities and environmental issues, and their interconnections. Linkages between local and global processes are emphasized. Major topics include urban forms and systems, population change, the complexity of environmental issues such as climate change and water scarcity, planning for sustainable cities.
Exclusion: (GGRA101Y, SOEA01Y), GGR107Y

GGRA203H3 Geographic Information Systems (GIS) and Empirical Reasoning
Confirmatory causal modeling and GIS; map as model; GIS data input; cartographic and GIS data structures; data errors and editing; elementary spatial analysis; measurement; map comparison; classification; statistical surfaces; spatial arrangement; privacy issues.
Exclusion: (SOEA01H, EES408H1, EES508H1, GGR272H1)

GGRB203H3 Urban Geography
This course will develop understanding of the geographic nature of urban systems and the internal spatial patterns and activities in cities. Emphasis is placed on the North American experience with some examples from other regions of the world. The course will explore the major issues and problems facing contemporary urban society.
Exclusion: GGR124Y
Prerequisite: [GGRA203H & GGRA03H] or [GGRA01Y] or [SOEA01Y] or [IDS201H] or alternative prerequisite with permission of the instructor.

GGRB210H3 Real Estate and the City
Operation of property markets in an economic analysis; cities as markets in land and structures; stocks of property and flows of accommodation service; location of industry, offices and retailing within the city; rental and owner-occupied housing; depreciation and maintenance; cyclical behaviour in metropolitan property markets; impacts of local government; property taxation.
Prerequisite: One of CITB101H, EMB01H, EMB02H, GGR05H, (GGR06H), (GGR27H), GGR27H

GGRB223H3 Social Geography
The reciprocal relations between spatial structures and social identities. The course examines the role of social divisions such as class, race/ethnicity, gender and sexuality in shaping the social geographies of cities and regions. Particular emphasis is placed on space as an arena for the construction of social relations and divisions.
Prerequisite: [GGRA03H & GGRA03H] or [GGRA01Y] or [SOCA01H & SOCA02H] or [SOEA01Y]

GGRB223H3 Environmental Conservation and Sustainable Development
Deals with two main topics: the origins of environmental problems in the global spread of industrial capitalism, and environmental conservation and policies. Themes include: changes in human-environment relations, trends in environmental problems, the response of environmental awareness and activism, environmental policy, problems of sustainable development.
Exclusion: (SOEB101H, GGR233Y)
Prerequisite: [GGRA20H or (GGRA01Y) or [EESA01H & EESA05H] or IDS201H or (SOEA01Y)

GGRB228H3 Geographies of Disease
Examines the geographical distribution of disease and the spatial processes in which diseases are embedded. Themes include spatial theories of health and disease and uneven development and health. Special attention will be given to the geographical dimension of the HIV pandemic.
Prerequisite: One of GGRA02H, GGRA03H or HLTA01H

GGRC203H3 Population Geography
An examination of the geographical dimension to human population through the social dynamics of fertility, mortality and migration. This is not a quantitative course; emphasis will be given to qualitative methods. Themes include disease epidemics, international migration, reproductive technologies, and changing family structure.
Exclusion: GGR223H
Prerequisite: HLT001H & (GGR13H or HLTA01H)

GGRC204H3 Urban Residential Geography
Household production; household governance and contracting; household economic behaviour, housing demand, life cycle and housing career, housing policy and markets; dwelling maintenance and neighbourhood; social mix and segregation.
Exclusion: GGR35H
Prerequisite: University-level half-credit in data analysis and one of CITB101H, EMB01H, EMB02H, GGR05H, (GGR06H), (GGR27H), GGR27H

GGRC213H3 Urban Political Geography
Geographical approach to the politics of contemporary cities with emphasis on theories and structures of urban political processes and practices. Includes nature of local government; political powers of the property industry, big business and community organizations and how these shape the geography of cities.
Exclusion: GGR39H
Prerequisite: GGR01H & (CITB101H or GGR06H)

GGRC218H3 Urban Transportation Policy Analysis
Demand forecasting; methodology of policy analysis; impacts on land values, urban form and commuting; congestion; transit management; regulation and deregulation, environmental impacts and safety.
Exclusion: GGR24H
Prerequisite: University-level half-credit in data analysis and one of CITB01H, EMB01H, EMB02H, GGR05H, (GGR06H), (GGR27H), GGR27H

GGRC219H3 Spaces of Multiraciality: Critical Mixed Race Theory
From Tiger Woods to Mariah Carey, the popular mixed race phenomenon has captured the popular imagination and recasted the contradictory logic of categorization underlying racial divisions. We will explore the complexities of racial identity formation to illuminate the experiences of those who fall outside the prevailing definitions of racial identities.
Limited enrolment: 25
Prerequisite: ANT104H or GGR13H or IDS201H or SOCA01H or WSTA01H or permission of instructor

GGRC220H3 Issues in Rural Development
Special problems of rural communities and regions and associated development issues and strategies in north and south, with particular attention to the impact of urbanization and globalization on rural communities and their environments, to structural causes of rural marginalization and to changes in rural development paradigms.
Exclusion: (DISC01H)
Prerequisite: [GGR13H & GGR220H] or [IDS201H & IDS202H]

GGRC223H3 Location and Spatial Development
Location of a firm; market formation and areas: agricultural location; urban spatial equilibrium; trade and spatial equilibrium; locational competition; equilibrium for an industry; trade and location.
Exclusion: (GGR27H), GGR220Y
Prerequisite: EMB01H or EMB02H

GGRC223H Agriculture, Environment and Development
Changing social, economic and environmental relationships of agriculture in the late twentieth century. Includes expansion of global agriculture, how this has affected conditions of agriculture at the farm and regional level and problems of achieving sustainable agriculture and food systems in an international development context.
Prerequisite: One of ANT36H, ANT54H, IDS201H, IDS202H, GGR220H
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GGRC3H3 The Greater Toronto Area
This course examines issues of urban form and structure, urban growth and planning in the Toronto region. Current trends in population, housing, economy, environment, government, transport, urban design and planning practices at the local level and the regional scale will be examined critically.
Prerequisite: GGRA3H1, GGRB0H5 or [CTIB0H1 or (GGRC90H1)]

GGRC4H3 Current Topics in Human Geography
Examination and discussion of current trends and issues in human geography, with particular emphasis on recent developments in concepts and methods. Specific content will vary from year to year. Seminar format with active student participation.
Limited enrolment: 36
Prerequisite: [GGRA2H1 & GGRA3H1] or [GGRB1Y1 or (GGRB1Y2)] or [one B-level full-credit in Human Geography]

GGRC6H3 Local Geographies of Globalization
Examines the localized consequences of global processes. Toronto will be used as a site for understanding how individuals interact with and experience the effects of globalizing forces differently based on their unique positions of life and how they respond to the challenges and opportunities of a globalized world.
Limited enrolment: 36
Prerequisite: GGRB0H1 or [GGRB0H1 or ANBI0H1 or ANBI1H1 or IDS60H1 or permission of instructor]

GGRC4H3 Tourism, Environment and Development
Critical examination of the social, economic and environmental problems of tourism, with emphasis on trends and patterns of tourism growth at different geographical scales, and on the problems and contributions of tourism to sustainable development. A field trip during reading week will be an optional feature of the course.
Prerequisite: GGRB2H1 or ANBI0H1 or [IDS60H1 & IDS60B2H]

GGRC47H3 Introduction to Research in Human Geography
A seminar course that helps participants to understand the research process in human geography including developing a research question, situating the question in the literature, undertaking ethical review, exploring possible approaches to investigation, and suggesting likely outcomes for analysis. Participants will study the research of key authors in the field and develop their own research proposal for possible use in GGRC0H1 (for which this course serves as preparation).
Limited enrolment: 40
Exclusion: GGRF01H1
Prerequisite: Open only to students in the Major Program in Human Geography who have already completed program requirements in (1) Introduction, (2) Theory and Concepts, (3) Methods

GGDR05H3 Supervised Research Project
An independent research project carried out under the supervision of an individual faculty member. Students complete a research paper and present their results at an end-of-term course conference.
Prerequisite: GGRC47H1 & minimum cumulative GPA of 2.5 & permission of faculty supervisor and supervisor of studies for geography. Open only to students in the Major Program in Human Geography who have already completed 15 FECs and program requirements in (1) Introduction, (2) Theory and Concepts, and (3) Methods.

GGDR07H3 Countryside Conservation
Problems and policies of countryside with special focus on the Greater Toronto area. Topics include social valuation of countryside, impacts of urban sprawl, land use and environmental change, urban containment, farmland and green space protection, rural heritage conservation. Field research projects and workshops. Limited enrolment: 25
Exclusion: [GGRC07H1]
Prerequisite: [CTIB0H1 or (GGRB06H1), GGRC29H1 & GGRC33H]

GGD099H3 Feminist Geographies
How do gender relations shape different spaces? We will explore how feminist geographers have approached these questions from a variety of scales - from the home, to the body, to the classroom, to the city, to the nation, drawing on the work of feminist geographers.
Limited enrolment: 20
Prerequisite: [GGRB31H & GGRC13H] or [WSTC2H & permission of instructor]

GGD109H3 Health and Sexuality
Examines links between health and human sexuality. Particularly explores sexually transmitted infections. Attention will be given to the social and therefore spatially constructed nature of sexuality. Other themes include sexual violence, masculinities and health, reproductive health, and transactional relationships and health. Examples will be taken from a variety of countries.
Limited enrolment: 25
Prerequisite: [GGRB1H1 or GGRB28H1 & [GGRB22H1 or GGRC19H1] or [HSTC02H & ANTC15H]]

Health Studies (B.A./B.Sc.)

Faculty List
F. D. Burton, B.Sc., M.A., (NYU), Ph.D. (CUNY), Professor Emerita
J.R. Miron, B.A. (Queens), M.A. (Pens.), M.Sc., Ph.D. (Toronto), Professor
A. F. Berl, B.A. (Harvard), M.A. (University of Canterbury), Sc.D. (Johns Hopkins), Associate Professor
M. Hunter, B.A., (Sussex), M.A. (Univ. of Natal), PhD (Univ California, Berkeley), Assistant Professor

Supervisor of Studies: T.B.A.
Health is an extremely important area of study, both from the perspective of science and social and behavioural sciences. Social scientists consider a wide range of questions, such as: how can health systems and public policy be designed so as to promote health? How does individual behaviour affect health? How do health and health needs vary over the lifecycle and between men and women? What can be learned from large scale survey data about health patterns? These programs group together relevant courses from a range of disciplines, of interest to students who may apply to graduate Programs in health or work in health and related professions. The Programs are intended to be combined with a major in a relevant discipline.

Guidelines for 1st year course selection
Students intending to complete a program in Health Studies should take one of the following sets of courses in first year: [ANTA60H1 & ANTA12H2] or [ECMA01H & ECMA05H] or [GGRB1H1 & GGRB2H] or [PSY10H1 & PSY102H] or [SOC300H1 & SOC301H]

Note: It is Department policy that students without the prerequisite(s) will be removed from the course. Students should check carefully the prerequisites required for particular B- and C-level courses. Note that some upper-level courses (e.g., SOC and ECM) are part of limited enrolment programs, with first preference in these courses going to students enrolled in those programs.
MAJOR (CO-OPERATIVE) PROGRAM IN HEALTH STUDIES
Supervisor of Studies: TBA. Advisor: TBA. Co-op Contact: TBA. E-mail: askcoop@utsc.utoronto.ca

Program Admission
This is a limited enrolment program, which must be completed in conjunction with another Major as part of a 4-year degree. For information on admissions, fees, work terms, and standing in the program, please see the Co-operative Programs section of this Calendar.

Minimum qualifications for entry following first year: 4.0 credits, including 3.0 from [ANTA01H & ANTA02H] or [ECMA01H & ECMA05H] or [GGRA01H & GGRA05H] or [PSYA01H & PSYA02H] or [SOCAA01H & SOCA02H], plus a cumulative GPA of at least 2.5.

Program Requirements
Work terms will be in the health and health-related sectors, and may be in public institutions, in research institutions, and in the private sector. There are two work terms, each of 4 months. In order to be eligible for the first work term, students must complete at least 9 full credits, including the Methodology requirements in section 1, HLTA01H, and one other course from the program requirements. In addition, they must complete the non-credit Arts & Science Work Term Preparation course.

Course Requirements
See requirements for Major Program in Health Studies. In addition, students are required to include HLTD03H, Health Research Seminar.

MAJOR PROGRAM IN HEALTH STUDIES (B.A./B.SC.)

Program Requirements
This program requires a minimum of 7 full credits (FCEs) as follows:

1. Methodology
   1.5 FCE from one of the following groups:
   [ANTA01H & ANTA02H & ANTC60H] or
   [ECMA01H & ECMA05H & ECMB01H] or
   [GGRA01H & GGRA05H & GGRB05H] or
   [PSYA01H & PSYA02H & PSYB01H] or
   [SOCAA01H & SOCA02H & SOCB05H]

2. Quantitative Methods
   0.5 FCE from:
   ANTCD2H Quantitative Methods in Anthropology
   ECMB11H Quantitative Methods in Economics I
   GGRA30H GIS and Empirical Reasoning
   PSYB07H Data Analysis in Psychology
   SOCB08H Social Statistics
   STAR22H Statistics I

3. Introduction to Health
   At least 3 FCEs from:
   ANTH14H Biological Anthropology: Beginnings
   ANTH15H Contemporary Human Evolution and Variation
   ANTH19H Varieties of Social Life
   ANTH20H Culture, Politics and Globalization
   ANTH56H Health and the Urban Environment
   ESAA16H Human Health and the Environment
   GGRA23H Geographies of Disease

4. Advanced Health Courses
   At least 1.5 FCEs from:
   ANTCD61H Medical Anthropology: Illness and Healing in Cultural Perspective
   ANTC62H Medical Anthropology: Biological and Demographic Perspectives
   ANTC63H The Anthropology of Food: Human Needs
   ANTC64H The Anthropology of Food: Consuming Passions
   ANTD01H The Body in Culture and Society
   ANTD23H Ethnomedicine
   BGCY17H Microbiology I: The Bacterial Cell
   BGCY22H Vertebrate Histology: Cells and Tissues
   BGCY23H Vertebrate Histology: Organs
   ECMC34H Economics of Health Care
   GGBR10H Health and Sexuality
   HLTC01H Directed Research on Health Services and Institutions
   HLTD02H Women and Health: Past and Present
   HLTD03H Directed Readings in Health Studies
   HLTD03H Health Research Seminar
   IDSIC11H Issues in International Health
   NROD67H Psychobiology of Aging
   POLC55H The Politics of Canadian Health Policy
   WSTC390H Special Topics in Women's Studies/Gender Issues (if offered as Women and Health)

5. 0.5 additional FCE from the courses listed in Requirements 3 (Introduction to Health) and 4 (Advanced Health courses).

MINOR PROGRAM IN HEALTH STUDIES (B.A.)

Program Requirements
This program requires 4 full credits as follows:

1. Introduction to Health
   2.5 full credits from:
   ANTH14H Biological Anthropology: Beginnings
   ANTH15H Contemporary Human Evolution and Variation
   ANTH56H Health and the Urban Environment
   GGRA23H Geographies of Disease
   HLTA01H Plagues and Peoples
   HLTA01H Health, Aging and the Life Cycle
   HLTA02H Issues in Child Health and Development
   IDSIC01H International Health Policy Analysis
   PHLB09H Biomedical Ethics
   PSYB32H Abnormal Psychology
   PSYB35H Human Brain and Behaviour

2. Advanced Health
   1.5 full credits from:
   ANTC61H Medical Anthropology: Illness and Healing in Cultural Perspective
   ANTC62H Medical Anthropology: Biological and Demographic Perspectives
   ANTC63H The Anthropology of Food: Human Needs
   ANTC64H The Anthropology of Food: Consuming Passions
   ANTD01H The Body in Culture and Society
   ANTD23H Ethnomedicine
   ECMC34H Economics of Health Care

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GOD101H Health and Sexuality
HLTC001H Directed Research on Health Services and Institutions
HLTC002H Women and Health: Past and Present
HLTC003H Directing in Health Studies
IDSC11H Issues in International Health
POLL05H The Politics of Canadian Health Policy

For this program, no more than 2 FCEs can be counted from any single course prefix (e.g., ANT) other than HLTr.

HLTAl01H Plagues and Peoples
Considers the origins, antiquity and impact of plagues on human societies. The course will embrace cultural, evolutionary, epidemiological and ecological themes. Consideration will be given to historic, contemporary and newly-emerging infectious epidemics, with a view to understanding why "plague" emerges and how their occurrence is intimately linked to human behaviour.

HLTB01H Health, Aging and the Life Cycle
This course focuses on the transition from birth to old age and changes in health status. Topics to be covered include: socio-cultural perspectives on aging, the aging process, chronic and degenerative diseases, caring for the elderly.
Prerequisite: HLTA01H or [ANTA01H & ANTA02H] or [BOYA01H & BOYA02H] or [PSYA01H & PSYA02H]

HLTB02H Issues in Child Health and Development
This course will explore socio-cultural aspects of health and development in children. Topics for discussion include genetics and development, growth and development, childhood diseases, the immune system, and nutrition during the early years.
Prerequisite: HLTA01H or [ANTA01H & ANTA02H] or [BOYA01H & BOYA02H] or [PSYA01H & PSYA02H]

HLTCP01H Directed Research on Health Services and Institutions
Provides students with the opportunity to analyze work of health institutions. Students taking this course will arrange, in consultation with the instructor, to work (usually as a volunteer) in a health institution. They will write a major research paper related to some aspect of their experience. They will build on material learned in IDSC04H and complement work in POLL05H

Students must obtain consent from the Supervisor of Studies and supervising instructor before registering for this course.
Prerequisite: HLTA01H & IDSC04H & permission of the instructor

HLTCD03H Women and Health: Past and Present
This course uses historical, anthropological, philosophical approaches to further understand the relationships intertwining women, health and society. Women's interactions with the health sector will be examined. Particular attention will be devoted to the social and gender construction of disease and the politics of women's health.
Prerequisite: ANTD01H or IDSC04H or B-level course on women's studies/gender

HLTCP01H Directed Readings in Health Studies
For upper level students whose interests are not covered in one of the other courses normally offered. Courses will normally only be available to students in their final year of study. Students must obtain consent from the supervising instructor before registering for this course.
Prerequisite: Permission of the instructor

HLTD02H Health Research Seminar
Provides senior students with the opportunity to apply methodological skills to a health research problem. Students will give presentations of their research proposals, and there may be a guest seminar on health research projects.
Limited enrollment: Limited to students in the Major (Co-operative) Program in Health Studies. Students who are non-co-op majors in Health Studies may take the course with permission of the instructor
Prerequisite: Students must have completed 6 FCE from the requirements of the Major Program in Health Studies, including

completed the methodology requirements from Requirements 1 and 2.

History

(B.A.)

Faculty List
J.S. Mac, M.A., Ph.D. (Toronto), D.D. (Presb. College, Montreal), Professor Emeritus
E.W. Dowler, A.M. (Harvard), Ph.D. (London School of Economics), Professor
M. Elkins, B.A. (Toronto), B.Phil. (Oxford), Professor
M. Govers, A.B. (Princeton), M.A. (Postiers), Ph.D. (Toronto), Professor
J.R. Robertson, M.A. (McGill), Ph.D. (Toronto), Professor
F. Iscovetta, M.A., Ph.D. (York, Canada), Associate Professor
S.J. Rockel, M.A., Ph.D. (Toronto), Associate Professor
D.S. Bender, M.A., Ph.D. (New York), Assistant Professor
E.A. Kazim, M.A., Ph.D. (Pennsylvania), Assistant Professor
E.N. Rothman, M.A. (Tel Aviv), Ph.D. (Michigan), Assistant Professor
J. Sharma, B.A. (Lady Shri Ram), M.A. (India), M.Phil. (Delhi), Ph.D. (Cambridge), Assistant Professor

Discipline Representative: S. Rockel (416-287-7145) Email: rockel@ualberta.ca

The study of history is intended to enhance our understanding of human society by examining the experiences of particular peoples and their societies in the past. Its findings depend upon the precise evaluation of specific evidence. History's concerns and goals are humanitarian: its methods draw from all forms of scholarly endeavour. History courses, therefore, can play a part in a number of interdisciplinary programs and can serve as an adjunct to courses in politics, philosophy, literature, economics, sociology, and anthropology. History can also be usefully combined with language study.

The History curriculum combines a variety of approaches and teaching in order to satisfy a number of purposes. HIS301H, HIS302H, HIS304H and HIS305H provide both a general introduction to the study of history at the university level, and the preparation for further studies in World history. A series of survey courses (HIS301H-911H) provides a comprehensive foundation of knowledge in particular areas. In upper-level courses students investigate more specific areas, periods, or problems. D-series courses are conducted as seminars. In them students make close and thorough studies of particular questions and present their findings in discussions and major essays. There are courses at all levels in the following areas and periods of history: Medieval Europe, Modern Europe, Britain, Canada, America and the United States, Russia, Ancient Greece and Rome, Africa, Asia, and Latin America.

The History Study Guide is available at: http://www.atc.utoronto.ca/hunt/History/studyguide/

Guidelines for 1st year course selection
Students intending to complete a program in History should take two of the following courses in their first year: HIS101H, HIS102H, HIS104H & HIS105H.

Note: Students are advised to consult the prerequisites for C-level and D-level courses when planning their individual Programs.

For Co-op opportunities related to the Specialist and Major Programs in History, please see the Humanities section of this Calendar.

SPECIALIST PROGRAM IN HISTORY
Supervisor of Studies: F. Iscovetta (416-287-7152) Email: iscovetta@ualberta.ca

Program Requirements
1. Number of Credits
Students must complete at least ten full credits in History. These ten must include two of HIS301H, HIS302H, HIS304H, HIS305H, as well as HIS301H and five upper-level full credits (C/D-level,
course in U of T Scarborough or 300/400-level courses on the St. George Campus or at U of T Mississauga). At least one of the five upper-level credits must be at the D-level.

2. Pre-1815 Credits
Of the ten credits, at least two full credits must deal with the period prior to 1815.

3. Areas of Study
Students must include:
A) At least one full credit in Canadian History, and
At least one half credit from each of three of the following areas of history:
a) American
b) Medieval
c) European
d) African, Asian, and Latin American
e) Ancient Greek and Roman

MAJOR PROGRAM IN HISTORY
Supervisor of Studies: E. Iacovetta (416-287-7152) Email: iacovetta@utsc.utoronto.ca

Program Requirements
1. Number of Credits
Students must complete five full credits in History. These seven must include two of HISA40H3, HISA40H4, HISA40H5, and three upper-level full credits (C-D-level courses at U of T Scarborough or 300/400-level courses on the St. George Campus or at U of T Mississauga).

2. Pre-1815 Credits
Of the seven credits at least one full credit must deal with the period prior to 1815.

3. Areas of Study
Students must also include at least one half credit from each of three of the following areas of history:
a) Canadian
b) American
c) Medieval
d) European
e) African, Asian, and Latin American
f) Ancient Greek and Roman

MINOR PROGRAM IN HISTORY
Supervisor of Studies: E. Iacovetta (416-287-7152) Email: iacovetta@utsc.utoronto.ca

Program Requirements
Students must complete four full credits in History, of which at least one full credit must be at the C- and/or D-level.

HISA01H3 The Twentieth Century World I
World history from the age of imperialism to the end of World War II, emphasizing both the diversity and the commonality of human experience in the twentieth century. Major themes include imperialism, war, revolution, totalitarian ideologies, social, economic, and cultural change, nationalism. Exclusion: (HISA01Y)

HISA02H3 The Twentieth Century World II
World history from the end of World War II to the present day, emphasizing both the diversity and the commonality of human experience in the twentieth century. Major themes include de-colonization, economic change, the Cold War, the communications revolution, the development crisis, struggles for human rights and democracy. Exclusion: (HISA02Y)
Prerequisite: HISA01H

HISA40H3 Themes in World History I
An introduction to history that focuses on a particular theme in world history, which will change from year to year. Themes may include migration; empires; cultural encounters; history and film; global cities.

HISA40H4 Themes in World History II
An introduction to history that focuses on a particular theme in world history, which will change from year to year. Themes may include migration; empires; cultural encounters; history and film; global cities.

HISB01H3 History and Evidence
An examination of the nature and uses of evidence in historical and related studies. Historians use a wide variety of sources as evidence for meaningful statements about the past. This course explores what is meant by history and how historians evaluate sources and test their reliability as historical evidence.

HISB18H3 History on Film
An examination of selected historical events or phenomena and their depiction in films. This course will explore the ways in which historical events, such as revolutions, or phenomena such as slavery, have been portrayed by filmmakers. The topics to be studied will change from year to year.

HISB20H3 Victorian Britain
An introduction to Victorian Britain offering a broad survey of economic, social, and political trends. Central themes include the industrial revolution and workers' movements, popular protest and state responses, women and family, social welfare, Irish nationalism, and the urban poor.
Europeana Exclusion: (HISB20Y), (HISB239Y), (HISB49H)

HISB21H3 Twentieth-Century Britain
An introduction to twentieth-century Britain offering a broad survey of economic, social, and political trends. Central themes include gender and war, the "modern" welfare state, Labour party, and post-1945 politics. Attention will be paid to the influence of class, gender, and culture on social experience, ideology, and political movements.
Europeana Exclusion: (HISB20Y), (HISB239Y), (HISB49H)

HISB22H3 American History to 1885
The history of Canada from the first European contacts to the late 19th century. Topics include the earliest European contacts, New France, the British Conquest, immigration and settlement, Confederation, the constitution, and the early development of Canada as a transcontinental country.
0.25 pre-1815 credit
Canada Exclusion: (HISB04Y), (HISB26Y), (HISB26Y)

HISB23H3 American History Since 1885
Topics include cultural conflict, the optimism of the Laurier period, the impact of the two world wars, political independence, Americanization and relations with the United States, regionalism, and relations between English-speaking and French-speaking Canada. Canadian Exclusion: (HISB04Y), (HISB26Y), (HISB26Y)
Prerequisite: None, but HIS3400 highly recommended.

HIS3503H African in the Nineteenth Century
An introduction to the history of Sub-Saharan Africa, from the era of the slave trade to the colonial conquests. Throughout, the capacity of Africans to overcome major problems will be stressed. Themes include slavery and the slave trade; pre-colonial states and societies; economic and labour systems; and religious change. African, Asian, and Latin American Area
Exclusion: (HIS3504H, HIS3509Y, HIS3510Y, HIS3505Y).
Prerequisite: Any modern history credit or permission of the instructor.

HIS813H Twentieth Century Africa
Modern Sub-Saharan Africa, from the colonial conquests to the post-colonial era of structural adjustment. The emphasis is on both structure and agency in a hostile world. Themes include conquest and resistance, colonial economies; gender and ethnicity; religious and political movements; development and underdevelopment, post-colonial conflicts, as well as cultural achievements. African, Asian and Latin American Area
Exclusion: (HIS3512H, HIS3508Y), HIS3509Y, HIS3507H.
Prerequisite: Prerequisite: HIS3505H or HIS3506H.

HIS8153M Modern Southeast Asia I: 1750-1900
An introduction to the political, socioeconomic, and cultural history of Southeast Asia under the last indigenous dynasties and during the phase of colonial conquest. Topics will include processes of indigenous state formation, the emergence of colonial regimes, and the creation of export-oriented economies. Pre-1815 course
African, Asian, and Latin American Area
Exclusion: (HIS3514H).

HIS8143H Modern Southeast Asia II: 1900-Present
An examination of the political, socioeconomic, and cultural history of Southeast Asia in the periods of emerging nationalism, decolonization, and independence. Topics will include anti-colonial resistance, the Japanese occupation, wars of independence, liberal and authoritarian modes of government, religious change, export-oriented economic development, separatist movements, and regional cooperation. African, Asian, and Latin American Area
Exclusion: (HIS3514H).
Prerequisite: HIS3515H.

HIS8579H Sub-Continental Histories: South Asia in the World
A survey of South Asian history, from ancient times to the present day. The course explores diverse and exciting elements of this long history, such as ecology and landscape, religion, trade, literature, and the arts, keeping in mind South Asia’s global and diasporic connections.
African, Asian and Latin American Area.
Exclusion: HIS2822Y, HIS2828H.

HIS8609H Europe in the Early Middle Ages (305-1053)
This course covers the development of Europe from the Late Roman period to the eleventh-century separation of the Roman and Byzantine Churches. It includes the foundation and spread of Christianity, the settlement of "barbarians" and Vikings, the establishment of Frankish kingship, the Empire of Charlemagne, and feudalism and manorialism.
Pre-1815 course
European Area
Exclusion: (HIS3607Y, HIS260Y).

HIS8619H Europe in the High and Late Middle Ages (1053-1492)
An introduction to the social, political, religious and economic foundations of the Western world, including Church and State relations, the Crusades, pilgrimage, monasticism, universities and culture, rural exploitation, town development and trade, heresy, plague and war. Particular attention will be devoted to problems which continue to disrupt the modern world.
Pre-1815 course
Medieval Area
Exclusion: (HIS3607Y, HIS260Y).
Prerequisite: none, but HIS8610H highly recommended.

HIS8621H Bandits, Burghers, and Burgomasters: Life in the Mediterranean World, 1500-1800
This course will explore the interplay of culture, religion, politics and commerce in the Mediterranean region from 1500 to 1800. Through travel narratives, auto-biographical texts, and visual materials we will trace how men and women on the Mediterranean’s European, Asian, and African shores experienced their changing world.
Pre-1815 course
European Area, African, Asian and Latin American Area.

HIS8709H Kievian Rus and Muscovy, 650-1669
The early history of present-day Ukraine and Russia from origins to the beginnings of empire. Topics will include Christianization, Kievian society and law, the Mongol conquest, the rise of Muscovy, the growth of the autocratic state, early European contacts and the Church schism.
Pre-1815 course
European Area
Exclusion: (HIS8707Y, HIS250Y).

HIS8719H Imperial Russia, 1662-1900
The history of the Russian Empire from Peter the Great to the dawn of the twentieth century.
We will examine through lectures and tutorials the evolution of imperial institutions, war, emancipation of the serfs, industrialization, emergence of social classes, reform and revolution, the flowering of Russian art and literature.
Pre-1815 course
European Area
Exclusion: (HIS8707Y, HIS250Y).

HIS8721H Revolutionary Russia, 1899-1939
The history of the Russian Empire and the Soviet Union from the 1905 revolution to the present. Major topics include the revolutions of 1905 and 1917, the experimentation of the 1920s, collectivization and industrialization, the Stalin era, the distortion of Stalinism and the end of the USSR.

HIS890H Early Modern Europe I: 1450-1550
A period of fundamental, often violent, change in European civilization. Renaissance, humanism, and printing; development of new types of monarchy; religious reformations splitting Western Christendom; local and continental wars; exploration and the first European empires.
Pre-1815 course
European Area
Exclusion: (HIS890Y, HIS2431H).

HIS891H Early Modern Europe II: 1550-1800
Social, political, and intellectual transformations culminating in revolution. Thirty Years War; witchcraft and science; Louis XIV and absolutism; the Enlightenment; the agricultural revolution; slavery; European empire; the French Revolution.
Pre-1815 course
European Area
Exclusion: (HIS890Y, HIS2441H).
Prerequisite: none, but HIS8810H recommended.

HIS893H Modern European I: The Nineteenth Century
Europe from the French Revolution to the First World War. Major topics include revolution, industrialization, nationalism, imperialism, science, technology, art and literature.
European Area
Exclusion: (HIS890Y, HIS2411H).

HIS894H Modern European II: The Twentieth Century
Europe from the First World War to the present day. War, political extremism, economic crisis, scientific and technological change, cultural modernism, the Holocaust, the Cold War, and the European Union are among the topics covered.
European Area
Exclusion: (HIS890Y, HIS2421H).
HISC341H3 People in Motion: Immigrants and Migrants in U.S. History
Overview of the waves of immigration and internal migration that have shaped America from the colonial period to the present. Topics include colonization and westward migration, immigrants in the industrial and contemporary eras, nativism, stances towards pluralism and assimilation, and how migration experiences have varied by race, class, and gender. American Area Prerequisite: [HISB040H1 & HISB141H] or permission of instructor

HISC404H3 Atlantic Canada to 1815
An intensive study of the region: the First Nations; the Acadians; the coming of British settlers; the development of each of the colonies. Pre-1815 course Canadian Area Exclusion: (HISC646Y1, HISG404Y) Prerequisite: [HISB040H1 & HISB41H1] or permission of instructor

HISC414H3 Atlantic Canada since 1815
An intensive study of the region: Confederation and the Maritimes after Confederation; Newfoundland and from earliest European contacts to its entry into Confederation. Canadian Area Exclusion: (HISC646Y1, HISG404Y) Prerequisite: [HISB040H1 & HISB41H1] & HISG404H1 or permission of instructor

HISC440H3 Québec Since 1759
Themes will include "survival" as an issue; "nationalism" and its variants; immigration and the relationship of the majority with minorities; Confederation; the impact of the two world wars; the "Quiet Revolution" in the 1960s; the growth of a movement for independence; Knowledge of the French language is not required. Canadian Area Exclusion: HIS314Y & HISG13H Prerequisite: [HISB040H1 & HISB41H1] or [HISB040Y]

HISC593H3 Immigrants and Race Relations in Canadian History
This course examines aspects of the history of immigrants and race relations in Canada, particularly for the period 1840s-1960s. It covers various immigrant and racialized groups and explores how class, gender and race/ethnicity shaped experiences and racial/ethnic relations. Canadian Area Prerequisite: Any four FCEs

HISC472H3 Canadian Labour History
The development of a working class from the pre-industrial era of independent artisans to the modern period. Topics will include the impact of technology on workers, ethnic factors, the development of unions, such pivotal events as the Winnipeg General Strike, and the relationship of labour to politics. Canadian Area Exclusion: HIS313H1, HIS511Y Prerequisite: [HISB040Y] or [HISB40H1, HISB61H]

HISC484H3 Canada Between the World Wars
An intensive examination of the leading themes in Canadian political, economic, social, and cultural history in the 1920s and 1930s. Topics will include the impact of the First World War, the development of Canadian autonomy, and the Great Depression of the 1930s. Canadian Area Prerequisite: [HISB040Y] or HISB41H1

HISC591H3 A History of Ethiopia
Ethiopia from the fourth through the nineteenth century, with particular emphasis on the Christian Church, the monarchy, links with both the Mediterranean world and the Indian subcontinent, and the relationship of individuals to their social, economic, artistic and geographic environments. Pre-1815 course African, Asian, and Latin American Area Exclusion: [HISC61H] Prerequisite: A History credit considering Europe, Asia, or Africa before 1900. Highly recommended: HISB40H1, (HISG60Y1), HISB60H, or HISB61H

HISC141H3 Global Footways
An exploration of how eating traditions around the world have been affected by economic and social changes, including imperialism, migration, the rise of the global economy, and urbanization. Topics include: immigrant cuisines, commodity exchanges, and the rise of the restaurant. Lectures will be supplemented by cooking demonstrations. Limited enrolment: 30 Prerequisite: [HISA01H1 & HISG03H] or (HISA01Y & HISG20Y)

HISC235H3 Europe and the Atlantic World, 1450-1800
This course investigates Europe's encounter with the American and western Africa (ca. 1450-1800). Specific topics include European exploration, the transplantation of European societies abroad, the impact of conquest and colonization, and the role played by these non-European peoples in reshaping European ideas about cultural difference, gender, religious belief, and society. Pre-1815 course European Area Limited enrolment: 40 Prerequisite: Any four FCEs

HISC181H3 Europe in the Enlightenment, 1700-1789
An examination of the ideals of the Enlightenment against the background of social and political change in eighteenth-century Europe. This course looks at Enlightenment thought and the ways in which European monarchs like Frederick the Great and Catherine the Great adapted it to serve their goals of state building. Pre-1815 course European Area Exclusion: (HISC181Y, HIS234H, HIS341Y) Prerequisite: 1.0 FCE at B-level in European history

HISC240H3 Early Modern Britain I: From the Wars of the Roses to the Defeat of the Armada, 1465-1588
Overview of political, social and cultural patterns with emphasis on the reigns of Henry VIII and Elizabeth. Powers and personalities of monarchs, major institutions and the religious crisis, international relations. Pre-1815 course European Area Exclusion: (HISC233Y, HIS238H1, HIS368H1) Prerequisite: Any 4.0 FCEs at the B-level

HISC259H3 Early Modern Britain II: From the Defeat of the Armada to the Formation of Great Britain, 1588-1717
Overview of political, social and cultural patterns with emphasis on the Civil War and execution of the king, the republican interlude, the foundations of the modern economy and expansion overseas. Pre-1815 course European Area Exclusion: (HISC233Y, HIS238H1, HIS368H1) Prerequisite: Any 4.0 FCEs at the B-level. HISC240H3 highly recommended
HISC553H Topics in Asian History
A topical study of the cultures, peoples and states of South and Southeast Asia. Topics may include India in the eighteen-century, Official and Missionary Orientalism, emergence and development of Indian nationalism, formation of ethnic and gender identities, Muslim revival and separatism, partition and post-partition politics and society.
Exclusion: HISC454H Prerequisite: One full credit in History
HISC543H Economy, Society, and Colonialism in Southeast Asia
An examination, through lectures and discussions, of how colonial rule gnawed the economic structure of Southeast Asia towards the world market and how it transformed indigenous social structures. Topics include demographic trends, export-oriented primary production, the influence of foreign and indigenous elites, rural living conditions, urbanization, and the Great Depression.
Exclusion: HISC435H Prerequisite: (HIS454H or HISC555H) or permission of the instructor
HISC555H War and Society in Modern Africa
Conflict and social change in Africa from the slave trade to contemporary times. Topics include the politics of resistance and women, war and repression, and social issues, the Cold War, guerrilla movements, resource predation. Case studies of anti-colonial rebellions, liberation wars, and civil conflicts will be chosen from various regions.
Exclusion: HISC454H Prerequisite: (HISC555H or HISC555H) or permission of the instructor
HISC556H Delhi and London: Imperial Cities, Mobile People
Delhi and London were two major cities of the British Empire. This course studies their parallel destinies, from the imperial into the post-colonial world. It explores how diverse cultural, ecological, and migratory flows connected and shaped these cities, using a wide range of literary, historical, music, and film sources.
Exclusion: HISC556H Prerequisite: (HISC556H or HISC556H) or 1 FCE in Modern History
HISC600H Old Worlds?: Strangers and Foreigners in the Mediterranean, 1200-1700
An exploration of how medieval and early modern societies encountered foreigners and accounted for foreigness, as well as how religious, linguistic, and cultural difference were sharedly crafted. Topics include: monsters, relics, pilgrimage, the rise of the university, merchant companies, mercenaries, piracy, captivity and slavery, tourism, and the birth of resident embassies.
Pre-1815 course
Exclusion: HISC600H, HISC600H or HISC600H
HISC654H Venice and its Empire, 800-1600
A social and cultural history of the Venetian Empire from a fisherman’s colony to the Napoleonic Occupation of 1797. Topics include the relationships between commerce and colonialization in the Mediterranean, state building and piracy, aristocracy and slavery, civic rituals and spirituality, guilds and confounditures, households and families.
Pre-1815 course
Exclusion: HISC654H Prerequisite: 1 FCE in History
HISC758H Social History of Imperial Russia, 1700-1900
The development of Russian society from the revolutionary reforms of Peter the Great to the counter-revolutionary reforms of Alexander III. Topics include peasant society, the nobility, women, urbanization, and proletarianization.
Pre-1815 course
Exclusion: HISC758H Prerequisite: (HISC758H or HISC758H) or any 2.5 FCEs in History
HISC759H Social History of Revolutionary Russia, 1900-Present
Dramatic change in Russia and the USSR from the 1905 revolution to the end of the Soviet Union. Topics include the social processes that produced the revolutions of 1905 and 1917, social experimentation in the 1920s, Stalinism and its disintegration and the social background to the breakup of the USSR.
Exclusion: HISC759H, HISC759H, HISC759H Prerequisite: (HISC759H or HISC759H or HISC759H) or any 2.5 FCEs in History
HISC658H Early Modern France, 1500-1715
This course examines themes in Early Modern French history (ca. 1500-175). Specific topics include demographic change, the role played by social elites, popular culture and popular revolt, women and family, the development of French absolutism, military change, the Wars of Religion, witchcraft, and the possibilities for Protestant-Catholic coexistence.
Pre-1815 course
Exclusion: HISC658H Limited enrolment: 40 Prerequisite: Any 0 FCEs
HISC659H Modern Germany I: The Nineteenth Century
German history from the end of the Holy Roman Empire to the outbreak of the First World War. The rise of Prussia, the impact of political and industrial revolution, the unification of modern Germany, the imperial age, science, technology, art and music are among the themes pursued.
Pre-1815 course
Exclusion: HISC659H Limited enrolment: 18 Prerequisite: (HISC659H or HISC659H) or permission of instructor
HISC660H Between Two Worlds: Translators and Interpreters in History
This seminar explores the social history of translators, interpreters, and the texts they produce. Through several case studies from Ireland and Lisbon to Quebec, Mexico City, and Goa, we will ask how translators shaped public understandings of "self" and "other," "civilization" and "barbarity" in the wake of European colonization.
Exclusion: HISC660H Limited enrolment: 18 Prerequisite: HISC659H, HISC659H or permission of instructor
HISD360H3 Gendering America
The history of gender in the United States from the era of exploitation to the present day. The changing social roles of men and women and the evolving constructions of femininity and masculinity. Particular topics include: work, family, sexuality, and state policy.

American Area

Limited enrolment: 15
Prerequisite: [HISB08H] & HISB11H or permission of instructor

HISD351H3 Thinking of Diversity: Perspectives on American Pluralisms
A seminar exploring the evolution of American thinking about diversity—ethnic, religious, and regional—from colonial-era defenses of religious tolerance to today's multiculturalism. Participants will consider pluralism, thought in relation to competing ideologies, such as nationalism, and compare American pluralisms to formulations arrived at elsewhere, including Canada.

American Area

Limited enrolment: 15
Prerequisite: [HISB08H] & HISB11H or permission of instructor

HISD340H3 Topics in American Social and Cultural History
This fourth-year seminar is funded by the Canada Research Chair in Urban History and is taught by an advanced graduate student in American history. The course, with topics varying from year to year, will focus on major themes in American social and cultural history, such as, women's history, labour history, and the history of slavery and emancipation.

American Area

Limited enrolment: 15
Prerequisite: [HISB08H] & HISB11H or permission of instructor

HISD250H3 The Politics of American Immigration, 1865-present
A seminar that puts contemporary U.S. debates over immigration in historical context, tracing the roots of such longstanding controversies as those over immigration restriction, naturalization and citizenship, immigrant political activism, bilingual education and "English-only" movements, and assimilation and multiculturalism. Extensive reading and student presentations are required.

American Area

Limited enrolment: 15
Prerequisite: HISB31H

HISD353H3 From New Deal to New Right: American Politics since 1933
The most striking development in U.S. politics in the last half century has been the rebirth and rise to dominance of conservatism. This seminar examines the roots of today's conservative ascendency, tracing the rise and fall of New Deal liberalism and the subsequent rise of the New Right.

American Area

Limited enrolment: 15
Prerequisite: HISB31H

HISD353H3 Topics in American Urban History: New York City
An examination of the rise of American cities and the problems associated with urban life through the lens of the nation's largest and most diverse city, from its founding to the present day. Topics will include: Native Americans, colonial trade, industrialization, social and political movements, urban policy, suburbanization, and immigration.

American Area

Limited enrolment: 15
Prerequisite: [HISB08H] & HISB11H or permission of instructor

HISD447H3 Selected Topics in Canadian Women's History
Weekly discussions of assigned readings. The course covers a broad chronological sweep but also highlights certain themes, including race and gender relations, working women and family economies, sexuality, and women and the courts. We will also explore topics in gender history, including masculinity studies and gay history.

Canadian Area

Limited enrolment: 15
Prerequisite: [HIST10Y] or any credit in Canadian History

HISD447H3 Cold War Canada in Comparative Contexts
A seminar on Cold War Canada that focuses on the early post-war era and examines Canadian events, developments, experience within a comparative North American context. Weekly readings are organized around a particular theme or themes, including the national insecurity state, reds, spies, and civil liberties; suburban and sexuality.

Canadian Area

Limited enrolment: 15
Prerequisite: [HIST40Y] or HISB41H and at least one other B- or C-level credit in History

HISD51H3 Southern Africa, 1852-1910
A seminar study of the history of the peoples of southern Africa, beginning with the hunter-gatherers but concentrating on farming and industrializing societies. Students will consider pre-colonial civilizations, colonialism and white settlement, slavery, the frontier, the mineral revolution and the South African War. Extensive reading and student presentations are required.

African, Asian and Latin American Area

Limited enrolment: 15
Exclusion: [HISD91Y]
Prerequisite: HISB50H or (HISB10H or HISB20H or HISC90Y or HISC90Y) or any 2.5 FCE in History or permission of instructor

HISD51H3 Southern Africa: Colonial Rule, Agrarian and Liberation
A seminar study of southern African history from 1810 to the present. Students will consider industrialization in South Africa, segregation, apartheid, colonial rule, liberation movements, and the impact of the Cold War. Historiography and questions of race, class and gender will be important. Extensive reading and student presentations are required.

African, Asian and Latin American Area

Limited enrolment: 15
Exclusion: [HISD91Y]
Prerequisite: HISD55H

HISD52H3 East African Societies in Transition
A seminar study of East African peoples from late pre-colonial times to the 1990's, emphasizing their rapid although uneven adaptation to integration of the region into the wider world. Transitions associated with migrations, commercialization, religious change, colonial conquest, nationalism, economic development and conflict, will be investigated. Student presentations are required.

African, Asian and Latin American Area.

Limited enrolment: 15
Prerequisite: [One of HISB08H, HISB11H, (HISB101H, HISB50H), (HISC91H), (HISD91Y)] or any 2.5 FCE in History or permission of instructor

HISD540H3 State Formation in Precolonial Southeast Asia, c. 1750-1870
The seminar will examine the structural changes in Southeast Asian polities during the last century before high imperialism. Case studies in, among other topics, administrative reforms, political ideologies, territorial integration, revenue patterns, and the political role of religion will be related to broader themes such as the origin of imperialist intrusion and the emergence of the modern national state.

Pre-1815 course

African, Asian, and Latin American Area

Limited enrolment: 15
Prerequisite: Two B- or C-level credits in History, or permission of the instructor.

HISD56H3 'Colonial' Plantations and South Asian Diasporas
This seminar studies South Asian male and female migrants sent to work on plantations world-wide, and their descendants. It explores imperialism, labour, migration, racialization, post-colonial societies, memory and cultural hybridity. This course explores the historical multi-cultural diversity of Caribbean nations, and countries like Great Britain and Canada.

African, Asian, Latin American Area

Prerequisite: [HISB571H or HISB581H] or any 2.0 FCEs at the B- or C-level in Modern History.
The development of travel and travel narratives before 1800, and their relationship to European trade and colonization in the Mediterranean and beyond. Topics include: Ptolemy and the allure of the East, pilgrimage and crusading, the history of geography, cartography, and ethnography. Extensive reading and student presentations are required.

Pre-1815 course
European Area, African, Asian and Latin American Area
Limited enrolment: 15
Prerequisite: At least one of HIS60H3, HIS61H3 or HIS62H3.
Recommended preparation: HISC60H3

The Crusades: I
Modern interpretations of the Crusades will be investigated in the broad context of Western expansion into the Middle East (1099-1291), Spain and southern Europe, and, North-Eastern Europe. Also considered will be the Christian Military Orders, the Mongols and political crusades within Europe itself.

Pre-1815 course
Medieval Area
Limited enrolment: 15
Prerequisite: (HIS60H3) or (HIS60H3)

The Crusades: II
An intensive study of the primary sources of the First through Fourth Crusades, including works by Eastern and Western Christian, Arab and Jewish authors. The crusading period will be considered in terms of Western Christian expansion into the Middle East, Spain and Northern Europe in the 11th through 13th centuries.

Pre-1815 course
Medieval Area
Limited enrolment: 15
Prerequisite: (HIS60H3) or (HIS60H3)

France and New France, 1500-1763
This seminar involves an in-depth study of the history of New France within the framework of the transplantation of a European society abroad. Under this comparative France/New France rubric, specific topics will include French-American relations, government institutions, Jesuit missionary efforts, social structures, as well as gender and family issues.

Pre-1815 course
European Area
Limited enrolment: 15
Prerequisite: One C-level FCE in European or Canadian History, or permission of instructor.

Weimar Culture
An examination of the social and political foundations of "modernism," using the cultural ferment of Germany between 1918 and 1933 as model. Individual artists and thinkers will be considered, but the emphasis will nevertheless be on culture as a social manifestation.

European Area
Limited enrolment: 15
Prerequisite: One C-level credit in European History.

The Mediterranean World: I

Greece

The Mediterranean World: II

Rome

Army and Empire in the Roman World

Economy

These courses may be used to fulfill History Program requirements. (See the Classical Studies section of this Calendar for full descriptions.)

Pre-1815 courses
Ancient Greek and Roman Area

HIS650H3

Humanities (B.A.)

Faculty List
R.A. Campbell, B.A., M.A., (Windsor), Ph.D. (Waterloo) , Associate Professor

The Department of Humanities comprises several distinct disciplines, such as Visual and Performing Arts, Classical Studies, English, History, Philosophy, Languages and Linguistics. Each of these offers a range of courses in its own area and its own Program(s) of study. These are listed under the pertinent headings in the Calendar.

In addition, the Department offers a Co-operative Program in Humanities as well as various courses that fall outside the purview of the traditional disciplines.

The Humanities Study Guide is available at:
http://www.utm.utoronto.ca/%7Ehumdev/Humanities/studyguide/index.htm

CO-OPERATIVE PROGRAM IN HUMANITIES

Co-op Contact: S. Crawford. Email: askcoop@utm.utoronto.ca

The Co-operative Program in Humanities allows students to combine their chosen academic program with work experience that draws upon the knowledge and skills acquired during their academic studies. Students are required to complete a Specialist Program offered by the Department of Humanities, or two Major Programs, at least one of which is offered by the Department, and to complete the requirements of an Honours (20-credit) B.A. degree plus two work terms. For information on fees, work terms, and studying in the program, please see the Co-operative Programs section of this Calendar.

Program Requirements
The program requires eight four-month sessions of study and two four-month work sessions over a four-year period.

Note: For information on the Specialist (Co-operative) Program in Arts Management, which operates separately from the Co-op Program in Humanities, see the Visual and Performing Arts section of this Calendar.

Course Requirements
Students in the Co-operative Program in Humanities must complete all 2.5 of the following core full credit equivalents. Where appropriate, credits in this list may also count towards the completion of a Specialist or Major Program.

1. (1.5 full credit equivalents)

1.5 FCE either English or Language as follows:
- ENG203H3 Critical Thinking About Narrative
- ENG204H3 Critical Thinking About Poetry
- ENG205H3 Critical Writing about Literature

2. LGG171H Current Approaches to the Academic Writing Process I: A Course for Non-Native Speakers of English
3. LGG181H Current Approaches to the Academic Writing Process II: A Course for Non-Native Speakers of English
4. LGG191H Writing Practicum: A Course for Non-Native Speakers of English

5. VPA260H Visual and Performing Arts in the Digital Age

(CSCA02H3) The Why and How of Computing
In addition to the core credits, students must complete a Specialist Program offered by the Department of Humanities, or of two Major Programs. (A Major Program in Humanities only be combined with a second Humanities Major, or with a Major offered by any other academic department at U of T Scarborough.)

The following programs offered by the Department of Humanities may be chosen by students:

**Specialist Programs**
- Art and Culture
- English
- French
- History
- Linguistics
- Philosophy
- Psycholinguistics

**Major Programs**
- Art History
- Drama
- English
- French
- History
- Linguistics
- Music and Culture
- Philosophy
- Studio
- Women’s Studies

For the requirements of these programs, please see the program descriptions elsewhere in this Calendar.

Students in the Co-operative Program in Humanities are encouraged to use their elective credits to take courses outside their area(s) of concentration in order to broaden their understanding of contemporary social issues and their historical context and to enhance their communication skills. Students should consult with the Supervisor of Studies of the Co-operative Program in Humanities as well as with their discipline program supervisor(s) about their course selection.

**Program Admission**

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.uts.cc.utoronto.ca/registrar. The minimum qualifications for entry are 4.0 credits from the following list of courses plus a cumulative GPA of at least 2.5:

1. Art & Culture (Specialist): VPA101H & 1 other full credit in Visual & Performing Arts
2. Art History (Major): VPA101H & 1 full credit in Art History
3. Arts Management (Specialist): VPA101H
4. Drama (Major): VPA101H
5. English (Specialist & Major): ENG102H, ENG104H & ENG105H
6. French (Major): FREA101H & FREA102H
7. History (Specialist & Major): 2.0 full credits from [HSA101H, HSA102H, HSA103H, HSA105H] or 1 full credit at the B-level in HIS
8. Linguistics (Major): LINA101H & LINA102H

**Music & Culture (Major): VPA101H & 1 full credit in Music**

9. Philosophy (Major): 1 full credit in PHI
11. Studio (Major): VPA101H & 1 full credit in Studio
12. Women’s Studies (Major): WSTA101H & WSTA102H

**Work Terms**

Two work terms are an integral part of the co-op curriculum. To be eligible for their first work term, students must be in good-standing in the program and have completed at least 9.0 full credit equivalents, including at least 2.0 full credit equivalents from among the Co-op core courses and at least 4.5 full credit equivalents toward the requirement of the Specialist Program or the Humanities Major Program(s) in which they are enrolled. Students are encouraged to include Requirement 3 - VPA101H or (CSCA202H) among the core courses completed before the first work term. In addition, students must have completed the non-credit Arts & Science Co-op Work Term Preparation course.

To be eligible for their second work term, students must have completed at least 12.5 full credit equivalents, including all 2.5 co-op credits and at least 7.0 credits towards the requirements of their Specialist program or their Major Program(s). As well, they must have received a satisfactory evaluation for their performance and their report on their first work term.

**MINOR PROGRAM IN RELIGION**

**Supervisor of Studies:**
Until June 30 R. Campbell (416-287-7498) Email: rcampbell@utsc.utoronto.ca
From July 1: TBA Email: ra-religion@utsc.utoronto.ca

**Program Requirements**

Students must complete 4.0 full credits (FCEs) as follows:

1. HUMB03H Religious Traditions of the West
2. HUMB04H Religious Traditions of the East
3. 3.0 additional FCEs from the following list, with at least 1.0 FCE at B or C level:
   - ANTR30H Conceptualizing Religion
   - ANT45H Peoples of the Middle East
   - ANT47H Ritual and Religious Action
   - ANT55H Muslim Societies
   - CLA101H Classical Mythology I: Myths of the Gods
   - CLA102H Classical Mythology II: Myths of the Heroes
   - ENGB42H The Bible and Literature I
   - ENGB43H The Bible and Literature II
   - HIST33H The Crusades: I
   - HIST54H The Crusades: II
   - HUMC10H The Five Books of Moses
   - HUMC11H Religion and Language
   - HUMC12H Religious Pluralism
   - HUMC14H The Gospels
   - HUMC16H Hindu Epic
   - HUMC17H The Qur’an
   - HUMC42H Selected Topics in Western Religions
   - HUMC44H Selected Topics in Eastern Religions
   - PHIL100H Introduction to Chinese Philosophy
   - PHIL102H Introduction to Buddhist Philosophy
   - PHIL401H The Nature of Buddhist Ethics
   - PHIL424H Confucianism
HUMB034H3 Selected Topics in Western Religion
Intensive study of selected topics in Western religions that will vary with each offering of the course.
Prerequisite: HUMB08H3

HUMB449H3 Selected Topics in Eastern Religions
Intensive study of selected topics in Eastern religions that will vary with each offering of the course.
Prerequisite: HUMB04H

HUMB591H3
HUMB592H3
HUMD573Y1 Supervised Readings
Independent study of an advanced and intensive kind, under the direction of a faculty member. The material studied should bear some significant relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in other courses.

Students are advised that they must obtain consent from the supervising instructor before registering for these courses. The student should submit to the instructor a statement of objectives and proposed content for the course, which should be submitted by 15 April for 3' and 3W courses and by 1 December for 5' courses. If the proposal is approved, two faculty members from relevant disciplines will supervise and evaluate the work.

Prerequisite: Three 3-level full-credit equivalents in the Department of Humanities.

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Industrial Microbiology

**B.Sc.**

**SPECIALIST (JOINT) PROGRAM IN INDUSTRIAL MICROBIOLOGY**

**Supervisor:** R. Fulthorpe (416-287-7221)
**Email:** fulthorpe@uwaterloo.ca

This program is offered in collaboration with the School of Engineering Technology and Applied Science at Centennial College. The program may be taken in partial fulfillment of the requirement of an Honours B.Sc. degree. In addition to completing the requirements for the degree, students will qualify for a diploma from Centennial College.

**Program Admission**

Limited enrolment. For application procedures, see the Joint Programs with Centennial College section of this Calendar.

**Program Requirements**

The program requires the completion of 15.5 full credit equivalents (FCEs) as follows. Courses with the designators IMC and STF are taught at Centennial's campus.

**1. 3.5 FCE:**

- **BOYA10H** Introductory Biology: Part I
- **BOYA20H** Introductory Biology: Part II
- **CHMA10H** Introductory Chemistry I: Structure and Bonding
- **CHMA11H** Introductory Chemistry II: Reactions and Mechanisms
- **MATA30H** Calculus I (grade 12) [MATA35H Calculus I for Biological Sciences or MATA36H Calculus II for Physical Sciences
- **STAB22H** Statistics
- **PSCB57H1** Introduction to Scientific Computing
IMCB02H3 Microbial Techniques
Practical applications of the concepts covered in IMCB01H. Limited to students in the Joint Program in Industrial Microbiology.
Exclusion: IMCB02H may not be taken after or concurrently with BGYCI17H, MBY377H or MGY377H.
Prerequisites: [BGYA01H & BGYA02H] or [BGYA01Y]
Corequisite: IMCB01H3

IMCB03H3 Lab Instrumentation
The use and function of a variety of chemical instruments for the purpose of chemical analysis. Students learn to perform accurate measurements and/or analyses of experimental samples, and acquire proficiency in laboratory procedures of instrumental analysis as applied to QC: government, and industry standards. Limited to students in the Joint Program in Industrial Microbiology.
Prerequisites: [CHEM10H & CHEM11H] or [CHEM10Y]

IMCB04H3 Food Microbiology
An introduction through theory, lab, and field work to microorganisms of importance to the food and dairy industries. Quality control of raw materials and finished products, microbial metabolism, food and drug regulations and guidelines, theory of Good Manufacturing Practice for food manufacturers and Hazard Analysis and Critical Control Point Programs (HACCP). Limited to students in the Joint Program in Industrial Microbiology.
Prerequisite: IMCB01H3

IMCB05H3 Microbiology Project
Practical experience in locating, collecting, and interpreting scientific information for the purpose of designing laboratory procedures. Students work individually or in students in the Joint Program in Industrial Microbiology.
Corequisites: IMCB01H & IMCB02H

IMCB06H3 Pharmaceutical Microbiology
Quality control and quality assurance as they apply to the pharmaceutical industry, based on current government regulations. Students acquire knowledge of microbial production and assay methods, enumerate and identify microorganisms from commercial products, and evaluate the anti-microbial effectiveness of disinfectants, preservatives, and antibiotics. Limited to students in the Joint Program in Industrial Microbiology.
Prerequisite: IMCB04H

IMCB07H3 Food Chemistry
The principles of food preparation science including HACCP, organoleptic evaluation and sensory evaluation, tools for the measurement of food, and the physics of food preparation. Food components and their sources, and an introduction to food additives and contamination. Limited to students in the Joint Program in Industrial Microbiology.
Prerequisite: CHEM12H

IMCB08H3 Biochemistry and Applications I
Theory and practical applications of Biochemistry. Theory focuses on the most important molecules found in living systems. Practical applications include the preparation of soap, testing of food oils, identification of sugars, paper chromatography of amino acids, and isolation of casein from milk. Limited to students in the Joint Program in Industrial Microbiology.
Exclusion: IMCB08H may not be taken after or concurrently with BGYCI12H, BCH310H or BCH321Y.
Prerequisites: CHEM12H

IMCC01H3 Advanced Microbiology Project
With individual consultation, guidance, and supervision, select and design a scientific protocol and perform a microbiology experiment, using researched information. A final thesis will be presented and defended orally. Limited to students in the Joint Program in Industrial Microbiology.
Prerequisites: IMCB05H & IMCB06H

Note: For students who have graduated from Centennial College with a Technologist Diploma in Biotechnology/Industrial Microbiology, the following modifications apply:

• First year chemistry courses may be waived and replaced with equivalent FCEs in higher level chemistry, environmental science, biochemistry or biology courses.

• BGYA01H may be waived and replaced with 0.5 FCE from higher level biology, environmental science or biochemistry courses. Students are advised that BGYA02H is required for higher level physiology and ecology courses.

IMCB01H3 Microbiology Basics
Basic principles of microbiology including study of microorganisms (bacteria, viruses, protozoans, algae, and fungi), the isolation, cultivation and identification of microbes, host-parasite relationships as they relate to disease, microbial and molecular genetics, growth and control of microbes, and the human immune response to microbes. Limited to students in the Joint Program in Industrial Microbiology or the Joint Program in Environmental Science and Technology. Exclusion: IMCB01H may not be taken after or concurrently with BGYC17H, MBY377H or MGY377H.
Prerequisites: [BGYA01H & BGYA02H] or [BGYA01Y]
International Development Studies

Faculty List

A. Berry, B.A. (Western), M.A. (Yale), Ph.D. (Princeton), Professor Emeritus
E. C. Reph, B.A., M. Phil. (London), Ph.D. (Toronto), Professor
J. Teitelman, B.A., M.A., Ph.D. (Toronto), Professor
S. Bamford, B.A. (Toronto), M.A. (McMaster), M.A., Ph.D. (Virginia), Associate Professor
A. E. Bins, B.A. (Harvard), M.A. (University of Canterbury), Sc.D. (Johns Hopkins), Associate Professor
P. C. Hsiung, B.A. (National Chien-sung University), M.A. (Chinese Cultural University), M.A., Ph.D. (C.E.A.), Associate Professor
K. Kingston, B.A. (Toronto), M.A. (London), D.Phil. (Oxford), Associate Professor
A. G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill), Associate Professor
S. J. Asadat, B.A., M.A., Ph.D. (Toronto), Associate Professor
N. L. Cortes, M.A., Ph.D. (Toronto), Associate Professor
G. Fraser, M.A. (Toronto), Ph.D. (Yale), Assistant Professor
M. Hoffmayer, B.S. (Michigan Technological University), Ph.D. (George Washington University), Assistant Professor
M. Hunter, B.A., (Oxford), M.A. (Univ. of Natal), Ph.D (Univ California, Berkeley), Assistant Professor
K. MacDonald, B.A., M.A., Ph.D. (Waterloo), Assistant Professor
K. Nordvik, B.A., M.A. (Geneva), Assistant Professor
Supervisor of Studies: TBA Email: ido-supervisor-studies@uottawa.ca

Our programs provide students with a critical understanding of international development issues through exposure to a variety of academic disciplines, cultures, and, in the case of the specialist co-op program, an overseas work experience in the field of international development. The IDS programs are challenging and intended for bright and self-motivated students who are interested in both excelling academically and actively engaging themselves in the pursuit of social justice around such issues as poverty, inequality, and oppression. The students in the IDS program take initiatives, seek empowerment, are driven to solve social and environmental problems, understand the importance of teamwork and coordination, and are responsible and accountable. They have diverse interests that span the social sciences, humanities, and environmental science, all of which is underpinned by a strong sense of social responsibility.

The specific objectives of our IDS programs are to: (1) provide a broad understanding of different development paths and of the complex set of international and domestic factors affecting their success and sustainability; (2) develop sensitivities to and an awareness of the reality in developing countries their cultures, their societies, their political systems, and their position within the global arena; (3) provide skills and opportunities for IDS students to share their experience and insights, to enhance awareness of development issues at the university, and in the broader community, and to promote work on development within Canada; (4) (in the case of specialist co-op program), provide practical work experience in a different culture under the supervision of a Canadian or European non-governmental organization (NGO), research institute, multinational organization, or private partner; and (5) develop partnerships with individuals and organizations in the Global South working in international development.

There are five IDS programs offered: a new specialist (co-op), a master, a minor, and an interfield combination program in IDS and environmental studies with Trent University on the St. George campus (open only to IDS specialist co-op students and major students in environmental studies at Trent). Depending on the specific program chosen, students can graduate with a B.A. or B.Sc.

As a way of enhancing the interdisciplinary nature of the IDS programs, students are also encouraged to consider complementing their particular program in IDS with a parallel program in a related discipline. For example, those doing a major or a minor in IDS might consider a parallel major or minor in any one of environmental sciences, economics, geography, sociology, anthropology, and political science. While not required for graduation, specialist students (co-op or non-co-op) are also encouraged to consider fulfilling the requirements for a major program in a related discipline along side their specialist IDS program. For details about how these joint programs can be worked out, please contact the IDS Supervisor of Studies.

Guidelines for 1st year course selection

Students intending to complete any of the above IDS programs should include the following required courses in their first year selection: ECON401H, ECON402H, ECON501H and IDS502H. Other useful related (but not required) first year courses include: GGRA200H, HLA410H, and POLA502H. Students should also be careful to make sure that they take the appropriate prerequisites for all courses and programs they decide to pursue.

Note: It is Department policy that students without the prerequisite(s) will be removed from the course.

SPECIALIST PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

Program Requirements

This program requires 12 full credits (FCEs).

1. Fundamentals of Development Studies (3 full credits as follows)

- ECONA01H Introduction to Microeconomics or ECONA04H Introduction to Microeconomics: A Mathematical Approach
- ECONA05H Introduction to Macroeconomics or ECONA06H Introduction to Macroeconomics: A Mathematical Approach
- EESSA01H Introduction to Environmental Science

2. International Development Studies (7 full credits)

- IDS501H International Development Studies: Political Economy
- IDS502H International Development Studies: Development and Environment
- IDS503H Project Management I
ANTC101H - Anthropological Perspectives on Development
ANTC141H - Feminism and Anthropology
ANTC151H - Gender and Sexualities
ANTC191H - Producing People and Things: Economics and Social Life
ANTC221H - Political Anthropology
ANTC301H - Fieldwork in Social and Cultural Anthropology
ANTC611H - Medical Anthropology: Illness and Healing in Cultural Perspective
ANTC621H - Medical Anthropology II: Biological and Demographic Perspectives
ANTC631H - The Anthropology of Food: Human Needs
ECMC661H - Economic Development
ECMC671H - Development Policy
FORB201H - Conservation of Tropical and Subtropical Forests
GGRC191H - Spaces of Multinationality: Critical Mixed Race Theory
GGRC201H - Issues in Rural Development
GGRC291H - Agricultural, Environment and Development
GGRC451H - Local Geographies of Globalization
GGRC461H - Tourism, Environment and Development
GDRI101H - Health and sexuality
HLETC201H - Women and Health: Past and Present
HMB303H - Global Health and Human Rights
IDSC311H - Research Design for Development Fieldwork
IDSC403H - Directed Research on Canadian Institutions and International Development
IDSC407H - Project Management II
IDSC411H - Topics in International Development Studies
IDSC413H - Issues in International Health
PHLC841H - Psycological Studies in Philosophy
POLC371H - The New International Agendas
POLC391H - Development Studies: Political and Historical Perspectives
POLC391H - Latin America: Dictatorship and Democracy
POLC351H - International Political Economy of Trade
POLC361H - Politics in the Middle East I
POLC371H - Politics and Society in the Middle East II
POLC391H - Latin America: Politics of the Dispossessed
POLD881H - Exploring the New International Agenda
POLD901H - Public Policy and Human Development in the Global South
POLD941H - Selected Topics on Developing Areas
SOC251H - Comparative Ethnic and Race Relations
SOC341H - Globalization & Transnationalism
WSTC101H - Women and Development
WSTC111H - Applied Study in Women and Development
WSTC201H - Women and Environments

SPECIALIST PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.SC.)

Program Requirements
This program requires 12 full credits (FCEs).

1. Requirements 1 through 4 of the Specialist Program in International Development Studies (B.A.) above, 7.5 credits in total, plus the following:

2. Fundamentals (C0 full credits from among the following)

BGYA101H - Introductory Biology: Part I
BGYA202H - Introductory Biology: Part II
BGYB311H - Plant Physiology
BGYB331H - Human Development and Anatomy
BGYB501H - Ecology
Work Placement

This Program requires twenty courses (four years) of study and a work term of approximately eight to twelve months duration. The work term will normally begin no sooner than the end of the third year and no later than January of the fourth year of the Program.

The majority of students obtain placements with Canadian employers—Canadian development agencies (NGDOs), research institutes or private sector consulting firms. The location of the placements will vary according to each student's disciplinary and regional preferences and abilities, the availability of positions, and the practicability and safety of development work. Students who wish to carry out their placement in a developing country where there is no Canadian employer working, may be asked to finance the living allowance expenses of the placement themselves.

The IDS work placement is an integral part of the Co-op curriculum and is designed to provide students with practical hands-on experience of the development process in a Third World field setting. Students are placed as interns with Canadian or local development agencies or universities in a developing country for a 10-12 month period. Students are required to submit progress reports every 2 months and begin work on a major research project based on their work placement experience. To be eligible for placement, students must have completed 14.5 full-course equivalents including 12 IDS credits. These 12 must include 10 credits from Requirements 1 through 6 of which at least 6.5 must be from Requirements 1 through 4 plus completion of Requirement 7 and the Introduction to IDS Co-op Tutorial (see below). Students must also maintain throughout their IDS program a cumulative GPA of at least 2.5 (see the Co-operative Programs section of this Calendar for more information on status in the program). The IDS work placement normally begins after the third year of study and requires a minimum of 2 years of residence in the Program. Extra course credit of 0.5 full-course equivalent is granted for each four-month work period. Work term credits are in addition to the 20 full-course degree requirement and are graded on a Credit, No Credit system.

In addition to submitting a detailed examination of their placement, students will participate in a one-day placement de-briefing session with the IDS administrators.

Introduction to IDS Co-op Tutorial

Students participate in a non-credit co-op tutorial, commencing at the end of the year in which they complete 10 FCE, and continuing through the following year (the pre-placement year). Presentations, group exercises and individual assignments prepare students for the placement experience. There are mandatory sessions on cross-cultural understanding, health and safety issues on placement, researching for the IDS300/1V thesis, and other key topics. A weekend retreat with the fifth year (who have returned from placement) provides the opportunity for sharing of first-hand experience.

Program Admission

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website: www.utc.utoronto.ca/registrar/. The minimum qualifications for entry are 4.0 credits and a cumulative GPA of at least 2.5. An interview is required.

Program Requirements

All students must complete Requirements 1 through 6 of the program requirements for the Specialist Program in International Development Studies (B.A./B.Sc.) as listed above, plus the following:

1. Regional Language and Culture (2 full credits from the following. One of these full credits should be a language appropriate for work in developing countries. Students with a functional knowledge of an appropriate language may substitute non-language regional credits).
3. Introduction to Environmental Science (0.5 full credits)
   EESA01H Introduction to Environmental Science

4. Students must take four and one-half full-credits with at least one full credit from two of the following groups:

5. Social/Cultural Perspectives
   ANTBI9H Political Ecology
   ANTB19H Varieties of Social Life
   ANTRB20H Culture, Politics and Globalization
   ANTC10H Anthropological Perspectives of Development
   ANTC14H Feminism and Anthropology
   ANTC15H Genders and Sexualities
   ANTC19H Producing People and Things: Economies and Social Life
   ANTC32H Political Anthropology
   ANTC51H Medical Anthropology: Illness and Healing in Cultural Perspectives
   ANTC52H Medical Anthropology: Biological and Demographic Perspectives
   ANTC53H Anthropology of Food: Human Needs
   ANTC54H Anthropology of Food: Consuming Passions
   GCCR19H Spaces of Multiculturality: Critical Mixed Race Theory
   GGRD10H Health and Sexuality
   POLC91H Development Studies: Political and Historical Perspectives
   POLC91H Latin America: Dictatorship and Democracy
   POLC96H Politics and Society in the Middle East I
   POLC97H Politics and Society in the Middle East II
   POLC98H Latin America: The Politics of the Dispossessed
   POLD94H Public Policy and Human Development in the Global
   POLD94H Selected Topics on Developing Areas
   SGC53H Globalization & Transnationalism
   WSTC11H Women and Development

6. Policy Perspectives
   ANTBI6H Health and the Urban Environment
   ANTC35H Quantitative Methods in Anthropology
   ANTC50H Fieldwork in Social and Cultural Anthropology
   ECMC56H Economic Development
   ECMC67H Development Policy
   GGRB28H Geographies of Disease
   GGRB29H Issues in Rural Development
   GGRB29H Agricultural, Environment and Development
   GGRB51H Local Geographies of Globalization
   GGRB46H Tourism, Environment and Development
   HTCB2H Issues in Child Health and Development
   HTCB2H Women and Health: Past and Present
   IDSB04H International Health Policy Analysis
   IDSD05H Economics of Small Enterprise and Micro-Credit
   IDCSC11H Issues in International Health
   POLB08H Introduction to International Relations
   POLB21H International Conflict and Conflict Management
   POLC51H The New International Agenda
   POLD88H Exploring the New International Agenda

7. Environmental Perspectives
   BOVCS9H Advanced Population Ecology
   EESB02H Principles of Geomorphology
   EESB03H Principles of Climatology
MINOR PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

Program Requirements

Students must complete 4 FCEs for the Minor Program in International Development Studies, as follows:

1. Economics (1 full credit)
   - ECON105H Introduction to Microeconomics or ECO104H Introduction to Microeconomics: A Mathematical Approach
   - ECON155H Introduction to Macroeconomics or ECO105H Introduction to Macroeconomics: A Mathematical Approach

2. Development Studies (1 full credit)
   - IDS001H International Development Studies: Political Economy
   - IDS002H International Development Studies: Development and Environment

3. Environmental Science (0.5 full credit)
   - ESSA101H Introduction to Environmental Science

4. 1.5 FCE from among courses listed under Requirement 4 for the Major Program, which must include 1 FCE at the C- or D-level. Although POL108H1 & POL109H1 are very useful complimentary courses, although only 0.5 FCE (one of them) can be counted as a requirement for the Minor Program.

INTERFACULTY COMBINATION PROGRAM IN INTERNATIONAL DEVELOPMENT AND ENVIRONMENTAL STUDIES

This is an Interfaculty Program for U of T Scarborough students wishing to pursue the Specialist (Co-op) Program in International Development Studies in conjunction with a Major in Environmental Studies, from Innis College. Students registered in the Specialist or Major in Environmental Studies at Innis College may choose also to complete the requirements for a Major in International Development Studies offered by the University of Toronto Scarborough.

Program Admission

This is a limited enrollment Program. Students already registered in the Specialist (Co-op) Program in International Development Studies must fill out the Interfaculty Program.

Program Requirements

See the University of Toronto Faculty of Arts and Science Calendar for Program requirements at: www.artsci.utoronto.ca/col/calendar. Look also for Environmental Studies under Innis College.

Program Counsellor: David Powell | 416-946-8100 | Email: david.powell@utoronto.ca

IDS001H International Development Studies: Political Economy

Introduces students to major development problems, focusing on international economic and political factors. Course work, trade, aid, international institutions such as the World Bank, IMF and the WTO. Examines both conventional economic perspectives as well as critiques of these perspectives. Course can be counted for credit in ECM Programs. Limited enrollment: 170

Exclusion: ECO231Y1

Prerequisite: ECON105H1 & ECO104H1 or [ECMA41H3 & ECMA40H3] or [ECMA20Y3] or [ECMA10Y3]

IDS002H International Development Studies: Environment and Development

The environmental consequences of development activities with emphasis on tropical countries. Environmental change in urban, rainforest, semi-arid, wetland, and mountainous systems. The influences of development on the global environment; species extinction, loss of productive lands, reduced access to resources, declining water quality and quantity, and climate change. Limited enrollment: 170

Prerequisite: ESSA101H

IDS004H3 International Health Policy Analysis

This course explores institutional, economic, social, epidemiological, ideological, and political forces in the field of international health. Key themes include political economy of health and development; distribution of disease; social determinants of health; funding and organization of health systems; international health agencies; role of civil society, and globalization and health.

Prerequisite: 5.0 full credits

IDS005H3 Economics of Small Enterprise and Microcredit

Considers the role of micro- and small-medium enterprise in the development process, as compared to the larger firms. Identifies the role of smaller enterprises in employment creation and a more equitable distribution of income. Examines policies which can contribute to these outcomes, including micro-credit. This course can be counted for credit in ECM Programs.

Limited enrollment: 60

Prerequisite: [ECMA101H & ECMA105H] or [ECMA104H & ECMA106H] or [ECMA20Y2] or [ECMA20Y3]

IDS007H3 Research Design for Development Fieldwork

Examines research design and methods appropriate to development fieldwork. Provides 'hands on' advice (practical, personal and ethical) to those preparing to enter "the field"; or pursuing development work as a career. Students will prepare a research proposal as their main course assignment. Limited enrollment: Limited to students enrolled in the Specialist Coop Program in IDS.

Prerequisite: 9 FCE in total including at least 6 FCE satisfying Requirements 1 through 4 of the Specialist Co-op program

IDS009H3 Project Management I

Studies the phases of the project management cycle with emphasis on situational analysis and identification of needs, project implementation, project monitoring and evaluation. Examines basic organizational development, the role of Canadian non-governmental organizations engaged in the delivery of development assistance as well as with CIDA's policies and practices.

Prerequisite: [IDS001H & IDS002H] or ISTB101H

IDS010H3 Directed Research on Canadian Institutions and International Development

Introduces students to the role of Canadian institutions (both non-government organizations and private agencies) working in international development. Students taking this course will arrange, in consultation with the instructor, to work (usually as a volunteer) in a Canadian institution. They will write a major research paper related to some aspect of their experience. The course will use and apply some of the techniques and skills taught in IDS004H1. Students must obtain consent from the Supervisor of Studies before registering for this course.

Prerequisite: IDS001H & IDS002H & permission of the instructor

Corequisite: IDS004H1 recommended

IDS007H3 Project Management II

A case study approach building on Project Management I. Examines the art of effective communication and negotiation, visioning, participatory and rapid rural appraisal; survey design and implementation; advanced financial management and budgeting; basic bookkeeping and spreadsheet design; results based management; environmental impact assessment; cross-cultural effectiveness; and gender and development.

Prerequisite: IDS004H1

IDS010H3 Topics in International Development Studies

Course content is determined by instructor.

Prerequisite: IDS001H & IDS002H
International Studies

Faculty List
- F.W. Dowler, A.M. (Harvard), Ph.D. (London School of Economics), Professor
- A. Rubinoff, A.B. (Allegheny), M.A., Ph.D. (Chicago), Professor
- S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), Professor
- T. Tischman, B.A., M.A., Ph.D. (Toronto), Professor
- P. Kingston, B.A. (Toronto), M.A. (London), D.Phil. (Oxford), Associate Professor
- S.J. Rockel, M.A., Ph.D. (Toronto), Associate Professor
- K. Lidster, B.A. (Oberlin College), M.A. (Auburn), Ph.D. (Emory), Assistant Professor
- M. Mathias, B.A. (Dalhousie), Ph.D. (London), Assistant Professor
- L. Chen, B.A., M.A. (Toronto), Senior Lecturer

Discipline Representative/Superior of Studies: L. Chen (416-287-7511)
E-mail: chen@utsc.utoronto.ca

Canada is increasingly affected by international forces, including international treaties and institutions, trade, financial flows and communications. Since Canada is a country of recent immigration, many Canadians still retain ties to their country of origin. This program helps to prepare students for working and for undertaking graduate study in an increasingly international environment.

The International Studies curriculum contains courses from political science, history, languages, economics and geography, as well as courses dealing with new media/communications technology and regional studies. The International Studies Program complements well a major in these listed disciplines. Students can opt to enrol in the Major Program in International Studies, or apply for the limited enrolment Co-op Program in International Studies.

Guidelines for 1st year course selection
- Students intending to complete the Major Program in International Studies should include the following in their first year course selection: [ECMA01H] or [ECMA04H] and [ECMA05H] or [ECMA06H] and one or two courses that can be applied to Requirement 6 of the program.
IST001H International Studies and International Communications

Introduces the role of new communications technology and its effects internationally. Covers topics such as the digital divide, distance education, and issues of intellectual property. Students gain experience in using new technology, for example critiquing websites, creating websites, participating in an electronic conference using on-line tools. Limited enrolment: 90 per section (preference will be given in the first round of registration to students enrolled in IST programs). Prerequisite: 3.0 full credits

Journalism

Faculty List

M. Maitani, B.A. (Dalhousie), Ph.D. (London), Assistant Professor
K. McCridle, M.A. (Toronto), Ph.D. (Toronto), Senior Lecturer

specialist (Joint) Program in Journalism

Supervisor of Studies: K. McCridle (416-287-7135), Email: mccridle@stt.toronto.ca

This program may be taken in fulfillment of the requirements of a four-year (20-credit) Honours B.A. Degree and takes a minimum of four years to complete. In addition to completing the requirements for the degree, students have the option of qualifying for a diploma from Centennial College by undertaking one additional semester in a field placement and completing a short non-credit course on journalism career management at Centennial. Courses are taught at U of T Scarborough and at two campuses of Centennial College (the HP Science and Technology Centre at Morningside and Ellesmere and the Centre for Creative Communications in East York). Centennial courses are taken in the third and fourth years of the program.

Guidelines for 1st year course selection

Students intending to complete the program should include the following in their first year course selection: JOUA01H & JOUA02H and courses without university-level prerequisites that can be applied to the "Perspective" requirements and to the major or minor programs they plan to complete (see Requirements c-g).

Program Admission

Limited enrolment. Applicants must fill out a joint program application form, which is available online at http://www.atc.toronto.ca/jointprograms.

Program Requirements

a) JOUA01H Introduction to Journalism I and

b) JOUA02H Introduction to Journalism II

c) JOUB01H New Perspectives on Journalism, Migration and Transnationalism

d) JOUB02H Critical Journalism

HUMB11H Critical Thinking, Reasoning and Decision-Making

e) (International Perspective) 0.5 half credit equivalent from:

- ANTBS4H Peoples of the Middle East: An Introduction
- CLAAS2H Classical Mythology I: Myths of the Gods
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<td>Comparative Development in International Perspective</td>
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<td>VPHB42H</td>
<td>Carolingian and Romanesque Art and Architecture</td>
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<td>ANTAA2H</td>
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<td>LINB21H</td>
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<td>SOCBS65H</td>
<td>Sociology of Mass Media and Communications: Institutions, Technologies and Politics</td>
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<td>SOCBS75H</td>
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<td>VPAO50H</td>
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<td>Changing Normative Values in Art, Culture and Society</td>
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<td>VPHA40H</td>
<td>Ways of Seeing: Introduction to Art Histories</td>
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<td>Listening to Music</td>
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<td>WSTB13H</td>
<td>Women and the Media</td>
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| Courses that satisfy the requirements of one Major or two Minor Programs, which may include courses used to satisfy requirements (c) through (f) above: |
|-------------|-------------|
| (At least 2 half credits at the C- or D- level, which may include courses used to satisfy requirements (c) through (f) above: |
| (If) Journalism Group I -- students will be eligible to enrol in these courses after successfully completing at least 10 half credits at the University of Toronto Scarborough (or permission of the Supervisor of Studies), including JOUA00H, JOUA02H, JOUB00H, JOUB02H, HUMB11H and at least three of requirements (c) through (f) above. This group of courses should usually be taken concurrently. |
| JOUA00H | Journalism Law & Ethics* |
| JOUB11H | News Reporting* |
| JOUB14H | Page Design* |
| JOUB18H | Imaging: Journalism* |
| (If) Journalism Group II -- students will be eligible to enrol in these courses after successfully completing Group I above. |
| JOUC13H | Best Reporting* |
| JOUC16Y | Newspaper Laboratory 2* |
| JOUC17H | News for the Electronic Media 1* |
| (If) Journalism Group III -- students will be eligible to enrol in these courses after successfully completing Group II. |
| JOUC13H | Best Reporting* |
| JOUC16Y | Newspaper Laboratory 2* |
| JOUC17H | News for the Electronic Media 2* |

* A grade of C- is required in these courses to maintain standing in the program. |

Completion of 15-week job placement and Career Management course are also required to qualify for the diploma from Centennial College. See Journalism website or Supervisor of Studies for more information.
JOUC16Y3 Newspaper Laboratory 2
Practice using techniques learned in other program courses in order to produce content for "The Observer." As in JOUB18H4, students produce six issues per semester, but they play a more senior role and devote more time. Students attend staff meetings during class time, and research and write stories outside class. This is an intensive course which requires a large time commitment that may include evenings and weekends.
This course is taught at the HP Science and Technology Centre (Centennial College) and is open only to students in the Joint Program in Journalism.
Prerequisites: 10 credits including JOUAA1H, JOUA2H2, JOUB01H, JOUB03H, HUMU11H1.
Corequisites: JOUAA6H & JOUB11H & JOUB14H

JOUC13H3 Best Reporting
An advanced course in covering a specific "beat." Students work in teams to select a topic, conduct preliminary research, and prepare a proposal. Students then research and write a series of five stories each on their beat for publication in tabloid newspaper or magazine format. This is an intensive course which requires a large time commitment that may include evenings and weekends.
This course is taught at the HP Science and Technology Centre (Centennial College) and is open only to students in the Joint Program in Journalism.
Prerequisites: 14.5 credits including JOUAA3H, JOUB03H, JOUB09H, JOUB10H, JOUB17H
Corequisites: JOUC16Y & JOUC17H

JOUC17H3 News for the Electronic Media 2
An introduction to the production of television news wrap-around report. Students learn how to shoot, write, and edit TV news stories that communicate information clearly and stylishly. Students produce television news stories independently and in teams.
This course is taught at the Centre for Creative Communications (Centennial College) and is open only to students in the Joint Program in Journalism.
Prerequisites: 14.5 credits including JOUB09H & JOUB10H & JOUB09H & JOUB10H & JOUB17H
Corequisites: JOUC13H & JOUC16Y

Languages
See the Languages and Linguistics section of this Calendar.

Languages and Linguistics (B.A.)
Faculty List
C. Bertrand-Jennings, L. & L. (Paris), Ph.D. (Wayne State), Professor Emeritus
L.E. Douchette, B.A. (London), Ph.D. (Brown), Professor Emeritus
F.R. Lein, M.A., Ph.D. (Cornell), Professor Emeritus
C.V. Ponomaroff, M.A., Ph.D. (Toronto), Professor Emeritus
R. Skrjanec, B.A., M.Lit. (Brisbane), B.A., Ph.D. (Michigan), Professor Emeritus
H. Wittmack, M.A., Ph.D. (Mass.), Professor Emeritus
B.J. Bizim, B.A. (CUNY), M.A., Ph.D. (Chicago), Professor
D.M. James, B.A. (UBC), M.A. (Cornell), Ph.D. (Michigan), Associate Professor
S. Mitler, M.A. (Toronto), Ph.D. (Strasbourg), Associate Professor
I. Nadjarygirje, M.A. (Montreal-UQAM), Ph.D. (Montreal-UQAM), Associate Professor
R. Szczy, B.A. (Carleton), M.Sc. (Alberta), Ph.D. (Alberta), Associate Professor
R. Heins-Park, M.A., Ph.D. (Toronto), Assistant Professor
Y. Kang, B.A. (Seoul National), Ph.D. (Montreal), Assistant Professor
P. Riedeman, M.A., Ph.D. (Montreal), Assistant Professor
K. McCrindle, M.A. (Toronto), Ph.D. (Toronto), Senior Lecturer
F. Muggier, M.A. (Lyon), Ph.D. (Grenoble), Senior Lecturer
G. Beaufils, M.A., Ph.D. (Western), Lecturer
I. Dyson, B.A., MA, Ph.D. (Toronto), Lecturer
P. Radia, M.A. (Massey, Czech Rep.), Ph.D. (Toronto), Lecturer

Discipline Representative: D. James
Email: james@uts.ac.tomororo.ca
The Languages and Linguistics discipline encompasses degree programs in both French (FRE) and Linguistics (LING), as well as certain language courses (LOG) which are not associated with a specific degree. There is also a Specialist Program in Management (see the Management section of this Calendar for more information).

French (B.A.)
Faculty List
C. Bertrand-Jennings, L. & L. (Paris), Ph.D. (Wayne State), Professor Emeritus
L.E. Douchette, B.A. (London), Ph.D. (Brown), Professor Emeritus
S. Mitler, M.A. (Toronto), Ph.D. (Strasbourg), Associate Professor
I. Nadjarygirje, M.A. (Montreal-UQAM), Ph.D. (Montreal-UQAM), Associate Professor
P. Riedeman, M.A., Ph.D. (Montreal), Assistant Professor
K. McCrindle, M.A. (Toronto), Ph.D. (Toronto), Senior Lecturer
F. Muggier, M.A. (Lyon), Ph.D. (Grenoble), Senior Lecturer
G. Beaufils, M.A., Ph.D. (Western), Lecturer

Supervisor of Studies: F. Muggier (416-287-7143) Email: mugnier@uts.ac.tomororo.ca
Supervisor of Study Elsewhere: F. Muggier (416-287-7143) Email: mugnier@uts.ac.tomororo.ca
Studies in French allow for a wide range of interests: the enhancement of practical language skills, including translation, pronunciation and business French (FRE401H, FRE403H, FRE603H, FRE609H, FRE617H, FRE619H, FRE641H, FRE643H); the development of approaches to the teaching of French (FRE301H, FRE311H); and the exploration of the rich literatures and cultures of French Canada, France and other parts of the francophone world.
The following Programs are offered at University of Toronto Scarborough: a Minor Program in French; a Minor Program for francophone students; a Minor Program in French as a Second Language; a Major in French; a Joint Specialist Program in Management and Language (see the Management section of this Calendar), and a Specialist Program in French which can be completed either as a specialist program in its own right or as part of the Concurrent Teacher Education Program (CTEP).

Guidelines for course selection: French studies normally begin with FREA01H, Language Practice I, which serves to consolidate previous knowledge, and is the prerequisite for more advanced courses in all areas. FREA01H is designed primarily for students with Grade 12/OCAC French or equivalent competence. Those who have significant "immersion" or "enriched" high school experience, or who have native or near-native abilities in French, should consult the faculty member responsible for FREA01H or FREA01H about the appropriate entry course(s). Students without Grade 12/OCAC French equivalent may wish to take LLGA21H, Introductory French I, LLGA22H, Introductory French II, or LLGA22H, Intermediate French. Note that the Language Practice courses FREA01H and FREA02H and FREA02H and FREA02H and FREA02H must be taken in sequence. Normally, an A-level FRC course should not be taken at the same time as, or after, a B-level FRC course. Please do not hesitate to consult Program Supervisors or other faculty members for further advice about course selection and Programs.

The Study Elsewhere Program offers ideal opportunities for students of French to earn academic credit while studying in another province or country. For further information about this Program and about Letters of Permission, please refer to "Study at Other Universities" in this calendar, and speak to our Supervisor of Study Elsewhere.

Students with Grade 12/OCAC French who took Summer Bursary Program courses prior to attending U of T must see the Supervisor of Study Elsewhere during the first week of classes. After assessing the course, the Supervisor of Study Elsewhere will advise the student as to the appropriate level in which to register. Failure to seek advice at that time may result in a loss of credit to which the student is entitled.

Students must consult the Supervisor of Studies about possible exclusions if they are considering registering in French courses in the Faculty of Arts and Science or at University of Toronto Mississauga. Failure to do so may leave the student short a course for degree credit and thus delay graduation and increase tuition fees.

Note that two of our courses (FREB48H1 and FREC30H3) are conducted in English, readings and assignments for these courses are done in French by those who wish credit toward a French Program and in English by those who wish general credit toward a degree.

The French Study Guide is available at:
http://www.utoronto.ca/716hund1/langandlit/the_studyguide/index.htm

SPECIALIST PROGRAM IN EDUCATION OF TEACHERS IN FRENCH
Co-ordinator: C. Benagis (416-208-4754). Email: benagis@utsc.utoronto.ca

The Specialist Program in the Education of Teachers in French is being phased out and replaced by the Concurrent Teacher Education Program (CTEP) in French. (For more information on CTEP, see the Concurrent Teacher Education section of this Calendar.) Every effort will be made to ensure that students who first enrolled at U of T Scarborough in 2006/07 or earlier and who have been admitted to the program are able to complete it as described below.

Students in the program who have not yet taken FREB11H1 are advised to do so in 2007/08 since the course may not be offered again in the future.

This eight-session Program is designed and offered jointly by the Department of Humanities, University of Toronto Scarborough, and the Ontario Institute for Studies in Education/University of Toronto (OISE/UT) in order to meet the need for French teachers at all levels in the school system. It provides a comprehensive education for those intending to continue their studies at OISE/UT as well as for anyone broadly interested in the teaching of French as a second language. Emphasizing both content and methodology, it includes academic courses in French and other subjects as well as practical placements.

Program Admission
To remain in the Program, students must maintain a minimum average of 2.5. Students who successfully complete the Program and who meet the admission requirements of OSUE/UT will be admitted to OSUE/UT.

Several bourses are available for study in France or Quebec.

Program Requirements
Students in this Specialist Program must complete a total of 20 full credits chosen from the two main categories below:

a) Ten full credits in French as follows:
   1. Three credits consisting of FREB41H1, FREB42H1, FREB43H1, FREB44H1 and FREC46H1 and FREC49H1 (except where substitution of other French credits is permitted for students with special proficiency in the French language)
   2. Two full credits selected from FREB43H1, FREB44H1, FREB45H1, FREC46H1, FREC48H1, FREC49H1
   3. One full credit selected from FREB42H1, FREB47H1, FREB48H1
   4. Three full credits in literature which must include: one full credit in French Canadian literature; one full credit in French literature (FREB50H1 and FREB51H1 can fulfill this requirement); one half-credit in literature from other parts of the French-speaking world excluding France and Canada. Note: French courses taught in English cannot count towards this requirement.
   5. FREB11H1 and FREC11H1, FREB11H1 should be taken as early as possible to avoid timetable conflicts which might arise as a result of trying to schedule the practicum component of the course.

b) Ten further credits, students are advised to choose courses to suit the teaching program and teaching subjects in which they are interested. Information and advice will be available through the Program co-ordinator at U of T Scarborough and through counselling at OSUE/UT.

The following are recommended as general preparation for the OSUE/UT B.Ed. Program:

1. a half-credit in educational psychology
2. a half-credit in language acquisition - PLCB22H1 or (LNB22H1) and PLMG4H1 or (LNC4H1) are recommended
3. a half-credit to develop computer skills

Practicum requirement
All Program registrants are required, during their final four sessions, to spend a minimum of one half-day per week engaged in a supervised classroom teaching experience. This experience will allow registrants to put into practice their understanding of the French language teaching methods presented in FREB11H1 and FREC11H1. U of T Scarborough will help students arrange these practicum placements in local elementary or secondary schools.

Although this program is being phased out and replaced by CTEP, students currently registered in it will be able to complete it.

SPECIALIST PROGRAM IN FRENCH
Supervisor: C. Benagis (416-208-4754). Email: benagis@utsc.utoronto.ca

This program requires 10 credits and is designed to provide students with a fundamental knowledge and grasp of principles and practices in core areas of French: language, grammar, linguistics, literature and culture. It can be completed either as a Specialist Program in its own right or as part of the Concurrent Teacher Education Program (CTEP) in French. (For more information on CTEP, see the Concurrent Teacher Education section of this Calendar.)
French 201

MINOR PROGRAM IN FRENCH AS A SECOND LANGUAGE
Supervisor: F. Mugnier (416-287-7143) Email: mugnier@utsc.utoronto.ca

Program Requirements
Students in this Program must complete at least four full credits including FREA01H, FREA02H, FREB01H, FREB02H, FREC01H, FREC02H, and one other credit at the F level or higher.

Foundation (4.4) may be included if taken before FREA01H. Students who start at this level should complete at least 4 full credits including FREA01H, FREA02H, FREB01H, FREB02H, FREC01H, FREC02H, plus one other half credit at the FRE B-level.

MINOR PROGRAM IN FRENCH FOR FRANCOPHONES
Supervisor: F. Mugnier (416-287-7143) Email: mugnier@utsc.utoronto.ca

Program Requirements
Students in this Program must complete at least four full credits at the B- and C-levels, including FREB01H, FREB02H and FREC01H. At least one full credit must be at the C-level.

SPECIALIST PROGRAM IN MANAGEMENT AND FRENCH
Supervisor: F. Mugnier (416-287-7143) Email: mugnier@utsc.utoronto.ca

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

Program Requirements
The Departments of Management and Humanities have co-operated to develop a Program in Management and French. The Management requirement for this Program is the first five requirements for the Specialist in Management.

Language requirements consist of five full credits as follows:

French:
(a) FREA01H, FREA02H, FREB01H, FREB02H, and one full credit from among FREC01H, FREC02H, FREC05H
(b) At least one full credit from among FREB01H, FREB02H, FREC01H, FREC02H
(c) At least one full credit from among FREB02H, FREC01H, FREC02H
(d) An additional half-credit in French.

FREA01H Language Practice I

Prerequisite: OAC French or Grade 12 French or equivalent or permission of instructor

FREA02H Language Practice II

A continuation of FREA01H. Exclusion: Native or near-native fluency in French (FREA10Y, FSL11Y, FSL21Y). Prerequisite: FREA01H
FREN103H3 Conversation I
Development and reinforcement of spoken French.

FREN204H3 Conversation II
A continuation of Conversation I. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN205H3 Translation I
A continuation of Conversation I. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN206H3 Translation II
A continuation of Conversation I. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN301H3 French Language in the School System
This course is intended for students considering a career in language teaching. It involves a series of seminars as well as preparation for observations in local schools throughout the duration of the course.

Note: It is essential that students enrolled in the Specialist Program in Education of Teachers in French take this course in 2007-08 since it may not be offered again. Prerequisite: [FREN401H & FREN402H] or [FREN401Y] or equivalent or permission of instructor.

FREN302H3 Language Practice IV
A continuation of FREN201H.

FREN303H3 Conversation III
A continuation of Conversation II. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN304H3 Translation III
A continuation of Conversation II. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN305H3 Language Practice V
A continuation of Language Practice IV. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN306H3 Translation IV
A continuation of Conversation II. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN307H3 Language Practice VI
A continuation of Language Practice V. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN308H3 Translation V
A continuation of Conversation II. Texts from fields such as literature, business, politics, technology and sports will be translated and analyzed in terms of accuracy and lexical resourcefulness.

FREN309H3 English for Specific Purposes: French as a Second Language
This course is designed for students who wish to improve their English language skills in a specific field of study. It covers topics such as business, law, politics, and science.

FREN310H3 French for Specific Purposes
This course is designed for students who wish to improve their French language skills in a specific field of study. It covers topics such as business, law, politics, and science.

FREN311H3 French for Immigration
This course is designed for students who are preparing for immigration to French-speaking countries. It covers topics such as cultural adaptation, job search, and legal issues.

FREN312H3 French for International Development
This course is designed for students who are working in the field of international development. It covers topics such as project management, partnership building, and community development.

FREN313H3 French for Peacebuilding
This course is designed for students who are working in the field of peacebuilding. It covers topics such as conflict resolution, mediation, and reconciliation.

FREN314H3 French for Humanitarian Work
This course is designed for students who are working in the field of humanitarian work. It covers topics such as aid distribution, emergency response, and survivor support.

FREN315H3 French for Human Rights
This course is designed for students who are working in the field of human rights. It covers topics such as human rights violations, advocacy, and international law.

FREN316H3 French for the Media
This course is designed for students who are working in the field of media. It covers topics such as media production, journalism, and media law.

FREN317H3 French for International Relations
This course is designed for students who are working in the field of international relations. It covers topics such as diplomacy, international law, and global governance.

FREN318H3 French for Business and Commerce
This course is designed for students who are working in the field of business and commerce. It covers topics such as business ethics, financial management, and international trade.

FREN319H3 French for Law
This course is designed for students who are working in the field of law. It covers topics such as legal writing, legal research, and legal advocacy.

FREN320H3 French for Medicine
This course is designed for students who are working in the field of medicine. It covers topics such as medical terminology, patient communication, and medical ethics.

FREN321H3 French for the Arts
This course is designed for students who are working in the field of the arts. It covers topics such as art history, cultural studies, and art criticism.

FREN322H3 French for Tourism
This course is designed for students who are working in the field of tourism. It covers topics such as tourism management, hospitality, and travel planning.

FREN323H3 French for Sports
This course is designed for students who are working in the field of sports. It covers topics such as sports management, athletic training, and sports law.

FREN324H3 French for Environmental Studies
This course is designed for students who are working in the field of environmental studies. It covers topics such as environmental policy, sustainability, and natural resource management.

FREN325H3 French for Political Science
This course is designed for students who are working in the field of political science. It covers topics such as political theory, government, and international politics.

FREN326H3 French for International Development
This course is designed for students who are working in the field of international development. It covers topics such as project management, partnership building, and community development.

FREN327H3 French for Peacebuilding
This course is designed for students who are working in the field of peacebuilding. It covers topics such as conflict resolution, mediation, and reconciliation.

FREN328H3 French for Humanitarian Work
This course is designed for students who are working in the field of humanitarian work. It covers topics such as aid distribution, emergency response, and survivor support.

FREN329H3 French for Human Rights
This course is designed for students who are working in the field of human rights. It covers topics such as human rights violations, advocacy, and international law.

FREN330H3 French for the Media
This course is designed for students who are working in the field of media. It covers topics such as media production, journalism, and media law.

FREN331H3 French for International Relations
This course is designed for students who are working in the field of international relations. It covers topics such as diplomacy, international law, and global governance.

FREN332H3 French for Business and Commerce
This course is designed for students who are working in the field of business and commerce. It covers topics such as business ethics, financial management, and international trade.

FREN333H3 French for Law
This course is designed for students who are working in the field of law. It covers topics such as legal writing, legal research, and legal advocacy.

FREN334H3 French for Medicine
This course is designed for students who are working in the field of medicine. It covers topics such as medical terminology, patient communication, and medical ethics.

FREN335H3 French for the Arts
This course is designed for students who are working in the field of the arts. It covers topics such as art history, cultural studies, and art criticism.

FREN336H3 French for Tourism
This course is designed for students who are working in the field of tourism. It covers topics such as tourism management, hospitality, and travel planning.

FREN337H3 French for Sports
This course is designed for students who are working in the field of sports. It covers topics such as sports management, athletic training, and sports law.

FREN338H3 French for Environmental Studies
This course is designed for students who are working in the field of environmental studies. It covers topics such as environmental policy, sustainability, and natural resource management.

FREN339H3 French for Political Science
This course is designed for students who are working in the field of political science. It covers topics such as political theory, government, and international politics.
FRB6B03H Introduction to Linguistics: French Phonetics and Phonology
An examination of the sound system of modern French.
The course will acquaint student with acoustic phonetics and the basic concept and features of the French phonetic system. Phonological interpretation of phonetic data (from speech samples) and prosodic features such as stress and intonation will be examined.
Exclusion: FRED27Y, FRED7H
Prerequisite: [FREA01H & FREA02H] or [FREA12Y] or equivalent or permission of instructor

FRB6B5H3 Introduction to Linguistics: French Morphology and Syntax
An examination of the internal structure of words and sentences in French. Covered are topics including word formation, grammatical categories, syntactic structure of simple and complex clauses, and grammatical relations of subject, predicate and complement.
The course complements FRED43H and FRED44H.
Exclusion: FRED27Y
Prerequisite: [FREA01H & FREA02H] or [FREA12Y] or equivalent or permission of instructor

FRB6B6H3 Introduction to Literature in French I
A study of representative texts from the three major literary genres (fiction, drama, poetry). The course will introduce students to the critical reading of literary texts in French; students will acquire the basic concepts and techniques needed to analyze literature.
Exclusion: [FRED50Y] or equivalent
Prerequisite: [FREA01H & FREA02H] or [FREA12Y] or equivalent or permission of instructor

FRB6B1H3 Literary History in Context
A study of the evolution of the major trends of French literature from the Middle Ages to the 18th century through representative texts (short novels, poetry and short stories) selected for their historical relevance and literary importance.
Exclusion: [FRED50Y] or equivalent
Prerequisite: [FREA01H & FREA02H] or equivalent or permission of instructor

FRB6C9H3 Cinema of the Francophone World
An examination of films that have had a major impact on the development of francophone cinema. We will study motion pictures from France, Quebec and other parts of the francophone world that have made a significant contribution to both modern cinematography and Western culture.
Prerequisite: FRED41H and FRED42H or equivalent or permission of instructor

FRB6C4H3 Folktales, Myth and the Fantastic in the French-Speaking World
An examination of the imagined/imaginative in cultures and belief systems in the francophone world. Myths and folktales from Canada, the U.S., French Guyana, North and West Africa will be examined in terms of form, function, psychological dimensions and cultural interpretations of; for instance, life, death, food and individualism. Taught in English.
Prerequisite: [FREA01H & FREA02H] or [FRED12Y] for students enrolled in French programs or two A-level courses in Humanities or permission of instructor

FRB6C6H3 Language Practice V
The purpose of the course is to improve the student's written, listening and oral skills.
The course will focus on acquisition of the appropriate means of expression through practice in text summary, composition, error analysis, review of specific grammar points and discussion of recorded material, articles and films.
Exclusion: [FRED10Y], [FRED11Y], [FRED12Y], [FRED13Y], [FRED14Y], [FRED15Y] or equivalent.
Prerequisite: [FRED10H] or FRED12H or [FRED15Y] or equivalent.

FRB6C8H3 Special Topics in the Literature of Quebec: Postmodern Literature
An exploration of the textual forms and ideas that challenge tradition in contemporary writing. Quebecois postmodern literature speaks of vitality, liberating forces and creativity. We will examine issues such as gender identity, the question of the Self and the Other and the impact of technology on our culture.
Prerequisite: FRED50H or equivalent or permission of instructor

FRED65H3 Exercise in Interpreting
Preparation for using oral French for job and other contact-related purposes.
The class features small groups in "real-life" situations (e.g. legal cases, social work, immigration, annual business meetings). Practice in interpreting will focus on retention, accuracy of expression, lexical resourcefulness, cultural "informing" and speed of delivery.
Prerequisite: FRED17H or equivalent or permission of instructor

FRB6C1H3 Teaching French as a Second Language
A study of different theories of language teaching and learning and their application to the teaching of French as a second language.
Exclusion: FRED44H
Prerequisite: [FRED30H & FRED42H] or [FRED10Y] or equivalent or permission of instructor

FRB6C8H3 Translation for Business and Professional Needs
Practice in translating commercial, professional and technical texts.
Students will have the opportunity to widen their knowledge of the vocabulary and structures particular to the language of business as well as to such fields as industrial relations, insurance, software, health care, social work and finance.
Exclusion: FRED40Y, FRED41Y
Prerequisite: [FRED10H] or [FRED12Y] or equivalent or permission of instructor

FRED38H3 Special Topics in the Literature of Quebec: Postmodern Literature
An exploration of the textual forms and ideas that challenge tradition in contemporary writing. Quebecois postmodern literature speaks of vitality, liberating forces and creativity. We will examine issues such as gender identity, the question of the Self and the Other and the impact of technology on our culture.
Prerequisite: FRED50H or equivalent or permission of instructor

FRED40H3 French Syntax
A study of various aspects of French sentences.
Topics include grammatical patterns of sentences, how and why basic patterns are transformed, grammatical constraints on such transformations, and distinctive features that pose problems for FSI learners.
Exclusion: FRED7H
Prerequisite: FRED43H

FRED47H3 Special Topics in Linguistics: Pidgin and Creole Languages
A study of pidgin and creole languages worldwide.
The course will introduce students to the often complex grammars of these languages and examine French, English, Spanish and Dutch-based Creoles, as well as regional varieties. It will include some sociolinguistic discussion. Taught in English.
Prerequisite: FRED44H or FRED48H or FRED49H or LINA14H or permission of the instructor

FREC8H3 Sociolinguistics of French
An exploration of the relationship between language and society within a francophone context.
We examine how language use is influenced by social factors such as socio-economic status, types of situation and gender of speaker. Other topics include dialect, languages in contact, language shift, social codes and pidgin and Creole languages.
Exclusion: LINN21H
Prerequisite: [FRED10H & FRED12H] or [FRED10Y] or equivalent or permission of instructor

FREC4H3 French Semantics
An examination of meaning and interpretation in the structure, function and use of the French language. The course will introduce students to approaches to the notion of meaning as applied to French data. Identification of elements of meaning, of their properties and of their combination will be discussed.
Exclusion: FRED80H, LINN12H
Prerequisite: FRED10H or FRED12H or FRED14H or FRED50H or LINA14H or permission of the instructor
FRE505H3 Topics in French Literature: Short Stories of the 19th and 20th Centuries
A study of the genre illustrated by short stories from different periods and traditions. The course will examine themes and literary techniques in at least six short stories; attention will also be paid to their socio-cultural context.
Prerequisite: [FREB10H1 & FREB20H1 or (FREB10Y1)] & [FREB30H1 or equivalent] or permission of instructor

FRE513H3 Topics in French Literature: Humour in French-Language Fiction Today
An examination of modern and contemporary comic writing in French.
The bases and functions of literary humour in the last several decades will be studied in works by authors both French and francophone as we consider culture's influence and how and why satire, parody and mordant make us laugh.
Prerequisite: [FREB30H1 & FREB31H1] or [FREB30Y1] or equivalent or permission of instructor

FRE558H3 Cultural Identities and Stereotypes in the French-Speaking World
The history and development of perceptions of "us" and "them" in France and the francophone world.
The course examines language and culture, and the historic role of Eurocentrism and colonialism in the construction of cultural stereotypes. "Others" considered include the "humble savage", the "Oriental", the "country bumpkin" and the "foreigner".
Taught in English.
Prerequisite: Two Humanities courses or permission of instructor.

FRE512H3 Advanced Topics in Literature: Haitian Migrant Literature in Quebec
Novels by Haitian writers living in Quebec speak of migration, tension, marginalization, in-betweeness, belonging, the Self and the Other. This course will explore these issues through 4 novels and several other texts, all of which question our societies and encourage change.
Prerequisite: [FREB30H1 & at least one C-level literature course] or permission of instructor

FRE646H3 Special Topics in Advanced French Syntax
A close investigation of various constructions in French and their relevance to language acquisition. Emphasis is put on syntactic contrasts between French and English, as well as theoretical and methodological implications arising from their analysis.
Exclusion: FRE499H1
Prerequisite: FREC46H

FRE620H3
FRE623H
FRE644H
FRE669H
FRE670H
FRE697H Supervised Reading
These courses offer the student an opportunity to carry out independent study of an advanced and intensive kind, under the direction of a faculty member. Student and instructor work out in consultation the course's objectives, content, bibliography, and methods of approach. The material studied should bear a clear relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in regular courses. In applying to a faculty supervisor, students should be prepared to present a brief written statement of the topic they wish to explore. Final approval of the project rests with the French Discipline.
Students are advised that they must obtain consent from the supervising instructor before registering for these courses. Interested students should contact the Discipline Representative or Supervisor of Studies for guidance.
Prerequisites: One B-level course in the group FREB10H1-FREB20H1, except FREB10H1 & FREB10H1.

Languages

Faculty List
K. Holmes-Park, M.A., Ph.D. (Toronto), Assistant Professor
I. Dynan, B.A., M.A., Ph.D. (Toronto), Lecturer
P. Radia, M.A. (Mauritius, Czech Rep.), Ph.D. (Toronto), Lecturer

The courses listed under LGG include language courses in Arabic, French, Latin, Mandarin Chinese, Sanskrit and Spanish as well as courses in English for Academic Purposes intended for students whose first language is not English. Registration in all language courses (courses with the prefix LGG and language practice and conversation courses with the prefix FRE) is subject to the approval of the instructor.

For LGG-French language courses (LGG21H1, LGG22H1, LGGB2H1 and LGGB24H1), incoming students must register in the course appropriate to their level of language skill, based on the results of a placement test. The placement test is mandatory for all students who register in an LGG-French course for the first time. Please check the Humanities French webpage for details: http://www.utc.utoronto.ca/%7Ehumbd/w/LangandEng/Fre_studyguide/index.htm. If you experience difficulties in logging in or if you wish to write the test at the Department of Humanities, please write to french-placement@utc.utoronto.ca for assistance or to book an appointment. The Department strongly recommends that the placement test be completed prior to registration. Students with a grade 12 French credit should proceed directly to the FRE courses and will not be permitted to take LGG-French courses (some exceptions may apply with the permission of the supervisor of studies).

For all other language courses, students will be assessed at the beginning of the course in a manner to be determined by the instructor. Students whose level of proficiency in the language is considered unsuitable for the course will not be permitted to take the course. In some courses, the status of students will be listed as "interim" (INT) until they are approved (APP) by their instructors. Note that students are not permitted to take courses in a language in the wrong sequence (i.e., a lower-level course after a higher-level one).

For further information about language courses except for French, please consult Professor Rina Hebdas-Park, Co-ordinator of Language Studies, or, where appropriate, the instructors of these courses. For further information about LGG21H1/A22H1, Introductory French I & II, please consult Professor Corinne Beaupuis.
The Language Study Guide is available at:
http://www.utc.utoronto.ca/~7Ehumbd/w/LangandEng/lang_studyguide/index.htm

LGA11H3 Introduction to Canadian Culture and Society: A Course for Non-Native Speakers of English
A seminar course designed to introduce students who speak English as a second language to a study of Canadian culture and society through guest lectures, documentaries, non-fiction and fiction, with an emphasis on multicultural writings.
Evaluation is based on team oral presentations, research papers, and participation in class discussion.
Exclusion: (HUMA14Y1). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGG499H3 Current Approaches to the Academic Writing Process I: A Course for Non-Native Speakers of English
An examination of the fundamentals of academic writing.
Designed specifically for learners of English as a second language, this course highlights the importance of relevant content, coherence, and standard documentation in academic writing. Students enrolled in LGG417H must also be enrolled in LGG419H.
Exclusion: (LGG499H3). (HUMA14Y1). (LGG410Y). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Conqueptite: LGG419H
LGSA4193S Current Approaches to the Academic Writing Process II: A Course for Non-Native Speakers of English

A continuation of LGCA117H.

This course stresses the development of research-based writing skills, communication skills, and critical thinking through written assignments, short oral presentations, and discussion. Exclusion: LGSA495H (HUMA105Y), LGCA117H. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite. Prerequisite: LGCA117H or permission of the instructor.

LGSA4193S Writing Practicum: A Course for Non-Native Speakers of English

This course is designed to provide small groups of students with intensive writing and speaking practice on a weekly basis. Students enrolled in LGCA117H must be enrolled in LGCA4193S. Exclusion: LGSA495H (HUMA105Y) Corequisite: LGCA117H.

LGSA2193I Introductory French I

An intensive basic course in written and spoken French: comprehension, speaking, reading and writing.

This intensive, practical course is designed for those who have no previous training in French. Exclusion: FSL100H1Y or equivalent; not open to native or fluent speakers of French. Placement test is mandatory for all students who register in an LGG-French course for the first time. The Department strongly recommends that the placement test be completed prior to registration. Prerequisite: LGCA211H.

LGSA3093H Introductory Spanish I

An elementary course for students with no knowledge of Spanish.

The course develops listening, speaking, reading, and writing skills through a variety of oral and written courses enhanced by audiovisual and computer-based materials. For students fulfilling a language requirement and those with a general interest in Spanish. Exclusion: Grade 12 Spanish, OAC Spanish, (LGSA311Y), SPAD10Y, (SPAD101Y), native or near-native proficiency in Spanish. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Prerequisite: LGCA117H.

LGSA2193I Introductory Spanish II

A continuation of LGSA219H.

Exclusion: Grade 12 Spanish, OAC Spanish, (LGSA311Y), SPAD10Y, (SPAD101Y), native or near-native proficiency in Spanish. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite. Prerequisite: LGSA219H.

LGSA4093H Introduction to Standard Arabic I

An introduction to the basic grammar and vocabulary of standard Arabic, the language common to the Arab world. Classroom activities will promote speaking, listening, reading, and writing. Special attention will be paid to reading and writing in the Arabic script. Limited enrolment: 30

Exclusion: NMC210Y, NML210Y, Arabic instruction in high school, prior knowledge of Arabic. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Prerequisites: LGSA409H or permission of the instructor.

LGSA4093H Introduction to Standard Arabic II

A continuation of LGSA409H.

The course will build on the skills learned in LGSA409H and will provide further practice in reading and writing in the Arabic script. Limited enrolment: 30

Exclusion: NMC210Y, NML210Y. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite. Prerequisite: LGCA409H or permission of the instructor.

LGSA4593S Sanskrit I

An introduction to Sanskrit, the classical language of ancient India. Sanskrit is also the language of traditional Hinduism and the basis of early Buddhist texts. Students are introduced to the structural properties of Sanskrit and the devanagari script, used in various North Indian languages such as Hindi, Marathi, and Bhili. Limited enrolment: 30

Exclusion: The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Prerequisites: LGSA409H or LGSA411H.

LGSA5593S Sanskrit II

This course is a continuation of Sanskrit I. Students should gain enough familiarity with the script and the structure of the language to be able to read short texts in Sanskrit. Limited enrolment: 30

Exclusion: The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Prerequisite: LGSA459H or permission of the instructor.

LGSA4593S Introduction to Standard Chinese I

A comprehensive introduction to Standard Chinese as a foreign language for students with no previous knowledge of any aspect of any Chinese dialect. This course emphasizes integrated practical Chinese instruction in listening, speaking, reading, writing. (From characters to compositions) and translation (from Chinese into English and from English into Chinese). Limited enrolment: 30

Exclusion: All EAS Chinese language courses, (LGSA419H, LGSA691H, LGGB616H). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Prerequisites: LGSA409H or permission of the instructor.

LGGB2293S Intermediate French I

Intended for those who have studied some French in high school or have some knowledge of French. Offers a review of all basic grammar concepts and training in written and spoken French. Reinforces reading, comprehension, written skills and oral language competence. Preparatory class for FREA409H. Limited enrolment: 30

Exclusion: Grade 12 French, Grade 12 OAC French, FSL121Y or equivalent, FREA409H or (FSL141Y) or higher. Not open to native or fluent speakers of French. Prerequisite: LGCA221H, Grade 9 CORE French equivalent. (Students with Grade 12 or OAC French should proceed directly to FREA409H). The placement test is mandatory for all students who register in an LGG French course for the first time. The Department strongly recommends that the placement test be completed prior to registration.
LGB234H3 Intermediate French II
Intended for those who have some knowledge of French and who wish to bring their proficiency up to the level of normal University entrance; a continuation of LGB233H. Offers training in written and spoken French, reinforcing reading comprehension, written skills and oral/cultural competences.
Limited enrolment: 40 per section
Exclusion: Grade 12 French, FSL121Y or equivalent; FREA11H or FSL161Y or higher; not open to native or fluent speakers of French.
Prerequisite: LGB223H or equivalent. The placement test is mandatory for all students who register in an LGO French course for the first time. The Department strongly recommends that the placement test be completed prior to registration.

LGB232H3 Intermediate Spanish I
This course concentrates on an intensive review of Spanish grammatical principles in the context of written exercises, compositions, and translations.
Exclusion: SPA220Y, SPA200H1 (or SPA400H1), native or near-native proficiency in Spanish.
The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite:
Prerequisite: Grade 12 Spanish or OAC Spanish or LGA211H or (SPA200Y1).

LGB203H3 Intermediate Spanish II
A continuation of LGB202H.
Exclusion: SPA220Y, native or near-native proficiency in Spanish.
Prerequisite: LGB222H or (SPA400H1).

LGB424H3 Intermediate Standard Arabic I
Building on LGB341H, this course develops reading, writing, listening and speaking skills in standard Arabic and introduces new vocabulary and grammatical concepts in context. The course also includes discussion of colloquial Arabic and cultural aspects of everyday life in Arabic-speaking communities.
Limited enrolment: 30
Exclusion: Arabic courses in high school; advanced knowledge of Arabic; equivalent courses elsewhere. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite:
Prerequisite: LGB341H or permission of the instructor.

LGB542H3 Intermediate Standard Chinese I
This course will develop listening, speaking, reading, and writing skills in Standard Chinese. Writing tasks will help students to progress from characters to compositions and will include translation from Chinese to English and vice versa.
The course is not open to students who have more than the rudiments of Chinese.
Limited enrolment: 30
Exclusion: LGB341H or permission of the instructor.
Prerequisite: LGB341H or (LGB301H or LGB302H) or permission of the instructor.

LGB546H3 Intermediate Standard Chinese II
A continuation of LGB441H.
Limited enrolment: 30
Exclusion: LGB441H, LGB467H, LGB468H1, LGB468H2, LGB468H4 & all EAS Chinese language courses.
The course also includes discussion of colloquial Arabic and cultural aspects of everyday life in Arabic-speaking communities.
Limited enrolment: 30
Exclusion: Arabic courses in high school; advanced knowledge of Arabic; equivalent courses elsewhere. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those students who meet the prerequisite:
Prerequisite: LGB441H or (LGB301H or permission of the instructor.

LGB566H3 Modern Standard Chinese I
A comprehensive introduction to Modern Standard Chinese (Mandarin), for students who speak a Chinese dialect other than Mandarin and have learned complex-form Chinese characters. This course emphasizes Pinyin, speech sounds, written Chinese characters, and Pinyin writing on a novel. Students may be excluded from the course if the instructor deems their proficiency in Mandarin to be inappropriate for the level of the course.

LGB567H3 Modern Standard Chinese II
Exclusion: EAS200Y (HUM201Y), (LGB301Y), (LGB402H). Students may be excluded from the course if the instructor deems their proficiency in Mandarin to be inappropriate for the level of the course, including those students who meet the prerequisite:
Prerequisite: LGB566H1 or LGB566H2.

LGGC568H3 Advanced Spanish I
An intensive study of grammar and syntax, translation, composition, combined with oral practice.
Detailed examination of the subtleties of Spanish grammar through practice in translation; from and into Spanish; composition, and conversation.
Exclusion: SPA220Y, SPA200H1 (or SPA200Y1), native or near-native proficiency in Spanish.
Prerequisite: LGB311H or (SPA103H1).

LGGC569H3 Advanced Spanish II
A continuation of LGB311H.
Exclusion: SPA220Y, SPA200H1 (or SPA200Y1), native or near-native proficiency in Spanish.
Prerequisite: LGB311H.

LGGC824H3 Business Spanish
The Spanish language in a business context.
The course is designed primarily for students in the Management/Language Program but is open to others. The aim is to develop facility in the vocabulary and structures of this specialized use of the Spanish language through translation, correspondence, and individual and group oral presentations.
Corequisite: LGGC311H or (SPA205Y1).
3. Those of the following:
PSYB07H Data Analysis in Psychology
PSYB20H Introduction to Developmental Psychology
PSYB31H Perception and Cognition
PSYB57H Memory and Cognition
PSYB65H Human Brain and Behaviour
PSYC21H Advanced Developmental Psychology
4. Four further full credits in LIN and/or PLI and/or FRE linguistics (FREC46H, FREC47H, FREC48H), two of which must be at the C- or D-level.
5. One further full credit in PSY, which must be at the C- or D-level.

SPECIALIST PROGRAM IN LINQUISTICS

Supervisor: D. James Email: james@utsc.utoronto.ca

Program Requirements
Students must complete 11.5 full credits, as follows:

1. All of the following:
   LINA01H General Linguistics I
   LINA02H General Linguistics II
   PSYA01H Introduction Psychology: Part I
   PSYA02H Introduction Psychology: Part II

2. Two of the following:
   LINC02H Language and Culture
   LINL02H Language and Society
   LINL02H Sociolinguistics
   LINL02H Language and Ethnology
   LINL20H Language and Gender
   PLIB23H Second Language Learning
   PLIC24H First Language Acquisition
   PLIC34H Reading in a First or a Second Language
   PLIC35H Psycholinguistics
   PLIC44H Acquisition of the Mental Lexicon
   PLID55H Disorders of Speech and Language
   PLID55H Disorders of Speech and Language

3. Either three full credits in a language, whether under the FRE or LGG or other rubric, or two full credits in a language and one full credit in another language.

4. A further 2.5 full credits in any LIN, PLI, JAL, or JLP courses, and/or courses selected from the following courses. At least one of these 2.5 full credits must be at the C- or D-level.
   FREN06H French Semantics
   FREC46H French Syntax
   FREC47H Special Topics in Linguistics:Pidgin and Creole Languages
   FREC48H Sociolinguistics of French
   HUMC11H Religion and Language
   PHILB00H Symbolic Logic I
   PHILB00H Symbolic Logic II
   PHILC51H Symbolic Logic II
MAJOR PROGRAM IN LINGUISTICS

Program Requirements

Students must complete eight full credits, as follows:
1. LIN041H General Linguistics I
2. LIN026H General Linguistics II
2. Any two of the following four courses:
   LIN040H Phonology I
   LIN051H Morphology I
   LIN061H Syntax I
   LIN069H Phonetics: The Study of Speech Sounds
3. Two full credits in either LIN and/or PLI and/or FRE linguistics (FREC46H, FREC47H, FREC48H, FREC49H), of which at least two credits must be at the C- or D-level.

MINOR PROGRAM IN LINGUISTICS

Program Requirements

Students must complete four full credits, as follows:
1. LIN011H General Linguistics I
2. LIN026H General Linguistics II
2. Any two of the following four courses:
   LIN040H Phonology I
   LIN051H Morphology I
   LIN061H Syntax I
   LIN069H Phonetics: The Study of Speech Sounds
3. Two full credits in either LIN and/or FRE linguistics (FREC46H, FREC47H, FREC48H, FREC49H), of which at least one credit must be at the C- or D-level.

LIN011H General Linguistics I

An introduction to the various methods and theories of analyzing speech sounds, words, sentences and meanings, both in particular languages and language in general.
Exclusion: LIN100Y, LIN011Y
Prerequisite: LIN011H

LIN026H General Linguistics II

An introduction to the application of the linguistic methods and theories in LIN011H to topics such as the relationships between language and mind, language and culture, language and history, and language and society.
Exclusion: LIN100Y, LIN011Y
Prerequisite: LIN011H

LIN040H Phonology I

Practice in analysis of sound patterns in a broad variety of languages.
Exclusion: LIN229H
Prerequisite: LIN090H

LIN051H Morphology I

Practice in analysis of word structure in a broad variety of languages.
Exclusion: LIN231H
Prerequisite: LIN010H or LIN011Y

LIN061H Syntax I

Practice in analysis of sentence structure in a broad variety of languages.
Exclusion: LIN232H
Prerequisite: LIN010H or LIN011Y

LIN069H Phonetics: The Study of Speech Sounds

An examination of physiological and acoustic bases of speech.
Exclusion: LIN229H
Prerequisite: LIN010H or LIN011Y

LIN017H3 The Structure of English Sentences

Description and analysis of various aspects of the structure and grammar of English sentences, with emphasis on those distinctive and characteristic features most of interest to teachers and students of the language.
Exclusion: LIN204H, LIN017H1 may not be taken after or concurrently with LIN060H
Prerequisite: LIN011H or LIN010Y

LIN018H3 The Structure of English Words

Description and analysis of the structure of English words, including the sound and word structure systems, with emphasis on those distinctive and characteristic features most of interest to teachers and students of the language.
Exclusion: LIN203H, LIN018H1 may not be taken after or concurrently with LIN060H
Prerequisite: LIN011H or LIN010Y

LIN021H3 Language and Society

The study of the relationship between language and society, with the goal of understanding social structure through language. Major themes are: multilingual societies, including the politics of language and the spread or death of languages, and social interaction through speech, including how conversations work, politeness, and cross-cultural miscommunication.
Exclusion: FREC48H
Prerequisite: LIN012H or LIN011Y

LIN022H3 Sociolinguistics

The study of the relationship between language and society, with the goal of understanding language form and structure through its social functions. Topics include: regional dialects, social dialects, and speech styles; the role of speech varieties as symbols of group affiliation; social origins of linguistic change; attitudes towards linguistic variation.
Exclusion: (JAL254H, LIN250H)
Prerequisite: LIN012H or LIN011Y

LIN023H Language and Power

An examination of the relationship between language and power in society. Students will analyze academic, workplace, cross-cultural, and inter-cultural discourse in order to gain insight into how language is used to establish power relations, to express ideology, and to accomplish a variety of other goals in everyday life.
Exclusion: (LG Kag H)
Prerequisite: Any 4 full credits

LIN029H3 Phonology Theory I

Basic issues in phonological theory. This course assumes familiarity with phonetic principles, as discussed in LIN011H, and with phonological problem-solving methods, as discussed in LIN024H.
Exclusion: LIN022H
Prerequisite: LIN024H & LIN029H

LIN036H3 Language Change

An introduction to language change and language relationships.
Exclusion: LIN036H
Prerequisite: LIN024H

LIN038H3 Language History

An introduction to language history, with emphasis on what history can teach us about language and what language can reveal about prehistory and history.
Prerequisite: LIN061H

LIN111H3 Syntax II

Basic issues in syntactic theory, including principles and constraints governing sentence formation and interaction with other areas of language structure such as morphology and semantics, with emphasis on universal principles.
Exclusion: LIN131H
Prerequisite: LIN060H

LIN129H3 Semantics: The Study of Meaning

An introduction to the role of meaning in the structure, function, and use of language.
Exclusion: LIN041H, FREC49H
Prerequisite: LIN060H
LING154H3 Writing Systems
The sociolinguistics of written language, and its relationship to speech. The origin and relatives of the Latin alphabet. The types of writing systems, as exemplified by representative written languages (Chinese, Japanese, Korean, Arabic, Sanskrit, etc.), and the principles of their form and function.
Exclusion: JAL328H
Prerequisite: LIN209H

LING274H3 Language and Ethnicity
This course examines how different ethnic groups become identified by their speech, and concentrates especially on bilingualism in immigrant communities. In addition to conversational pragmatics like code-switching, we will consider language contact issues like borrowing, and how speakers' consciousness of such phenomena affects their use.
Prerequisite: One full credit at the B level in LIN or PLI

LING284H3 Language and Gender
An introduction to the research on differences between women and men in how they use language and how they behave in conversational interaction, together with an examination of the role of language in reflecting and perpetuating cultural attitudes towards gender.
Exclusion: JAL355H
Prerequisite: One full credit at the B level in ANT, LIN, SOC or WST

LING304H3
LING304H3
LING304H3
LING304H3
LING304H3 Supervised Reading
Independent study and research in an area of interest to the student. Students must obtain consent from a supervising instructor before registering for these courses. Interested students should contact Professor D. James, Supervisor of Studies.
Prerequisite: At least one full credit at the B-level in Linguistics & permission of the instructor.

LING314H3 Pragmatics
An introduction to pragmatics, that study of the use and interpretation of utterances, with emphasis on the division of labour between semantics and pragmatics. Topics will include inference, presupposition, conversational and conventional implicature, focus and topicalization, the role of context in interpretation and use, and implicit and indirect speech acts.
Prerequisite: LIN312H

PLIB253H3 Second Language Learning
The stages adults and children go through when learning a second language. The course examines linguistic, cognitive, neurological, social, and personality variables that influence second language acquisition. Recommended for students in the Specialist Program in the Education of Teachers in French.
Exclusion: LIN285H3
Prerequisite: LIN401H3 or LIN401Y or FRE844H3 or FRE845H3 or alternative prerequisite with permission of the instructor.

PLIC243H3 Developmental Psycholinguistics
Psycholinguistics: Descriptions of children's pronunciation, vocabulary and grammar at various stages of learning their first language. Theories of the linguistic knowledge and cognitive processes that underlie and develop along with language learning.
Exclusion: JLP315H
Prerequisite: [One full credit in LIN or (FRE844H3 & FRE845H3)] & one full credit in PSY

PLIC343H3 Reading in a First or a Second Language
An examination of linguistic and psycholinguistic issues pertinent to reading, as well as the role of a language's writing system and orthography in the learning process. This course is recommended for students enrolled in the Specialist Program in the Education of Teachers in French.
Exclusion: LIN204H3
Prerequisite: [LIN204H or LIN404Y] or [FRE844H3 & FRE845H3] & [PLIC243H or PLIB253H or alternative prerequisite with permission of the instructor].

PLIC559H3 Psycholinguistics
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind. Topics may include speech perception, word retrieval, use of grammar in comprehension and production, discourse comprehension, and the role of memory systems in language processing.
Exclusion: JLP374H
Prerequisite: One credit in LIN and one credit in PSY

PLID443H3 Acquisition of the Mental Lexicon
An examination of L1 (first language) and L2 (second language) lexical (vocabulary) acquisition. Topics include: the interaction between linguistic and cognitive development; the role of linguistic non-linguistic input; the developing L2 lexicon and its links with the L1 lexicon; the interface between lexical and syntactic acquisition within psycholinguistic and linguistic frameworks.
Prerequisite: PLIC243H or permission of the instructor

PLID505H3 Disorders of Speech and Language
Pathologies of language acquisition, comprehension and production. Topics include anatomy and physiology, voice disorders, articulation disorders, cleft palate, aphasia, apraxia, dysarthria, language delay, language learning disabilities, developmental delay, and hearing and auditory processing disorders.
Exclusion: JLS474H
Prerequisite: One full credit in LIN, one full credit in PSY & [PLIC253H or PLIC343H or PLIC353H] or permission of the instructor.

Linguistics
See the Languages and Linguistics section of this Calendar.

Management
(B.B.A.)

Faculty List
S. Benton, B.A. (Harvard), M.F.P. (Kennedy School of Gov't), Ph.D. (Harvard), Professor
A. Saka, B.A. (Western), M.A.Sc. (Waterloo), Ph.D. (Toronto), Professor
A. Stack, B.A. (U.C.B.C.), M.S.C. (London), M.A., Ph.D. (Harvard), Professor
J. Wen, B.Sc. (Harbin Inst. (China)), M.B.A. (York, Canada), Ph.D. (Toronto), Professor
I. Averbukh, M.Sc., Ph.D. (Moscow Institute of Physics & Technology), Associate Professor
S. Law, B.A. (Calcutta), B.A. (Wilson College), M.S. (Bucknell), Ph.D. (Toronto), Associate Professor
D. Zweig, B.A., M.A.Sc., Ph.D. (Waterloo), Associate Professor
P. Apparowl, B.A., M.B.A. (India), M.B.A., Ph.D. (Chicago), Assistant Professor
K. Kim, B.A., M.B.A. (Korea), Ph.D. (Minnoma), Assistant Professor
J. McCarty, B.A., M.A., Ph.D. (Western), Assistant Professor
S. Dong, B.A. (Laurentian), M.A. (Wilfrid Laurier), Ph.D. (Waterloo), Assistant Professor
K. Scott, B.A. (Calgary), M.A., Ph.D. (Waterloo), Assistant Professor
J. Trougakos, B.S., M.B.A. (Oklahoma State), Ph.D. (Purdue), Assistant Professor
S. Ahmad, B.Com., M.A. (India), M.B.A. (Concordia), Senior Lecturer
C. Bovard, B.A. (Queen's), M.Sc. (Stirling), M.B.A., (Western), Senior Lecturer
N. Daga, B.A. (Waterloo), C.A. (CICA), Senior Lecturer
A. Shavnyaga, B.A. (Toronto), M.B.A. (York, Canada), C.M.A., Senior Lecturer
D. Chau, B.Com. (Toronto), M.B.A (McMaster), Ph.D. (HRUST), Lecturer
L. H. Chen, M.S.Ed. (U Penn), M.B.A., Ph.D (U Toronto), CGA, Lecturer
J. Henheote, B.A., M.A., Ph.D. (Western), Lecturer
H. Laurence, B.A. (Amherst), M.A., Ph.D. (McGill), LLB (Osgoode), Lecturer
G. Quan Fan, B.A. (Toronto), C.A., C.M.A., Lecturer
P. Radhakrishnan, B.A. (Windsor), M.A., Ph.D. (Illinois), Lecturer
3. Admission after First Year

Admission of students during second year (that is, until they have completed up to 10 FCEs) will also be on the basis of all grades received. Students who have completed more than 10 FCEs will not be considered for admission to the Program.

Students applying at the end of first year or during the second year will be considered together for a total of approximately 170 places in the Specialist Programs.

Subject to enrollment limits, a student admitted to any of the Programs will have access to the full range of offerings in the Department. Specific Program requirements are listed below.

Guidelines for Course Selection for First-Year Students in Management Programs

Non Co-op Students directly admitted to the B.B.A.

MGTA03H, MGTA04H, ECGM04H, ECMMA0H, MATA32H, MATA33H, MGTB05H, MGTA06H are allowed.

Co-op Students directly admitted to the B.B.A.

All of the courses listed above for non-co-op students. Co-op students are required to take MGTB05H and MGTA06H in first year.

Students admitted directly into Interdisciplinary Programs leading to the B.B.A.

Students should consult the appropriate program descriptions below for a full description of their programs. In general, students in these programs in 1st year will take MGTA03H, MGTA04H, ECMMA0H, ECGM04H and will also take Mathematics courses appropriate to their non-management areas as well as introductory courses to begin their non-management concentrations.

Note: In the first year, students will take the courses required for the Program of their choice (see the following paragraphs). For information on the assessment of co-op students, see the Co-operative Programs section of this Calendar. In order to remain in the Program, students who are not in co-op must maintain a cumulative GPA (CPMA) of 1.6 or higher after having attempted at least 4 FCEs and a CPA of 2.0 or higher after having attempted at least 5 FCEs.

Students enrolling in any of the joint programs (Specialist Program in Management and Humanities, Specialist Program in Management and Information Technology, Specialist Program in Management and Language (French), Specialist Program in Management and Life Sciences, Specialist Program in Management and Science, Specialist Program in Management and Social Sciences) should also take courses to begin their majors in the linked departments.

Guidelines for Course Selection for Students Admitted to Pre-Program

Read the information set out with your offer of admission. Students must have at least 4 FCEs from the University of Toronto to apply to Programs. For B.B.A. consideration, enrol in: [MGTA03H or MGTA04H & MGTA06H], ECGM04H or ECMMA0H & ECMMA0H, MATA32H & MATA33H.

Taking a course in the Humanities or Social Sciences in first year is recommended.

The pre-program students interested in any of the interdisciplinary programs (Specialist Program in Management and Humanities, Specialist Program in Management and Information Technology, Specialist Program in Management and Language (French), Specialist Program in Management and Life Sciences, Specialist Program in Management and Science, Specialist Program in Management and Social Sciences) should also take some courses in the linked department and the appropriate Mathematics courses before applying to the program.

Notice to Non-Program Students

All B, C and D level Management courses are restricted to students in Management Programs. Management Program students include degree, certificate and non-degree students in Management. There will be no exceptions.

Management courses at the St. George campus are restricted and not available to U of T Scarborough students.
Program Requirements
The Program requires the completion of the following minimum requirements (14 FCEs) as part of a twenty-credit degree B.B.A.

Note: A single course may only be used to fulfill one of the following requirements:

1. [MGTA04] or [MGTA06H, MGTA06H]
2. MGTB03H, MGTB04H, MGTD05H, MGTD06H, [MGTD07H or MGB250H]
3. MGTC09H, MGTC24H, MGTC25H
4. [ECMA04H] or [ECMA06H]
5. [ECME41H] and [ECME46H] and [ECME46H]
6. [ECME41H] and [ECME46H]
7. [ECME41H]
8. [ECME46H]
9. [ECME46H]

Program Requirements
Curriculum
Co-op students will follow the course requirements specified in one of the Specialist in Management Programs with a co-op option. These programs are described later in this section. Please note that in addition to these requirements, Co-op students must have taken MGTC36H prior to the commencement of their second work term. In the first two years of study, most students will follow a common core curriculum of studies (please refer to the detailed requirements in the Management Programs). Students are advised to consult regularly with the Program Supervisor if they have questions regarding course selection and scheduling. It is however the students’ individual responsibility to ensure that they have completed the correct courses to make them eligible for each work term and that they have correctly completed Program and degree requirements for graduation.

Work Terms
To compete for a work term a student must be in good standing in the Program and must have completed:
- For the first work term: 7 FCEs, including ECMA04H, ECMA06H, [MGTA02Y or MGTA04H and MGTA06H]
- For the second work term: 9 FCEs (including, for students in the Specialist Program in Management only, MGTC36H)
- For the third work term: 11 FCEs

SPECIALIST PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES
This program, which includes a co-op option, is designed to provide students with a broad exposure to all the functional areas of Management as well as provide a solid grounding in Economics for BBA students interested in further study in Economics. See the Economics for Management Studies section of this Calendar for full description.

SPECIALIST PROGRAM IN MANAGEMENT
Supervisor: S. Ahmed E-mail: management-supervisor-studies@utsc.utoronto.ca
This Program which has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in Economics. Please see the section regarding work term requirements for specific details on courses required before each work term.

Streams of Study
Students registered in the Specialist in Management (B.B.A.) Program have the option of registering in one of the following streams. In order to have completion of the chosen stream noted on the transcript, students will have to complete at least 2.0 FCEs from a relevant set of courses noted below. In addition to the courses required for completion of the Specialist in Management (B.B.A.). In counting courses toward the core requirements and a stream, no course will be counted for more than one requirement. Students may register in only one stream of Management studies. Students are expected to consult with the Department of Management for course availability.

Accounting

Economic Data Analysis
Students must take ECMA02H and ECMA06H as their C-level Econ options within the B.B.A. Students must also take one of the following 2 FCEs in Economic Data Analysis: ECMA11H or ECMA12H

Finance

Human Resource Management
International Business
Two FCEs from (MGT261H, MGT244H, ECMC61H, ECMK22H, ECMC66H, ECMC97H)

Marketing Stream
Two FCEs from MGT129H, MGT201H, MGT068H, MGT130H, MGT120H

Public Management
Two FCEs from MGT242H, MGT045H, MGT065H, MGT068H, ECMB15H, ECMB38H, ECMC31H, ECMC32H

Strategic Management

SPECIALIST PROGRAM IN MANAGEMENT AND HUMANITIES
Supervisor: S. Ahmed E-mail: management-supervisor-studies@isc.utoronto.ca
This program which has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in one of the disciplines of Humanities. Please see the section regarding work term requirements for specific details on courses required before each work term.

Program Requirements
The program requires the completion of the following minimum requirements as part of a 20-credit degree:
2. ECM240H, ECM240H, ECM240H, [ECMB109H or ECMB110H] & [ECMB121H]
3. [MATA329H & MATA339H] or [MATA303H & one of MATA35H, MATA36H, MATA37H]
4. all of the requirements of one of the majors from the Department of Humanities
5. students may if they wish take up to one additional FCE from among the courses in MGT and ECM

Note:
a) Items 1, 2 and 5 effectively limit the number of MGT and ECM courses to 10 FCEs (although, of course, students are only required to complete 9 FCEs in MGT and ECM). Students in this program will therefore have to complete at least 10 FCEs outside MGT and ECM, and most of these courses will naturally constitute the requirements of the Humanities program.
b) Item 3 above: The introduction of MATA232H & MATA233H is effective as of Fall 2007 and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed MATA27H and CSA20H. These courses will be offered for the last time in 2007 Summer.

SPECIALIST PROGRAM IN MANAGEMENT AND INFORMATION TECHNOLOGY
Supervisor: S. Ahmed E-mail: management-supervisor-studies@isc.utoronto.ca
This program which has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in Computer Science. Please see the section regarding work term requirements for specific details on courses required before each work term.

Program Requirements
The program requires completion of the following course requirements (16.5 FCEs) as part of a twenty-credit degree.
3. C-level courses: CSCC04H, CSCC43H, [CSCC43H or CSCC73H], MGT031H, MGT038H, MGT242H, MGT274H
4. D-level courses: CSCD03H
5. Students may, if they wish, take up to one additional FCE from among courses in MGT and ECM.

Note: Items 1, 2, 3 and 5 effectively limit the number of MGT and ECM courses to 9 FCEs (although, of course, students are only required to complete 8 FCEs in MGT and ECM). Students in the program will, therefore, have to complete at least 11 FCEs outside MGT and ECM and most of those courses will naturally constitute the requirements of the Information Technology side of the program.

SPECIALIST PROGRAM IN MANAGEMENT AND LANGUAGE (FRENCH)
Supervisor: S. Ahmed E-mail: management-supervisor-studies@isc.utoronto.ca
The Department of Management and the Department of Humanities offer a Program in Management and French. This program which has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in French. Please see the section regarding work term requirements for specific details on courses required before each work term.

Program Requirements
The Management requirements for this Program are the first 4 requirements for the Specialist in Management. The fifth requirement is waived.

Students are encouraged to take (MGT260Y) or MGT261H & MGT264H, ECM404H & ECM405H, MATA23H, MATA30H and an appropriate course(s) in French in the first year.

Note: The introduction of MATA232H and MATA233H is effective as of Fall 2007 and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed MATA27H and CSA20H. These courses will be offered for the last time in Summer 2007.

Language requirements consist of five FCEs in French, made up of A. Basic Language, B. Business Language and C. Civilization, as follows:

French
A. FRE201H, FRE202H, FRE203H, one full credit from among FRE210H, FRE212H, FRE250H
B. At least one FCE from among FRE208H, FRE209H, FRE211H, FRE218H
C. At least one half FCE from among FRE222H, FRE227H, FRE232H
D. An additional half FCE in French

The remaining courses needed to complete the degree requirement of 20 FCEs can be chosen either within or outside the Department of Management in accordance with the student's interest.
SPECIAL PROGRAM IN MANAGEMENT AND LIFE SCIENCES

Supervisor: S. Ahmed  E-mail: management-supervisor-studies@utsc.utoronto.ca

This program has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in one of the disciplines of Life Sciences. Please see the section regarding work term requirements for specific details on courses required before each work term.

Program Requirements

The program requires the completion of the following minimum requirements as part of a twenty-credit degree:

1. [MGTAD2Y] or MGTAD3H & MGTAD4H, MGTB03H, MGTB04H, MGTB05H, MGTB06H, [MGTB07Y or MGTB02H & MGTB020], MGT005H, MGT006H, MGT010H, MGT020H

2. ECMA04H & ECMA06H, ECMB02H, ECMB06H, [ECMB09Y or ECMB11H & ECMB12H]
3. [MATLAB3H & MATLAB3H] or [MATLAB3E3H & MATLAB3H/MATH1A3H]. See note below.
4. All of the requirements of one of the majors from the Department of Life Sciences
5. Students may if they wish take up to one additional PCE from among the courses in MGT and ECM

Notes:

a) Item 1, 2 and 5 effectively limit the number of MGT and ECM courses to 10 FECs (although of course students are only required to complete 9 FECs in MGT and ECM). Students in this program will therefore have to complete at least 10 FECs outside MGT and ECM, and most of these courses will naturally constitute the requirements of the Life Sciences program.

b) Because statistics is covered in ECMB11H & ECMB12H and may also be required as part of the Life Sciences major, students should be aware of exclusions in choosing their statistics courses.

c) Note re item 3 above: The introduction of MATA32H & MATA33H is effective as of Fall 2007 and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed MATA27H & CSAC20H. These courses will be offered for the last time in Summer 2007.

SPECIAL PROGRAM IN MANAGEMENT AND SCIENCE

Supervisor: S. Ahmed  E-mail: management-supervisor-studies@utsc.utoronto.ca

This program has a co-op option is designed to give students a broad exposure to all functional areas of Management as well as a solid grounding in one of the disciplines of Social Sciences. Please see the section regarding work term requirements for specific details on courses required before each work term.

Program Requirements

The program requires the completion of the following minimum requirements as part of a twenty-credit degree:

1. [MGTAD2Y] or MGTAD3H & MGTAD4H, MGTB03H, MGTB04H, MGTB05H, MGTB06H, [MGTB07Y or MGTB02H & MGTB020], MGT005H, MGT006H, MGT010H, MGT020H

2. ECMA04H, ECMA06H, ECMB02H, ECMB06H, [ECMB09Y or ECMB11H & ECMB12H]
3. [MATLAB3H & MATLAB3H] or [MATLAB3E3H & MATLAB3H/MATH1A3H].
4. All of the requirements of one of the majors from the Department of Social Sciences
5. Students may if they wish take up to one additional PCE from among the courses in MGT and ECM

Notes:

a) Item 1, 2 and 5 effectively limit the number of MGT and ECM courses to 10 FECs (although of course students are only required to complete 9 FECs in MGT and ECM). Students in this program will therefore have to complete at least 10 FECs outside MGT and ECM, and most of these courses will naturally constitute the requirements of the Social Sciences program.

b) Because statistics is covered in ECMB11H and ECMB12H, and may also be required as part of the Social Sciences major, students should be aware of exclusions in choosing their statistics courses.

c) Note related to point 3 above: The introduction of MATA32H & MATA33H is effective as of Fall 2007 and affects all students admitted to U of T Scarborough in the Fall of 2007 or after. Students from previous years should have completed MATA27H & CSAC20H. These courses will be offered for the last time in Summer 2007.

CERTIFICATE IN BUSINESS

Website: www.utscc.utoronto.ca/~mgmt

The Department of Management also offers a Certificate Program for non-degree students. (See the Degrees section of this Calendar for details.) Non-degree students interested in this Certificate Program should visit the Department website.

NON-DEGREE STUDENTS IN MANAGEMENT AND ECONOMICS

Website: www.utscc.utoronto.ca/~mgmt

Non-degree students may be allowed to take individual courses as credits towards professional certification (for example in accounting or human resource management). Students may take courses if they have fulfilled the prerequisites or have the permission of the Supervisor.

Non-degree students will be admitted to courses only if there is room after regular degree students in Management Programs have been accommodated. Applicants must provide specific information regarding previous education and work experience. To assist in designing individual
course selection, the application form will ask about one's educational objectives. Applicants may begin in the Fall, the Winter or the Summer Session. Regular application deadlines apply, as per the Department website listed above.

CAREERS IN ACCOUNTANCY

U of T Scarborough offers a significant number of courses which have been recognized as meeting part of the educational training of Chartered Accountants, Certified General Accountants and Certified Management Accountants. Appropriate Co-op work terms with designated C.A. firms will be recognized by the Institute of Chartered Accountants of Ontario as part of their internship requirement. Brochures describing the various Programs and listing the recognized University of Toronto Scarborough courses are available from the Career Centre (416-287-3701).

MGTA63H3 Introduction to Management

Introduction to the process of management (planning, organizing, controlling, and directing), the functional components of profit and nonprofit organizations (accounting, finance, marketing, personnel, etc.), and the organization's role within a broader context, including ethical and societal considerations. This course should be taken before any other MGT courses.

Exclusion: Any other MGT course except BIS 5806 for students in Programs, COM 1101H, MGMT101H, MGMT202H

MGTA63H3 Introduction to Management I

This course serves as an introduction to the process of management, including planning, organizing and the role of management within the broader business community. This course should be taken before any other MGT courses.

Exclusion: MGTA62Y, COM 1101H, MGMT101H

MGTA64H3 Introduction to Management II

This course serves as an introduction to the functional areas of business, including accounting, finance, production and marketing. It builds on the material covered in MGTA63H.

Exclusion: MGTA62Y, MGMT101H, MGMT202H

Prerequisite: MGTA63H

MGTB03H3 Management Accounting

An introduction to management and cost accounting with an emphasis on the use of accounting information in managerial decision-making. Topics include patterns of cost behaviour, transfer pricing, budgeting and control systems.

Limited enrolment: Enrollment is limited to students registered in Programs requiring this course.

Exclusion: MGT123H, MGT222H & MGT232H, VPA103H

Prerequisite: [ECMA602Y or ECMA604H & ECMA608H] or [ECMA601H & ECMA608H] or [ECMA603Y] & MGT205H

MGTB04H3 Principles of Marketing

An introduction to basic concepts and tools of marketing designed to provide students with a conceptual framework for the analysis of marketing problems. The topics include: an examination of buyer behaviour, market segmentation; the basic elements of the marketing mix. Enrollment is limited to students registered in Programs requiring this course.

Limited enrolment: 60

Exclusion: MGTA62Y, MGT204H

Prerequisite: MGTA62Y or [MGTA603H & MGTA604H]

MGTB05H3 Financial Accounting I

Together with MGTB06H, this course provides a rigorous introduction to accounting techniques and to the principles and concepts underlying these techniques. The preparation of financial statements is addressed from the point of view of both preparers and users of financial information.

Exclusion: MGT210H, MGT220H, VPA103H

Prerequisite: MGTA62Y or [MGTA603H & MGTA604H]. Students admitted into the Management Program directly from high school and students registered in Programs requiring this course may take MGTA62Y or [MGTA603H & MGTA604H] concurrently.

MGTB05H3 Financial Accounting II

This course is a continuation of MGTB05H. Students are encouraged to take it immediately after completing MGTB05H. Technical topics include the reporting and interpretation of debt and equity issues, ownership equity, cash flow statements and analysis. Through cases, the discussion of treatment and disclosure are discussed, and the development of professional judgment is encouraged.

Exclusion: MGT120H, MGT220H, VPA103H

Prerequisite: MGTB05H

MGTB23H3 Managing People in Organizations

An introduction to micro-organizational behaviour theories from both conceptual and applied perspectives. Students will examine a variety of theories and concepts to help them develop an understanding of the behaviour of individuals in all types of organizational settings. Topics covered include: Individual differences, motivation, and job design, work attitudes, decision making, leadership.

Exclusion: MGTA62Y, MGT223H

Prerequisite: MGTA62Y or [MGTA603H & MGTA604H]

MGTB27Y3 Managing People and Groups in Organizations

An introduction to micro- and macro-organizational behaviour theories from both conceptual and applied perspectives. Students will develop an understanding of the behaviour of individuals and groups in different organizational settings. Topics covered include: Individual differences, motivation, and job design, organizational design, culture, and innovation, group dynamics and inter-group relations.

Exclusion: MGT226H, MGT232H, MGTB29H

Prerequisite: MGTA62Y or [MGTA603H & MGTA604H]

MGTB29H3 Managing Groups and Organizations

An introduction to the practical and theoretical aspects of macro-organizational behaviour. Building on MGTB23H, students will be introduced to theoretical and practical aspects of macro-organizational levels of behaviour that tackle management issues at group and organizational levels of analysis. Topics covered include: organizational design, culture, innovation, power and politics, group dynamics and organizational change.

Exclusion: MGTB227Y, MGT232H

Prerequisite: MGTB23H

MGTC02Y3 Introductory and Intermediate Finance

A treatment of basic and analytical tools in financial management. Using the concept of time value of money and the discount cash flow framework, the course will examine valuations of bonds, stocks and derivative securities, and tackle capital budgeting problems. Other topics include: cost of capital, and financial decision-making, and international finance.

Exclusion: MGT331Y, MGT332Y, MGT333H, MGT39Y

Prerequisite: [ECMB31H or ECMB30] or [MGTB01H] & MGTB03H

MGTC03H3 Principles of Finance

An introduction to basic concepts and analytical tools in financial management. Building on the fundamental concept of time value of money, the course will examine stock and bond valuations and capital budgeting under certainty. Also covered are risk-return trade-off, financial planning and forecasting, and long-term financing decisions.

Limited enrolment: 60

Exclusion: ACCT401H, ACCT401Y, MGT302Y, MGT332Y, MGT39Y

Prerequisite: [ECMB30Y or ECMB31H] & [MGTB01H] & MGTB03H

MGTC06H3 Intermediate Management Accounting

An examination of various cost accumulation and performance evaluation systems and decision-making tools. Topics include job and process costing, flexible budgeting, and variance analysis and cost allocations.

Limited enrolment: 60

Exclusion: MGT123H, MGT323H

Prerequisite: MGTB03H
Together with MGTC308H3, this course examines financial reporting in Canada. Through case analysis and the application of the technical material covered, students will build on their knowledge covered in MGTB05H3, MGTB06H3, and, to a lesser extent, MGTB03H3.
Limited enrolment: 60
Exclusion: MGTC22H4, MGTC22H5
Prerequisite: Completion of 10 CCEs including MGTB06H3 and MGTB03H3.

MGTC308H3 Intermediate Financial Accounting II
This course is a continuation of MGTC307H3. Students will further develop their case writing and technical skills and professional judgment through the study of several complex topics. Topics include leases, bonds, pensions, future taxes and earnings per share. Students must complete MGTC307H3 before attempting this course.
Limited enrolment: 60
Exclusion: MGTC22H4, MGTC22H5
Prerequisite: MGTC307H.

MGTC309H1/3 Intermediate Finance
This course covers mainstream finance topics. Besides a deeper examination of certain topics already covered in MGTC309H1, the course will investigate additional subjects such as working capital management, capital budgeting under uncertainty, cost of capital, capital structure, dividend policy, leasing, mergers and acquisitions, and international financial management.
Limited enrolment: 60
Exclusion: MGTC328Y, (MGTC331Y), MGTC337Y
Prerequisite: MGTC309H1.

MGTC310H3 Management Control Systems
An examination of how organizations support the implementation of strategy through the design of planning processes, performance evaluation, reward systems and HR policies, as well as corporate culture. Class discussion will be based on case studies that illustrate a variety of systems designs in manufacturing, service, financial, marketing and professional organizations, including international context.
Limited enrolment: 60
Exclusion: MGTC221H
Prerequisite: MGTC308H3 & [MGTC228H3 & MGTC229H3] or MGTC227Y.

MGTC11H3 Management Information Systems
This course is intended to help students understand the information systems that are a critical component of modern organizations. The course covers the technology, design, and application of data processing and information systems, with emphasis on managerial judgment and decision-making.
Limited enrolment: 60
Exclusion: MGTC317H
Prerequisite: MGTC28H3 & [MGTC22H3 & MGTC22H4 or MGTC22Y]

MGTC12H3 Advertising: From Theory to Practice
An introduction to the basic communication tools used in planning, implementing and evaluating promotional strategies. The course reviews basic findings of the behavioral sciences dealing with perception, personality, psychological appeal, and their application to advertising as persuasive communication. Students will gain experience preparing a promotional plan for a small business. The course will rely on lectures, discussions, audio-visual programs and guest speakers from the local advertising industry.
Limited enrolment: 60
Exclusion: MGTC215Y, MGTC249H
Prerequisite: MGTC11H.

MGTC13H3 New Ways of Work: Consulting, Contracting & Freelancing
With the changing nature of employment, students are increasingly likely to find careers involving a series of short-term contracts or project related assignments. The successful manager of the future will not have "jobs" but a portfolio of adaptable and transferable skills. The course examines case studies of what consultants do, and why organizations engage consultants.
Limited enrolment: 60
Prerequisite: MGTC30H3 & [MGTC228H3 & MGTC229H3] or MGTC227Y.

MGTC21H3 Judgement and Decision Making
This course concerns the elements of behavioral research as applied to consumer's decision making models and how this can be used to predict decisions within a marketing and consumer oriented environment. It also delves into psychology, economics, statistics, and other disciplines.
Limited enrolment: 60
Prerequisite: MGTC20H3.

MGTC18H3 Canadian Income Taxation I
First of two courses in Canadian income taxation. It provides the student with detailed instruction in income taxation as it applies to individuals and small unincorporated businesses. Current tax laws are applied to practical problems and cases. Topics include employment income, business and property income, and computation of tax for individuals.
Limited enrolment: 60
Exclusion: MGTC25Y, MGTC423H
Prerequisite: Completion of at least ten full-credit equivalents including MGTB05H3 & MGTB06H3 & MGTC30H3.
MGTC307H3 is highly recommended.

MGTC19H3 Canadian Income Taxation II
This course is designed to give the student an understanding of the more complex issues of federal income taxation, by applying current tax law to practical problems and cases. Topics include: computation of corporate taxes, corporate distributions, corporate reorganizations, partnerships, trusts, and individual and corporate tax planning.
Limited enrolment: 60
Exclusion: MGTC215Y, MGTC249H
Prerequisite: MGTC11H.

MGTC181H3 Human Resource Management
An introduction to current human resource practices in Canada, emphasizing the role of Human Resource Management in enhancing performance, productivity and profitability of the organization. Topics include recruitment, selection, training, career planning and development, diversity and human rights issues in the work place.
Limited enrolment: 60
Exclusion: MGTC468H
Prerequisite: [MGTC28H3 & MGTC29H3] or MGTC227Y.

MGTC22H3 Diversity in the Workplace
Examines the nature and effects of diversity in the workplace. Drawing on theories and research from psychology, the course will examine topics like stereotyping, harassment, discrimination, organizational climate for diversity, conflict resolution within diverse teams, and marketing to a diverse clientele.
Limited enrolment: 60
Prerequisite: [MGTC228H3 & MGTC229H3] or MGTC227Y.

MGTC241H3 Managerial Skills
This course deals with the development of managerial skills. It provides opportunities for students to develop skills related to the conceptual knowledge addressed in earlier courses. The objective is to improve students' own personal management competencies in areas such as interpersonal relations, decision making/problem solving, motivating, leading, and teamwork.
Limited enrolment: 60
Exclusion: MGTC221H
Prerequisite: [MGTC228H3 & MGTC229H3] or MGTC227Y.

MGTC313H3 The Legal Environment of Business I
An introduction to the Canadian legal system and its effects on business entities. The course includes an examination of the Canadian court structure and a discussion of the various forms of business ownership, tort law, contract law, and property law.
Limited enrolment: 60
Exclusion: MGTC311H
Prerequisite: Completion of at least ten full-credit equivalents including [MGTB05H3 & MGTB06H3] or MGTC227Y.
MGT302H The Legal Environment of Business II
This course further examines the issues raised in Legal Environment of Business. It focuses on relevant areas of law that impact business organizations such as consumer protection legislation and agency and employment law, and it includes a discussion of laws affecting secured transactions and commercial transactions.
Limited enrolment: 60
Exclusion: MGT394H
Prerequisite: MGT3C1H

MGT339H Event and Sponsorship Management
Event and Sponsorship Management involves the selection, planning, and execution of specific events as well as the management of sponsorship rights. This will involve the integration of management skills, including finance, accounting, marketing, and organizational behavior, required to produce a successful event.
Limited enrolment: 60
Prerequisite: Completion of at least 10 full-credit equivalents in the B.R.A. program

MGT353H Narratives on Management and Organization
Through the analysis of works of fiction and non-fiction dealing with managers in both private and public sector organizations, the course explores the ethical dilemmas, organizational politics, and career choices that managers can expect to face.
Limited enrolment: 55
Prerequisite: MGT823H & MGT829H

MGT368H Management Communications
In this course students will learn skills and techniques to communicate effectively in an organization. Creativity, innovation, and personal style will be emphasized. Students will build confidence in their ability to communicate effectively in every setting. Those completing this course will experience a high degree of personal satisfaction.
Limited enrolment: 40
Prerequisite: MGT823H & MGT829H or MGT827Y

MGT384H Entrepreneurship
This course focuses on the skills required and issues—personal, financial, sales, operational, personal—entrepreneurs face as their smaller business grows from start-up to maturity. The course should interest those who wish to own or seek careers with an entrepreneurial business in either the "skill" or "new" economies.
Limited enrolment: 60
Exclusion: MGT499F
Prerequisite: [MGT4A2Y or MGT4A9H] & [MGT823H & MGT829H or MGT827Y]

MGT393H New Venture Creation and Planning
Aimed at students interested in launching their own entrepreneurial venture. The core of the course is the development of a complete business plan which details the student's plans for the venture's initial marketing, finance, and growth. This course provides a framework for the evaluation of the commercial potential of business ideas.
Prerequisite: MGT984H & MGT985H & MGT986H

MGT413H Management Policy and Strategy
Begin with an examination of the concept of business mission. Students are then challenged to evaluate the external and industry environments in which businesses compete, to identify sources of competitive advantage and value creation, and to understand and evaluate the strategies of active Canadian companies.
Limited enrolment: 60
Exclusion: MGT422H, YPA131H
Prerequisite: [MGT482Y or MGT4A8H & MGT4A9H] & [MGT823H & MGT827Y] or [ECMB229H or ECMB239H]

MGT424H Public Management
An introduction to key public sector management processes-planning, budgeting, human resource management and to the New Public Management. Special emphasis on applications of information technology to service delivery and to governance. Makes use of cases, and simulations to develop management skills in a public sector setting.
Limited enrolment: 35
Prerequisite: [MGT823H or MGT827Y] or [POL851H & POL852H or (POL851H)]

MGT444H International Business Management
This course deals with problems faced by managers of international business, such as development of a global business strategy, location of operations, dealing with local cultures in marketing and human resource management, and negotiations with host governments.
Limited enrolment: 60
Exclusion: MGT499H
Prerequisite: [MGT4A2Y or MGT4A9H & MGT4A8H] & [MGT823H & MGT829H or MGT827Y]

MGT454H The Changing World of Business - Government Relations
How regulation, privatization and globalization are affecting today's managers. Most major management issues and business opportunities involve government (domestic or foreign) at some level—whether as lawmaker, customer, partner, investor, tax-collector, grant-giver, licensor, dealmaker, friend or enemy. This course provides students with an understanding of the issues and introduces some of the skills necessary to successfully manage a business's relationship with government.
Limited enrolment: 60
Prerequisite: MGT4A02Y or [MGT4A03H & MGT4A9H]

MGT525H Business Negotiation
An introduction to the theory and practice of negotiation in business. This course develops approaches and tactics to use in different forums of negotiation, and to introduction to traditional and emerging procedures for resolving disputes. To gain practical experience, students will participate in exercises which simulate negotiations.
Limited enrolment: 60
Prerequisite: [MGT4A2Y or MGT4A9H & MGT4A8H] & [MGT823H & MGT829H or MGT827Y]

MGT535H Introduction to Industrial Relations
An overview of the industrial system and process. The course will introduce students to: industrial relations theory, the roles of unions and management, law, strikes, grievance arbitration, occupational health and safety, and the history of the industrial relations system. Students will participate in collective bargaining simulations.
Limited enrolment: 60
Prerequisite: Completion of at least ten full-credit equivalents including [ECMA011H & ECMA008H (ECMA013Y)] or [ECMA008H & ECMA011H] & [MGT4A02Y or MGT4A9H & MGT4A9H]

MGT553H Planning and Budgeting for Public Institutions
The theory and practice of planning and resource allocation in public institutions. After presenting theories of planning and resource allocation in public institutions, the course will illustrate them by means of case studies of challenges faced by universities and colleges. Instruction will be a combination of lecture, discussion, and case studies.
Limited enrolment: 20
Prerequisite: MGT820H

MGT568H Educational Finance and Economics
This course is about the financing of schools, colleges, and universities; how resources are raised, how they are allocated and how they are economically justified. The course is also about connections between investments in education and economic growth, between systems and allocation, between forms of budgets and between funding and performance.
Limited enrolment: 20
Prerequisite: MGT820H

MGT589H Management Ethics
Increasingly, the marketplace has come to reward -- and government regulators have come to demand -- a sophisticated managerial approach to the ethical problems that arise in business. Topics include ethical issues in international business, finance, accounting, advertising, intellectual property, environmental policy, product and worker safety, new technologies, affirmative action, and whistle-blowing.
Limited enrolment: 60
Exclusion: PHIL800H
Prerequisite: MGT4A2Y or [MGT4A03H & MGT4A9H]
MGTC1983 Personal Financial Management
This course covers goal setting, personal financial statements, debt and credit management, risk management, investing in financial markets, real estate appraisal, and mortgage financing, tax saving strategies, retirement and estate planning. The course will benefit students in managing their personal finances, and in their future careers with financial institutions.
Limited enrolment: 50
Exclusion: [MGTD708] 
Prerequisite: [MGTC031] or [MGTD02Y]

MGTC7193 Introduction to Derivatives Markets
This course introduces students to the fundamentals of derivatives markets covering futures, swaps, options and other financial derivative securities. Detailed descriptions of, and basic valuation techniques for popular derivative securities are provided. As such, the risk management of derivative securities is introduced, its applications in investments and general risk management will be discussed.
Limited enrolment: 50
Exclusion: [MGTD401] 
Prerequisite: [ECMB111H] or [ECMB09V] & [MGTC031] or [MGTD02Y] 
Corequisite: [MGTC098]

MGTC4453 Analysis for Decision-Making
An introduction to the applications of Management Science in decision-making situations involving organizations like manufacturing, service and non-business institutions. Topics include linear programming, integer programming, transportation, assignment and transshipment problems; waiting line models; and decision analysis. Many of the techniques learned involve determination of optimal decision subject to various constraints.
Limited enrolment: 60
Exclusion: [ECMB202H] & [ECMB111H] & [ECMB212H] or [ECMB09V]
Prerequisite: [MGTC031] or [MGTD02Y]

MGTC7593 Operations Management: A Mathematical Approach
Introduction to the broad scope and major strategic, tactical, and operational decisions in Operations Management. Topics include: forecasting, long-range capacity planning, location and layout of facilities, aggregate planning, project management, inventory control, and production scheduling.
Limited enrolment: 60
Exclusion: [MGTC608], [MGTD474] 
Prerequisite: [MGTC445]

MGTD6003 Marketing in the Information Age
Information technology has had a radical impact on the marketing of even common consumer goods. This course allows students to become conversant with the implications and implementations of internet-related changes on business. Students will gain experience in critiquing web-sites of existing companies.
Limited enrolment: 40
Prerequisite: [CSCA081H], & [MGTD04H] or [MGTC04H]

MGTD7097 Market Research
A decision oriented course, which introduces students to the market research process. Alternative research approaches (exploratory, descriptive, causal), data collection, sampling, analysis and evaluation procedures are discussed. Theoretical and technical considerations in design and execution of market research are stressed. Instruction involves lectures and projects including computer analysis.
Limited enrolment: 40
Exclusion: [MGTD558] 
Prerequisite: [ECMB111H] & [ECMB12H] or [ECMB09V] or [MGTD10H] & [MGTD04H] or [MGTC04H]

MGTD1393 Consumer Behaviour
This course provides an overview of the role of products in the lives of consumers. Drawing on theories from psychology, sociology and economics, the course provides (1) a conceptual understanding of consumer behaviour (e.g. why people buy), and (2) an experience in the application of these concepts to marketing decisions.
Limited enrolment: 30
Prerequisite: [MGTD031] & [MGTD04H] or [MGTD02Y] & [MGTD04H] or [MGTC04H]

MGTD1493 Leadership and Management in the 21st Century
The information age, intense global competition, and an increasingly diverse workforce have ushered in the need for a new type of leader. This seminar will draw on empirical research and lessons learned from exceptional leaders to guide students in becoming the kind of leaders that will thrive in the new millennium.
Limited enrolment: 30
Prerequisite: [MGTD32H] & [MGTD09H] or [MGTD02Y] & [MGTD04H] 

MGTD1533 Commercial Dispute Resolution
This course examines the theory and practice of models of dispute resolution for the settlement of commercial conflict. Through readings, classroom lectures and independent research, students will consider alternate dispute resolution models of advanced negotiation, mediation and arbitration as alternatives to traditional court-based litigation.
Limited enrolment: 30
Prerequisite: [MGTD52H]

MGTD2093 Marketing Management
This course builds on the introductory course in marketing and takes a pragmatic approach to develop the analytical skills required of marketing managers. The course is designed to help improve skills in analyzing marketing situations, identifying market opportunities, developing marketing strategies, making concise recommendations, and defending these recommendations.
Limited enrolment: 40
Exclusion: [MGTD031] & [MGTD04H]
Prerequisite: [MGTD04H] or [MGTD04H] & 1.0 full credit equivalent of C- or D-level marketing electives from within [MGTD12H] or [MGTD12H] & [MGTD20H] & [MGTD04H] & [MGTD04H] & [MGTD04H]

MGTD2493 Occupational Health and Safety Management
Occupational health and safety is a management function, however, many managers are not prepared for this role when they arrive in their first jobs. This course will cover the physical, psychological, social, and legal environments relevant to health and safety in the workplace.
Limited enrolment: 30
Prerequisite: [MGTD23H] & [MGTD29H] or [MGTD04H] & [MGTD04H]

MGTD2593 Human Resources Recruitment and Selection
An in-depth look at recruitment and selection practices in organizations. Students will learn about organizational recruitment strategies, the legal issues surrounding recruitment and selection, how to screen job applicants, and the role of employee testing and employer interview in making selection decisions.
Prerequisite: [MGTD23H] & [MGTD29H] or [MGTD04H] & [MGTD22H] & [MGTD24H] or [MGTD24H]

MGTD2693 Training and Development
This course is designed to teach students about the training and development process. Topics include how training and development fits within the larger organizational context as well as learning, needs analysis, the design and delivery of training programs, on and off-the-job training methods, the transfer of training, and training evaluation.
Prerequisite: [MGTD22H]

MGTD2793 Human Resources Planning and Strategy
This course is designed to provide students with an understanding of strategic human resources management and the human resource planning process. Students will learn how to forecast, design, and develop human resource plans and requirements using both quantitative and qualitative techniques.
Limited enrolment: 40
Prerequisite: [MGTD22H]
MGTD56H3 Advanced Accounting Case Analysis
This capstone case analysis course stresses the critical thinking skills required of Management program graduates. Due to its integrative nature, emphasis on current accounting issues, the course is primarily directed towards accounting students. Cases will strategically include the specific competency areas outlined in the CICA's CA Candidates Competency Map.
Limited enrolment: 40
Prerequisite: MGT0C7H & MGT0C8H

MGTD60H3 Auditing
An introduction to the principles and practice of auditing. The course is designed to provide students with a foundation in the theoretical and practical approaches to auditing by emphasizing auditing theory and concepts, with some discussion of audit procedures and the legal and professional responsibilities of the auditor.
Limited enrolment: 60
Prerequisite: MGT0C7H

MGTD62H3 Advanced Auditing
An extension of the study of areas covered in the introductory audit course and will include the application of risk and materiality to more advanced topic areas such as pension and comprehensive auditing. Other topics include special reports, future-oriented financial information and prospectuses. This will include a review of current developments and literature.
Limited enrolment: 40 Exclusion: MGT0D6Y
Prerequisite: MGT0D6Y

MGTD62H3 Auditing in a Computer Environment
An examination of the problems related to auditing computer system generated financial data, including consideration of risks and exposure, evaluation of controls and audit strategy development. Attention will also be given to computer-assisted audit techniques.
Limited enrolment: 60 Exclusion: MGT0D6Y
Prerequisite: MGT0D6Y

MGT0D6Y3 Advanced Auditing and Auditing in a Computer Environment
An extension of the study of areas covered in the introductory audit course. This course will also examine the problems related to auditing computer system generated financial data (including consideration of risks and exposure, evaluation of controls and audit strategy development).
Exclusion: MGT0D61H, MGT0D62H
Prerequisite: MGT0D61H

MGT0D7H3 Advanced Financial Management
This course reinforces and expands upon the topics covered in MGT0C0H and MGT0C0H. It examines more advanced and complex decision making situations for a financial manager faced in such areas as capital budgeting, capital structure, financing, working capital management, dividend policy, leasing, mergers and acquisitions, and risk management.
Limited enrolment: 50
Prerequisite: MGT0C0H or MGT0C0Y

MGT0D7H3 Mergers and Acquisitions: Theory and Practice
This course provides a general introduction to the important aspects of M&A, including valuation, restructuring, divestiture, takeover defenses, deal structuring and negotiations, and legal issues.
Limited enrolment: 40 Exclusion: MGT0D51H
Prerequisite: MGT0C0H or MGT0C0Y

Mathematics

Faculty List
E.W. Ellers, Ph.D. (Humburg), Professor Emeritus
R.W. Sharp, M.Sc., Ph.D. (York), Professor Emeritus
J. Freudlander, M.A. (Waterloo), Ph.D. (Penn. State), F.R.S.C., University Professor
R.O. Buchweitz, Ph.D. (Hannover), Professor
M. Goldsheim, Ph.D. (Tulane), Professor
L.C. Jeffrey, A.B. (Princeton), M.A. (Cambridge), D. Phil. (Oxford), Professor
E. Mendelsohn, B.Sc., M.Sc. (McGill), Ph.D. (McGill), Professor
P. Selick, B.Sc., M.Sc., Ph.D. (Princeton), Professor
P. Sastry, Ph.D. (Purhar), Associate Professor
I. Schurk, D.Phil. (Oxford), Associate Professor
A. Balchan, Ph.D. (Stanford), Assistant Professor
B. Sarosy, Ph.D. (Budapest), Assistant Professor
B. Vrana, Ph.D. (Berkeley), Assistant Professor
N. Cherednichen, M.Sc. (Khartov), Associate Professor
E. Moore, M.A. (Memorial), Ph.D. (Toronto), Senior Lecturer
R. Gattrell, Ph.D. (Queen's), Lecturer
X. Rang, B.Sc., M.Sc., Ph.D. (Glasgow), Lecturer
Our Mathematics began in the ancient Mesopotamian civilizations. The Babylonians already knew much of the mathematics taught traditionally in our schools. Their algebra and geometry was phrased in terms of crops and fields and money. Since the Renaissance, much of mathematics has come from problems in physics and astronomy, for example, calculus arose from problems in mechanics. In turn mathematics has provided the theoretical framework and tools in the Physical Sciences. In the 19th century some parts of mathematics appeared to develop away from their origins in the physical world, To the great surprise of many scientists and mathematicians, some of the "pure" mathematics has turned out to be essential in many aspects of 20th century science. Differential geometry provides the language for general relativity and cosmology, and Hilbert space theory and group representations are the tools for quantum mechanics. Similarly, graph theory, combinatorics and number theory play a major role in computer science.

The Specialist and Major Programs in Mathematics and the Specialist Program in Mathematics and its Applications are eligible for inclusion in the Co-operative Program in Physical Sciences and in the Concurrent Teacher Education Program (CTEP). Please refer to the Physical Sciences section, the Co-operative Programs section and the Concurrent Teacher Education section of this Calendar for further information.

Guidelines for 1st year course selection

Students intending to complete Mathematics programs should include the following in their first year course selection:

- Specialist Programs in Mathematics: CSCE48H, MATA23H, MATA30H, MATA37H, PHYA10H, PHYA21H
- Specialist Programs in Mathematics & Its Applications: [CSCE48H or PSCB57H], MATA23H, MATA30H, MATA37H
- Major Program in Mathematics: [CSCE48H or PSCB57H], MATA30H, [MATA36H or MATA37H]

Students might also want to include one of the recommended writing courses.

Science Engagement Courses

For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

SUPERVISOR OF STUDIES: E. Moore (416-287-7267) Email: emoore@ntcutoronto.ca

The Supervisor of Mathematics is designed to give students a thorough grounding in the main areas of Mathematics, together with an understanding of the close relationship between Mathematics and other Sciences. It provides an excellent education for students who may decide to pursue a career in research, or who wish to go on to careers in non-mathematics fields.

Writing Requirement: Students are required to take a course from the following list of courses by the end of their second year.


Program Requirements

1. (0.0 full credit equivalents - FCEs):
   - CSCE48H Introduction to Computer Science
   - MATA23H Linear Algebra I
   - MATA30H Calculus 1
   - MATB34H Complex Variables
   - MATB37H Differential Equations II

2. (0.0 full credit equivalents - FCEs):
   - CSCE48H Introduction to Computer Science
   - MATA23H Linear Algebra I
   - MATA30H Calculus 1
   - MATB34H Complex Variables
   - MATB37H Differential Equations II

3. (0.5 FCEs - One of):
   - CSCE50H Numerical Algebra and Optimization
   - CSCE51H Numerical Approximation, Integration and Ordinary Differential Equations
   - MATD09H Introduction to Mathematical Logic
   - MATD16H Coding Theory and Cryptography
   - MATD32H Graph Theory and Algorithms for its Applications

4. (1.0 FCEs - One of):
   - MATD11H Topics in Mathematics I
   - MATD11H Topics in Mathematics II
   - MATD12H Topics in Mathematics III

5. (1.0 FCE - One of):
   - MATD31H Introduction to Combinatorics

6. (1.0 FCE - One of):
   - MATC34H Complex Variables
   - MATC37H Differential Equations II

7. (0.5 FCE - One of):
   - CSCE51H Numerical Approximation, Integration and Ordinary Differential Equations
   - MATD09H Introduction to Mathematical Logic
   - MATD16H Coding Theory and Cryptography
   - MATD32H Graph Theory and Algorithms for its Applications
   - MATD41H Introduction to Combinatorics

8. (1.0 FCE from MAT at B-, C+, or D-level)
   - PSCD01H Current Questions in Mathematics and Science

Note: PSCD01H is a required course for ETP students

Recommended course: PHYB21H
MAJOR PROGRAM IN MATHEMATICS

Supervisor of Studies: D. Grinnell (416-287-5655) Email: dgrinnell@utsc.utoronto.ca

Recommended Writing Course: Students are urged to take a course from the following list of courses by the end of their second year.


Program Requirements

This program requires eight full credits.

1. Core Courses:
   - [CSCA48H] Introduction to Computer Science
   - [PSCB57H] Introduction to Scientific Computing
   - MAT2A3H Linear Algebra I
   - MAT3A0H Calculus I
   - [MAT3A6H] Calculus II for Physical Sciences
   - [MAT3A7H] Calculus II for Mathematical Sciences (recommended)
   - MAT4B4H Linear Algebra II
   - MAT4B4H Calculus of Several Variables I
   - MAT4B4H Calculus of Several Variables II
   - STAB02H Introduction to Probability
   - [MATC01H] Groups and Symmetry
   - [MATC15H] Introduction to Number Theory

2. Analysis: 1.5 FCE from:
   - [MATB64H, MATC25H, MATC01H, MATC02H, MATC09H, MATC15H, MATC32H, MATC48H, MATC53H]
   - 4.0 FCE from
     - CSC C-level, CSC D-level, MATC16H, MATC23H, MATC46H, MATC30H, STAB57H, any STA C-level course, any STA 300, STA 400 level course on the St. George campus

SPECIALIST PROGRAM IN MATHEMATICS AND ITS APPLICATIONS

Supervisor of Studies: E. Moore (416-287-7267) Email: emoore@utsc.utoronto.ca

The specialist program in Mathematics and its Applications is recommended to students with strong interests in mathematics and with career goals in areas such as teaching, computer science, the physical sciences and statistics. The program is flexible; there is a core of courses in mathematics and related disciplines, but you can choose among several areas of concentration.

Writing Requirement: Students are required to take a course from the following list of courses by the end of their second year.


Program Requirements

Core for all program streams:

1. (2.0 full credit equivalents):
   - [CSCA48H] Introduction to Computer Science
   - [PSCB57H] Introduction to Scientific Computing
   - MAT2A3H Linear Algebra I
   - MAT3A0H Calculus I
   - [MAT3A1H] Calculus I (OAC)
   - [MAT3A6H] Calculus II for Physical Sciences
   - [MAT3A7H] Calculus II for Mathematical Sciences (recommended)

2. (2.5 FCE):
   - MATB44H Linear Algebra II
   - MATB44H Techniques of the Calculus of Several Variables I
   - MATB44H Techniques of the Calculus of Several Variables II
   - MATB44H Introduction to Analysis
   - MATB44H Differential Equations I

3. (1.0 FCE):
   - STAB52H An Introduction to Probability
   - STAB57H An Introduction to Statistics

4. (0.5 FCE):
   - MATC01H Groups and Symmetry

5. (0.5 FCE):
   - MATC34H Complex Variables
   - [PSCB57H] is required for the Computational Physical Sciences stream
   - [STAB52H and STAB57H] must be taken in second year for the Statistics stream

AREAS OF CONCENTRATION:

Teaching Stream:

1. (2.0 FCE):
   - MATC02H Fields and Groups
   - MATC15H Introduction to Number Theory
   - MATC25H Classical Plane Geometry and their Transformations
   - MATC32H Graph Theory and Algorithms for its Applications
   - [MATC44H] Introduction to Combinatorics

2. (1.5 FCE): Three of:
   - MATB64H Linear Programming and Optimization
   - MATC09H Introduction to Mathematical Logic
   - MATC14H Coding Theory and Cryptography
   - MATC35H Chaos, Fractals and Dynamics
   - MATC37H (MATC38H) Introduction to Real Analysis
   - MATC46H Differential Equations II
   - MATC63H Differential Geometry I
   - MATC65H Complex Variables II
   - MATC90H Beginnings of Mathematics

3. (2.0 FCE): Four C- or D-level CSC, MAT or STA half-credit courses

4. (0.5 FCE):
   - PS2D02H Current Questions in Mathematics and Science

   - CSCD03H Social Impact of Information Technology

Note: Early Teacher Project (ETP) students are required to take PS2D01H.
MATA2H3 (NON-CREDIT): Preparation for Calculus I
Rates of change, concepts and skills of differential calculus applied to polynomials, rational, exponential, and logarithmic functions; may include background material on functions, analytic geometry, and trigonometry, as well as on limits. 

Exclusion: MATA2H3 is a NON-CREDIT course limited to non-Ontario students whose high school mathematics preparation is strong but does not include calculus. A grade of 60% or more in MAT3613 will be accepted as the prerequisite for MATA2H3.

Prerequisite: Grade 12 Advanced Functions and Introductory Calculus and Trigonometry.

MATA3H3 Calculus I

Exclusions: MATA3H3 may be taken in place of MAT2H3 and/or MATA3H4.

Prerequisite: Grade 12 Advanced Functions and Introductory Calculus or Grade 12 Mathematics of Data Management.

MATA3H4 Calculus II
This is a calculus course with real examples and applications of an economic nature. Topics to be covered: linear programming (geometric), introduction to financial mathematics; continuous functions including exponential and logarithmic functions with applications to finance; differential calculus of one variable; marginal analysis; optimization of single variable functions: techniques of integration.

Exclusions: MAT2H3, MAT2H4, MAT2H5, MAT3H7, MAT3H8, MAT3H9, MAT4H3.

Prerequisite: Grade 12 Advanced Functions and Introductory Calculus.
MAT23H3 Calculus for Management II
This course will introduce the students to multivariate calculus and linear algebra. Topics will include: matrix algebra; multi-variable functions; contour maps; partial and total differentiation; optimization of multi-variable functions; optimization of constrained multi-variable functions; Lagrange multipliers.
Exclusions: MAT2A7H, MAT2A9H, MAT2A3H, MAT2A7H, MAT2B0H, MAT2B2H, MAT2B3H, MAT2B5H, MAT2B7H, MAT2B9H, MAT2B9X, [MAT3A0H or (MAT3A1H & [one of Grade 12 Geometry and Discrete Mathematics or Mathematics of Data Management)]

MAT2A3H3 Calculus II for Biological Sciences
A calculus course emphasizing examples and applications in the biological and environmental sciences. Discrete probability; basic statistics: hypothesis testing, distribution analysis. Basic calculus: extrema, growth rates, diffusion rates; differential equations; population dynamics; vectors and matrices in 2 and 3 dimensions; genetics applications. Note: This course will not satisfy the Mathematics requirements for any Program in Computer and Mathematical Sciences, nor will it normally serve as a prerequisite for further courses in Mathematics.
Students who are not sure which Calculus II course they should choose are encouraged to consult with the supervisor(s) of Programs in their area(s) of interest.

MAT2B4H3 Linear Algebra II
Fields, vector spaces over a field, linear transformations; diagonalizability, invariant subspaces, Cayley–Hamilton theorem; hermitian inner product, normal, self-adjoint and unitary operators, method of least squares, introduction to coding theory.
Exclusion: MAT2A2H
Prerequisite: MAT2A3H or (MAT2A4H, MAT2A5H)

MAT2A4H3 Techniques of the Calculus of Several Variables I
Partial derivatives, gradient, tangent plane, Jacobian matrix and chain rule, Taylor series; extremal problems, external problems with constraints and Lagrange multipliers, multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.
Exclusion: MAT2A2H, MAT2A3H, MAT2A7H, MAT2A9H
Prerequisite: [MAT2A1H or (MAT2A3H & MAT2A4H)] or [MAT2A1H or MAT2A7H or (MAT2A9H & MAT2A2H)]

MAT2B4H3 Techniques of the Calculus of Several Variables II
Fourier series. Vector fields in R^n, Divergence and curl, curves, parametric representation of curves, path and line integrals, surfaces, parametric representations of surfaces, surface integrals. Greens' Theorem, Stokes' Theorem which will also be covered. An introduction to differential forms, total derivative.
Exclusion: MAT2A2H, MAT2A3H, MAT2A7H, MAT2A9H
Prerequisite: MAT2A1H

MAT2A4H3 Introduction to Analysis
Calculus revisited rigorously: properties of real numbers, limits, compactness, topology of Euclidean space, continuity, differentiability, fundamental theorem, Riemann integral.
Exclusion: MAT2A2H
Prerequisites: [MAT2A3H or (MAT2A4H & MAT2B4H)]
Corequisite: MAT2A2H

MAT2B4H3 Differential Equations I
Ordinary differential equations of the first and second order, existence and uniqueness solutions by series and integrals; linear systems of first order; non-linear equations; difference equations.
Exclusion: MAT2A0H, MAT2A8H
Prerequisites: [MAT2A3H or (MAT2A4H & MAT2A5H)]
Corequisites: MAT2A1H & MAT2A4H

MAT2B1H3 Linear Programming and Optimization
Linear programming, simplex algorithm, duality theory, interior point method; convex and concave optimization, stochastic programming; applications to portfolio optimization and operations research.
Exclusion: APM21H
Prerequisite: MAT2A1H
Corequisite: MAT2B1H

MAT2A4H3 Groups and Symmetry
Congruences and fields; Permutations and permutation groups. Linear groups, Abstract groups, homomorphisms, subgroups. Symmetry groups of regular polygons and Platonic solids, wallpaper groups, Group actions, class formula.

Costs, Lagrange's theorem. Normal subgroups, quotient groups. Emphasis on examples and calculations.
Exclusion: MAT2A0H, MAT2A4H
Prerequisite: MAT2A7H & [MAT2A2H or MAT2A4H]

MAT2C0H3 Fields and Groups
Abstract group theory: Sylow theorems, groups of small order, simple groups, classification of finite abelian groups. Fields and Galois theory: polynomials over a field; field extensions, constructibility; Galois classification of polynomials, in particular cubics; insolvability of quintics by radicals.
Exclusion: MAT2A2H, MAT2A4H
Prerequisite: MAT2A1H

MAT2C0H3 Introduction to Mathematical Logic
Predicate calculus. Relationship between truth and provability. Gödel's incompleteness theorem, First order arithmetic as an example of a first-order system, Gödel's incompleteness theorem, outline of its proof. Introduction to recursive functions.
Exclusion: MAT2A2H, CSC2A3H, [MAT2B3H & (CSC2B6H or CSC2B8H or CSC2B9H or CSC2A3H or CSC2A4H)]

MAT2C1H3 Introduction to Number Theory
Elementary topics in number theory; arithmetic functions; polynomials over the residue classes modulo m, characters on the residue classes modulo m; quadratic reciprocity law, representation of numbers as sums of squares.
Exclusion: MAT2A2H
Prerequisite: [MAT2A3H or MAT2A7H or (MAT2A4H & MAT2A8H)]

MAT2C1H3 Coding Theory and Cryptography
The main problems of coding theory and cryptography are defined. Classical linear and non-linear codes. Error correcting and decoding properties. Cryptanalysis of classical ciphers from substitution to DES and various public key systems e. g. RSA and discrete logarithms based systems.
Needed mathematical results from number theory, finite fields, and complexity theory are stated.
Prerequisite: MAT2A4H & STA2A2H
Corequisite: MAT2C1H

MAT2C1H3 recommended
MATC35H3 Complex Plane Geometries and their Transformations
An introduction to geometry with a selection of topics from the following: symmetry and symmetry groups, finite geometries and applications, non-Euclidean geometry.
Exclusion: MAT462H, MAT363H
Prerequisite: MAT232H
Corequisite: MAT30H

MATC27H3 Introduction to Topology
Exclusion: MAT327H
Prerequisite: MAT249H & MAT349H

MATC32H3 Graph Theory and Algorithms for Its Applications
Graphs, subgraphs, isomorphism, trees, connectivity, Euler and Hamiltonian properties, matchings, vertex and edge colorings, planarity, network flows and strongly regular graphs; applications to such problems as timetabling, personnel assignment, task force scheduling, travelling salesman, tournaments scheduling, experimental design and finite geometries.
Prerequisite: MAT151H or MAT152H & MAT249H
Exclusion: MAT328H

MATC34H3 Complex Variables
Theory of functions of one complex variable, analytic and meromorphic functions, Cauchy's theorem, residue calculus, conformal mappings, introduction to analytic continuation and harmonic functions.
Exclusion: MAT34H
Prerequisite: MAT249H

MATC35H3 Chaos, Fractals and Dynamics
Topics covered include: metric spaces, dynamics on the real line, fixed points, periodic points, attractors, repellors, Sharkovskii's theorem parameterized families of functions and bifurcations, period doubling, dynamics of the logistic map, symbolic dynamics, chaos, topological equivalence of the logistic map and the shift map, Newton's method; dynamics on the complex line, iterations of rational functions, Julia sets, Mandelbrot set.
Exclusion: MAT35H
Prerequisite: MATB43H

MATC37H3 Introduction to Real Analysis
Exclusion: MAT337H, MAT389H
Prerequisite: MAT34H

MATC44H3 Introduction to Combinatorics
Basic counting principles, generating functions, permutations with restrictions. Fundamentals of graph theory with algorithms; applications (including network flows). Combinatorial structures including block designs and finite geometries.
Exclusion: MAT34H
Prerequisite: MATB4H

MATC46H3 Differential Equations II
Sturm-Liouville problems, Green's functions, special functions (Bessel, Legendre), partial differential equations of second order, separation of variables, integral equations, Fourier transform, stationary phase method.
Exclusion: APM34H
Prerequisite: MATB4DH & MAT249H
Corequisite: MATB42H

MATC56H3 Geometric Design
Curves and surfaces in Euclidean 3-space: Serret-Frenet frames and the associated equations, the first and second fundamental forms and their integrability conditions, intrinsic geometry and parallelism, the Gauss-Bonnet theorem.
Exclusion: MAT36H
Prerequisite: MATB43H

MATC58H3 Complex Variables II
Applications of complex analysis to geometry, physics and number theory. Fractional linear transformations and the Lorentz group. Solution to the Dirichlet problem by conformal mapping and the Poisson kernel, The Riemann mapping theorem. The prime number theorem.
Exclusion: MAT34H
Prerequisite: MATC54H

MATC59H3 Beginnings of Mathematics
Mathematical problems which have arisen repeatedly in different cultures, e.g. solution of quadratic equations, Pythagorean theorem; transmission of mathematics between civilizations; high points of ancient mathematics, e.g. study of incommensurability in Greece, Pell's equation in India.
Exclusion: MAT190H
Prerequisite: Two Grade 12 Mathematics courses & 5 additional FTUs

Music
See the Visual and Performing Arts section of this Calendar.

Neuroscience
B.Sc.

Faculty List
J.W. Good, B.A. (Mount Allison), Ph.D. (McGill), Professor Emeritus
R. Boe, B.Sc. (Calgary), Ph.D. (British Columbia), Professor
L.R. Brown, B.Sc. (Carleton), Ph.D. (Texas), Professor
G.D. Ey, B.A. (Drew), Ph.D. (California), Professor
N.W. Milgram, B.A. (UCLA), M.A., Ph.D. (McGill), Professor
T.E. Petri, B.Sc., M.A. (Louisiana), Ph.D. (Florida), Professor
A.C. Mason, B.Sc. (Goehlp), M.Sc., Ph.D. (Toronto), Associate Professor
K.K. Zafarzadeh, B.A., M.A., Ph.D. (York), Associate Professor
M. Binder, B.Sc., M.Sc. (Western), Ph.D. (McGill), Assistant Professor
G.S. Crichton, B.A., M.A., Ph.D. (Western), Assistant Professor
S. Erb, B.Sc. (Williard Laurier), M.A., Ph.D. (Concordia), Assistant Professor
D.W. Elder, B.A. (Amos Amos), M.A., Ph.D. (McGill), Assistant Professor
M. Bek kidd, B.Sc. (McGill), M.Sc., Ph.D. (Brown), Assistant Professor
J.E. Nus, B.Sc. (Abderdeen), M.Sc., Ph.D. (Univ. of Manchester), Assistant Professor
M. Niu, M.A. (Hamburg), Ph.D. (Technion), Assistant Professor
D. Neabe, B.A., M.A. (York), Ph.D. (Waterloo), Assistant Professor
S. G. Reid, B.Sc., Ph.D. (Ottawa), Assistant Professor
J.C. Cellini, B.Sc., M.A., Ph.D. (Toronto), Lecturer

Music
See the Visual and Performing Arts section of this Calendar for full course descriptions.

Neuroscience
B.Sc.

Faculty List
J.W. Good, B.A. (Mount Allison), Ph.D. (McGill), Professor Emeritus
R. Boe, B.Sc. (Calgary), Ph.D. (British Columbia), Professor
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G.D. Ey, B.A. (Drew), Ph.D. (California), Professor
N.W. Milgram, B.A. (UCLA), M.A., Ph.D. (McGill), Professor
T.E. Petri, B.Sc., M.A. (Louisiana), Ph.D. (Florida), Professor
A.C. Mason, B.Sc. (Goehlp), M.Sc., Ph.D. (Toronto), Associate Professor
K.K. Zafarzadeh, B.A., M.A., Ph.D. (York), Associate Professor
M. Binder, B.Sc., M.Sc. (Western), Ph.D. (McGill), Assistant Professor
G.S. Crichton, B.A., M.A., Ph.D. (Western), Assistant Professor
S. Erb, B.Sc. (Williard Laurier), M.A., Ph.D. (Concordia), Assistant Professor
D.W. Elder, B.A. (Amos Amos), M.A., Ph.D. (McGill), Assistant Professor
M. Bek kidd, B.Sc. (McGill), M.Sc., Ph.D. (Brown), Assistant Professor
J.E. Nus, B.Sc. (Abderdeen), M.Sc., Ph.D. (Univ. of Manchester), Assistant Professor
M. Niu, M.A. (Hamburg), Ph.D. (Technion), Assistant Professor
D. Neabe, B.A., M.A. (York), Ph.D. (Waterloo), Assistant Professor
S. G. Reid, B.Sc., Ph.D. (Ottawa), Assistant Professor
J.C. Cellini, B.Sc., M.A., Ph.D. (Toronto), Lecturer
Neuroscience encompasses aspects of a variety of disciplines that have the common goal of understanding how the nervous system works. Techniques from constituent disciplines like anatomy, biochemistry, molecular biology, pharmacology, physiology, psychology and zoology are used to unravel some of the mysteries of the brain and its mechanisms of action. Investigators in neuroscience have also made fundamental contributions to clinical aspects of neurodysfunction and behaviour.

The Major Program is intended for students who wish to combine their studies of Neuroscience with other areas of interest. The Specialist Program is designed for students who have a particular interest in the Neuroscience and wish to focus their studies in this area. The Specialist (Co-operative) Program provides the student with a broad background in neuroscience, with intensive lab experience and practical experience in real job settings.

In a very few instances, courses from the other campuses may be used to satisfy program requirements. However, such substitutions must be pre-approved by the Supervisor of Studies, in writing on an official form.

**Admission to Neuroscience Programs**

Beginning with the 2007 Summer Session, the Specialist and Major programs in Neuroscience will have enrollment limits. Students will apply to the program after completing a minimum of 4.0 FCEs (full course equivalents), including 1.0 FCE in Biology, 1.0 FCE in Chemistry, and 1.0 FCE in Psychology. Admission will be based on cumulative grade point average with a 2.8 or greater guaranteeing admission. Students with a GPA lower than 2.8 but greater than 2.0 will be admitted to the extent that laboratory course spaces are available. The minimum GPA used to admit these students will be determined in May (after the Winter session) and August (after the Summer session). Application for admission will be made to the Registrar through ROOL in April/May and July/August.

**Neuroscience courses**

Priority access to Neuroscience courses will be given to Major and Specialist in Neuroscience programs and other programs requiring these courses. During the first two weeks of Fall/Winter registration, the courses will be restricted to those students. Provided space is available, the courses will be opened to other students in the third week.

**First-Year Students in Neuroscience**

BGYA01H, BGYA02H, CHMA10H, CHMA11H, PSYA01H and PSYA02H are recommended in the first year if you are intending to pursue a Specialist or Major Program in Neuroscience.

**Science Engagement Courses**

For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

**SPECIALIST PROGRAM IN NEUROSCIENCE**

**Supervisor of Studies**: TBA

**Program Requirements**

The Program requires completion of 13.5 full-credit equivalents (FCEs): 4.5 FCEs:

1. The following 3 FCEs:

   - BGYB10H Cell Biology
   - BGYB11H Molecular Aspects of Cellular and Genetic Processes
   - BGYB30H Mammalian Physiology I

   or

   - NROB30H Animal Physiology
   - BGYB32H Animal Physiology Laboratory
   - CHMB44H Organic Chemistry I
   - CHMB43H Organic Chemistry II
   - NROB40H Neuroscience III: Cell Anatomy and Physiology
   - PSYB07H Data Analysis in Psychology

   (STAB22H may not be used to fulfill this requirement)

   - PSYB55H Human Brain & Behaviour

3. The following 3.5 FCEs:

   - BGYC12H Biochemistry I: Proteins & Enzymes
   - BGYC13H Biochemistry II: Biomechanics & Metabolism
   - NROC34H Neuroethology (Invertebrate Neurobiology)
   - NROC41H Neuroscience II: Learning & Motivation
   - NROC63H Neuroscience Laboratory
   - NROC64H Neuroscience III: Sensory & Motor Systems
   - PSYC08H Advanced Data Analysis in Psychology

4. 1.5 FCEs from the following: (Supervised Study or Thesis courses can be used to fulfill a maximum of 0.5 FCE in this category).

   - BGYC21H Vertebrate Histology: Cells and Tissues
   - BGYD16H Topics in Cellular and Molecular Neurobiology
   - BGYD24H Topics in Vertebrate Endocrinology
   - BGYD27H Molecular Endocrinology
   - BGTD45H Animal Communication
   - NROC35H Developmental Neurobiology
   - NROC60H Sympathetic Organization of the Brain
   - NROC90H Supervised Study in Neuroscience
   - NROC91H Supervised Study in Neuroscience
   - NROC60H Current Topics in Neuroscience
   - NROC62H Advanced Neuroscience Laboratory
   - NROC60H Pathologies of the Nervous System
   - NROC67H Psychology of Aging
   - NROC89Y Thesis in Neuroscience
   - PSYC22H Developmental Psychology
   - PSYC31H Clinical Neuropsychology
   - PSYC52H Drugs and the Brain
   - PSYD33H Current Topics in Abnormal Psychology

5. 1.0 FCEs from the courses listed by the Department of Humanities, Management or Social Sciences.

   **Note**: Although not required, PHYA10H (Introduction to Physics I) is recommended.

**SPECIALIST (CO-OPTATIVE) PROGRAM IN NEUROSCIENCE**

**Supervisor of Studies**: TBA Co-op Contact: N. Hoy, Email: askcoop@uofa.utoronto.ca

The Neuroscience Co-operative program is designed to provide the student with a broad education in neuroscience, including neuromonitoring, neurophysiology, behaviour, psychology, biochemistry, cell and molecular biology and data analysis through lectures, lectures/lab and intensive laboratory courses.

The program combines academic studies in the field of neuroscience with practical work experience in settings in which scientific knowledge from various subfields in the discipline is applied. Students may apply for work term employment in settings such as research and
development departments in industry, educational institutions, health care institutions and government agencies.

The work experience provided by the program enables students to explore career opportunities that may be pursued following the Bachelor's degree. Work settings may also provide students with the opportunity to observe neuroscientists interacting with other professionals, hence providing a broader and more informed basis for the selection of a post-graduate program appropriate to the student's talents and interests. Some work settings will provide the opportunity for participation in applied research.

For information on admissions, fees, work terms and standing in the program, please see Co-operative Programs section of this Calendar.

Program Admission

Enrollment in the program is limited.

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar's Office website: www.uta.utoronto.ca/registrar/. The minimum qualifications for entry are 4.0 credits including BGYA10H, BGYA20H, CHMA10H, CHMA11H, PSYA01H & PSYA02H plus a cumulative GPA of at least 2.75.

Program Requirements

Work Terms

The program requires eight four-month terms of study and two four-month work terms over a four year period. To be eligible for their first work term, students must have completed at least ten full credits including: BGYB10H, BGYB11H, BGYB12H, BGYB13H, CHMB41H, CHMB42H, CHMB43H, CHMB44H, CHMB45H, CHMB46H and the ten-credit Arts & Science Co-op Work Term Preparation course.

To be eligible for their second work term, students must have completed at least 12.5 full credits and have received satisfactory evaluation for their performance and for their report on their first work term.

Course Requirements

The program requires the completion of 14.5 full credit equivalents including the 13.5 FCEs as specified in the Specialist Program in Neuroscience, plus the following:

1. BGYB12H Cell and Molecular Biology Laboratory
2. BGYC22H Practical Approaches to Biochemistry
3. The Arts & Science Co-op Work Term Preparation course

MAJOR PROGRAM IN NEUROSCIENCE

Supervisor of Studies: TBA

Program Requirements

The program requires seven full-credit equivalents. Students who wish to combine the Major in Neuroscience with the Major in Integrative Biology or the Major in Psychology are advised that they must present 12 distinct full-credit equivalents to receive certification of the completion of both programs. Consultation with the respective Program Supervisors in the selection of credits is recommended.

The following indicates the required credits for the Major in Neuroscience:

1. The following 3.0 FCEs:
   - BGYA01H Introductory Biology: Part I
   - BGYA02H Introductory Biology: Part II
   - CHMA10H Introductory Chemistry I: Structure and Bonding

2. The following 1.5 FCEs:
   - NROSC1H Neuroscience I: Cell Anatomy & Physiology
   - NROSC2H Neuroscience II: Learning and Motivation
   - NROSC3H Neuroscience III: Sensory and Motor Systems

3. 2.0 FCEs from the following:
   - BGYB10H Cell Biology
   - BGYB11H Molecular Aspects of Cellular and Genetic Processes
   - [BGYB30H Mammalian Physiology]

   - NROB30H Animal Physiology
   - BGYB32H Animal Physiology Laboratory
   - [STAB2H Statistics I or PSYA07H Data Analysis in Psychology]
   - PSYB55H Human Brain and Behaviour

   - BGYC21H Vertebrate Histology: Cells and Tissues
   - [BGYD46H Topics in Cellular and Molecular Neurobiology or BGYD44H Vertebrate Endocrinology]
   - BGYD27H Molecular Endocrinology
   - BGYD45H Animal Communication
   - NROSC4H Neurobiology (Invertebrate Neurobiology)
   - NROSC5H Developmental Neurobiology
   - NROSC6H Neuroscience Laboratory
   - NROSC9H Synaptic Organization of the Brain
   - NROSC91H Supervised Study in Neuroscience
   - NROSC95H Supervised Study in Neuroscience
   - [NROD60H Current Topics in Neuroscience]
   - NROD61H Advanced Neuroscience Laboratory
   - NROD65H Pathologies of the Nervous System
   - NROD67H Psychology of Aging
   - [NROD9Y Thesis in Neuroscience]
   - PSYC22H Developmental Psychology
   - PSYC31H Clinical Neuropsychology
   - PSYC62H Drugs and the Brain
   - PSYD33H Current Topics in Abnormal Psychology

NROB80H3 Neuroscience I: Cell Anatomy and Physiology

Overview of the structure and function of the nervous system. Topics include neuroanatomy, structure and function of neurons and glia, neurochemistry, neural mechanisms of communication at the cellular and molecular levels, and intracellular signal transmission in neurons. Exclusion: PSY290H, PSY299H, ZOO322H Pre requisite: [BGYA10H & BGYA20H or (BGYA01H & PSYA01H) & PSYA02H or (PSYA01H & Note: [CHMA10H & CHMA11H or (CHMA01Y)] is strongly recommended for students with no Chemistry background).

NROC34H3 Neuroethology

Neural basis of natural behaviour; integrative function of the nervous system; motor and sensory systems; mechanisms of decision-making, imitation action, co-ordination, learning and memory. Topics may vary from year to year. Pre requisite: [BGYB30H or (BGYB32H) or NROD30H]
NROCS5H5 Developmental Neurobiology
An examination of the development of the nervous system with emphasis on cellular and molecular mechanisms.
Topics will include differentiation of nerve cells, migration of neurons, pathfinding, synaptic growth and the rearrangement of neuronal connections. Offered in alternate years with BGYD181H.
Prerequisite: BGYD11H & [GYB30H1 or (GYB33H1 or NROCS30H1) or NROCS60H1]

NROCS61H3 Neuroscience II: Learning and Motivation
Topics covered under the category of motivation include: physiological basis of eating, drinking and sexual behaviour, sleep, and the neural correlates of reward. Topics covered under learning include: learning categories, memory systems and the cell and molecular basis of learning and memory.
Prerequisite: NROCS60H1 plus one other B-level half-credit in PSY

NROCS63H1 Neuroscience Laboratory
In a variety of techniques used in investigations of nervous system function.
Behavioral techniques, neurological manipulation, perfusions, histology, animal ethics and the preparation of scientific papers will be covered.
Priority will be given to students enrolled in the Neuroscience Specialist Program (Co-op and Non-co-op) Limited enrollment: 20
Exclusion: PSY399H
Prerequisites: [PSYB07H1 or STAB22H1] & NROCS60H1

NROCS64H3 Neuroscience III: Sensory and Motor Systems
A focus on the mechanisms by which the nervous system processes sensory information and controls movements.
The topics include sensory transduction and the sensory physiology for each of the sensory systems (olfactory, visual, somatosensory, auditory, gustatory) and models of sensory processing. Both spinal and central mechanisms of motor control are also covered.
Exclusion: PSY390H
Prerequisite: NROCS60H1

NROCS68H3 Sympathetic Organization of the Brain
Neural morphology, synaptic connectivity, and molecular mechanisms of synaptic function are covered in detail. Similarities in circuits among such diverse structures as the olfactory bulb, cerebellum, hippocampus and neocortex are examined in detail. The goal is to engender a deeper understanding of cellular mechanisms of information processing in the CNS.
Prerequisite: NROCS60H1

NROCS69H3
NROCS69S3 Supervised Study in Neuroscience
An independent study course designed to permit intensive examination of the literature of a selected topic or laboratory or field project in neuroscience. Supervision of the work is arranged by mutual agreement between student and instructor. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission.
Students must obtain a permission form from the Life Sciences Office (S521H) that is to be completed and signed by the intended supervisor, and returned to the Life Sciences Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course.
Students seeking supervision off campus are further advised to verify first with the Supervisor of Studies that the prospective project supervisor currently holds a cross-appointment at the University of Toronto and that the project is acceptable. In addition, the student must have a co-supervisor who is a member of the Neuroscience group at UTSC.
Exclusion: PSY399H
Prerequisite: Satisfactory completion of fifteen full-credit equivalents in any discipline, but including PSYB07H and one laboratory half-course in Psychology, Biology or Neuroscience and consent of a faculty member in Psychology or Biology to serve as a research supervisor.

NROCS9H3 Advanced Neuroscience Laboratory
Instruction in a variety of advanced techniques used in investigations of nervous system function. Advanced behavioral, surgical, and histological techniques used in the study of neuroscience will be covered.
Limited enrollment: 20
Exclusion: PSY399H
Prerequisite: NROCS69H
Corequisite: NROCS61H & PSY65H

NROCS9H2 Pathologies of the Nervous System
An intensive examination of selected pathologies affecting the nervous system such as Alzheimer and Parkinson disease, multiple sclerosis, stroke, the epilepsies, various infectious agents, and others. These pathologies will be examined from an integrative perspective encompassing the pathogenesis, resulting behaviours, and current treatments and therapies.
Limited enrollment: 20
Prerequisites: NROCS60H, PSYB65H & a C-level NRO course.
Corequisite: NROCS61H

NROCS9H3 Psychobiology of Aging
This course will characterize various anatomical, biochemical and physiological changes that occur in the nervous system with age and will explore the association between these changes and cognitive deterioration. We will examine several age-related disease states and evaluate the validity of current theories and experimental models of aging in depth.
Limited enrollment: 20
Prerequisites: NROCS60H & [NROCS61H or NROCS64H], Corequisite: NROCS61H

NROCS9Y3 Thesis in Neuroscience
This course offers qualified students the opportunity to engage in a year-long research project under the supervision of a faculty member. Students will meet as a group with the course co-ordinator to present their own research proposals, to appraise the proposals of others and to discuss the results of their investigations. The research project will culminate in a written report and an oral presentation at the Neuroscience Research Day in the Spring.
Students must obtain a permission form from the Life Sciences Office (S521H) that is to be completed and signed by the intended supervisor, and returned to the Life Science Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course. Students seeking supervision off campus are further advised to verify first with the Supervisor of Studies that the prospective project supervisor currently holds a cross-appointment at the University of Toronto. In addition, the student must have a co-supervisor who is a member of the Neuroscience group at UTSC. Exclusion: PSY399H, GYB30Y
Prerequisite: Satisfactory completion of fifteen full-credit equivalents in any discipline, but including PSYB30H and one laboratory half-course in Psychology, Biology or Neuroscience and consent of a faculty member in Psychology or Biology to serve as a research supervisor.

SCIB09H1 Science Engagement Outreach
SCIB09H2 Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)
New Media Studies (B.A.)

Faculty List
X. Liddle, B.A. (Queen's College), M.A. (York), Ph.D. (Toronto), Assistant Professor
M. Mahani, B.A. (Bristol), Ph.D. (London), Assistant Professor
L. Chan, B.A., M.A. (Toronto), Senior Lecturer

MAJOR (J.oint) PROGRAM IN NEW MEDIA STUDIES

Supervisor of Studies: L. Chan Email: chan@uottawa.ca

A highly interdisciplinary program, New Media Studies explores the effects of digital technology on traditional forms of media as well as how new forms of cultural representations are created, consumed, and shared. A unique Joint Program between U of T Scarborough and Centennial's Centre for Creative Communication (CCC), this program allows students to get the best of both worlds—the academic research strength of U of T Scarborough and the industry experience and reputation of the CCC. In this Joint program, students have the option to master the techniques necessary to create new digital representations, but more importantly, to learn about the theories and practice of using these media to achieve desired purposes within their academic programs.

This program may be taken in partial fulfillment of the requirements of a four year (20 credit) Honours Degree. When taken with a major (or specialist) program in another field. In addition to completing the requirements for the degree, students have the option of qualifying for a certificate from Centennial College by undertaking an additional session which includes a field placement and a professional practice course.

Program Admission

Limited enrolment.

For direct admission from secondary school or from another UofT Faculty or from another post-secondary institution, see the Joint Programs with Centennial College section of this Calendar.

Students already at U of T Scarborough will be considered for admission after completing 4 full credits. Students may request that the program in ROM by the appropriate deadline and submit the Supplementary Application Form to the program supervisor by the same deadline. Students may be required to attend an interview before the admission decision is made. (For more details on application procedures and deadlines, see the program web site at http://www.arts.uottawa.ca/jointprograms/newmedia/apply.html.)

Guidelines for 1st year course selection

Students who intend to complete the New Media program must include NMEA20H1 and NMEB20H1 in their 1st year course selection. As part of the requirements for both courses, students will be creating a portfolio that documents their academic as well as creative work. This portfolio will be maintained and built upon by the students from their first year until their graduation.

Program Requirements

Students must complete 8 full credits including:

1. NMEA20H1 Introduction to New Media in Humanities and Social Sciences
2. 0.5 credits from among:
   (CSCA201H) The Why and How of Computing
   (CSCE202H) Introduction to Computer Programming
   (CSCE203H) Computer Science for the Sciences
   (CSCE204H) Introduction to Computer Science
   (VPA203H) Visual and Performing Arts Management in the Digital Age
   (VPA204H) Computers and the Arts I

New Media Group 1 — students will be eligible to enrol in these courses after successfully completing at least 10 full credits at University of Toronto Scarborough, which must include requirements (a), (b), (c), and (d) above.

NMEA20H1 Digital Fundamentals
NMEA20H2 Introduction to New Media Communications
NMEA20H3 The Language of Design
NMEA20H4 Interface Design, Navigation and Interaction I
NMEA20H5 Interface Design, Navigation and Interaction II
NMEA20H6 Project Development and Presentation
NMEA20H7 Application Software for Interactive Media
NMEA20H8 Sound Design
NMEA20H9 Design for New Media
NMEA20H10 New Media Senior Project
NMEA20H20 Theory and Practice of New Media

The following NME courses are taught at UTSC: NMEA20H1, NMEB20H1, NMEED0H1 and NMEED20H1. All other NME courses are taught at Centennial College.
NME2A0H3 Introduction to New Media in the Humanities and Social Sciences
Introduces students to the variety of ways new media are used by scholars to enable new modes of enquiry, knowledge representation, and learning. Explores how digital media are used to enhance creative communications and new forms of knowledge representation in a variety of contexts and disciplines. Limited enrolment: 50. Prerequisite: This course is restricted to students in the New Media Studies Joint Major. A limited number of spaces are open to non-major students, who should get prior approval by the instructor before enrolling in the course.

NME2B0H3 Design in Visual Culture
How do contemporary cultural workers engage the potential of emerging design technologies? CAD, digital networks, robotics, space age materials, exotic industrial processes, bioengineering and countless other technologies are changing design practices, styles and content. This course offers a conceptual framework for investigating the cultural impact of these new media. Limited enrolment: 50. Prerequisite: NME2A0H3.

NME40H3 Digital Fundamentals
This course introduces basic hardware and software for new media. Students will learn basics of HTML, CSS, JavaScript, and Python. They will explore the basics of creating and using web sites, JavaScript, and Python. They will also learn about the fundamentals of digital technology, including storage and retrieval of data, and the basics of digital communication. Limited enrolment: 35. Prerequisite: NME2B0H3.

NME2B0H3 Introduction to New Media Communications
This course enables students to develop strong written communications skills for effective project proposals and communications, as well as non-linear writing skills that can be applied to a wide range of interactive media projects. The course examines the difference between successful writing for print and for new media, and how to integrate text and visual material. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisite: 10 FCE. Corequisites: NME2A0H3, NME2B0H3.

NME2A0H3 The Language of Design
This course introduces the fundamentals of two-dimensional design, graphic design theory, graphic design history, colour principles, typographic principles and visual communication theories applied to New Media Design. Working from basic form generators, typography, two-dimensional design principles, colour and visual communication strategies, lessons will be introduced to the exciting world of applied graphic design and multi-media. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisite: 10 FCE. Corequisites: NME2A0H3, NME2B0H3, NME2C0H3.

NME2A4H3 Interface Design, Navigation and Interaction I
This course introduces students to the discipline of user interface and software design, and in particular their impact and importance in the world of new media. The course uses theory and research in combination with practical application, to bring a user-centred design perspective to developing new media software. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisite: 10 FCE. Corequisites: NME2A0H3, NME2B0H3, NME2C0H3.

NME2B0H3 Interfacé Design, Navigation and Interaction II
Extends work on interface design. Students have opportunities to gain real world experience in the techniques of user interface design. Participants learn to do a "requirements document" for projects, how to design an interface which meets the needs of the requirements of the document and how to use a design with real world users. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisite: NME2A0H3, NME2A0H3, NME2B0H3, NME2B0H3.

NME2B0H4 Project Development and Presentation
This course enables the participant to understand the new media production process. Learners will develop the skills to conduct benchmarking, scope and testing exercises that lead to meaningful project planning documents. Learners will develop and manage production schedules for their group projects that support the development efforts using the project planning documents. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisite: NME2A0H3, NME2A0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME40H3.

NME2D0H3 New Media Senior Project
This course requires students to create a new media project, combining their learning in new media with another academic discipline (typically their other major). Projects can be websites, CS3 or other similar projects. All projects will be evaluated both by the course convener and by a supervisor in another suitable academic discipline. Limited enrolment: 35. Prerequisite: Completion of 15 FCE including NME2A0H3, NME2B0H3, NME2C0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3.

NME2D0H3 Theory and Practice of New Media
A seminar course providing critical reflection on digital media applications and their implications. It is a variety of settings, including education, publishing, performing arts, video and film production. Students will also examine the ideological, political, cultural, and representational assumptions underlying much of new media production and consumption in contemporary society. Limited enrolment: 35. Prerequisites: NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3 & NME2B0H3.

NME2B0H3 Sound Design
This course introduces students to the scope of sound design - creative audio for new media applications. Students will work with audio applications software to sample, edit and construct audio in the planning and post-production of new media. Students will also learn to use audio in interactive ways such as soundscapes. Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media. Prerequisites: NME2A0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3, NME2B0H3.
Primary Care Practice Integration and Decision Making*
PSYCH1H Case Studies in Health Promotion
PSYCH2H Psychology and Health* (same as PSYCH2H)
PSYCH3H Introduction to Social Psychology
PSYCH4H Abnormal Psychology

1.0 full credit equivalent from the following:
ANT26H Health and the Urban Environment
ANT48H Medical Anthropology: Illness and Healing in Cultural Perspective
ANT49H Medical Anthropology: Biological and Demographic Perspectives
ANT56H The Body in Culture and Society
HLTA1H Illness under the Sun
HLTA2H Health Research Seminar
HPH44H International Health Policy Analysis
PSYB41H Behaviour Modification: Origins and Applications
PSYH11H Cross-Cultural Social Psychology
*At a grade of 60% is required in these courses to maintain standing in the program.

Students should pay careful attention to prerequisites, and should check the program website for a suggested course sequence which will allow for timely program completion.

PSMB320H Pre-hospital Care 1: Theory and Lab* Allows students to develop the critical thinking skills and problem-solving approaches needed to provide quality pre-hospital emergency care. Emphasized are the components of primary and secondary assessment, and the implementation of patient care based on interpretation of assessment findings. Discusses principles of physical and psychosocial development, and how these apply to the role of the paramedic. Students must pass each component (theory and lab) of the course to be successful. This course is taught at the Centennial HP Science and Technology Centre.
Prerequisite: Enrolment is restricted to students in the Specialist Program in Paramedic. Corequisite: [PSMB321H & PSMB411H] or [PSMB401Y]
Concurrent: PSMB320H

PSMB325H Therapeutic Approaches to Behaviour in Crisis Focuses on the utilization of effective communication tools when dealing with patients facing mental health crises. Students will learn about coping mechanisms utilized by patients and families, and the effects of death and dying on the individual and significant others. Students will have the opportunity to visit or examine community services and do-class presentations. This course is taught at the Centennial HP Science and Technology Centre. Limited enrolment: Enrolment is restricted to students in the Specialist Program in Paramedic.
Prerequisite: [PSMB321H & PSMB411H] or [PSMB401Y]
Concurrent: PSMB325H

PMDC30H Alterations of Human Body Function 1 Discusses how human body function is affected by a variety of patho-physiological circumstances. The theoretical framework includes the main concepts of crisis, the adaptation of the body by way of compensatory mechanisms, the failure of these compensatory mechanisms and the resulting physiological manifestations. Students will learn to identify such manifestations. This course is taught at the Centennial HP Science and Technology Centre. Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedic.
Prerequisite: PMDB220H, PMDB412H
Concurrent: PMDC30H

PMDC32Y Corequisite: PMDB32Y, PMDB36H
PHMDC373 Pre-hospital Care 2: Theory, Lab and Clinical

This course is taught at the Centennial HP Science and Technology Centre.
Limited enrolment: Enrolment is restricted to students in the Specialist Program in Paramedicine.
Prerequisite: [BGYA01H & BGYA02H] or [BGYA01Y]
Corequisites: PHMDC22H, PHMDC25H, BGYB33H

PHMDC40H3 Alterations of Human Body Function II

Strengthens students' decision-making skills and sound clinical practices. Students continue to develop an understanding of various complex alterations in human body function from a variety of patho-physiological topics. Physiological alternations will be discussed in terms of their potential life threat, their effect on the body's compensatory and decompensatory mechanisms, their manifestations and complications and treatments. This course is taught at the Centennial HP Science and Technology Centre.
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PHMDC22Y, PHMDC33H, PHMDC44H, BGYB11H
Corequisites: PHMDC40H, PHMDC42Y

PHMDC43Y3 Pre-hospital Care 4: Theory, Lab and Field

Combines theory, lab and field application. New concepts of pediatric trauma and Basic Trauma Life Support will be added to the skill and knowledge base. Students will be guided to develop a final portfolio demonstrating experiences, reflection and leadership. Students must pass each component (theory, lab and field) of the course to be successful. This course is taught at the Centennial HP Science and Technology Centre.
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PHMDC30H, PHMDC32Y, PHMDC36H, BGYB11H
Corequisites: PHMDC43H, PHMDC44H

PHMDC43H3 Medical Directed Therapeutics and Paramedic Responsibilities

Applies concepts and principles from pharmacology, patho-physiology, and pre-hospital care to make decisions and implementation of controlled and delegated medical acts for increasingly difficult case scenarios in a class and lab setting. Ethics and legal implications/responsibilities of actions will be integrated throughout the content. Patient care and monitoring of intravenous fluid administration. This course is taught at the Centennial HP Science and Technology Centre.
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PHMDC40H, PHMDC42Y, PHMDC43H
Corequisite: PHMDC56H

PHMDC56H3 Primary Care Practitioner Integration and Decision Making

Challenges students with increasingly complex decisions involving life-threatening situations, ethical/legal dilemmas, and the application of sound foundational principles and knowledge of pharmacology, patho-physiology, communication, assessment and therapeutic interventions. Students will analyze and discuss real field experiences and case scenarios to further develop their assessment, care and decision-making. This course is taught at the Centennial HP Science and Technology Centre.
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PHMDC40H, PHMDC42Y, PHMDC43H
Corequisite: PHMDC54Y

Philosophy

Faculty List
W.C. Graham, M.A., Ph.D. (Toronto), Professor Emeritus
J.H. Sobel, M.A. (Iowa State), Ph.D. (Michigan), Professor Emeritus
W.E. Steger, M.A. (Alberta), Ph.D. (Toronto), Professor
P. Kintner, B.Sc. (Toronto), Ph.D. (Pittsburgh), Associate Professor
L. Lange, B.A., M.A. (Manitoba), Ph.D. (Toronto), Associate Professor
S. Sedivy, B.A. (Toronto), Ph.D. (Pittsburgh), Associate Professor
J. Hawkins, B.A. (Reed), M.A., Ph.D. (Princeton), Assistant Professor
B. Bellie, B.A. (Stanford), Ph.D. (Princeton), Assistant Professor
M. Lim, B.A. (NYU), Ph.D. (Chicago), Assistant Professor
J. Wilson, B.A. (U.C. San Diego), Ph.D. (Cambridge), Assistant Professor
J. Yan, B.A. (Northwestern Univ. of China), M.A. (People's Univ. of China), Ph.D. (Toronto), Assistant Professor
Philosophy

PHLA01H3 Reason and Truth
An introduction to philosophy focusing on issues of rationality, metaphysics and the theory of knowledge. Topics may include: the nature of mind, freedom, the existence of God, the nature and knowability of reality. These topics will generally be introduced through the study of key texts from the history of philosophy.
Exclusion: (PHL041V)

PHLA11H3 Introduction to Ethics
Ethics is concerned with concrete questions about how we ought to treat one another as well as more general questions about how to justify our ethical beliefs. This course is an introduction to legal theories of ethics and considers their application to contemporary moral problems.
Exclusion: (PHL001VI, PHL275H)

PHLB03H3 Philosophy of Art
What is art? We will examine theories of the nature of art together with critiques of each of these theories. The course will then examine some issues specific to particular forms of art, such as literature, drama, film, dance and the visual arts.

PHLB05H3 Social Issues
An examination of contemporary or historical issues that force us to consider and articulate our values and commitments. The course will select issues from a range of possible topics, which may include globalization, medical ethics, war and terrorism, the role of government in a free society, equality and discrimination.

PHLB06H3 Business Ethics
An examination of philosophical issues in ethics, social theory, and theories of human nature as they bear on business. What moral obligations do businesses have? Can social or environmental costs and benefits be calculated in a way relevant to business decisions? Do political ideas have a role within business?
Exclusion: PHL295H

PHLB07H3 Happiness and Freedom
What is well-being? What is autonomy? These two notions are central in ethical theory: law, bioethics, and in the popular imagination. In this course, we will explore well-being and autonomy in more depth, and then consider how our views about well-being and autonomy shape our views about ethics.
Limited enrolment: 50

PHLB08H3 Ethics and International Development
Ethics is concerned with right action - with questions of how we should treat one another. This course will focus on ethical questions that arise in the context of international, cross-cultural interactions with a particular focus on the interactions between the developed world and the developing world.
Limited enrolment: 50

PHLB09H3 Biomedical Ethics
This course is an examination of moral and legal problems in medical practice, in biomedical research, and in the development of health policy. Topics may include: the ethics of health, disease, patients' rights, informed consent, allocation of scarce resources, euthanasia, risks and benefits in research and others.
Exclusion: PHL261Y

PHLB11H3 Philosophy of Law
A discussion of right and rights, justice, legality, and related concepts. Particular topics may include: justification for the legal enforcement of morality, particular ethical issues arising out of the interactions of law and morality, such as punishment, freedom of expression and censorship, autonomy and paternalism, constitutional protection of human rights.
Exclusion: PHL271H

PHLB13H3 Philosophy and Feminism
What is feminism? What is a woman? Are gender relations natural or inevitable? Why do gender relations exist in virtually every society? How do gender relations interact with other social relations, such as economic class, culture, race, sexual orientation, etc.?}

PHLB15H3 Philosophy of Education
A philosophical study of the nature, purpose and value of education. Major philosophical accounts of education will be examined. Topics to be considered may include: the nature, aims, and content of education, education and indoctrination, the role and justification of educational institutions, authority and freedom in the school.
PHB.816H  Political Philosophy: Ancient Greece and the Middle Ages
This course will introduce some important thinkers in political philosophy, such as Plato, Aristotle, Augustine and Aquinas.
Exclusion: PHIL.265H. Note: PHIL.160H may not be taken after or concurrently with PHIL.816H.

PHIL.817H Political Philosophy: The Modern Period
This course will introduce some important thinkers in political philosophy from the 16th Century to the 19th Century. These may include Thomas Hobbes, John Locke, Jean-Jacques Rousseau, G.W.F. Hegel, John Stuart Mill, or Karl Marx.
Exclusion: PHIL.265H. Note: PHIL.817H may not be taken after or concurrently with PHIL.817H.

PHIL.820H Belief, Knowledge, and Truth
An examination of the nature of knowledge, and our ability to achieve it. Topics may include the question of whether any of our beliefs can be certain, the problem of skepticism, the scope and limits of human knowledge, the nature of perception, rationality, and theories of truth.
Exclusion: (PHIL.230H).

PHIL.820H Existentialism
A study of the views and approaches pioneered by such writers as Kierkegaard, Husserl, Jaspers, Heidegger and Sartre. Existentialism has had influence beyond philosophy, impacting theology, literature and psychotherapy. Characteristic topics include the nature of the self and its relations to the world and society, self-deception, and freedom of choice.
Exclusion: PHIL.230H.

PHIL.820H Introduction to Ancient Philosophy
A survey of some main themes and figures of ancient philosophical thought, concentrating on Plato and Aristotle. Topics include the ultimate nature of reality, knowledge, and the relationship between happiness and virtue.

PHIL.835H Introduction to Early Modern Philosophy
This course covers the major figures and themes in seventeenth and eighteenth century philosophy. Descartes, Spinoza, Leibniz, Berkeley, and Hume will be covered. Metaphysical and epistemological themes will be emphasized.

PHIL.840H Introduction to Chinese Philosophy
The course will be based on the study of three major traditions in Chinese thought: Confucianism, Daoism and Buddhism. Primary texts in translation and key areas of philosophy will be discussed. We put our emphasis on historical development of each tradition and textual analysis.
Exclusion: PHIL.230H.

PHIL.840H Introduction to Buddhist Philosophy
We make a historical approach to the main aspects of Buddhist philosophy. We seek understandings of what Gotama taught through his discourses and secondary interpretive literature. Following the development of Buddhism, we will also study some aspects of Mahayana and Tantric Buddhist philosophy in China and Tibet.

PHIL.850H Symbolic Logic I
An introduction to formal, symbolic techniques of reasoning. Sentential logic and quantification theory (or predicate logic), including identity will be covered. The emphasis is on appreciation of and practice in techniques, for example, the formal analysis of English statements and arguments, and for construction of clear and rigorous proofs.
Exclusion: PHIL.243H.

PHIL.850H The Art of Thinking
A study of methods and techniques for developing effective reasoning and argumentation. This course aims to develop skill in identifying ambiguities, evaluating premises, constructing counter-examples, and reconstructing arguments. This course provides an important foundation for Philosophy students, while offering essential critical skills for all students, no matter what their Program.
Exclusion: PHIL.247H, TRN200Y

PHIL.855H Puzzles and Paradigms
Philosophy often begins with a puzzle or paradox. Zeno once convincingly argued that motion was impossible; but people continue to move. The "bar's paradox" seems to show that everything is both true and false, but that can't be right. This course, we will puzzle through these and related issues.

PHIL.850H Metaphysics
A consideration of problems in metaphysics: the attempt to understand "how everything fits together" in the most general sense of this phrase. Some issues typically covered include: the existence of God, the nature of time and space, the nature of mind and the problem of the freedom of the will.
Exclusion: (PHIL.230H).

PHIL.850H Philosophy of Science
A study of philosophical questions raised by the natural and social sciences. Topics discussed may include: the nature of rationality and the role of values in science, the description of scientific methodology, the nature of scientific theory, and the question of how or in what sense science progresses.
Exclusion: HPS250H. Prerequisite: One full or half credit course in Philosophy or in one of the Sciences.

PHIL.850H Philosophy of Language
An examination of philosophical issues about language. Philosophical questions to be covered include: what is the relation between mind and language, what is involved in linguistic communication, is language an innate biological feature of human beings, how do words manage to refer to things, and what is meaning.

PHIL.850H Theories of Mind
An examination of questions concerning the nature of mind. Philosophical questions considered may include: what is consciousness, what is the relation between the mind and the brain, how did mind evolve and do animals have minds, what is thinking, what are feelings and emotions, and can machines have minds.
Exclusion: PHIL.240H.

PHIL.860H Foundations of Cognitive Science
A study of the hypotheses and theories that ground cognitive science. Fundamental questions include: what is a computational system and how can a physical system think and understand language? The course examines the functionalist theory of mind, the relationship between syntax and semantics, and the theory of interpretative formal systems.

PHIL.891H Theories of Human Nature
An examination of theories which provide answers to the question 'What is a human being?' investigating catch-phrase definitions such as: 'Man is a rational animal.' 'Man is a political animal.' 'Man is inherently individual.' 'Man is inherently social,' etc. Authors studied include: Aristotle, Hobbes, Rousseau, Darwin, Marx and Freud.
Exclusion: PHIL.291H.

PHIL.893H Topics in the Philosophy of Art
An exploration of some current issues concerning the various forms of art: the role of the museum, the loss of beauty and the death of art.
Prerequisite: 2.00 credit in PHIL or permission of the instructor.

PHIL.893H Ethical Theory
Philosophers offer systematic theories of ethics: theories that simultaneously explain what ethics is, why it matters, and what it tells us to do. This course is a careful reading of classic philosophical texts by the major systematic thinkers in the Western tradition of ethics. Particular authors read may vary from instructor to instructor.
Exclusion: (PHIL.601H, PHIL.375H). Prerequisite: One course in Philosophy, preferably PHIL.111H (though not required), or permission of the instructor.

PHIL.893H Topics in Ethical Theory
Philosophical ethics simultaneously aims to explain what ethics is, why it matters, and what it tells us to do. This is what is meant by the phrase 'ethical theory' - in this class we will explore specific topics in ethical theory in some depth. Specific topics may vary with the instructor.
Exclusion: (PHIL.016H, PHIL.375H). Prerequisite: One course in Philosophy, preferably PHIL.016H (though not required), or permission of the instructor.
PHLC 233H Topics in Philosophy and Feminism
What is gender? Gender issues have animated discussion among feminist philosophers and social scientists, as well as among the public at large. Current approaches vary greatly. However, since ideas about gender differences have historically been used to subordinate women, the approaches discussed all share a commitment to social critique.
Prerequisite: This is a senior general interest course for philosophy students and others, with lectures, class discussion, and essays. Students should have completed at least 2.0 FCEs at the B- or C-level in any subject before beginning this course.

PHLC 282H Topics in the Theory of Knowledge
A follow up to PHIL 282H. This course will consider one or two epistemological topics in depth, with an emphasis on class discussion. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide.
Prerequisite: 1.0 FCE in Philosophy or Permission of the Instructor.

PHLC 253H Topics in Early Modern Philosophy: Rationalism
In this course, we study the major figures of early modern rationalism – Descartes, Spinoza, and Leibniz – with a particular emphasis on topics such as substance, knowledge and sense perception, the mind-body problem, and the existence and nature of God.
Exclusion: PHIL 311H
Prerequisite: At least one FCE in Philosophy at the B- or C-level. Recommended: PHIL 335H or PHIL 343H.

PHLC 267H1 Topics in Early Modern Philosophy: Empiricism
In this course, we study major figures of early modern empiricism – Locke, Berkeley, Hume – with a particular emphasis on topics such as substance, knowledge and sense perception, the mind-body problem, and the existence and nature of God.
Exclusion: PHIL 311H
Prerequisite: [PHIL 351H or PHIL 360H] & 1.0 further FCE in Philosophy.

PHLC 240H3 Topics in Buddhist Philosophy: Buddhist Ethics
Buddhism is a response to what is fundamentally an ethical problem - the perennial problem of the best kind of life for us to lead. Gotama was driven to seek the solution to this problem and the associated ethical issues it raises. This course discusses the aspects of ethics, ethics and psychology, karma, ethics in Mahayana, Buddhism, utilitarianism, and Aristotle.
Prerequisite: PHIL 440H or PHIL 423H or permission of the instructor.

PHLC 242H3 Topics in Chinese Philosophy: Confucianism
Through studying Confucian classics in translation and related readings, this course discusses theories of philosophers and their debate. Gender roles, attitudes toward the natural environment and modern concept in business ethics reflecting in Confucian texts will also be discussed.

PHLC 243H3 History of Analytic Philosophy I
The foundation of Analytic Philosophy in the late 19th and early 20th century, concentrating on Frege, Russell, and Moore. Special attention paid to the discovery of mathematical logic, and its motivations from and consequences for metaphysics and the philosophy of mind.
Exclusion: PHIL 325H
Prerequisite: 0.5 FCE in logic, either PHIL 350H, PHIL 351H, PHIL 440H or MAT 209H, and 0.5 other FCE in Philosophy at the B or C level.
Recommended: PHIL 360H or PHIL 361H

PHLC 246H3 History of Analytic Philosophy II
Analytic Philosophy in the mid-20th century, concentrating on Wittgenstein, Ramsey, Carnap, and Quine. Special attention paid to the metaphysical foundations of logic, and the nature of linguistic meaning, including the relations between "truth-conditional" and "verificationist" theories.
Exclusion: PHIL 325H
Prerequisite: 0.5 FCE in logic, either PHIL 350H, PHIL 351H, PHIL 440H or MAT 209H, and 0.5 other FCE in Philosophy at the B or C level.
Recommended: PHIL 360H or PHIL 361H

PHLC 253H3 Symbolic Logic II
After consolidating the material from Symbolic Logic I, we will introduce necessary background for metalogic, the study of the properties of logical systems. We will introduce set theory, historical developed in parallel to logic. We conclude with some basic metalogic theory of the propositional logic learned in Symbolic Logic I.
Prerequisite: PHIL 350H

PHLC 254H3 Metalogic
Symbolic Logic I deals with formal languages: you work inside formal proof systems, and also consider the "semantics", dealing with truth, of formal languages. Instead of working inside formal systems, Metalogic treats systems themselves as objects of study, from the outside.
Prerequisite: PHIL 350H or a strong mathematical background, as determined by the instructor; or permission of the instructor.

PHLC 255H3 Philosophy of Mathematics
What are numbers? Are they physical? Mental? Created by humans? How do we know anything about numbers, if we never saw or touched them? What is mathematics truth? Such questions should concern mathematicians students interested in the foundations of mathematics, and philosophy students, as a rich source of philosophical puzzle.
Exclusion: PHIL 340H
Prerequisite: [Two MAT courses & one PHIL course] or [One MAT course & PHIL 335H & one other PHIL course] or permission of the instructor.

PHLC 260H3 Topics in Metaphysics
A follow up to PHIL 160H1. This course will consider one or two metaphysical topics in depth, with an emphasis on class discussion. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide.
Prerequisite: [PHIL 360H & 1.0 further FCE in Philosophy] or permission of the instructor.

PHLC 263H3 Topics in Philosophy of Science
A follow up to PHIL 267H1. This course will consider one or two topics in the Philosophy of Science in depth, with an emphasis on class discussion. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide.
Prerequisite: [PHIL 370H & 1.0 further FCE in Philosophy] or permission of the instructor.

PHLC 284H3 Seminar in Philosophy: Postcolonial Studies in Philosophy
A critical postcolonial examination of some aspects of western European philosophy. How has western philosophy been shaped by the colonization of other parts of the globe? We will examine modern western philosophy's ideals of rationality, universality, and progress in this light.
Prerequisite: 2.0 FCEs in Philosophy or permission of the instructor.

PHLC 285H3 Issues in the Philosophy of Mind
Advance issues in the Philosophy of Mind. For example, an examination of arguments for and against the idea that machines can be conscious, can think, or can feel. Topics may include: Turing's test of machine intelligence, the argument based on Gold's theorem that there is an unbridgeable gulf between human minds and machine capabilities, Searle's Chinese Room thought experiment.
Prerequisite: 2.0 FCEs in PHIL or permission of the instructor.

PHLC 289H3 Topics in Analytic Philosophy
Advanced topics in Analytic Philosophy. Sample contemporary topics: realism/antirealism; truth; interrelations among metaphysics, epistemology, philosophy of mind and of science; Sample historical topics: the study of an important period; the work of an important analytic philosopher. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide.
Prerequisite: 1.0 FCE in philosophy or permission of the instructor.
PHILC593H Topics in Contemporary Political Philosophy
An examination of some central philosophical problems of contemporary political philosophy. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide. Prerequisite: Two B-level half-credit courses in Philosophy.

PHILC693 Seminar in Philosophy: Justice
A discussion of the question “What is justice?” The question has been asked since the time of Plato, but seems to resist definitive answers. This course will examine debates about justice in recent political philosophy. Authors discussed may include: John Rawls, Robert Nozick, Bruce Ackerman, Michelle Sandel, Iris Young. Prerequisite: Two B-level half-credit courses in Philosophy or permission of the instructor.

Physical Sciences

The following Specialist Programs are offered by the Department of Physical and Environmental Sciences:
- Biological Chemistry
- Chemistry
- Environmental Biology
- Environmental Chemistry
- Environmental Geosciences
- Environmental Physics
- Environmental Science and Technology
- Natural Sciences (offered jointly with the Department of Computer and Mathematical Sciences)
- Physical and Mathematical Sciences
- Physics and Its Applications

The following Major Programs are offered by the Department of Physical and Environmental Sciences:
- Astrophysics and Physics
- Biochemistry
- Chemistry
- Environmental Science
- Physical Sciences

The Department also offers a Minor Program in Environmental Science. For more information on these programs, see the appropriate section of this Calendar.

Students are strongly advised to take the courses in the sequence recommended by their program(s) of choice. Irreconcilable timetable differences may arise if courses are delayed to later years. Students should pay careful attention to all pre- and co-requisite courses to ensure that they are eligible to take their courses at the proper time. Some C- and D-level courses are offered in alternate years. Students are advised to consult with their Program Supervisor(s) to find out when particular courses will be available.

Science Engagement Courses
For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.

EARLY TEACHER PROJECT
Coordinator: C.C. Dyer (416-287-7206) Email: dyer@utsc.utoronto.ca

The Early Teacher Project (ETP) in Physical Sciences is being phased out and replaced by the Concurrent Teacher Education Program (CTEP) in the mathematical and physical sciences. Every effort will be made to ensure that students who first enrolled at U of T Scarborough in 2006-07 or earlier and who are admitted to the Early Teacher Project are able to complete it as described in the 2006/07 Calendar.

For more information on CTEP, see the Concurrent Teacher Education section of this Calendar.

CO-OPERATIVE PROGRAM IN PHYSICAL SCIENCES
Supervisor of Studies: A.G. Price (416-287-7327) Email: price@utsc.utoronto.ca

The Co-operative Program in Physical Sciences allows students to combine their chosen academic program with an integrated and complementary work experience. Students are required to complete any one of the Specialist Programs offered by the Department of Physical and Environmental Sciences or the Department of Computer and Mathematical Sciences, except those in Computer Science, or an approved combination of two Major Programs within their 20-credit degree program. They will also complete three work terms of four months each, as well as a specially designed series of enhancement seminars. The overall purpose of the Co-op Program is to provide for students an educational milieu that will allow them to develop as highly qualified scientists, with excellent experience in both the academic and workplace environments.

For information on fees, work terms, and studying in the program, please see the Co-operative Programs section of this Calendar.

Note: The Co-op in Computer Science is not part of the Physical Sciences Co-op. For more information on it, see the Computer Science section of this Calendar.

Eligible Programs of Study for Co-op:
Students may take any of the Specialist Programs offered in the Department of Physical and Environmental Sciences or the Department of Computer and Mathematical Sciences, except those in Computer Science and the Joint Specialist Program in Environmental Science and Technology. Currently, these Programs are:
- Biological Chemistry
- Chemistry
- Environmental Biology
- Environmental Chemistry
- Environmental Geosciences
- Environmental Physics
- Mathematics
- Mathematics and Its Applications (with streams of Statistics, Computational Physical Sciences and Mathematics Teaching)
8. Environmental Geoscience (Specialist): 4.5 full credits as follows: BGYA01H, BGYA02H, CHMA10H, CHMA11H, ESEA01H, ESEA02H, MATA35H or MATA36H or MATA37H & PHYA101H plus a cumulative GPA of at least 2.5
9. Environmental Physics (Specialist): 4.5 full credits as follows: CHMA10H, CHMA11H, ESEA01H, ESEA02H, MATA35H or MATA36H or MATA37H, PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
10. Environmental Science (Major): 4.5 full credits including BGYA01H, BGYA02H, ESEA01H & ESEA02H plus a cumulative GPA of at least 2.5
11. Mathematics (Major): 4.0 full credits including [CSCA43H or PSCB37H], MATA23H, MATA30H & [MATA35H or MATA36H] plus a cumulative GPA of at least 2.5
12. Mathematics (Specialist): 4.0 full credits including CSCA43H, MATA23H, MATA30H, MATA31H, PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
13. Mathematics & Its Applications (Specialist): CSCA44H, MATA23H, MATA30H & MATA31H plus a cumulative GPA of at least 2.5
The Computational Physical Sciences stream also requires ASTA01H, ASTA02H, PHYA101H & PHYA21H
14. Natural Sciences (Specialist): 4.0 full credits including BGYA01H, BGYA02H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
15. Physical Sciences (Major): 4.5 full credits as follows: ASTA01H, ASTA02H, CHMA10H, CHMA11H, CSCA43H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
16. Physical & Mathematical Sciences (Specialist): 4.0 full credits including ASTA01H, ASTA02H, MATA23H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
17. Physics & Its Applications (Specialist): 4.0 full credits including ASTA01H, ASTA02H, MATA23H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA101H & PHYA21H plus a cumulative GPA of at least 2.5
18. Statistics (Major): 4.0 full credits including CSCA44H, MATA23H, MATA30H & MATA31H plus a cumulative GPA of at least 2.5

Work Terms
To be eligible for their first work term, students must have completed at least 7.0 FCEs and have completed the Arts & Science Co-op Work Term Preparation course. Students will work in areas as closely related as possible to their academic programs. If a student is taking a double-major Program, and if the second major is in Computer Science or in another department, the work term will be primarily associated with the primary Physical Sciences major. Students are not permitted to complete more than one summer work term.

PROGRAMS AND COURSES
The Programs offered by the Department of Physical and Environmental Sciences emphasize co-ordination among traditional subject areas. The aim is to provide students with an integrated view of science. The Concurrent Teacher Education Program (CTEP) and the Co-operative Programs offered in the Department build on this inter-disciplinary theme.

Note: Co-requisites and prerequisites must be carefully checked; for example, MATB41H is a co-requisite for PHYB21H.

The Department of Physical and Environmental Sciences offers interdisciplinary courses under the PVC designation. They are designed for students with a broad interest in Physical Science. Many of the Specialist and the Major Programs offered by the disciplines of the Department of Physical and Environmental Sciences require one or more PVC courses.

The Department offers an interdisciplinary Specialist Program in the Physical and Mathematical Sciences. This Program provides an excellent opportunity to combine studies from a number of disciplines
270 Physical Sciences

SPECIALIST PROGRAM IN NATURAL SCIENCES
 Supervisor: S. Tryphonou  E-mail: tryphonou@utsc.utoronto.ca
The program is designed to give students a broad background in science with a deeper knowledge of one field. Two seminar courses and a humanities requirement are intended to ensure that graduates can also talk about science and write about science. The program is well-suited to students interested in teaching science at an elementary or intermediate level and as such complements the Concurrent Teacher Education Program (CTEP). It could also lead to careers in science journalism or in science policy.

Program Requirements
The program requires 13.5 to 14.5 FCEs depending on choices made in Requirement 5 as follows:
1. Year 1, 4.0 FCE in total:
   a) 1.0 FCE Biology: BGYA01H & BGYA02H
   b) 1.0 FCE Chemistry: CHMA10H & CHMA11H
   c) 1.0 FCE Physics: PHYA10H & PHYA11H
   d) 1.0 FCE Calculus: MATA30H & one of MATA32H, MATA36H or MATA37H
2. Additional required courses, 2.5 FCE in total:
   a) CSCE20H or PSCB57H
   b) EESA01H or EESA06H
   c) ASTA10H
   d) STAB22H or STAB52H
   e) PSRL20H
3. 3.0 FCE at B-level in each of THREE of the discipline groups, 3.0 FCE in total:
   a) Physics & Astronomy
   b) Chemistry
   c) Biology
   d) Mathematics & Statistics (not to include STAB22H or STAB52H if taken to satisfy 2 above)
   e) Environmental Science
4. PSCD00H & PSCD02H
5. Complete the remainder of the required courses for one major program in one of the discipline groups.

SPECIALIST PROGRAM IN PHYSICAL AND MATHEMATICAL SCIENCES
Supervisor: J. Lowman (416-208-4800)  Email: lowman@utsc.utoronto.ca
This Program provides a framework of courses in the Physical Sciences based upon a firm Mathematical foundation, relating Astronomy, Chemistry, Computer Science, Physics and Statistics. It prepares students for careers in teaching, industry, and government as well as for further studies at the graduate level.

Program Requirements
First Year:
ASTA01H Introduction to Astronomy and Astrophysics I: The Sun and Planets
ASTA02H Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms
MATA23H Linear Algebra I
MATA30H Calculus I
[MATA36H Calculus II for Physical Sciences
or
MATA37H] Calculus II for Mathematical Sciences
PHYA10H Introduction to Physics I
PHYA12H Introduction to Physics IIA

Second Year:
CSCE20H Computer Science for the Sciences
MATH241H Linear Algebra II
MATH341H Techniques of the Calculus of Several Variations I
MATH444H Differential Equations I
PHYB10H Intermediate Physics Laboratory I
PHYB12H Electricity and Magnetism
PHYB25H Foundation of Modern Physics

Second or Third Year:
ASTA21H Solar System and Stellar Astrophysics
CHMA20H Chemical Thermodynamics and Elementary Kinetics
CHMA21H Chemical Structure and Spectroscopy
CSCE351H Computer Organization
MATH423H Techniques of the Calculus of Several Variables II
MATH468H Differential Equations II
PSCB87H Introduction to Scientific Computing
STAB25H Introduction to Probability

Third and Fourth Year:
ASTC22H Galactic and Extragalactic Astrophysics
[CSCS346H Numerical Methods
or
CSCS301H Numerical Algorithms and Optimization
and
CSCS346H Numerical Approximation, Integration and Ordinary Differential Equations
CSCS351H Microprocessor Systems
MATH341H Linear Programming and Optimization
MATH424H Complex Variables
[PSCB01H Instrumentation of Science
or
PHYB110H Intermediate Physics Laboratory II
PHYB200H Vibrations and Waves
PSCC10H Physical Sciences Project
[PSCD02H Current Questions in Mathematics and Science
or
PSCD10H Physical Sciences Project
STAB37H Introduction to Statistics
Note: PSCD00H & PSCD02H are required for ETP students

MAJOR PROGRAM IN PHYSICAL SCIENCES
Supervisor: G. Lorincz (416-287-7248)  Email: lorincz@utsc.utoronto.ca
The Major Program in Physical Sciences is intended for students desiring a general background in the physical sciences (with emphasis in the area of astronomy, physics and physical chemistry) but who do not intend to pursue graduate studies. Parallel major Programs for students more interested in the mathematical sciences or in chemistry are offered in Mathematical Sciences, in Chemistry, and in Biochemistry.

Program Requirements
The Program requires 8 full-course equivalents as follows:
First Year:
ASTA01H Introduction to Astronomy and Astrophysics I: The Sun and Planets
ASTA02H Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms
PHYSICS 273

PHY342H with the approval of the Program supervisor.
Exclusion: PHYS342H
Prerequisite: Completion of at least 3.5 FCEs of a Physics Sciences program
Corequisite: Continued participation in one of the Physical Sciences programs.

PSCD1093 Physical Sciences Project
This course is intended to introduce students to current topics of research in the physical sciences under the supervision of a professional faculty member. Students will undertake an independent project or series of projects involving theoretical, computational, experimental laboratory or field work in the Physical Sciences. Students will be evaluated by the supervising faculty member in consultation with the course supervisor. Students must obtain the consent of the course supervisor to enrol in this course.
Exclusion: PSCD101H
Prerequisite: 14.0 credits & a cumulative GPA of at least 2.5

SCIB0113 Science Engagement Outreach
SCIB0213 Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)

PHYSICS

Faculty List
A. Griffin, M.Sc. (British Columbia), Ph.D. (Cornell), Professor Emeritus
A. Jacobs, B.A.Sc., B.Sc. (Waterloo), Ph.D. (Illinois), Professor Emeritus
J.D. King, B.A., Ph.D. (Saskatchewan), Professor Emeritus
M.J.G. Lee, M.A., Ph.D. (Cambridge), Professor Emeritus
F.J. O'Donnell, B.Sc., Ph.D. (Glasgow), Professor Emeritus
J.M. Perez, B.A.Sc., M.A.Sc. (Toronto), Ph.D. (Cambridge), Professor Emeritus
P. Antyupov, M.Sc.(Wawarun University), Ph.D. (N. Copericus Astron. Center, Polish Academy of Sciences), Professor
C.C. Dyer, B.Sc. (Bishop's), M.Sc., Ph.D. (Toronto), Professor
L.P. Loman, B.Sc. (Toronto), M.Sc., Ph.D. (York Univ.), Assistant Professor
G. Lorz, B.Sc., M.Sc. (Toronto), Senior Lecturer
S. Mesfiq, B.Sc., M.Sc. (Al-Mustansiriyah) Ph.D (Trieste, Italy), Lecturer

Physics is the study of the basic laws that govern how material objects move and influence each other. The laws of Physics can accurately describe the effect of a star on the motion of a planet, or of the Earth on the motion of a satellite, the effect of a molecule on a nearby atom, or of an atomic nucleus on an electron. Although Newton's laws of motion adequately describe some of these situations, in most cases it is necessary to apply the more recently discovered refinements of these laws, quantum mechanics, and the theory of relativity, together with the understanding of electric and magnetic effects so
beautifully synthesized in Maxwell’s theory of electromagnetism. From these basic principles many of
the properties of gases, liquids, solids, planets, and nuclear matter can be related to the interactions
among the individual units of which these forms of matter are composed.

Physics allows us to describe the properties of light, sound and heat to the point where these
erase our senses, as well as x-rays, radio, cosmic and other radiations of which we are not directly
aware. The remarkable properties of some materials under extreme conditions of temperature and
pressure, and of other materials when an electric current passes through them, form the basis of a
wide range of applications of the subject.

It is possible to develop, in mathematical language, theories that so accurately describe physical
phenomena that they may be used to predict the results of many carefully controlled experiments.
The study of physics, therefore, involves both mathematics and the techniques of experimentation.

At the University of Toronto Scarborough, students who are interested in Physics can take the
Specialist Program in Physical & Mathematical Sciences, the Specialist Program in Physics and
its Applications, the Specialist Program in Computer Science and Physical Sciences (Computer
Science and Physics streams), or the Major Program in Physical Sciences. Note that most of the
courses in the last two years of the Specialist Program in Physics and its Applications are taught
on the St. George campus. Also, there are a number of other Specialist programs associated with
the Department of Physics. These include Specialist in Biophysics, Chemical Physics, Computer
Science and Physics, Geology and Physics, Earth Systems: Physics & Environment and
Planetary Science. Students interested in any of these options should consult with the Program
Supervisor within the first week of classes.

Note: MAT337H is the preferred co-requisite for PHYA21H, although MATA35H or
MAT234H is an acceptable alternative. However, only MATA37H will serve as a prerequisite
for higher-level MAT courses. Therefore, students contemplating a Program that contains MAT
courses beyond the A-level must take MATA37H.

Science Engagement Courses

For service-learning courses and team research opportunities see the Science Engagement
section of this Calendar.

SPECIALIST PROGRAM IN PHYSICS AND ITS APPLICATIONS
Supervisor: S. Tawfik (416-287-7243) Email: tswfig@tmsc.utoronto.ca

Program Requirements

Note: Courses which have a number as the fourth character (e.g. PHYB351H) are offered on
the St. George Campus.

Please refer to the Concurrent Teacher Education section of this Calendar or to the "Early
Teacher Project" in the Physical Sciences section for details on this route for admission to
OISE/UT, University of Toronto.

Note: Students in this program are exempt from the normal limit of 4.0 FCEs (full-credit
equivalents) on other campuses; they may take a maximum of 10.0 FCEs on other campuses in
order to complete the requirements of the program.

First Year - 4.0 FCE

ASTA01H Introduction to Astronomy and Astrophysics I: The Sun and Planets
ASTA03H Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
CSG21H Computer Science for the Sciences
PHYA10H Introduction to Physics I
PHYA21H Introduction to Physics II
MAT22H Linear Algebra I
MAT23H Calculus I
MAT33H Calculus II for Physical Sciences
MAT37H Calculus II for Mathematical Sciences

Second Year - 4.0 FCE

ASTB21H Solar Systems and Stellar Astrophysics
PHYB30H Intermediate Physics Laboratory I
PHYB31H Intermediate Physics Laboratory II
PHYB32H Electricity and Magnetism
PHYB33H Foundation of Modern Physics
MATB41H Techniques of the Calculus of Several Variables I
MATB42H Techniques of the Calculus of Several Variables II
MATB44H Differential Equations I
or
MATB44H Ordinary Differential Equations

Third & Fourth Years - 6.0 FCE

Teaching Concentration

ASTC22H Galactic and Extragalactic Astrophysics
PHYB50H Vibrations and Waves
PHYB32H Thermal Physics

Two of:

ASTJ10H History and Nature of Astronomical Discovery
ASTJ25H Life on Other Worlds
ASTJ30H Introduction to Astrophysics
ASTJ32H Practical Astronomy

Four of:

PHYC20H Quantum Physics I
PHYC35H Electronics Lab I
PHYC37H Introduction to Computational Physics
PHYC35H Radiation on Planetary Atmospheres
PHYC36H Modern Physics Laboratory
PHYC36H Intermediate Biophysics
PHYC37H Classical Mechanics
PHYC37H Electromagnetic Theory
PHCSB7H Introduction to Scientific Computing

An additional 1.0 FCE from:

(EN215) Chemistry and Physics of Planet Earth
(EN235) Introduction to Archaeometry
(EN30H) Physics and Archaeology

An additional 0.5 FCE from AST or PHY D- or 400-level courses, including the following:

PSCD1H The Physical Sciences in Contemporary Society

PHYJ41H The Physical Sciences in Contemporary Society

(PSCD2H Current Questions in Mathematics and Science
or
PHYJ42H Current Questions in Mathematics and Science

Astronomy and Physics Concentration

ASTC22H Galactic and Extragalactic Astrophysics
PHYB30H Vibrations and Waves
PHYB32H Thermal Physics
MATC40H Differential Equations II
or
APM34H Differential Equations
MAJOR PROGRAM IN ASTROPHYSICS AND PHYSICS
Supervisors: C. Dyer (416-287-7290) Email: dyer@utsc.utoronto.ca

The Major Program in Astrophysics and Physics combines introductory and more advanced
work in the two areas along with essential mathematics courses. It is especially appropriate for
students in the Physical Sciences Co-op Program or in the Concurrent Teacher Education
Program (CTEP) who wish to pursue a Major Program strongly oriented towards physical
phenomena in combination with another Major as part of degree and program requirements.

Program Requirements
8.0 FCEs (full credit equivalents) are required.

First Year:
ASTA61H1 Introduction to Astronomy and Astrophysics I: The Sun and Planets
ASTA62H1 Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
MAT321H1 Calculus I
MAT322H1 Calculus II for Physical Sciences
MAT374H1 Calculus II for Mathematical Sciences
PHYA10H1 Introduction to Physics I
PHYA21H1 Introduction to Physics IA

Second Year and Later Years:
ASTB21H1 Solar System and Stellar Astrophysics
CSCA20H1 Computer Science for the Sciences
MATA23H1 Linear Algebra I
MATA41H1 Techniques of the Calculus of Several Variables I
MATHB2H1 Techniques of the Calculus of Several Variables II
PHYB10H1 Intermediate Physics Laboratory I
PHYB21H1 Electricity and Magnetism

And 1.5 FCEs from:
ASTC22H1 Galactic and Extragalactic Astrophysics
PHYB11H1 Intermediate Physics Laboratory II
PHYB22H1 Vibrations and Waves
PHYB25H1 Foundation of Modern Physics
PSCB10H1 The Instrumentation of Science
PSCB17H1 Introduction to Scientific Computing

SPECIALIST PROGRAM IN ENVIRONMENTAL PHYSICS
(See the Environmental Sciences section of this Calendar.)

SPECIALIST PROGRAM IN NATURAL SCIENCES
(See the Physical Sciences section of this Calendar.)

PHYA2H3 Basic Physics
The course will be offered at a level at or slightly above the level of OAC or new
Grade 12 Physics. Topics include the
concepts of motion, energy, kinematics, vectors and coordinate systems, force and
Newton's laws of motion and dynamics in
one and two dimensions. It is intended to
be the preparation required to allow those
students who did not take OAC Physics or
new Grade 12 Physics to proceed easily to
PHYA10H1. It cannot be counted toward

the first year physics requirements of any
science or mathematics program at UTSC.
If this course is to be taken, it must be
taken before entry to PHYA10H1. It is also
suitable for students in other areas who
desire a general interest course in basic
physics.
Exclusion: Physics 12U - SPH4U (Grade
12 Physics), OAC Physics, PHY110Y
Prerequisite: Advanced Functions and
Introduction to Calculus (MC34U).}
Corequisite: MATA30H1
PHY101H Introduction to Physics I
The core theme in this course is energy and energy conservation as a main concept of classical physics and its applications to macroscopic systems in one and three dimensions. This includes mechanical systems, fluid mechanics and energy in classical waves, and oscillatory motion. Geometrical optics and some applications of modern optics, such as x-rays, will also be studied.
Exclusion: PHY110Y, PHY135Y, PHY139Y
Prerequisite: [Physics 12U - SP14U (Grade 12 Physics) & Advanced Functions and Introductory Calculus (MCF3U4)] or PHYA01H
Corequisite: MAT3A0H

PHY121H3 Introduction to Physics II A
This course is intended for students in physical and mathematical sciences. First Electricity and Magnetism (including Electromagnetic theory) will be covered. This provides students with an example of the concept of unification which become a fundamental theme of Modern physics. The second topic will be Nuclear physics, which represents an important application of modern physics, and Nuclear Magnetic Resonance (NMR) will serve as an application of these concepts to real life.
Exclusion: PHY110Y, PHY135Y, PHY139Y
Prerequisite: PHYA01H
Corequisite: MAT3A3H or MAT3A8H or MAT3A7H (MAT3A8H does not allow for many future programs in science)

PHY122H3 Introduction to Physics II B
The course covers the main concepts of Thermodynamics, Electricity and Magnetism and Nuclear radiation. It provides basic knowledge of these topics with particular emphasis on its applications in life and environmental sciences. It also covers some of the applications of modern physics such as Atomic physics and nuclear radiation.
Exclusion: PHYA21H, PHY110Y, PHY135Y, PHY138Y
Prerequisite: PHYA01H or PHYA10H
Corequisite: MAT3A3H or MAT3A8H or MAT3A7H (MAT3A8H does not allow for many future programs in science)

PHY151H3 Intermediate Physics Laboratory I
Experimental and theoretical study of AC and DC circuits with applications to measurements using transducers and electronic instrumentation. Practical examples are used to illustrate several physical systems.
Limited enrolments: 25
Exclusion: PHYB23H
Prerequisite: PHYA21H

PHY152H3 Intermediate Physics Laboratory II
The main objective of this course is to help students develop skills in experimental physics by introducing them to a range of important measuring techniques and associated physical phenomena. Students will carry out several experiments in Physics and Astrophysics including electricity and magnetism, optics, solid state physics, atomic and nuclear physics.
Limited enrolments: 20
Exclusion: PHYB23H
Prerequisite: PHYB10H
Corequisite: PHYB21H

PHY202H3 Vibrations and Waves
We introduce the concept of Waves in general and some of its applications. It covers the following topics: Harmonic oscillation including forced & damped oscillation; Fourier Series; Hamilton Principle & Lagrange Dynamics; Continuous Systems (waves); Propagation of Waves; Energy transfer and Electromagnetic waves.
Exclusion: PHYC208H
Prerequisite: PHYB12H & (MAT3A6H or MAT3A7H)
Corequisite: MATB41H & MATB44H

PHY202H3 Electricity and Magnetism
A first course at the intermediate level in electricity and magnetism, which is one of the well-established core areas of Physics. The course provides an in-depth study of electostatics and magnetostatics. It also, covers Maxwell’s equations, electromagnetic waves and their interaction with matter.
Exclusion: PHYC21H, PHYC35H
Prerequisite: PHYA21H & MATB41H
Corequisite: MATB42H

PHY202H3 Quantum Mechanics in Three Dimensions
The course introduces the main concepts of the Theory of Relativity and the Quantum Theory. Einstein’s special theory of relativity will be discussed with some applications. Then we will introduce the experimental basis for the quantum theory and the properties of the wave function. Schrödinger equation will be introduced with some applications in one dimension.
Exclusion: PHY206H, PHY214H
Prerequisite: PHYA21H or PHYA22H or PHY139Y

PHY242H3 Quantum Physics I
The course builds on the basic concepts of quantum theory students learned in PHY202H. It extends the applications of Quantum Mechanics to three dimensions including the study of angular momentum. It describes the Heisenberg (Matrix) formalism of quantum mechanics and its applications to spin wave functions. It also introduces some approximation methods that can be used to address more realistic problems in Molecular and Nuclear Physics.
Exclusion: CHM326H, PHY255H, PHY457H
Prerequisite: PHYB12H or [PHYB14H] & MAT2A2H

SCI1010H Science Engagement Outreach 
SCI202H3 Science Engagement In-Reach

Political Science

BAJ
Faculty List
E.G. Andrew, B.A. (British Columbia), Ph.D. (London), Professor Emeritus
S.J. Colman, M.A. (Oxon.), Professor Emeritus
R. Maneer, B.A., B.Ed. (New Brunswick), M.A. (Oxon.), Ph.D. (Harvard), Professor Emeritus
A. Rubinfeld, A.B., A.L. (Allegany), M.A., Ph.D. (Chicago), Professor
G.S. Shohat, B.A., M.A. (Alberta), Ph.D. (British Columbia), Professor
S. Solomon, B.A. (McGill), M.A., Ph.D. (London), Professor
J. Teitelman, B.A., M.A., Ph.D. (Toronto), Professor
P. Kingston, B.A. (Toronto), M.A. (London), D. Phil. (Oxford), Associate Professor
M. Hoffmann, B.S. (Michigan Technological University), Ph.D. (George Washington University), Assistant Professor
C. Nordf, B.A., M.A. (Lund), Ph.D. (Geneva), Assistant Professor
P. Trudel-Frappier, B.A., M.A. (Brock), PhD. (New School NY), Assistant Professor
L. Way, B.A. (Harvard), M.A., Ph.D. (UC, Berkeley), Assistant Professor

Discipline Representative: A. Rubinfeld
Supervisor of Studies: TIA. Email: political-science-supervisor-studies@utc.utoronto.ca

Contemporary states and societies are beset by political crisis and change. Since the end of the Cold War and in the post 9/11 period, International relations are unstable and unpredictable and a new world order has yet to be constructed. The sovereignty of nation-states and their capacity to implement national policies of economic and social welfare are being transformed by the new global economy. Religious and ethnic nationalism divides many countries, and even in historically stable liberal democracies political mobilization by race, ethnicity, language, and gender challenge the legitimacy of established cultural and political relationships. Potentially catastrophic problems, such as exploiting populations, proliferation of nuclear weapons, and environmental degradation, threaten the ability of national governments and international organizations to secure human survival. Dealing with these problems is a fundamental necessity for citizens and their governments. In its teaching, research, and community service, the discipline of Political Science seeks to help in meeting this need.
Political Science is the study of enduring issues of power and authority, citizenship and governance, justice and legitimacy in ancient and modern states and societies. The field of Political Science is divided into the following sub-fields: Canadian Politics, Comparative Politics (Developed and Developed Countries), International Relations and Political Theory. In the area of Canadian Politics, students learn about the political-institutional foundations, political processes and public policies of Canada. Courses in comparative politics deals with the problems of political change and development in areas such as Asia, Europe, Latin America, and the Middle East. Political participation and mobilization, transitions to democracy and ethnic and religious conflict are some of the themes dealt with in comparative politics courses. International relations is devoted to studying the foreign policies of particular nation-states and the patterns of conflict and co-operation among states. Political theory explores the ideas, such as justice and legitimacy, that are fundamental to political thought and practice, giving special attention to reading and interpreting the classic expositions of politics from ancient Greek philosophers to post-modern social theorists.

Guidelines for 1st year course selection
Students who intend to complete the Political Science or Public Policy programs should include the following in their 1st year course selection:

Political Science: One full credit at the A-level in Political Science.
Public Policy: SOC308H1, SOCAD3H1 & one of the Computer Science courses listed in Requirement 1 of the program.

SPECIALIST PROGRAM IN POLITICAL SCIENCE

Supervisor of Studies: TBA; Email: political-science-supervisor-studies@utsc.utoronto.ca

Program Requirements

Students must complete at least ten full credits in Political Science including:

1. One full credit from among the A-level political science courses (no more than one full credit at the A-level may be counted towards the program requirements).

2. POLB704H1 Classic Texts in Political Theory I
   and

3. POLB711H1 Classic Texts in Political Theory II

4. A full credit in any of the following (two full credits):
   - POLB83H1 International Conflict and Conflict Management
   - POLB84H1 Comparative Development in International Perspective
   - POLB82H1 Comparative Politics: Revolution, Democracy and Authoritarianism in Modern Europe
   - POLB94H1 Comparative Politics: Ethnic Conflict and Democratization in Europe after the Cold War

5. Four full credits in political science at the C- and/or D-level

MAJOR PROGRAM IN POLITICAL SCIENCE

Supervisor of Studies: TBA; Email: political-science-supervisor-studies@utsc.utoronto.ca

Program Requirements

Students must complete at least seven full credits in Political Science as follows:

1. One full credit from among the A-level political science offerings (no more than one full credit at the A-level may be counted towards the program requirements).

2. POLB704H1 Classic Texts in Political Theory I
   and

3. POLB711H1 Classic Texts in Political Theory II

4. At least four of the following (two full credits):
   - POLB83H1 International Conflict and Conflict Management
   - POLB84H1 Comparative Development in International Perspective
   - POLB82H1 Comparative Politics: Revolution, Democracy and Authoritarianism in Modern Europe
   - POLB94H1 Comparative Politics: Ethnic Conflict and Democratization in Europe after the Cold War

5. Four full credits in political science at the C- and/or D-level

MINOR PROGRAM IN POLITICAL SCIENCE

Supervisor of Studies: TBA; Email: political-science-supervisor-studies@utsc.utoronto.ca

Program Requirements

The Program requires the completion of at least four full credits above the A-level in Political Science. At least two of these must be at the C- or D-level. There are two options: either the four full credits must be taken from any one of the fields listed below (e.g. Canadian Government); or two credits must be taken from each of any two of these fields (e.g. two credits in International Relations, two credits in Comparative Politics).

a) Canadian Government and Politics: POLB50H1, POLB52H1, POLC35H1, POLC45H1, POLC53H1, POLC57H1, POLC66H1, POLC67H1, POLD50H1, POLD52H1

b) Political Theory: POLB70H1, POLB71H1, POLC47H1, POLC74H1, POLC76H1, POLC78H1, POLD71H1, POLD72H1, POLD73H1

c) International Relations: POLB80H1, POLB81H1, POLC32H1, POLC33H1, POLC34H1, POLC35H1, POLC38H1, POLC59H1, POLD87H1, POLD88H1

d) Comparative Politics: POLB80H1, POLB81H1, POLB82H1, POLB83H1, POLC40H1, POLC41H1, POLC60H1, POLC90H1, POLC91H1, POLC92H1, POLC93H1, POLC96H1, POLC97H1, POLC99H1, POLD53H1, (POLD62H1), POLD64H1, POLD90H1, POLD94H1

SPECIALIST PROGRAM IN POLITICAL SCIENCE and ECONOMICS FOR MANAGEMENT STUDIES

(See the Economics for Management Studies section of this Calendar.)

MAJOR PROGRAM IN PUBLIC POLICY

Supervisor of Studies: TBA; Email: public-policy-supervisor-studies@utsc.utoronto.ca

The Major Program in Public Policy equips students with the analytical and methodological skills to secure employment as policy analysts in government, business, and non-governmental sectors, or to continue to graduate training in public policy.

The Program is cross-disciplinary; public policy analysis is the exercise of applying the theoretical frameworks and positivist and interpretive methodologies of the social sciences and humanities to understand the development, implementation, and evaluation of public policy. It requires the ability to think clearly and critically, to design and execute research projects, to analyze both quantitative and qualitative data, and to write clearly. It also requires an understanding of the context, institutions, and processes of policy-making and implementation, as well as concepts and criteria for policy evaluation.

Program Requirements

Students must pay careful attention to the prerequisites for higher level courses.
Course requirements:

Students must complete 7.5 full credits from the following list:

1. 0.5 FCE in Computer Science: one of:
   - CSCA01H Introduction to Computer Programming
   - CSCA02H Computer Science for the Sciences
   - CSCA40H Introduction to Computer Science

2. SOCA01H Introduction to Sociology I
3. SOCA02H Introduction to Sociology II

3. 0.5 FCE in Quantitative Data Analysis selected from the following list:
   - ANTC35H Quantitative Methods in Anthropology
   - GGRA30H Geographic Information Systems (GIS) and Empirical Reasoning
   - MGMT310H Quantitative Methods in Management

4. 0.5 FCE in Social Theory

5. 1 FCE in Research Methods

6. POLS50H1 Canada's Political Institutions

7. 0.5 FCE from among the following:
   - ECDM33H Public Decision-Making
   - ECDM40H Economic Aspects of Public Policy

8. PLB90H1 Planning in Canada

9. 1.0 FCE in the C- or D-level from among the following list:
   - ANTC35H Quantitative Methods in Anthropology
   - ANTC36H Medical Anthropology: Illness and Healing in Cultural Perspective
   - ANTC62H Medical Anthropology II: Biological and Demographic Perspectives
   - ECMC31H Economics of the Public Sector: Taxation
   - ECMC32H Economics of the Canadian Public Policy
   - ECMC33H Economics of Canadian Public Policy
   - ECMC34H Labour Economics I
   - ECMC35H Labour Economics II
   - GGRG00H1 Urban Residential Geography
   - GGRG13H Urban Geography
   - GGRG18H Urban Transportation Policy Analysis
   - GGRG20H Issues in Rural Development
   - GGRG33H The Greater Toronto Area
   - GGRD07H Countryside Conservation
   - HISC45H Immigrants and Race Relations in Canadian History
   - HISD40H Selected Topics in Canadian Women's History
   - MGTC42H Public Management
   - PHIL91H Theories of Human Nature
   - PHIL53H Seminar in Philosophy: Cultural Criticism
   - POLC51H Canadian Environmental Politics I
   - POLC54H Intergovernmental Relations in Canada
   - POLC55H Politics of Canadian Health Care Policy
   - POLC57H Intergovernmental Relations and Public Policy
   - POLC88H The New International Agenda

MAJOR (CO-OPTIVE) PROGRAM IN PUBLIC POLICY

Superior of Studies: L. Chan Email: chan@ustc.utoronto.ca
Advisor: TBA Email: public-policy-supervisor@ustc.utoronto.ca
Co-op Contact: TBA Email: usccoop@ustc.utoronto.ca

The Co-operative Program in Public Policy is a work-study Program which combines academic studies in various disciplines with work terms in public enterprises, the private sector, and non-governmental organizations. Two work terms, each of four months duration, must be completed along with the academic Program. An optional, third work term may be completed with the permission of the Co-op Co-ordinator.

The Program equips students with the analytical and methodological skills to secure employment as policy analyst in government, business, and the non-governmental sectors, or to continue to graduate training in public policy. The Program is cross-disciplinary; public policy analysis is the exercise of applying the theoretical frameworks and the positivist and interpretive methodologies of the social sciences and humanities to understand the development, implementation, and evaluation of public policy. It requires the ability to think clearly and critically, to design and execute research projects, to analyze both quantitative and qualitative data, and to write clearly. It also requires an understanding of the context, institutions, and processes of policy-making and implementation, as well as concepts and criteria for policy evaluation.

The Co-operative Program in Public Policy is designed to be completed in conjunction with a Major or Specialist Program in another discipline and may only be taken as part of a twenty course honours degree.

For information on fees, work terms and standing in the Program, please see the Co-operative Programs section of this Calendar.

Program Admission
Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Programs section in this Calendar.

Current U of T Scarborough students: Application procedures can be found at the Registrar's Office website: www.ustc.utoronto.ca/registrar/. The minimum qualifications for entry are 4.0 credits plus a cumulative GPA of at least 2.5.

Program Requirements

Work Placement
To be eligible for the first work term, students must have completed at least 10 FCEs, including 3 FCEs as a University of Toronto Scarborough student including those specified below and have completed the Arts & Science Co-op Work Term Preparation course.
POLA590H3 Critical Issues of Canadian Democracy
This course examines some issues critical to the well-being of Canadian democracy. The issues may change from year to year but will normally include citizen participation, ethical conduct in political life, national unity, and North American regionalism.

POLA783H3 Politics in Literature
This course is an introduction to political, social, and economic themes arising from imaginative literature. Authors and topics covered will vary from year to year.

POLA809H3 Cultures of Conflict: Politics, Society and War Since 1912
This course examines political and social attitudes towards war, and their underlying causes, during the 19th and 20th Centuries, as portrayed in film, literature, and historical writing. Wars examined include the War of 1812, World Wars I and II, and the Vietnam War. Exclusion: POLA590H3

POLA893H3 Immigration and Ethnic Relations
This course provides a study of the causes and patterns of immigration in the twentieth century. The course examines the variety of political factors (war and revolution, ethnic/racial discrimination, poverty, deficiencies of conscription that triggered emigration in the twentieth century) and social, economic, cultural, and political factors involved. Sources include political and historical works, novels and films.

POLA894H3 Globalization and Governance
This course turns to questions of governance in the context of an increasingly globalized world. The course examines the legitimacy and accountability of international organizations, such as the World Trade Organization, and focuses on the rise of new forms of political activism, such as citizen groups and NGOs. Exclusion: POLA590H3, POLA102Y, POLA180H4.

POLB52H3 Canadian Politics: Connecting Citizens and Governments
This course examines the participatory processes and processes through which Canadian citizens seek to render their government responsive and responsible. Political parties, the electoral system, interest groups, new social movements, Quebec nationalism and aboriginal self-determination are given attention. Exclusion: POLB50Y1, POLB101Y, POLB115Y, POLB214Y.

POLB561H Canadian Politics: Connecting Citizens and Governments
This course examines the institutional foundations of Canadian government. The constitution, the executive, Parliament, the public service, the federal system, the Charter of Rights and Freedoms, and the courts are discussed, with emphasis on their role in democratic and responsible government. Exclusion: POLB550Y, POLB101Y, POLB115Y, POLB214Y.

POLB582H3 Introduction to International Relations
This course examines approaches to international relations, the characteristics of the international system, and the factors that motivate foreign policies. Exclusion: POLB201Y, POLB581Y.

POLB583H3 Introduction to International Conflict and Conflict Management
This course provides a study of the role of international institutions in managing conflict and cooperation at the international level. Exclusion: POLB202Y, POLB580Y.

POLB903H3 Comparative Development in International Perspective
This course examines the historical and current impact of the international order on the development prospects and policies of less developed countries. Topics include colonial conquest, multi-national investment, the debt crisis and globalization. The course focuses on the effects of these international factors on domestic power structures, the urban and rural poor, and the environment. Exclusion: POLB911Y, POLB214Y. Prerequisite: Any 4.0 FCEs.

POLB703H3 Classic Texts in Political Theory I
This course examines central political texts from the ancient Greeks to the Renaissance, including Plato's Republic and Aristotle's Politics. Exclusion: POLB203Y, POLB210Y. Prerequisite: Any 4.0 FCEs.

POLB713H Classic Texts in Political Theory II
This course examines central political texts from the French Revolution to the French Revolution, including Hobbes' Leviathan, Locke's Second Treatise, Rousseau's Social Contract and the Discourse on Inequality. Exclusion: POLB50Y, POLB570Y.
POLC54H3 Intergovernmental Relations in Canada
This course examines relationships between provincial and federal governments in Canada, and how they have been shaped by the nature of Canada's society and economy, judicial review, constitutional amendment, and regionalization and globalization. The legitimacy and performance of the federal system are appraised. Lecture-seminar format.
Exclusion: (POLC54Y)
Prerequisite: POLA51H1 or POLB50H1 or (POLB50Y) or equivalent.

POLC55H3 The Politics of Canadian Health Policy
This course examines Canadian health care policies and potential solutions. The impact on health care policies of the interests of health care providers, federal and political parties and Canadian attachment to Medicare are discussed.
Prerequisite: Any 5.0 FCEs. (POLB50H1 & POLB52H1) or (POLB50Y) are highly recommended.

POLC57H3 Intergovernmental Relations and Public Policy
This course examines intergovernmental relations in various areas of public policy and their effects on policy outcomes. It evaluates how federalism affects the capacity of Canadians to secure desirable social, economic, environmental, and trade policies. Lecture-seminar format.
Exclusion: (POLC54Y), POLA316Y
Prerequisite: (POLB50H1 or (POLB50Y) or equivalent) & POLC54H1

POLC58H3 Public Policy Making
This course provides a study of current theories of public policy-making and the processes that are involved in making public policies. Policy processes of agenda setting, choosing governing instruments, making public decisions, and implementing and evaluating governmental programs are examined using specific cases of public policy-making in Canada.
Exclusion: (POLC54Y)
Prerequisite: POLA51H1 or POLB50H1 or (POLB50Y) or POLB52H1

POLC67H3 Public Policy in Canada
This course examines the political process and the dynamics of public policy-making. It covers the role of government and non-governmental organizations in shaping public policy. Lecture-seminar format.
Exclusion: (POLC54Y)
Prerequisite: POLA51H1 or POLB50H1 or (POLB50Y) or POLB52H1

POLC68H3 The Formulation of American Foreign Policy
This course examines the process by which American foreign policy is formulated.
Exclusion: (POLC68Y), (POLC68Y)
Prerequisite: One full credit from: POLB80H1, POLB80Y1, POLB81H1, (POLB81Y), POLC82H1, POLC83H1

POLC69H3 The Application of American Foreign Policy
This course examines the foreign policy of the United States by analyzing its content and application to a number of specific regions and problems in the world.
Exclusion: (POLC68Y), (POLC68Y)
Prerequisite: One full credit from: POLB80H1, POLB80Y1, POLB81H1, (POLB81Y), POLC82H1, POLC83H1

POLC62H3 Canadian Foreign Policy
This course introduces Canadian foreign policy since 1945.
Exclusion: (POLC62Y)
Prerequisite: (POLB50H1, & POLB52H1) or (POLB80H1 & POLB81H1 or (POLB81Y))

POLC65H3 Canadian Foreign Policy
This course considers the issues and influences which have determined Canadian foreign policy.
Exclusion: (POLC65Y)
Prerequisite: POLC48H1

This course examines the rise and the collapse of the first Communist state. Topics include the Stalinist dictatorship and de-Stalinization, the planned economy and the black market, ethnic politics and dissent. Particular attention is paid to the attempt to reform communism before 1991.
Exclusion: (POLC66Y), (POLC26Y)
Prerequisite: One full credit in Political Science
POLS5303 The American Political Process
This course analyzes the American federal system and the institutions and processes of government in the United States.
Exclusion: POLS382Y, POLS387Y
Prerequisite: One full credit in Political Science at the B-level

POLS5303 Public Policies in the United States
This course focuses on selected policy issues in the United States.
Exclusion: POLS320Y, POLS387Y
Prerequisite: One full credit in Political Science at the B-level

POLS5303 International Political Economy of Trade
This course examines why countries trade and how international exchange is affected by domestic and international structures.
Grand theories of international political economy are surveyed for this purpose, and recent perspectives and issues related to the organization of world trade are reviewed.
Prerequisite: POLS101H & POLS111H or (POLS101Y or equivalent); familiarity with basic economic concepts is recommended.

POLS5303 Politics and Society in the Middle East I
This course examines politics and society in the contemporary Middle East with a focus on understanding the region's resistance to economic and political liberalization.
Topics covered include the role of external actors in the creation and evolution of the Middle East state system, the nature of authoritarian methods of statecraft in both republics and monarchs, the developmental effects of oil revenues, and the prospects for both secular and Islamist social protest movements.
Prerequisite: POLS101H & POLS111H or (POLS101Y)

POLS5303 Politics and Society in the Middle East II
This course covers contemporary issues in Middle East politics.
Topics include the role of co-operation and competition, the impact of economic and political liberalization, civil society politics with respect to women, human rights and the environment, and the impact of globalization on the region.
Prerequisite: POLS101H & POLS111H or (POLS101Y)

POLS5303 Latin America: The Politics of the Dispossessed
This course explores the way the poor and oppressed have organized and fought for their rights. Special attention is given to the way in which globalization has affected popular organizing, including its impact on insurgent movements such as the Zapatistas.
Exclusion: POLS480Y, POLS505Y
Prerequisite: POLS490H1Y or (POLS501Y or equivalent)

POLJ5013 Research Seminar in Political Science
This course provides an opportunity to design and carry out individual or small group research on a political topic. After class readings on the topic under study, research methods and design, and research ethics, students enter "the field" in Toronto. The seminar provides a series of opportunities to present and discuss their preliminary work.
Limited enrolment: 15
Exclusion: POLJ301H may not be taken after or concurrently with POLJ701H.
Prerequisite: 2.0 credits in Political Science and a cumulative GPA of at least 3.2
Concurrent: POLJ578H is recommended but not required.

POLJ5033 Political Interests, Political Identity, and Public Policy
This course examines the interrelationship between organized interests, social movements and the state in the formulation and implementation of public policy in Canada and selected other countries.
Prerequisites: POLS101H or (POLS300H & POLS302H) or (POLS301Y)

POLJ5043 Topics in Canadian and Comparative Politics
This seminar course explores selected issues of Canadian politics from a comparative perspective.
The topics in this course vary depending on the instructor.
Limited enrolment: 25
Prerequisites: (POLJ300H & POLS302H) or (POLS301Y)

PSLY5043 Comparative Public Policy
This seminar course explores some of the major approaches to the comparative analysis of public policies of industrialized countries. The course uses a combination of case studies and theoretical literature to examine selected social and economic public policies and policy making in Europe, Canada, and the United States.
Prerequisites: One FCE at the B- or C-level in comparative or Canadian politics.

POLJ7013 Canadian Political Ideas I
This course introduces students to the ideas informing Canadian political movements and parties.
Limited enrolment: 25
Prerequisite: POLS101H or (POLS300H & POLS302H, POLS303H, POLS307Y, POLS171H or equivalent)

POLJ7023 Canadian Political Ideas II
This course is an in-depth examination of the ideas informing Canadian political movements and parties.
Limited enrolment: 25
Prerequisite: POLS171H

POLS6703 Political Analysis II
This seminar course is intended for students interested in deepening their understanding of methodological issues that arise in the study of politics. In addition to class readings, students will write critical reviews of published work and will work to design their own research projects.
Limited enrolment: 25
Prerequisite: POLS778H or (POLS75Y)

POLS6873 Rational Choice and International Cooperation
This course takes an introduction to rational choice theories with applications to the international realm.
A main goal is to introduce analytical constructs frequently used in the political science and political economics literature to understand the behavior of states in the international realm.
Limited enrolment: 20
Prerequisites: POLS101H & POLS111H

POLB8933 Exploring the New International Agenda
This course examines in depth the broad set of new issues on the international agenda: terrorism, non-proliferation, human security, women's issues, human rights and others. It emphasizes in-class participation and student presentations.
Limited enrolment: 25
Exclusion: POLS387Y
Prerequisite: POLS101H
POLD9581 Public Policy and Human Development in the Global South

While domestic and international political factors have discouraged human development policies in much of the global south, there have been some important success stories. This course examines the economic and social policies most successful in contributing to human development and explores the reasons behind these rare cases of relatively successful human development.

Limited enrollment: 25

Prerequisite: A social sciences or humanities course on the global south or on development

POLD9404 Selected Topics on Developing Areas

Topics vary according to instructor.

Prerequisite: A Social Sciences or Humanities course on the Third World or Development.

POLD9593 Supervised Research

A research project under the supervision of a member of faculty that will result in the completion of a substantial report or paper acceptable as an undergraduate senior thesis. Students wishing to undertake a supervised research project in the Winter Session must register in POLD9593 during the Fall Session. The student is the responsibility of a faculty member who is willing to supervise the project and the student must obtain consent from the supervising instructor before registering for the course. During the Fall Session the student will prepare a short research proposal, and both the supervising faculty member and the Supervisor of Studies must approve the research proposal prior to the first day of classes for the Winter Session.

Prerequisite: Permission of the instructor

POLD9882 Supervised Reading

Advanced reading in special topics. This course is meant only for those students who, having completed the available basic courses in a particular field of Political Science, wish to pursue further intensive study on a relevant topic of special interest. Students are advised that they must obtain consent from the supervising instructor before registering for this course.

Exclusion: POLS982

Prerequisite: One B-Level course in Political Science & permission of the instructor.

**Psychology**

**(B.S.)**

**Faculty List**

G.B. Breidh, B.Sc. (CUNY), Ph.D. (NYU), Professor Emeritus
J.E. Fisher, B.A., Ph.D. (Sydney), Professor Emeritus
B. Fortin, B.A. (Toronto), M.A., Ph.D. (Michigan), Professor Emeritus
A. Kukla, A.B., M.A., Ph.D. (UCLA), Professor Emeritus
M.C. Smith, B.A. (Toronto), Ph.D. (MIT), Professor Emeritus
J. Janss, B.A. (McGill), Ph.D. (Cornell), Professor
G.C. Capshew, B.A. (Michigan), M.A., Ph.D. (Wisconsin), Professor
K.K. Dixon, B.A. (Wellesley), Ph.D. (Minnesota), Professor
G.O. Ivy, B.A. (Drew), Ph.D. (California), Professor
J.M. Kinateder, B.Sc., M.Sc. (Belfast), Ph.D. (Cornell), Professor
N.W. Milgram, B.A. (Columbia), M.A., Ph.D. (McGill), Professor
T.L. Pettit, B.Sc., M.A. (Louisiana), Ph.D. (Florida), Professor
M.A. Schumacker, B.A. (SUNY-Binghamton), Ph.D. (Cornell), Professor
S. Jodoin, B.A. (New Brunswick), M.A., Ph.D. (Waterloo), Associate Professor
K.K. Zakrzewski, B.A., M.A., Ph.D. (York), Associate Professor
G.S. Crede, B.A., M.A., Ph.D. (Western), Assistant Professor
S. Pebb, B.Sc. (Wilfrid Laurier), M.A., Ph.D. (Concordia), Assistant Professor
M.A. Fournier, B.A., Ph.D. (McGill), Assistant Professor
D.W. Hakey, B.A. (Amherst), M.A. (San Francisco), Ph.D. (Albuquerque), Assistant Professor
M. Inzunza, B.Sc. (McGill), M.Sc., Ph.D., Assistant Professor
M. Noweiz, M.A. (Hamburg), Ph.D. (Utrecht), Assistant Professor
D. Nussbaum, B.A., M.A. (York), Ph.D. (Waterloo), Assistant Professor
D.A. Bons, B.A. (Florida), M.A. (Regina), Ph.D. (Toronto), Senior Lecturer
J.C. Leboutilier, B.Sc., M.A., Ph.D. (Toronto), Lecturer

**Associate Chair:** T.B.A.

Psychology is that branch of science which seeks to understand behaviour and mind. Why organisms - human and inhuman - act as they do is one of the most compelling and longstanding questions in the history of human thought. Philosophers, artists, novelists, theologians and others have sought the answer through a variety of lenses. Psychology uses the methods of scientific enquiry to address the question.

The areas of interest encompassed by the discipline of psychology include: How organisms perceive their environment; how they learn, adapt, and remember; how they change over their lifetimes; how they choose among alternate courses of action; how they respond to motivating forces; how they are affected by the presence of other organisms in social settings; how their behaviour relates to their physiological functions; and how individuals and species differ from one another. Our course offerings in Psychology include all of these topics, covering how psychologists go about answering the important questions in each, and what we have learned about each.

The Specialist Program in Psychology includes courses from each of the main sub-areas within the discipline. This Program is intended both for students with a strong interest in the field and for those who wish to pursue graduate work in psychology after the first degree. Students considering graduate study should plan to include the PSY107Y (three course) or their undergraduate Program.

The Specialist Co-operative Program in Psychology and Its Applications offers three streams, one in Cognition and Behaviour, another in Public Opinion and Behaviour, and a third in Behavioural Disorders. Admission to the program, which involves practical work experience, is limited.

The Major Program in Psychology is designed to introduce students to the main areas within the discipline. The Minor Program is designed for students who are interested in a less intensive exposure to the field. Other, students wish to concentrate their studies in two areas, in which case a double Major Program combining psychology with another discipline is ideal.

Students particularly interested in the relation of brain to behaviour should consider the Neuroscience Programs described earlier in this Calendar. Those particularly interested in the study of knowledge - language, communication and thought - may wish to consider the Cognitive Science and Psycholinguistics Programs described earlier.

**Planning your Program in Psychology**

Students should be aware that the A, B, C, D course structure in Psychology dictates the sequence in which courses should be taken, but not the year of study in which a given course must be taken. That is, A, B, C, and D do not correspond to first, second, third and fourth year. For example, it is recommended that PSYB07H and PSYC08H be taken consecutively in the two terms of second year. Students should be aware that with the exception of PSY107Y and PSY108H, courses in the Faculty of Arts and Science correspond to B-, C- or D-level and all 400-series are not necessarily considered D-level. Students are encouraged to plan carefully so that they will meet their educational objectives over the years of their degree. Discussions with the Program Supervisor can be very valuable in this regard.

**First-Year Students in Psychology**

PSY401H & PSY402H are recommended in first year for students intending to pursue a Specialist or Major Program in Psychology.

**Courses in Neuroscience**

Students interested in including Neuroscience courses in their Psychology Program should consult the Neuroscience section for further details.

**Science Engagement Courses**

For service-learning courses and team research opportunities see the Science Engagement section of this Calendar.
Program Requirements

1. The Program requires completion of 12.5 full-credit equivalents, and fulfills the Program requirements for the 4-year B.Sc. degree in Psychology.

2. a) 10.5 full-credit equivalents in Psychology, as follows:
   1. PSYA01H1 Introductory Psychology: Part I (1 full-credit equivalent)
   2. Statistical Methods I (1 full-credit equivalent)
      a) PSYB07H1 Data Analysis in Psychology
      b) PSYC28H3 Advanced Data Analysis in Psychology
   3. Laboratory Methods I (1 full-credit equivalent)
      a) PSYB01H1 Psychological Research Laboratory
      b) one half-credit (0.5 full-credit equivalent) from among the following:
         PSYC15H3 Social Psychology Laboratory
         PSYC26H3 Developmental Psychology Laboratory
         PSYC38H3 Cognitive Psychology Laboratory
         NRO63H3 Neuroscience Laboratory
   4. PSYC28H2 Scientific Communication in Psychology (1 full-credit equivalent)
   5. History and Theoretical Psychology (1.5 full-credit equivalent)
      a) PSYC25H2 Theoretical Psychology
      b) PSYC85H1 History of Psychology
   6. Credits at the B-level and C-level (1.5 full-credit equivalents)
      Students are required to take 1.5 full-credit equivalents at the B-level or C-level from each of the two content groups listed below:
      a) Social, Developmental and Personality (courses listed in the 10-, 20-, and 30-series);
      b) Learning, Perception, Cognition and Physiology (courses listed in the 40-, 50- and 60-series);
   7. Credits at the D-level (1 full-credit equivalent)
      Certain D-level NRO courses may be used to fulfill this requirement in Group 6b with approval of the Supervisor of Studies.
      Specialists are encouraged to plan on enrolling in the PSYD98Y (thesis course) in their third or fourth year, particularly if they intend to pursue a career in Psychology or a related discipline.
      Note: A 300-level course in Psychology at the University of Toronto is required to be taken as a C-level course, even if listed as an exclusion to a D-level course. Hence, a 300-level course may not be used to satisfy the D-level program requirement, although it may be applied as appropriate to other program requirements. Courses at the 000-level count as D-level courses.
   8. Additional credits in Psychology (1.5 full-credit equivalents)
      Students must choose 2.5 further full-credit equivalents from any of the remaining courses in Psychology. In selecting the 2.5 full-credit equivalents, 1.0 full-credit equivalent must be in the C- or D-level.
      b) Other Disciplines (2 full-credit equivalents)
      Students must select at least two full-credit equivalents at the B-level or higher in a discipline or disciplines other than Psychology.
a) 18.5 full-credit equivalents in Psychology, as follows:

1. PSY 101H Introductory Psychology, Part I

2. PSY 102H Introductory Psychology, Part II

3. PSY 210H Research Methods in Psychology

4. PSY 220H Developmental Psychology

5. PSY 300H Cognitive Psychology

6. PSY 350H Neuroscience

7. PSY 400H Advanced Data Analysis

8. PSY 410H Theoretical Psychology

b) PSY 101H Psychological Research Laboratory

and

b) PSY 201H Cognitive Psychology Laboratory

and

PSY 300H Neuroscience Laboratory

6. Credits at the B-level and C-level (3 full-credit equivalents)

Students are required to take 1.5 full-credit equivalents at the B-level or C-level from each of the two content groups listed below:

a) Social, Developmental and Personality (courses listed in the 10-, 20-, and 30-series): students in the Cognition and Behaviour stream must include PSY 102H, Introduction to Developmental Psychology, among the courses selected to meet this requirement;

b) Learning, Perception, Cognition and Physiology (courses listed in the 40-, 50- and 60-series): students in the Cognition and Behaviour stream must take the following courses to complete this requirement:

PSY 101H Perception and Cognition*

PSY 220H Perception and Cognition*

PSY 300H Cognition and Perception*

PSY 200H Cognition and Perception*

PSY 651H Brain and Behaviour

7. Credits at the D-level (one full-credit equivalent), chosen from:

PSY 505H Current Topics in Memory and Cognition

PSY 520H Fundamental Issues in Cognitive Science

PSY 530H The Scientific Study of Conscious and Unconscious Influences

PSY 550H Disorders of Speech and Language

8. Additional credits in Psychology (2.5 full-credit equivalents)

Students in the Cognition and Behaviour stream must include:

a) PSY 101H Psychology and Its Applications: Advanced Seminar

b) at least one full-credit equivalent from among the following courses**:

PSY 201H Perception and Cognition

PSY 310H Neuropsychological Rehabilitation

PSY 310H Psychology of the Law

PSY 451H Cognition and Representation

PLSc 241H Developmental Psycholinguistics

PLSc 551H Psycholinguistics

The choice of the remaining one full-credit equivalent is unconstrained.
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7. Credits at the D-level (one full-credit equivalent), chosen from:
   a) PSYD15H Current Topics in Social Psychology
   b) PSYD17H Psychology of Gender
   c) PSYD22H Socialization Processes
   d) PSYD44H Human Intelligence

8. Additional credits in Psychology (2.5 full-credit equivalents)
   Students in the Public Opinion and Behaviour stream must include:
   a) PSYD95H Psychology and Its Applications: Advanced Seminar
   b) PSYC12H Advanced Social Psychology*
   c) PSYC14H Cross-Cultural Social Psychology
   d) PSYC21H Advanced Developmental Psychology

9. The choice of the remaining 0.5 full-credit equivalent is unconstrained.

b) Other Disciplines (2.0 full-credit equivalents)
   Students in the Public Opinion and Behaviour stream must choose at least two full-credit equivalents from among the following courses:
   a) PSYD15H Current Topics in Social Psychology
   b) PSYD17H Psychology of Gender
   c) PSYD22H Socialization Processes
   d) PSYD44H Human Intelligence

Public Opinion and Behaviour Stream
This stream provides a theoretical and methodological foundation for the study of attitudes and
behaviour patterns, with an emphasis on understanding diversity. The stream is relevant to a
multitude of issues such as: health related attitudes and behaviours; political and consumer
attitudes and behaviour; attitudes about cross cultural issues, including the study of prejudice and
discrimination; behaviour patterns and their diversity across cultures, including the study of
social and sexual mores and of acculturation experiences. Students may apply for work term
employment in survey research organizations and in government departments and other agencies
interested in such issues.

10.5 full-credit equivalents in Psychology, as follows:

1. PSYA10H Introductory Psychology: Part I
   and
   PSYA20H Introductory Psychology: Part II
   (1 full-credit equivalent)

2. Statistical Methods (1 full-credit equivalent)
   a) PSYB07H Data Analysis in Psychology
   and
   b) PSYC08H Advanced Data Analysis in Psychology

3. Laboratory Methods (1 full-credit equivalent)
   a) PSYB01H Psychological Research Laboratory
   b) PSYC11H Social Psychology Laboratory*

4. PSYC22H Scientific Communication in Psychology (1.5 full-credit equivalent)

5. History and Theoretical Psychology (1 full-credit equivalent)
   a) PSYC32H Theoretical Psychology
   b) PSYC35H History of Psychology

6. Credits at the B-level and C-level (3 full-credit equivalents)
   Students must take 1.5 full-credit equivalents at the B-level or C-level from
   each of the two contents groups listed below:
   a) Social, Developmental and Personality (courses listed in the 10-, 20-, and 30-series)
   b) Learning, Perception, Cognition and Physiology (courses listed in the 40-, 50- and
      60-series); students in the Public Opinion and Behaviour stream must include
      PSYB57H, Memory and Cognition, in the courses used to satisfy this requirement.

Behavioural Disorders Stream
This stream provides a theoretical and methodological foundation for the study of behaviour
disorders and their treatment. Students will have the opportunity to apply for work term
employment in clinical settings such as may be found in hospitals and extended care facilities.

10.5 full-credit equivalents in Psychology as follows:

1. PSYA10H Introductory Psychology: Part I
   and
   PSYA20H Introductory Psychology: Part II
   (1 full-credit equivalent)

2. Statistical Methods (1 full-credit equivalent)
   a) PSYB07H Data Analysis in Psychology
   and
   b) PSYC08H Advanced Data Analysis in Psychology

3. Laboratory Methods (1 full-credit equivalent)
   a) PSYB01H Psychological Research Laboratory
   b) PSYC22H Clinical Neuropsychology Laboratory*

4. PSYC22H Scientific Communication in Psychology (1.5 full-credit equivalent)

5. History and Theoretical Psychology (1 full-credit equivalent)
   a) PSYC32H Theoretical Psychology
   or
   b) PSYC35H History of Psychology
6. Credits at the B-level and C-level (3 full-credit equivalents)
   Students are required to take 1.5 full-credit equivalents at the B-level or C-level from:
   each of the two content groups listed below:
   a) Social, Developmental and Personality (courses listed in the 10-, 20-, and 30-series); students in the Behavioural Disorders stream must include the following courses to satisfy this requirement:  
      PSYB32H Introduction to Developmental Psychology
      and
      PSYB32H Introduction to Abnormal Psychology
      b) Learning, Perception, Cognition and Physiology (courses listed in the 40-, 50- and 60-series); students in the Behavioural Disorders stream must take the following courses to meet this requirement:
      PSYB34H Behaviour Modification: Origins and Applications
      and
      PSYB35H Human Brain and Behaviour
      or
      PSYB35H Memory and Cognition
      or
      PSYB34H Perception and Cognition
    7. Credits at the D-level (one full-credit equivalent).
    Students in the Behavioural Disorders stream must include PSYD32H, Current Topics in Abnormal Psychology. The choice of the other 0.5 full-credit equivalent is unconstrained.
    8. Additional credits in Psychology.
    (2.5 full-credit equivalents)
    Students in the Behavioural Disorders stream must include:
    a) PSYD45H Psychology and Its Applications: Advanced Seminar
    b) PSYD43H Neuropsychological Rehabilitation
    c) PSYD62H Drugs and the Brain
    0.5 full-credit equivalent from among the following courses:
    PSYC21H Advanced Developmental Psychology
    PSYC21H Developmental Psychology Laboratory
    The choice of the remaining 0.5 full-credit equivalent is unconstrained.
    b) Other Disciplines (3.0 full-credit equivalents)
    Students must select at least three full-credit equivalents at the B-level or higher in a discipline or disciplines other than Psychology. Students in the Behavioural Disorders stream may take:
    1. BGYA01H Introductory Biology: Part I
    2. BGYA02H Introductory Biology: Part II (both BGYA01H and BGYA02H should be taken during the first year of study)
    3. NROB01H Neuroscience I: Cell Anatomy and Physiology
    4. NROB01H Neuroscience II: Learning and Motivation
    5. The choice of the remaining 1.0 full-credit equivalent is unconstrained.
    * These credits must be successfully completed before the first work term.
    ** This credit must be successfully completed before the second work term.

PSYA03H3 Introductory Psychology: Part I
This course provides a general overview of topics including research techniques in psychology, evolutionary psychology, the biology of behaviour, learning and behaviour, sensation, perception, memory and consciousness. The most influential findings from each of these areas will be highlighted.
Exclusion: (PSY A01Y), PSY 100H, PSY 100Y, (PSY 101H)

PSYA03H3 Introductory Psychology: Part II
This course provides a general overview of topics including language, intelligence, development, motivation and emotion, personality, social psychology, stress, mental disorders and treatments of mental disorders. The most influential findings from each of these areas will be highlighted.
Exclusion: (PSY A01Y), PSY 100H, PSY 100Y, (PSY 102H)

PSYB03H3 Psychological Research Laboratory
This course surveys the basic research techniques and designs used in the diverse field of psychological research, both in experimental and non-experimental areas. The topics range from the general principles of scientific research to concrete design issues, from sampling techniques to the typical problems faced when interpreting data.
Prerequisite: (PSY A01H & PSY A02H) or (PSY A01Y)

PSYB07H3 Data Analysis in Psychology
This course focuses on the fundamentals of the theory and the application of statistical procedures used in research in the field of psychology. Topics will range from descriptive statistics to simple tests of significance, such as Chi-Square, t-tests, and one-way Analysis-of-Variance. A working knowledge of algebra is assumed.
Students in the Specialist programs in Psychology, Cognitive Science, Psychology and Neuroscience or Neuroscience will be given priority for this course.

PSYB100H3 Introduction to Social Psychology
Surveys a wide range of phenomena relating to social behaviour.
Social Psychology is the study of how feelings, thoughts, and behaviour are influenced by the presence of others. The course is designed to explore social behaviour and to present theory and research that foster its understanding.
Exclusion: PSY 220H
Prerequisite: (PSY A01H & PSY A02H) or (PSY A01Y)

PSYB120H3 Introduction to Developmental Psychology
Developmental processes during infancy and childhood.
This course presents students with a broad and integrative overview of child development. Major theories and research findings will be discussed in order to understand how the child changes physically, socially, emotionally, and cognitively with age. Topics are organized chronologically beginning with prenatal development and continuing through selected issues in adolescence and life-span development.
Exclusion: PSY 210H
Prerequisite: (PSY A01H & PSY A02H) or (PSY A01Y)

PSYB300H3 Personality
This course is intended to introduce students to the scientific study of the whole person in biological, social, and cultural contexts. The ideas of classical personality theorists will be discussed in reference to findings from contemporary personality research.
Exclusion: PSY 290H
Prerequisite: (PSY A01H & PSY A02H) or (PSY A01Y)

PSYB320H3 Abnormal Psychology
The study of abnormal psychology is a search for why people behave, think, and feel in unexpected, sometimes bizarre, and typically self-defeating ways. Much less is known about what we would like. However, this course will focus on the ways in which psychologists have been trying to learn the causes of abnormal behaviour and what they know about preventing and alleviating it.
Exclusion: PSY 290H
Prerequisite: (PSY A01H & PSY A02H) or (PSY A01Y)
PSYB60H3 An Introduction to Physiological Psychology
A survey of the biological mechanisms underlying fundamental psychological processes. Topics include the biological basis of motivated behaviour (e.g., emotional, ingestive, sexual, and reproductive behaviour, sleep and arousal), sensory processes and attention, learning and memory, and language. Exclusion: NROC61H, PSY201H
Prerequisite: [PSYA01H & PSYA02H] or [PSYA01Y]

PSYB80H3 Human Brain and Behaviour
The neurological basis of human behaviour: an introduction to human neuro-psychology. Hemispheric specialization, diseases of the central nervous system, behavioural consequences of damage to each of the cortical lobes, speech disorders, psychopharmacology, and the biological basis of psychiatric disorders will be covered. Exclusion: [PSYA01H & PSYA02H] or [PSYA01Y]

PSYC22H3 Scientific Communication in Psychology
How we communicate in psychology and why. The differences between scientific and non-scientific approaches to behaviour and the implications for communication are discussed. Focus is on improving the student's ability to obtain and organize information and to communicate it clearly and critically, using conventions of the discipline. Limited enrolment: limited to students in the Specialist Program in Psychology. Exclusion: PSYB02H or [PSYB07H or SOC60H or STAB22H]
Corequisite: PSYC06H

PSYC29H3 Advanced Data Analysis in Psychology
This course is a continuation of PSYB07H. The primary focus of this course is on the understanding of Analysis-of-Variance and its application to various research designs. Examples will include a priori and post hoc tests. Finally, there will be an introduction in multiple regression, including discussions of design issues and interpretation problems. Exclusion: STAC23L, PSY201H
Prerequisite: [PSYB07H or SOC60H or STAB22H] and one additional B-level half-credit in psychology

PSYC19H3 Social Psychology Laboratory
Introduces conceptual and practical issues concerning research in social psychology, and provides experience with several different types of research. This course is designed to consider in depth various research approaches used in social psychology (such as attitude questioning, observational methods for studying ongoing social interaction). Discussion and laboratory work. Limited enrolment: 25
Exclusion: PSY321H
Prerequisite: PSYB01H & [PSYB07H or SOC60H or STAB22H] & PSYB100H

PSYC19H3 Advanced Social Psychology
A detailed examination of selected social psychological topics introduced in PSYB100H. This course examines the nature of attitudes, stereotypes and prejudice, including their development, persistence, and automaticity. It also explores the impact of stereotypes on our targets, including how stereotypes are perceived and how they affect performance, attributions, and coping. Exclusion: PSY202H
Prerequisite: [PSYB07H or SOC60H or STAB22H] & PSYB100H plus one additional B-level half-credit in PSY

PSYC14H3 Cross-Cultural Social Psychology
A survey of the role of culture in social thought and behaviour. The focus is on research and theory that illustrate ways in which culture influences behaviour and cognition about the self and others, emotion and motivation. Differences in individualism and collectivism, independence and interdependence as well as other important orientations that differ between cultures will be discussed. Social identity and its impact on accommodation in the context of immigration will also be explored. Exclusion: PSY321H
Prerequisite: [PSYB07H or SOC60H or STAB22H] & PSYB100H plus one additional B-level half-credit in PSY

PSYC18H3 The Psychology of Emotion
Emotions are examined in everyday life and in relation to the arts. The focus of this course is on a contrast between action and experience oriented approaches to emotion. An effort is made to synthesize the many theories of emotion coming from psychoanalysis, functionalism, behaviorism, social constructivism, and phenomenology. Exclusion: PSY394H
Prerequisite: PSYB100H
Recommended: PSYB07H or STAB22H or their equivalents

PSYC22H3 Advanced Developmental Psychology
An examination of selected issues pertaining to adult development and aging. Examples of topics which may be considered: adaptation to parenthood, work-related functioning, continuity versus change in adulthood. Teaching method: lectures, discussion. Exclusion: PSY313H
Prerequisite: PSYB200H plus one additional B-level half-credit in PSY. Recommended: PSYB07H or STAB22H or their equivalent

PSYC22H3 Developmental Psychobiology
A review of the interplay of psychosocial and biological processes in the development of stress and emotion regulation. Theory and research on infant attachment, mutual regulation, gender differences in emotionality, neurobiology of the parent-infant relationship, and the impact of socialization and parenting on the development of infant stress and emotion. Prerequisite: PSYB200H

PSYC26H3 Developmental Psychology Laboratory
This course introduces conceptual and practical issues concerning research in developmental psychology. Developmental psychology focuses on the process of change within and across different phases of the life-span. Reflecting the broad range of topics in this area, there are diverse research methods, including techniques for studying infant behaviour as well as procedures for studying development in children, adolescents, and adults. This course will cover a representative sample of some of these approaches. Limited enrolment: 24
Exclusion: PSY313H
Prerequisite: PSYB01H & [PSYB07H or SOC60H or STAB22H] & PSYB200H
PSYC31H Clinical Neuropsychology
Clinical neuropsychology is an applied science concerned with the behavioral expression of brain dysfunction. In this course, we will first examine the brain and localization of neuropsychological function. We will then explore the science and practice of clinical neuropsychology where tests measuring different neuropsychological domains (e.g., memory, attention and so on) are employed in patient populations to infer brain dysfunction. Students in the Behaviour Disorders Co-op stream should enrol in PSYC32H, not in this course.
Limited enrolment: 75
Exclusion: PSYC32H
Prerequisites: PSYB10H & [PSYB10H or SOCB1001 or SOCBl68I or STAB22H1] & PSYB32H & PSYB35H

PSYC32H Clinical Neuropsychology Laboratory
The applied science concerned with the behavioral expression of brain dysfunction for students in the Behavioral Disorders stream of the Co-op Program in Psychology and its Applications. Lecture and demonstration material will be as described for PSYC31H, Clinical Neuropsychology, but students will also complete a laboratory component. The laboratory will afford the student the opportunity for hands-on experience with a number of neuropsychological measures and will emphasize the learning of specific test administration and interpretation.
Limited enrolment: Enrollment is limited to students in the Behavioral Disorders stream of the Co-op Program in Psychology and its Applications. Exclusion: PSYC11H
Prerequisites: PSYB10H & [PSYB10H or SOCB1001 or STAB22H1] & PSYB32H & PSYB35H

PSYC33H3 Neuropsychological Rehabilitation
An examination of the therapeutic methods used to improve the capacity of a brain damaged individual to process and use incoming information, enhancing functioning in everyday life. Students will be introduced to methods that aim to restore cognitive function by compensatory techniques. Neuropsychological rehabilitation problems caused by deficits in attention, visual processing, language, memory, reasoning/problem solving, and executive functioning will be stressed. Lectures and demonstrations. Students in the Behaviour Disorders stream of the Co-operative Program in Psychology and its Applications will have priority for entry to the course.
Prerequisites: [PSYC31H or PSYC32H] & PSYB10H

PSYC35H3 Advanced Personality Psychology
This course is intended to advance students’ understanding of contemporary personality theory and research. Emerging challenges and controversies in the areas of personality structure, dynamics, and development will be discussed.
Exclusion: PSYJ39H
Prerequisites: [PSYB10H or SOCB1001 or STAB22H1] & PSYB10H plus one additional B-level half-credit in PSY.

PSYC35H3 Psychology and the Law
This course focuses on the application of psychology to the law, particularly criminal law including cognitive, neuropsychological and personality applications to fitness to stand trial, criminal responsibility, risk for violent and sexual recidivism and civil forensic psychology.
Prerequisites: a PSYB50-series half-credit

PSYC540H Cognition and Representation
Recent research on the psychology of representation, in pictures, words, metaphors, analogies and symbols.
Topics will include developmental and cross-cultural research on children's drawing, the perception of pictures by the sighted, and blind people identifying raised pictures. It will also include studies on children and adults using literal and non-literal representation, including metaphors, similes, and analogies. It will include cross-cultural research on forms used as symbols, and studies on children and machines using symbols. Teaching method will be lectures and demonstrations.
Prerequisites: [PSYB10H or SOCB1001 or STAB22H1] & a PSYB20-series or a PSYB50-series half-credit

PSYC559H3 Cognitive Neuroscience
The goal of this course is to present and analyze current methods, findings and theories relating brain function to cognitive processes such as perception, action, attention, memory, learning, and problem-solving. Recently developed research methods of functional neuro-imaging (including PET, MEG, and functional MRI) will be described along with the important research findings that they have generated. Prerequisites: PSYB10H & PSYB35H

PSYC569H3 Music Cognition
Studies the perceptual and cognitive processing involved in musical perception and performance. This class acquaints students with the basic concepts and issues involved in the understanding of musical expressivity. Topics will include discussion of the physical and psychological dimensions of sound, elementary music theory, pitch perception and melodic organization, the perception of rhythm and time, musical memory, musical performance, and emotion and meaning in music.
Prerequisites: [PSY A01H & PSY A02H] or [PSYA01Y1, PSYB10H or SOCB1001 or STAB22H1] & a PSYB50-series half-credit

PSYC585H3 Cognitive Psychology Laboratory
This course introduces conceptual and practical issues concerning research in cognitive psychology.
Students will be introduced to current research methods through a series of practical exercises conducted on computers. By the end of the course, students will be able to program experiments, manipulate data files, and conduct basic data analyses.
Limited enrolment: 40
Prerequisites: PSYB10H & [PSYB10H or SOCB1001 or STAB22H1] & PSYB10H or PSYB10H
Note: PSYC585H is recommended but not required.

PSYC586H3 Drugs and the Brain
An examination of behavioral and neurobiological mechanisms underlying the phenomenon of drug dependence.
Topics will include principles of behavioural pharmacology and pharmacokinetics, neurobiological mechanisms of drug action, and psychotropic drug classification. In addition, concepts of physical and psychological dependence, tolerance, sensitization, and reinforcement and aversion will also be covered.
Exclusions: PSYJ36H & PCL175Y
Prerequisites: [PSYB10H or its equivalent] & [at least one of PSYB40H, PSYB55H or NROB695H] & [one additional B-level or C-level half-credit in PSY or NRO]

PSYC592H3 Theoretical Psychology
An introduction to the problems and methods of theoretical analysis in psychology. The emphasis of the course is on developing sophistication in the techniques of theoretical analysis. The aim is to enable the student to read and evaluate the current literature in theoretical psychology.
Exclusion: PSYJ30H
Prerequisites: [PSYB10H or SOCB1001 or STAB22H1] or permission of the instructor

PSYC595H3 History of Psychology
A survey of developments in Western philosophy and science which influenced the emergence of modern psychology in the second half of the Nineteenth Century. Three basic problems are considered: mind-body, epistemology (science of knowledge), and behaviour/motivation/ethics. We begin with the ancient Greek philosophers, and then consider the contributions of European scholars from the Filthenth through Nineteenth Centuries. Twentieth Century schools are discussed including: psychoanalysis, functionalism, structuralism, gestalt, behaviourism, and phenomenology.
This course is restricted to 3rd and 4th year Specialists in Psychology, Psychological and Cognitive Science. Limited enrolment: 25
Exclusion: PSY500H
Prerequisites: Two B-level half-credits in Psychology or permission of the instructor Recommended: PSYB10H or STAB22H1 or their equivalent
PSYD30H3 Current Topics in Personality Psychology
An intensive examination of selected issues and research problems in personality psychology. The specific content will vary from year to year. Limited enrolment: 20
Exclusion: PSY440H
Prerequisite: PSYB30H plus one C-level half-credit in PSY

PSYD32H3 Current Topics in Abnormal Psychology
An intensive examination of selected issues and research problems in abnormal psychology. The specific content will vary from year to year. Limited enrolment: 20
Exclusion: PSY440H
Prerequisite: PSYB32H plus one C-level half-credit in PSY

PSYD46H3 Human Intelligence
Part I of this course reviews the classical literature as well as past research strategies and findings in the field of human intelligence. Part II examines current work in the area. Part III critically considers the concept of heritability, how it is measured, and its application to the investigation of individual and group differences on IQ tests. Limited enrolment: 20
Prerequisite: PSYB01H & [PSY107H or SOC306H] or STAR22H. PSYC08H also recommended.

PSYD50H3 Current Topics in Memory and Cognition
An intensive examination of selected topics. The specific content will vary from year to year. Limited enrolment: 20
Exclusion: PSY471H
Prerequisite: PSYB57H plus one C-level half-credit in PSY

PSYD55H3 Current Topics in Perception
The course provides an intensive examination of selected topics in recent research on perception. Topics may include research in vision, action, touch, hearing and multisensory integration. Selected readings will cover psychological and neuropsychological findings, intersensory models, synesthesia and an introduction to the Bayesian mechanisms of multisensory integration. Limited enrolment: 20
Prerequisite: PSYB51H & PSYC08H

PSYD65H3 Fundamental Issues in Cognitive Science
An examination of the conceptual and theoretical issues that lie at the foundation of cognitive science. Topics include: the mind-body problem, functionalism, mental representations, metaphor, propositional attitudes, nativism, the modularity of mind, rationality, artificial intelligence, consciousness. Limited enrolment: 20
Prerequisite: [PSYB07H or SOC806H] or STAR22H & a PSY50-series half-credit & a PSY C-level half-credit or permission of the instructor.

PSYD67H3 The Scientific Study of Conscious and Unconscious Influences
This course focuses on empirical attempts to distinguish between conscious and unconscious processes, and to better understand the manner in which they combine to affect performance. The course will begin with a brief history of experiments studying conscious and unconscious influences, and will then shift to a detailed examination of more current approaches. Topics covered will include subliminal perception, conscious versus unconscious memory, and models of the relation between conscious and unconscious influences. Limited enrolment: 20
Prerequisite: PSYB57H and at least one C-level course in Psychology

PSYD69H3 Current Topics in Human Brain and Behavior
An extensive examination of selected human brain and behaviour topics introduced in PSYB50H. The neural bases of mental functions such as language, learning, memory, emotion, motivation and addiction are examples of the topics that may be included. Students will be expected to read and discuss current empirical research in this field. Limited enrolment: 24
Prerequisite: PSYB50H
Recommended: PSYB07H or STAR22H or their equivalent
Corequisite: One additional C-level in Psychology

PSYD2003 Current Topics in Social Psychology
An intensive examination of selected issues and research problems in social psychology. Limited enrolment: 20
Exclusion: PSY226H, PSY420H
Prerequisite: [PSYB01H or PSYC12H or PSYC24H]

PSYD2013 Current Topics in Social Psychology
The development of social psychology is examined both as a discipline (its phenomena, theory, and methods) and as a profession. The Natural and Human Science approach to phenomena are contrasted. Students are taught to observe the lived world, choose a social phenomenon of interest to them, and then interview people who describe episodes from their lives in which these phenomena occurred. The students interpret these episodes and develop theories to account for their phenomena before searching for scholarly research on the topic. Limited enrolment: 20
Exclusion: PSY420H
Prerequisite: PSYC11H or PSYC12H or PSYC12H plus one C-level half-credit in PSY

PSYD191H3 Psychology of Gender
This course focuses on theory and research pertaining to gender and gender roles. The social psychological and social-developmental research literature concerning gender differences will be critically examined. Other topics also will be considered, such as gender-role socialization. Teaching method: seminar. Limited enrolment: 20
Exclusion: PSY212H
Prerequisite: PSYB11H plus two C-level half-credits in PSY

PSYD201H3 Current Topics in Developmental Psychology
An intensive examination of selected issues and research problems in developmental psychology. The specific content will vary from year to year with the interests of both instructor and students. Lectures, discussions, and oral presentations by students. Limited enrolment: 20
Exclusion: PSY410H
Prerequisite: PSYC21H or PSYC24H or PSYB20H plus one C-level half-credit in PSY

PSYD220H3 Socialization Processes
The processes by which an individual becomes a member of a particular social system (or systems). The course examines both the content of socialization (e.g., development of specific social behaviors) and the context in which it occurs (e.g., family, peer group, etc.). Material will be drawn from both social and developmental psychology. Limited enrolment: 20
Exclusion: PSY311H, PSY410H
Prerequisite: PSYB11H & PSYD20H plus one C-level half-credit in PSY

PSYD290H3 Supervised Study in Psychology
A reading or research project. These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate a background adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive literary research and/or data collection will be required. Such a project will culminate in a written submission.

Students must obtain a permission form from the Life Sciences Office (SS12) that is to be completed and signed by the intended supervisor, and returned to the Life Sciences Office. At this time, the student will be provided with an outline of the schedule and general requirements for the course.

Students seeking supervision off-campus are further advised to verify first with the Supervisor of Studies that the prospective project supervisor currently holds a cross-appointment at the University of Toronto. Exclusions for PSYD06H: COG291H, NOEC08H, PSYD30H, PSYD40H
Exclusions for PSYD30H: COG292H, NOEC08H, PSYD33H, PSYD40H
Prerequisite: Three full-credit equivalents in Psychology & permission of the instructor.
PSYD90H3 Seminar in Computational Cognitive Neuroscience
In this course high-performing, senior undergraduates participate in a graduate seminar on Computational Cognitive Neuroscience. Each week visiting experts present research on at least two of computation, cognition or neuroscience. Students are expected to read and comment on articles, attend the talks, and write a final paper.
Limit enrolment: 5
Prerequisite: Minimum cumulative GPA of at least 3.6 & permission of instructor

PSYD90H3 Psychology and Its Applications, Advanced Seminar
Students will undertake library research relating to their work experience, make classroom presentations, and submit a written paper.
Enrolment in this course is limited to students in the Specialist (Co-operative) Program in Psychology and its Applications.
Prerequisite: Satisfactory completion of the two required work terms and associated work term reports.

PSYD90H3 Thesis in Psychology
This course offers the opportunity to engage in a year-long research project under the supervision of an interested member of the faculty in Psychology. The project will culminate in a written report in the form of a thesis and a defence of that report. During the course of the year, at appropriate times, students will meet to present their own research proposals, to appraise the proposals of others, and to discuss the results of their investigations.
Students will meet as a group with the coordinator as well as individually with their supervisor. This course is restricted to Specialists in Psychology with a cumulative GPA of 3.3 or higher. Students planning to pursue graduate studies are especially encouraged to enrol in this course. Students must obtain a permission form from the Life Sciences Office (SS218) that is to be completed and signed by the intended supervisor, and returned to the Life Sciences Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course. Students seeking supervision off-campus will need to arrange co-supervision with a faculty member in Psychology at this campus.
Exclusions: NRO098Y, COGD101H, PSY400Y
Prerequisites: PSYB101H & (PSYB107H or SOC106H or STAB21H) & PSYC101H, Psychology Specialist, cumulative GPA of 3.3 or higher.
Corequisite: 0.5 D-level credit in Psychology.
Note: Registration in D-level courses or ROSI is tentative. This is to ensure spaces in these courses for students who need them to graduate at the end of the current session. ROSI will show your status in the course and its final confirmation.

PLB252H3 Second Language Learning
PLC240H3 Developmental Psycholinguistics
PLC340H3 Reading in a First or a Second Language
PLC550H3 Psycholinguistics
PLC244H3 Acquisition of the Mental Lexicon
PLD059H3 Disorders of Speech and Language
These courses may be used as Psychology courses to fulfill Psychology program requirements. (See the Languages and Linguistics (LGntgics) section of this Calendar for full descriptions.)

SCIB01H3 Science Engagement Outreach
SCIB02H3 Science Engagement In-Reach
(See the Science Engagement section of this Calendar for full course descriptions.)

Science Engagement
Coordinator: Dr. Kamini Persaud, Email: kpersaud@uwc.uottawa.ca
Science Engagement is a trans-disciplinary approach to science education. The goal of Science Engagement is to deepen students’ knowledge by helping them actively engage in science as scientists, themselves. Through a range of activities, we simultaneously strengthen the U of T Scarborough research endeavour, reach out to our communities and broaden the way we help our undergraduates learn science. There are three major categories of activities: Team Research, Science Outreach and Science In-Reach.

Team Research
A group of 4-6 students work as a team to develop and/or implement a project. Faculty members provide general guidance, and students meet weekly with an appropriate graduate student. Participation requires registration in a supervised study course offered by the departments of Computer & Mathematical Sciences, Life Sciences or Physical and Environmental Sciences and permission of the Science Engagement coordinator (Dr. Kamini Persaud; kpersaud@uwc.uottawa.ca). Students must also obtain a permission form from the Science Engagement office (AC312C).

Outreach and In-Reach Service Learning
Students do their science engagement work within the context of service learning courses, a pedagogical approach which links academic content with direct practice through critical reflection. For service learning done outside the university learning community students enrol in SCIB01H3 for service learning done within the university learning community students enrol in SCIB02H3.

SCIB01H3 Science Engagement Outreach
A service learning course in which students bring concepts taught in the science classroom to science-interested parties within the community such as area schools, laboratories, NGOs and government departments. Problem-solving, professional communication and self-reflective learning skills will be developed. Evaluation is based on participation, self-reflective writing and project portfolio creation.
Limit enrolment: 30
Prerequisite: (1) Completion of 4 FCEs, (2) selection of a U of T Scarborough major or specialist subject POS offered by Computer and Mathematical Sciences, Life Sciences or Physical and Environmental Sciences, (3) permission of science engagement coordinator (Kamini Persaud; kpersaud@uwc.uottawa.ca); GPA and communication skills will also be considered.

SCIB02H3 Science Engagement In-Reach
A service-learning course in which students deepen their knowledge by using their own educational experience in a completed science course to enrich the learning of students currently in the course by helping those students document their own learning. Evaluation is based on self-reflective writing, learning-aids produced and project portfolio. To participate in SCIB02H3, students must identify a course offered by Computer & Mathematical Sciences, Life Sciences or Physical & Environmental Sciences that they have completed with a grade of 70% or better. They must negotiate a service-learning contract with the current instructor of this completed course which will outline how the active learning of currently enrolled students will be facilitated. The service-learning contract can be obtained from and must be approved by the science engagement coordinator (Dr. Kamini Persaud; kpersaud@uwc.uottawa.ca).
Society and Environment (BA)

Discipline Representative/Supervisor of Studies: TBA

The Program in Society and Environment offers an interdisciplinary approach to environmental issues from the perspective of the social sciences. It assumes that the distinction between environment as commonly understood (i.e., the physical environment) and the built, social and political-economic environment is artificial and that environmental problems are mostly created by human societies. A clear understanding of environmental issues from this perspective requires knowledge of social and political processes, of social theory, of the history of conservation, of planning and urban development, and of human ecology, as well as of natural environmental processes. In this Program, the complex interactions between societies and environments are approached through a core of specialized courses, social science methods and theories, which are applied specifically to the themes of: relations between humans and ecosystems; planning cities; policies for agriculture and food; practices and policies for health. In order to pursue these themes, students can select from relevant courses in Sociology, Political Science, Geography, Anthropology, International Development Studies, Environmental Sciences and other related disciplines. It therefore combines well with those disciplines for students who wish to combine Society and Environment with another Major.

Guidelines for 1st year course selection:
Students who intend to complete the Major Program in Society and Environment should include GGRA02H & GGRA03H in their 1st year course selection.

MAJOR PROGRAM IN SOCIETY AND ENVIRONMENT

Program Requirements
The requirements for this Program are eight full credits, as follows:

- Introductory Courses:
  GGRA02H Geography and Global Processes
  GGRA03H Cities and Environments

- Students are also recommended to take 3 FCEs (full credit equivalents) from:
  ANTA01H Introduction to Anthropology: Becoming Human
  ANTA02H Introduction to Anthropology: Society, Culture and Language
  ECM00H Introduction to Microeconomics
  ECM05H Introduction to Macroeconomics
  EESA01H Introduction to Environmental Science
  EESA06H Introduction to Planet Earth
  HIS01H The Twentieth Century World I
  HIS02H The Twentieth Century World II
  HLTA01H Plagues and People
  POLA01H Critical Issues of Canadian Democracy
  POLA02H Politics, Corruption and Violence
  SOC01H Introduction to Sociology I
  SOC02H Introduction to Sociology II

Focus Courses:
- GGBE02H Environmental Conservation and Sustainable Development
- ANTB01H Political Ecology
- ISBR02H International Development Studies: Development and Environment
- ANTC04H Environmental Stress, Culture and Human Adaptability

Plus one full credit from:
- ANTB11H Introduction to World Prehistory: The Old Stone Age
- ANTB12H Introduction to World Prehistory: The Rise of Civilization
- ANTB14H Biological Anthropology: Beginnings
- ANTB15H Contemporary Human Evolution and Variation
- ANTB33H First Nations of North America: Hunters, Gatherers, Farmers
- ANTB39H First Nations of North America: Social Complexity and the State
- ANTB06H Health and the Urban Environment
- CITT01H Canadian Cities and Planning
- CLAB01H The Mediterranean World I: Greece
- CLAB02H The Mediterranean World II: Rome
- IFED01H Biotechnology-Environmental Implications
- FOS01H Feeding Humans: The Cost to the Planet
- GGBE02H Urban Geography
- GGRG01H Geographies of Disease
- IDSD01H International Development Studies: Political Economy
- IDSC01H Project Management I
- SOC04H Urban Sociology: Macro-Analysis
- SOC05H Urban Sociology: Micro-Analysis

Methodology:
- One full credit from:
  ANTC01Y Introduction to Archaeological Field Methods
  ANTB01H Fieldwork in Social and Cultural Anthropology
  EESS03H Geographic Information Systems and Remote Sensing
  EESG01H Environmental Impact Assessment and Auditing
  GGBE02H Geographic Information Systems (GIS) and Empirical Reasoning
  SOC03H Social Statistics
  SOC12H Qualitative Methods in Social Research
  SOC13H Quantitative Methods in Social Research
  STAB02H Statistics I

Advanced Courses:
- Three full credits from:
  ANTC05H Culture, Science and Biotechnology: Redefining the 'Natural' Order of Things
  ANTC06H Anthropological Perspectives on Development
  ANTC08H Death and Burial
  ANTC09H Medical Anthropology: Illness and Healing in Cultural Perspective
  ANTC10H Medical Anthropology: Biological and Demographic Perspectives
  ANTC11H The Anthropology of Food: Human Needs
  ANTC12H The Anthropology of Food: Consuming Passions
  ANTD01H Biomedical Anthropology
  EESS01H Urban Environmental Problems of the Greater Toronto Area
  EESS02H Environmental Law
  GGRG01H Population Geography
  GGRG02H Issues in Rural Development
Sociology

(B.A.)

Faculty List
W. W. Isagwe, B.A. (LaSalle), M.A., Ph.D. (Catholic Univ. of America), Professor Emeritus
J. Haninian, B.A., M.A. (Western Ontario), Ph.D. (Ohio State), Professor
R. O'Toole, B.A. (Ottawa), PGCE (London), M.A. (McMaster), Ph.D. (Toronto), Professor
A. Sevér, B.A., M.A. (Windsor), Ph.D. (York, Canada), Professor
J. Turner, B.Sc. (Hon.) (London) PGCE (Leicester), M.A., Ph.D. (Alberta), Professor
P.-C. Hsing, B.A. (National Chiao-tung University), M.A. (Chinese Cultural University), M.A., Ph.D. (UCLA), Associate Professor
S. Unger, B.A. (McGill), M.A., Ph.D. (York, Canada), Associate Professor
J. Hämmer, B.A. (Western), M.A. (Carleton), D.Phil. (Oxon.), Assistant Professor
P. Landolt, B.A., M.A. (York), M.A., Ph.D. (Johns Hopkins), Assistant Professor
K. Liddel, B.A. (Guelph College), M.A. (Auburn), Ph.D. (Emory), Assistant Professor
A. Mullens, B.A. (California), M.A., Ph.D. (Yale), Assistant Professor

Discipline Representative: P. Landolt (416-287-7156), Email: landolt@utsc.utoronto.ca

Sociology is the scientific study of interaction among people, the social relations which they establish, and the social groups which they form. Sociology attempts to explain how society is ordered, how it functions, and what accounts for social cohesion, social stratification, social mobility, and social change. It studies the consequences of cooperation, competition, and conflict.

Students may wish to take Sociology courses as part of a general education, in anticipation of the selection of certain courses in future occupations or professions, or as part of a Specialist, Major or Minor Program. The introductory courses, SOCA01H1 and SOCA02H1 (SOCA01Y), are intended to familiarize students with the distinctive theories, methods and questions of sociology as a part of a liberal education. In addition, the course provides a minimum background of knowledge about sociology, and hence is prerequisite to all of the more advanced courses.

Students who want to learn about certain areas of sociology which may be useful in later occupational situations may consult faculty advisors who are prepared to assist them in course selection. There are no formal requirements for these special areas and they will not be designated on diplomas.

Sociology 311

Planning a Program in Sociology

Students are obliged to take required courses in the Major and Specialist Programs as early in their careers as possible. For example, SOC410H1 and SOC420H1 should be taken during the first year, SOC386H1, SOC385H1, SOC384H1 and SOC383H1 should be taken during the second year and SOC401H1 and SOC411H1 should be taken during the third year. Failure to do so may lead to timetable conflicts and could prolong the completion of the Program. Students are reminded that they are not permitted to register in courses for which they have not completed the prerequisites listed in the Calendar. They may only enter a course for which they lack the prerequisites by obtaining the permission of the instructor prior to registration. Instructors have the right to request removal of any student ineligible for enrolment.

SPECIALIST PROGRAM IN SOCIOLOGY

Superintendent of Studies: K. Liddle Email: sociology-supervisor-studies@utsc.utoronto.ca

Program Admission

Enrollment in the Specialist Program is limited. Students must normally apply to enter the Program after completing 4 or 5 full credits including SOC3A01H1 and SOC3A02H1 (SOC3A01Y). Decisions are made on Program admissions only twice a year, in May and in August, and are based on student requests submitted to the Registrar through ROSI. Admission is determined on the basis of a student's overall GPA and grades in SOC3A01H1 and SOC3A02H1 (SOC3A01Y). For students applying after 8-10 credits, admission will be on the basis of overall GPA and grades in SOC courses taken.

Specialist students will be entitled to priority access to SOC386H1, SOC384H1, SOC383H1, SOC223H1 & SOC331H1, for fall/winter sessions, in the summer early registration period.

Program Requirements

The Program requires completion of ten full credits as described below. No more than fourteen full credits equivalents in Sociology may be included in a four-year degree:

1. (SOC3A01Y) Introduction to Sociology
2. (SOC3A01H1) Introduction to Sociology I and (SOC3A02H1) Introduction to Sociology II
3. (SOC3B05H) Logic of Social Inquiry
4. (SOC3B06H) Social Statistics
6. (SOC4B3H) Classical Sociological Theory Part II
7. Two full course equivalents at B-Level in Sociology
8. (SOC4C0H1) Contemporary Sociological Theory, Part I
9. (SOC4C1H) Contemporary Sociological Theory, Part II
10. (SOC4C2H) Qualitative Methods in Social Research or (SOC3C3H) Quantitative Methods in Social Research
11. One and a half full credits at C-Level
12. One other full credit in Sociology

SPECIALIST (CO-OBJECTIVE) PROGRAM IN SOCIOLOGY

Superintendent of Studies: I. Chan Email: chan@utsc.utoronto.ca

Advisor: K. Liddle Email: sociology-supervisor-studies@utsc.utoronto.ca

The Co-operative Program allows students to pursue an in-depth study of Sociology combined with two-four month work terms in areas complementary to the area of study. Work terms can be with research institutes, private sector, public institutions, and non-government organizations.

For information on admissions, fees, work terms, and standing in the program, please see the Co-operative Programs section of this Calendar.
Program Admission

This is a limited enrollment program.

Prospective Applicants: For direct admission from secondary school or for students who wish to transfer to U of T Scarborough from another U of T faculty or from another post-secondary institution, see the Co-operative Program section in this Calendar. Curricular U of T Scarborough students: Application procedures can be found at the Registrar's Office website: www.arts.utoronto.ca/registrar/. The minimum qualifications for entry are 4.0 credits including SOC/A01H & SOC/A02H plus a cumulative GPA of at least 2.5.

Program Requirements

Work Terms

In order to be eligible for placement, students must complete a minimum of 10 full credits, including SOC/B05H, SOC/B06H, SOC/B41H and SOC/B43H and complete the Arts & Science Co-op Work Term Preparation course.

Course Requirements

Students must complete the requirements for the Specialist Program in Sociology (see below), with the following additional requirements:

Either SOC/B43H or SOC/B55H

(These courses may be counted in partial fulfillment of the requirements for B-level courses within the Sociology Specialist Program.)

MAJOR PROGRAM IN SOCIOLOGY

Supervisor of Studies: K. Liddle Email: sociology-supervisor-studies@utoronto.ca

Program Admission

Enrollment in the Major Program is limited. Students must normally apply to enter the Program after completing 4 or 5 full credits including SOC/A01H and SOC/A02H (SOC/A01Y). Decisions are made on Program admissions only twice a year, in May and in August, and are based on student rankings submitted to the Registrar through ROSI. Admission is determined on the basis of a student's overall GPA and grades in SOC/A01H and SOC/A02H (SOC/A01Y). For students applying after 6-10 credits, admission will be on the basis of overall GPA and grades in SOC courses taken. Major students will be entitled to priority access to SOC/B00H, SOC/B42H and SOC/B43H for fall/winter sessions, in the summer early registration period.

Program Requirements

The Program requires completion of seven full credits in Sociology including:

1. SOC/A01Y Introduction to Sociology or
SOC/A01H Introduction to Sociology I and
SOC/A02H Introduction to Sociology II
2. SOC/B05H Logic of Social Inquiry
3. SOC/B06H Social Statistics
4. SOC/B41H Classical Sociological Theory I
5. SOC/B43H Classical Sociological Theory II
6. Four full credits in Sociology, at least one and a half of which must be at the C-level

MINOR PROGRAM IN SOCIOLOGY

Supervisor of Studies: K. Liddle Email: sociology-supervisor-studies@utoronto.ca

Program Admission

Admission to the Minor Program in Sociology is not limited. All students who apply for this Program will be admitted. However, students are warned that they are not guaranteed admission to B-level and C-level courses during fall and winter session, and thus will be accommodated only after other Program students have been admitted to these courses. Thus some courses may be unavailable, or available only in the summer.

Program Requirements

The Program requires completion of four full credits in Sociology including:

1. SOC/A01Y Introduction to Sociology or
SOC/A01H Introduction to Sociology I
and
SOC/A02H Introduction to Sociology II
2. SOC/B05H Logic of Social Inquiry
3. SOC/B41H Classical Sociological Theory I
4. SOC/B43H Classical Sociological Theory II
5. 1.5 additional full credits in Sociology including 1.0 at the C-level

SOC/A01H Introduction to Sociology I

An introduction to the basic concepts, principles and methods of Sociology as a discipline for the study of society. Sociology covers theory, methods, culture, social interaction and social stratification. Exclusions: SOC/A01Y, SOC/A11Y

SOC/A02H Introduction to Sociology II

Sociology II applies the ideas from Sociology I to social institutions and processes. Topics covered include race and ethnicity, gender, urbanization, globalization, population and deviant behavior. Exclusions: SOC/A01Y, SOC/A11Y

Prerequisite: SOC/A01H

SOC/B05H Logic of Social Inquiry

This course introduces the logic of sociological research and surveys the major quantitative and qualitative methodologies. Students learn to evaluate the validity of research findings, develop research questions and select appropriate research designs. Limited enrollment: 170

Exclusions: SOC/B09H, SOC/B08Y, SOC/B04H, SOC/B03H, SOC/B41H

Prerequisite: SOC/A01H & SOC/A02H

SOC/B06H Social Statistics

A consideration of elementary statistics including the summarizing of data, the logic of statistical decision-making and a number of common statistical tests. Statistics is a basic tool used by sociologists. An understanding of statistics is necessary for the student who wants to become an informed user of social research. A working knowledge of elementary algebra is required. However, the lecture will undertake brief reviews of mathematics as the need arises. Limited enrollment: 170


Prerequisite: SOC/A01H & SOC/A02H or SOC/A01Y

SOC/B23H Sociology of Gender

This course examines gender as a sociological category that organizes and, at the same time, is organized by, micro and macro forces. By examining how gender intersects with race, ethnicity, class, sexuality, age, and other dimensions, we analyze the constitutions and evolution of gendered ideology and practice. Prerequisites: SOC/A01H & SOC/A02H

SOC/B24H Sociology of Education

This course offers a sociological perspective on a familiar experience: attending school. It examines the stated and hidden purposes of schooling; explores how learning in schools is organized; evaluates the drop-out problem; the determinants of educational success and failure; and, it looks at connections between school and work. Limited enrollment: 170

Prerequisites: SOC/A01H & SOC/A02H or SOC/A01Y

SOC/B25H Classical Sociological Theory I

The development of classic sociological theory from its Enlightenment origins to the eve of the 20th century. Special emphasis is placed on the work of Auguste Comte, Herbert Spencer and Karl Marx. Limited enrollment: 170

Exclusion: SOC/B03Y, SOC/B04Y

Prerequisite: SOC/A01H & SOC/A02H or SOC/A01Y

SOC/B26H Classical Sociological Theory II

The development of classic sociological theory from the end of the 19th century to the eve of World War II. Special emphasis is placed on the work of Emile Durkheim, Max Weber and Georg Simmel. Limited enrollment: 170

Exclusion: SOC/B03Y, SOC/B04Y

Prerequisite: SOC/A01H & SOC/A02H or SOC/A01Y, SOC/B42H
SOCB44H3 Urban Sociology: Macro-Analysis
A theoretical and empirical examination of the processes of urbanization and suburbanization. Considers classic and contemporary approaches to the ecology and social organization of the pre-industrial, industrial, corporate and postmodern cities.
Limited enrolment: 170
Exclusion: [SOCB0Y3], SOC20Y
Prerequisite: [SOCA01H & SOC20A2H] or [SOC21Y]

SOCB45H3 Urban Sociology: Micro-Analysis
Examines the organizational and social psychological dimensions of urbanization in relation to local neighbourhoods, sub-cultures, networks and lifestyles. Students will be required to undertake a fieldwork study as part of the course requirements.
Limited enrolment: 170
Exclusion: [SOCB0Y3], SOC20Y
Prerequisite: [SOCA01H & SOC20A2H] or [SOC21Y], SOC44H3

SOCB46H3 Social Class and Stratification I
The description and analysis of the patterns of social stratifications and theories of social inequality up to and during the first three centuries of the Industrial Revolution.
Limited enrolment: 170
Exclusion: [SOCB0Y3], SOC20Y
Prerequisite: [SOCA01H & SOC20A2H] or [SOC21Y]

SOCB47H3 Social Class and Stratification II
The description and analysis of patterns of social stratification and theories of social inequality in the contemporary world, with special emphasis on the Canadian situation.
Limited enrolment: 170
Exclusion: SOC20Y, (SOCB1Y)
Prerequisite: [SOC21H & SOC22H] or [SOC21Y], SOC44H3

SOCB48H3 Family and Society
Focuses on the relationship between family and society by considering the historical, social, political and economic influences on family life and by examining how the family unit affects the social world. Readings draw on theory, history and ethnographic materials.
Limited enrolment: 170
Exclusion: SOC21Y, (SOCB1Y)
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB49H3 International Migration and Immigrant Incorporation
The course provides an overview of competing theories and concepts in the field of international migration and immigrant incorporation. Discussion puts the Canadian case in comparative perspective.
Limited enrolment: 170
Exclusion: SOC21Y, (SOCB1Y)
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB50H3 Race and Ethnicity
The course draws on a geographically varied set of case studies to consider both the historical development and contemporary state of the sociological field of race, racialization and ethnic relations.
Limited enrolment: 170
Exclusion: SOC21Y, (SOCB1Y)
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB51H3 Sociology of Work and Industry I
Economic activity drives human society. This course explores the nature of work, how it is changing, and the impact of changes on the transition from youth to adult life. It also examines racism in the workplace, female labour force participation, and why we call some jobs "professional", but not others.
Limited enrolment: 170
Exclusion: SOC21Y, SOC20Y, SOC11Y, SOC27Y
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB56H3 Sociology of Culture
Is it just about the money? This course examines the factors that shape workplace behavior-the effects of managerial control systems, technology and work groups, the expectations that people have of their jobs. It examines relationships between workers and management, trade unions and industrial conflict. It explores cheating in the workplace.
Limited enrolment: 170
Exclusion: SOC21Y, SOC20Y, SOC11Y, SOC27Y
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB58H3 Sociology of Culture
An introduction to various ways that sociologists think about and study culture. Topics will include the cultural aspects of a wide range of social phenomena— including inequality, gender, economics, religion, and organizations. We will also discuss sociological approaches to studying the production, content, and audiences of the arts and media.
Limited enrolment: 170
Exclusion: SOC21H, SOC36Y
Prerequisite: [SOC21H & SOC22H] or [SOC21Y]

SOCB59H3 Collective Behaviour
The study of institutionalized group behavior - crowds, panics, crazes, riots and the genesis of social movements.
Limited enrolment: 60
Prerequisite: [SOC21H & SOC22H] or [SOC21Y] & [SOC20Y] or [SOCB1H & SOC44H]

SOCB61H3 Social Movements
The development of an approach to social movements which includes the following: the origins of social movements, mobilization processes, the career of the movement and its rearticulation. The course readings will be closely related to the lectures, and a major concern will be to link the theoretical discussion with the concrete readings of movements.
Limited enrolment: 60
Prerequisite: [SOC21H & SOC22H] or [SOC21Y] & [SOC20Y] or [SOC21H & SOC22H] & [SOC24H]

SOCB66H3 Gender and Information Technology
Examines transformation and perpetuation of gender stratification in relation to information technology (IT). It explores the roles of family, ideology, state/policies, and other social institutions, and in the context of development and globalization. Students will develop and apply analytical skills to understand gender and IT in everyday life.
Limited enrolment: 60
Exclusion: SOC11Y
Prerequisite: [SOC21H & SOC22H] or [SOC21Y] & [SOC22H] & [SOC20Y] or [SOCB1H] & [SOC24H]

SOCB69H3 Sociology of Gender and Work
Explores the interaction of gender and work, both paid and unpaid work. Critically examines some cases for central theoretical debates and recent research. Considers gender differences in occupational and income attainment, housework, the relation of work and family, gender and class solidarity, and the construction of gender identity through occupational roles.
Limited enrolment: 60
Exclusion: SOC11Y
SOGC1003 Sociology of Urban Growth
An in-depth examination of the conditions, patterns and consequences of urban growth and development. Major topics will include the emergence of new urban institutions (legal, political, economic) and the formation and expansion of urban social networks.
Limited enrolment: 30
Exclusion: SOGC201H, SOGC206Y
Prerequisite: 10 credits including SOC201H, SOC202H, SOC205H, SOC206H & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)

SOGC333H Comparative Social Structure
A comparative analysis of social systems, social institutions and social organizations which attempts to link the specific to the general and the local to the global in the area of social structure. Attention will be devoted to various case studies.
Limited enrolment: 60
Prerequisite: [SOC201H & SOC202H] or [SOC201Y] & [SOC205H] & [SOC206H] & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)

SOGC340H Globalization and Transnationalism
Reviews current theoretical debates about the relationship between globalization, transnationalism, the nation and the state. Focuses on the ways in which transnationalism practices and processes transform and are reflected in the everyday lives of workers, citizens, and migrants.
Limited enrolment: 60
Prerequisite: [SOC201H & SOC202H] or [SOC201Y] & [SOC205H] & [SOC206H] & [SOC208H] & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)

SOGC350H Sociology of Gender
An examination of the social construction of gender as a social relation, as well as the construction of diachronic and contemporaneous cultural identities. Situates racialization in the broader sociological concerns with inequality, hegemony and counter-hegemonic processes.
Limited enrolment: 60
Exclusion: [SOC201H & SOC202H] or [SOC201Y] & [SOC205H] & [SOC206H] & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)

SOGC351H Sociology of Gender
An examination of the social construction of gender as a social relation, as well as the construction of diachronic and contemporaneous cultural identities. Situates racialization in the broader sociological concerns with inequality, hegemony and counter-hegemonic processes.
Limited enrolment: 60
Exclusion: [SOC201H & SOC202H] or [SOC201Y] & [SOC205H] & [SOC206H] & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)

SOGC354H Sociology of Social Change
An examination of processes of change in social structures, social institutions and social organizations grounded in the investigation of general theories of social transformation. Special attention is devoted to the nature, causes and consequences of socio-cultural changes in the contemporary world.
Limited enrolment: 60
Prerequisite: [SOC201H & SOC202H] or [SOC201Y] & [SOC205H] & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy)
SOC3C3H3 Gender and the Sociology of Higher Education
An examination of a number of key issues in the sociology of education, focusing particularly upon gender and higher education.
Limited enrolment: 60

SOC3C3H4 Political Sociology
An examination of power in its social context. Specific attention is devoted to such topics as ideologies, parties, movements, nations, states and revolutions.
Limited enrolment: 60

SOC4C4H3 Contemporary Sociological Theory Part I
The development of sociological theory from the end of World War II to the late 1960s. Special attention is devoted to the perspectives of Functionalism, Conflict Theory and Symbolic Interactionism.
Limited enrolment: 60
Exclusion: [SOC3C5Y]

SOC4C4H4 Contemporary Sociological Theory Part II
The development of sociological theory from the 1960s to the present. Phenomenological, Sociobiological, Rationalism/Choice and other perspectives are explored.
Limited enrolment: 60
Exclusion: [SOC3C5Y]

SOC4C4H1 Media and Society
Provides an introduction to the emergence, organization and regulation of various media forms; social determinants and effects of media content; responses of media audiences; and other contemporary media issues.
Limited enrolment: 60
Exclusion: [SOC3B5H] & [SOC3B7H]

SOC4C4H2 Supervised Independent Research
Student research by field methods, survey analysis or library or archival research. Regular supervision of data collection and analysis, culminating in a research report. Students are advised that they must obtain consent from the supervising instructor before registering for this course.
Exclusion: [SOC3C9Y]
Prerequisite: [SOC3C9H, SOC3A2H]

SOC4C4H3 Advanced Seminar in Sociological Theory
Exploration of significant topics of interest contemporary sociological theory. Designed for and restricted to students enrolled in the final year of the Specialist Program in Sociology.

SOC4D4H1 Advanced Seminar in Research Methods
Special topics in quantitative and/or qualitative methodologies used in contemporary sociological research. Restricted to final year students taking a Specialist Program in Sociology.
Prerequisite: [SOC3B2H] & [SOC3B4H] & [SOC3C4H] & [SOC3B5H]

Statistics
(B.Sc.)
Faculty List
M. Evans, B.Sc. (Western Ontario), M.Sc., Ph.D., Professor
A. Haslim, B.Sc. (Columbia), Ph.D. (Missouri), Senior Lecturer
K. Butler, Ph.D. (Simon Fraser University), Lecturer
Discipline Representative: A. Haslim (416-287-7252)
Probability and statistics have developed over a period of several hundred years as attempts to quantify uncertainty. With its origins in modeling games of chance, probability theory has become a sophisticated mathematical discipline with applications in such fields as demography, genetics and physics. Statistics is concerned with the proper collection and analysis of data, both to reduce uncertainty and to provide for its assessment via probability. Applications range from pre-election polling to the design and analysis of experiments to determine the relative efficiencies of different vaccines. Statistics is an introduction to the methods and theory of statistical inference. The C-level course builds on the introductory material to provide a deeper understanding of statistical methodology and its practical implementation.

Guidelines for 1st year course selection
Students who intend to complete the Major Program in Statistics should include [ESCA481] or [PSCB171], [MAT231H] or [MAT236H] or [MAT371H] in their 1st year course selection.

Science Engagement Courses
For science-literate courses and team research opportunities see the Science Engagement section of this Calendar.

SOCIAL PROGRAM IN NATURAL SCIENCES
(See the Physical Sciences section of this Calendar.)

MAJOR PROGRAM IN STATISTICS
Recommended Writing Courses: Students are urged to take a course from the following list of courses by the end of their second year.

STAT201H Statistics I
This course is a basic introduction to statistical reasoning and methodology, with a minimal amount of mathematics and calculation. The course covers descriptive statistics, populations, sampling, confidence intervals, tests of significance, correlation, regression and experimental design. A computer package is used for calculations.
Exclusion: ANTC35H1, ECON100, ECON190Y, ECO
Visual and Performing Arts

For Co-op opportunities related to the Specialist Program in Art & Culture and to the Major Programs above, please see the Humanities section of this Calendar. VPA Programs are outlined below. To find descriptions of individual courses see the end of program listings.

Courses which may fulfill the requirements of the Program:

- VPA305H Collaborations in the Visual and Performing Arts
- VPA306H Dialogues in the Diaspora
- Add any course in VPH

Drama
- VPA305H Collaborations in the Visual and Performing Arts
- Add any course in VPD

Music
- VPA305H Collaborations in the Visual and Performing Arts
- Add any course in VPM except VPA303H

Studio
- VPA305H Collaborations in the Visual and Performing Arts
- Add any course in VPS

SPECIALIST PROGRAM IN ART AND CULTURE

Superior of Studies: M. Schoenberg (416-287-7165) Email: schoenberg@ustc.utoronto.ca

This program provides training in the visual and performing arts in a university setting, both for students who want a conceptual and historical knowledge of the arts and the interrelationships among them, and for those who wish primarily to develop their practical abilities. The program is a basis for careers or further study for future practitioners in the arts, for gallery and museum professionals, for academics, and for those who wish a thorough knowledge of history, theory and practice in the arts.

The core courses give a basic knowledge of music, visual art and drama, as well as opportunities to develop writing and computing skills and to explore arts concepts and theories. Beyond this core, options range from concentration in one area to work across all the arts. All students in the program are expected to take advantage of the opportunities that exist on this campus to participate in arts events and clubs, as spectators and members and, where appropriate, as artists.

Students following the Drama, Multi-Disciplinary, Music and Studio streams of this Program should consult the Major and Minor Programs in these areas for instructions concerning the required courses in Performance and Studio.

The VPA Study Guide is available at:
http://www.ustc.utoronto.ca/%7EHumdiv/VPA/VPA/studyguide/

Program Requirements

The Specialist Program in Art and Culture requires the completion of 13.5 full credits within a twenty-credit degree. This program has five streams: Multi-disciplinary; Art History; Drama; Music and Studio. These programs are designed to provide in-depth study in the Visual and Performing Arts.

Discipline Representative: John Mayo (416-287-7191) Email: mayo@ustc.utoronto.ca

Art history, arts management, drama, music, and studio together constitute Visual and Performing Arts. Recognizing that much artistic work crosses the boundaries traditionally seen as separating one art form from another, Visual and Performing Arts invites exploration of the links and commonalities among the arts, in addition to providing opportunities for study in individual art areas.

All students will benefit greatly by going to the many plays, concerts, exhibitions and other arts events, and should also consider participating actively in, for instance, the series of choir and band courses and the public productions at the Legatis Lee Bower Theatre. Please contact the U of T Scarborough Cultural Affairs office (416-287-7076) or the VPA Discipline Representative.

Specialist Programs

Arts Management (Co-op)
Art and Culture
Major Programs
Art History
Drama
Music and Culture
Studio
Minor Programs
Art History
Drama
Music History
Studio
324 Visual and Performing Arts

SPECIALIST IN ART AND CULTURE (MULTI-DISCIPLINARY)
The Specialist in Art and Culture (Multi-Disciplinary) requires the following courses:

1. a) Two Minor Programs from the Visual and Performing Arts 
   plus
   One full credit in Visual and Performing Arts at the A- or B-level from an area outside those of the chosen Minor Programs. Approval of the Supervisor is required.
   or
   b) Individual plan of study; a student may design a set of seven full credits, including two full credits at the C- or D-level, in order to pursue an individual approach to a Visual and Performing Arts subject. The student must confer with the Supervisor and get prior approval of the individual plan of study.
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside those of the individual plan of study. Approval of the Supervisor is required.

2. Core courses required for all streams:
   PHILB33H The Art of Thinking
   VPAA06H Visual and Performing Arts Management in the Digital Age
   VPAB05H Introduction to Contemporary Cultural Theory
   VPCO35H Intermediate Seminar
   VPAC47H The Body in Modernity: Theories and Representations
   VPAF48H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 full credit from:
   A B level course in English chosen in consultation with the Program Supervisor
   PHILB33H Philosophy of Art
   VPAF06H Challenging Normative Values in Art, Culture and Society

SPECIALIST IN ART AND CULTURE (ART HISTORY)
The Specialist in Art and Culture (Art History) requires the following courses:

1. The Major Program in Art History
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside the Art History Major

2. Core courses required for all streams:
   PHILB33H The Art of Thinking
   VPAF06H Visual and Performing Arts Management in the Digital Age
   VPAF05H Introduction to Contemporary Cultural Theory
   VPCO35H Intermediate Seminar
   VPAC47H The Body in Modernity: Theories and Representations
   VPAD05H Senior Project

3. At least 5 full credits from:
   A B level course in English chosen in consultation with the Program Supervisor
   PHILB33H Philosophy of Art
   VPAF06H Challenging Normative Values in Art, Culture and Society

SPECIALIST IN ART AND CULTURE (DRAMA)
The Specialist in Art and Culture (Drama) requires the following courses:

1. The Major Program in Drama
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside of the Drama Major

2. Core courses required for all streams:
   PHILB33H The Art of Thinking
   VPAF06H Visual and Performing Arts Management in the Digital Age
   VPAF05H Introduction to Contemporary Cultural Theory
   VPCO35H Intermediate Seminar
   VPAC47H The Body in Modernity: Theories and Representations
   VPAF48H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 full credit from:
   A B level course in English chosen in consultation with the Program Supervisor
   PHILB33H Philosophy of Art
   VPAF06H Challenging Normative Values in Art, Culture and Society

SPECIALIST IN ART AND CULTURE (MUSIC)
The Specialist in Art and Culture (Music) requires the following courses:

1. The Major Program in Music
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside the Music Major

2. Core courses required for all streams:
   PHILB33H The Art of Thinking
   VPAF06H Visual and Performing Arts Management in the Digital Age
   VPAF05H Introduction to Contemporary Cultural Theory
   VPCO35H Intermediate Seminar
   VPAC47H The Body in Modernity: Theories and Representations
   VPAF48H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 full credit from:
   A B level course in English chosen in consultation with the Program Supervisor
   PHILB33H Philosophy of Art
   VPAF06H Challenging Normative Values in Art, Culture and Society

SPECIALIST IN ART AND CULTURE (STUDIO)
The Specialist in Art and Culture (Studio) requires the following courses:

1. The Major Program in Studio
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside of the Studio Major.

2. Core courses required for all streams:
   PHILB33H The Art of Thinking
   VPAF06H Visual and Performing Arts Management in the Digital Age
   VPAF05H Introduction to Contemporary Cultural Theory
   VPCO35H Intermediate Seminar
   VPAC47H The Body in Modernity: Theories and Representations
   VPAF48H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 full credit from:
   A B level course in English chosen in consultation with the Program Supervisor
   PHILB33H Philosophy of Art
   VPAF06H Challenging Normative Values in Art, Culture and Society
VPAC063 The Body in Contemporary Culture: Theories and Representations
A course focusing on the experience of the body in the public spaces of the modern city and in cyberspace. Of special interest will be the viewpoints of artists, writers, and filmmakers who explore how the "other" is constructed in terms of class, stature, and ethnicity. Same as ENGC77H1.
Limited enrolment: 45
Exclusion: ENGC77H1, VPHIC48H1
Prerequisite: Two full credits from ENG101H1, ENG102H1, ENG103H1, ENG104H1, ENG105H1, ENG106Y1, ENG107Y1, VPHIC40H1, VPHIC49H1, VPHIC50H1, VPHIC51H1, VPHIC52H1, WST107H1, WST108H1, WST109Y1 or permission of the instructor.

VPAC063 The Body in Contemporary Culture: Theories and Representations
A course focusing on the experience of the body in the public spaces of the modern city and in cyberspace. Of special interest will be the viewpoints of artists, writers, and filmmakers who explore how the "other" is constructed in terms of class, stature, and ethnicity. Same as ENGC77H1.
Limited enrolment: 45
Exclusion: ENGC77H1, VPHIC48H1
Prerequisite: Two full credits from ENG101H1, ENG102H1, ENG103H1, ENG104H1, ENG105H1, ENG106Y1, ENG107Y1, VPHIC40H1, VPHIC49H1, VPHIC50H1, VPHIC51H1, VPHIC52H1, WST107H1, WST108H1, WST109Y1 or permission of the instructor.

VPAC064H3 Senior Project
This course allows for individual or collaborative projects at an advanced level. Students will be required to complete a project or series of works that reflect the research completed in VPAC063H1.
Prerequisite: VPAC063H1

VPAC065H3 Planning for Equity and Diversity in Art Organizations
An examination of best practices in the management of the arts in a pluralistic society.
Exclusion: VPHIC41H1
Prerequisite: VPAB06H1 or permission of instructor

Art History
Because art is perceived through the eyes and other senses as well as through the intellect, art history courses use slides, films, videos, and direct viewing of art works in galleries and museums and at the cities. Although some of the courses reflect a traditional structuring of art history by time periods, instructors often use new methodologies to explain the work within these periods. Art history courses at the A-level and B-level are normally open to all students. In addition to the practical critical thinking and writing provided by all Humanities disciplines, these courses offer basic information about painting, sculpture, architecture, and other arts, and a chance to improve perceptual awareness.

Guidelines for 1st year course selection
Students who intend to complete an Art History program should include VPAA05H1 and an A-level Art History course in their 1st year course selection.

Art History Study Guide is available at:
http://www.utmontreal.ca/eharvey/VPAA/ArtHistory/studyguide/

MAJOR PROGRAM IN ART HISTORY
Supervisor of Studies: E. Harney (416-287-7109) Email: harney@utmontreal.ca

Program Requirements
Students must complete seven full credits as follows:
1. VPAA05H1 plus one-half credit at the A-level in Art History.
2. Four full credits at the B-level in Art History. Students may substitute one full credit from VPAA05H1 or another course (such as VPAB06H1 or PHILB03H1) with the Supervisor's approval.
3. Two full credits in Art History at the C- or D-level (or at the 300-400-level) on the St. George campus.

MINOR PROGRAM IN ART HISTORY
Supervisor of Studies: E. Harney (416-287-7109) Email: harney@utmontreal.ca

Program Requirements
Students must complete four full credits from the courses below as follows:
1. VPAA05H1 plus one-half credit at the A-level in Art History.
2. Two full credits at the B-level in Art History.
3. One full credit in Art History at the C- or D-level, chosen in consultation with the Supervisor.
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPHB48H3</td>
<td>Science, Vision, and Humanism in Renaissance Europe</td>
<td>This course is an introduction to European art and culture during the 15th and 16th centuries. Students will explore the rise of new artistic media and techniques, along with critical issues of social, cultural, intellectual and religious contexts that shaped the form and function of art made during this era. Exclusions: FAH230H1, FAH274H1, (VPA441H), (VPA544H). Prerequisite: VPHA46H1.</td>
</tr>
<tr>
<td>VPHB57H3</td>
<td>Women in the Arts: Hot Mamas, Amazons, and Madame</td>
<td>Women artists of the last 150 years, their relationships to &quot;mainstream&quot; art, and the influences of feminism on the production and reception of art. Exclusions: VIS200H1, VPHB57H1. Prerequisite: [WSTA10H1 &amp; WSTA102H] or (VPA440H) or (VPA461H) or (VPA461H) or permission of the instructor.</td>
</tr>
<tr>
<td>VPHB58H3</td>
<td>Modern Art and Culture</td>
<td>Nineteenth and twentieth century art in relation to the modern world. What &quot;modern&quot; means when used to describe art, and how art is affected by the dynamic cultural, economic, social, and political contexts of the modern world. Exclusions: FAH231H1, FAH288H1.</td>
</tr>
<tr>
<td>VPHB59H3</td>
<td>Modern in Postmodern Art</td>
<td>Shifts in theory and practice in art of the past fifty years. Studying selected artists' works from around the world, we explore how notions of modern art gave way to the postmodern as artists' media, patterns of practice, and ideas about their relations to the public and to their institutional contexts changed. Exclusions: FAH289H1.</td>
</tr>
<tr>
<td>VPHB60H3</td>
<td>Canadian Visual Art</td>
<td>What Canadian artists have made in the country's diverse cultural contexts, from 19th century churches of Quebec, designed and decorated by talented family studios, to First Nations art and major twentieth century Anglo-Canadian and Quebecois painters. Exclusions: VPHB47H1, (VPA448Y).</td>
</tr>
<tr>
<td>VPHB61H3</td>
<td>Space, Place and the Arts</td>
<td>Artist David Hockney has said that the way we define space has a lot to do with how we behave in it. Here we examine different ideas and assumptions about space and place and perspective in painting, performance, installation and other arts, and what these may communicate to us. Exclusions: FAH350H1, FAH350Y.</td>
</tr>
<tr>
<td>VPHB62H3</td>
<td>The History of Photography</td>
<td>The centrality of the photographic image in African cultures and histories from the period of European imperialism, the rise of modernist &quot;primitivism&quot; and the birth of ethnology and anthropology to contemporary African artists living on the continent and abroad. Prerequisite: None. Visual art studio students are encouraged to enrol.</td>
</tr>
<tr>
<td>VPHB53H3</td>
<td>Medieval Art</td>
<td>The origins of European artistic traditions in the early Christian, Mediterranean world; how these traditions were influenced by classical, Byzantine, Moslem and pagan forms; how they developed in an entirely new form of artistic expression in the High Middle Ages; and how they led on to the Renaissance. Exclusions: (VPHB25H1), VPHB35H1. Prerequisite: VPHA46H1, (VPA461H) or (VPA441H) recommended.</td>
</tr>
<tr>
<td>VPHB42H3</td>
<td>Carolingian and Romanesque Art and Architecture</td>
<td>Major artistic and architectural monuments of Europe from the Carolingian Renaissance to the Renaissance of the twelfth century, considered in relation to geographical context, to monasticism and pilgrimage, to artistic developments of the contemporary Mediterranean world, and to the art and architecture of the later Roman Empire, Byzantium and Armenia, Islam, and the art of the invasion period. Exclusions: FAH321H1, FAH322H1, (VPA412H).</td>
</tr>
<tr>
<td>VPHB44H3</td>
<td>Paris: The Capital of the 19th Century</td>
<td>Impressionism and Post-Impressionism</td>
</tr>
<tr>
<td>VPHB46H3</td>
<td>Africa Through the Photographic Lens</td>
<td>This course is an introduction to European art and culture during the 15th and 16th centuries. Students will explore the rise of new artistic media and techniques, along with critical issues of social, cultural, intellectual and religious contexts that shaped the form and function of art made during this era. Exclusions: FAH230H1, FAH274H1, (VPA441H), (VPA544H). Prerequisite: VPHA46H1.</td>
</tr>
</tbody>
</table>

VFPA00H3 | Ways of Seeing: Introduction to Art Histories | How do our definitions vary across cultures and time periods? Studying different approaches to writing art history and considering a wide range of media from photography to printmaking and installation art. Exclusions: FAH100Y. |
Art History

VPHC48HL Art and the Everyday: Mass Culture and the Visual Arts
This course explores the relationship between visuality and practices of everyday life. It looks at the interaction of the political, economic, and aesthetic aspects of mass media with the realm of "everyday" as history and culture. We will explore notions of the public, the mass, and the simulacrum.
Exclusion: VCC310H, VCC310H
Prerequisite: VPHIA40H

VPHC420H Gothic Architecture
The development of Gothic architecture from the beginning of the twelfth century to the middle of the thirteenth century. Emphasis on Notre-Dame in Paris, the cathedrals of Chartres, Reims, and Amiens, and a select number of monuments in England. A discussion of the sculptural programs of these churches will be included.
Exclusion: FAH120H (FAH160H)
Prerequisite: One credit in art history at the B-level or permission of the instructor

VPHC450H Seminar in Twentieth-Century Art
Special topics in twentieth-century painting and sculpture. The subject will change from time to time. After introductory sessions outlining the subject and ways of getting information about it, seminar members will research and present topics of their choice.
Exclusion: VPCG45H
Prerequisite: One credit in modern art history at the B-level or permission of the instructor

VPHC460H Topics in Art of the Ancient World
A special topics course in ancient art and architecture. Concentrated study of a particular topic in ancient art, which will change from year to year.
Exclusion: VPCG46H
Prerequisite: VPHIB2H or permission of the instructor

VPHC400H Advanced Studies in Art Theory
The class will read selected recent cultural theory and art theory and consider its implications for a variety of works of art, as well as select additional exhibitions and the critical discourse surrounding the oeuvres of individual artists.
Prerequisites: VPHIA40H & (VPAH40H or VPAH40H)
Corequisite: Two credits at the B-level in art history and/or studio, or permission of the instructor

VPHC510H Word and Image
The interface between modern and contemporary arts and the communicative power of language, written word and graphic systems. By examining the long-standing, cross-cultural links between the verbal and the visual, we will consider how artists combine narrative content and graphic designs of letters, words, and conventional and invented inscriptions.
Prerequisites: VPHIB40H or VPH201H or permission of instructor

VPHC520H Issues in Contemporary Global Arts
The theoretical debates and institutional structures that surround the production, circulation and interpretation of the arts in a transnational art world, paying particular attention to the interplay of identity and visuality. Works by artists from throughout the globe, contributing to a global contemporary art discourse and genre will be considered.
Exclusion: VPHIC60H
Prerequisites: VPHIB40H, VPH201H, VPH201H or permission of instructor

VPHC530H The Silk Roads
The Silk Routes were a lacing of highways connecting Central, South and East Asia and Europe. Utilizing the Royal Ontario Museum's collections, classes held at the Museum and U of T Scadding House will focus on the art produced along the Silk Routes in 7th to 9th century Asia, India, China and the Tadamakhan regions.
Prerequisite: One full credit in art history or in Asian or medieval European history or permission of instructor

VPHC500H Art Writing
Art criticism as a complex art of practice performed not only by critics, art historians, curators and the like, but also by artists (and collectors). The traditional role of art critics in the shaping of an art world, and the parallel roles played by other forms of writing about art and culture (from anthropology, sociology, film studies). Limited enrolment: 23
Prerequisites: 2 full credits at the B level from VPA, VPH, and/or VPS

VPHC550H Religion in the Arts: Hinduism and Jainism
This course explores Eastern religions and arts, with a specific focus on Hinduism and Jainism in art from India, Pakistan, and Sri Lanka. Investigation of context, use, and symbolism, paralleled with the examination of rituals, belief and performance. The classes will take advantage of collections at the ROM.
Prerequisites: VPHIB66H or HUM104H or permission of instructor

VPHC560H Religion in the Arts: The Judeo-Christian Traditions
This course will address how arts give expression to spiritual beliefs and reflect patterns and iconographic debates operating across the cultures of the Judeo-Christian worlds. Investigation of context, use, and symbolism, paralleled with the examination of rituals and beliefs. The classes will take advantage of collections at the ROM and the AGO.
Prerequisites: VPHIB66H

VPHC580H Topics in Buddhist Art
This upper level seminar will address theoretical concerns and advance methodological approaches to the study of Buddhist arts. Topics will vary according to year and materials available.
Prerequisite: VPHIB66H

VPHC580H Art in Global Cities
This course looks at the global city as a hub for the creation of visual, performing arts and architecture. How do cyberspace and increased transnational flows of art and artists changed the dynamic surrounding urban arts? What are the differences between the arts within the modern and global contemporary city?
Exclusion: VPHIC52H, ANTR52H
Prerequisites: VPHIB59H or VPHIB59H or permission of instructor

VPHC580H Scholars and Aristocracy in Buddhist Art: The Literati and the Gilchrist
This course explores the relationships between scholarly, religious and artistic traditions within the Buddhist world. The classes will take advantage of collections at the ROM and elsewhere in Toronto.
Prerequisites: VPHIB66H

VPHIC410H VPHIC410H Supervised Reading in Art History
A course offering the opportunity for advanced investigation in an area of interest; for students who are nearing completion of an art history program and who have already acquired independent research skills. Students must locate a willing supervisor, and topics must be identified and approved, by the end of the previous term.
Exclusion: VPAD41H (VPAD41Y)
Prerequisite: One credit at the C-level in art history.

Students are advised that they must obtain consent from the supervising instructor before registering for these courses.
Arts Management

SPECIALIST (CO-OPERATIVE) PROGRAM IN ARTS MANAGEMENT

Supervisor of Studies: Storm Helwig (416-287-7600) Email: helwig@arts.utoronto.ca
Campus Co-ordinator: Shelley Crawford (416-287-7114) Email: sakcom@arts.utoronto.ca

The Co-operative Program in Arts Management is designed for students with an interest both in the arts and in business of the arts, and normally requires four to five years to complete. It combines academic study in a wide variety of subjects with practical work experience, preparing students for permanent employment as arts managers or for further studies in Arts Management, Business Administration, Museum Studies, Cultural Studies, Drama, Music, Art History, Curatorial Studies or Studio. This program requires fifteen academic full credits plus two work terms of twelve weeks each. For further information, see http://www.arts.utoronto.ca/coopart.

For information on admissions, fees, work terms and standing in the Program, please see the Co-operative Programs section of this Calendar.

Program Admission

Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, and interest and potential ability in Arts Management.

Program Requirements

Work terms

Students are normally eligible for a work placement after their second year of study. Work terms may begin in May, September or January. The places of work will vary widely according to availability and to a student's needs and abilities. To compete for work placement a student must be in good standing in the Program and must have completed at least ten full credits including:

- Two full credits from the artistic field
- VPA A10H Introduction to Arts Management
- VPA B12H Marketing and Communications in the Arts and Cultural Sector
- VPA B14H Fundraising and Resource Development in the Arts and Cultural Sector
- MGTA 03H Introduction to Management I
- MGTA 04H Introduction to Management II

Students must also have completed the Co-op Work Prep Course.

Course Requirements

Students complete six full credits in the arts management core program, three full credits in the management field, six full credits from the artistic field, and a further five full credits from the elective field. Continuous consultation with the Supervisor of Studies is strongly encouraged for all students in each year of their program.

1. Arts Management Core Program

Students must complete six full credits as follows:

a) The following five full credits:

- VPA A10H Introduction to Arts Management
- VPA A06H Visual and Performing Arts Management in the Digital Age
- NMEA 20H Introduction to New Media in the Humanities and Social Sciences
- (CSCA 02H) The Why and How of Computing
- VPA B05H Introduction to Contemporary Cultural Theory
- VPA B06H Challenging Normative Values in Art, Culture and Society

b) One additional full credit from the following list:

- VPA 16H Legal and Human Resource Issues in Arts Management
- VPA D01M Planning for Equity and Diversity in Arts Organizations
- VPA D31H Art, Culture, and Policy
- VPA D41H Independent Studies in Arts Management

2. Management Field of Study

The following three full credits are required:

- MGTA 03H Introduction to Management I
- MGTA 04H Introduction to Management II
- MGTA 23H Managing People in Organizations

Plus one additional full credit from Management or Economics

d) Artistic Field of Study

Six full credits (in addition to courses listed in the Arts Management Core Program) from Art History, Drama, Music, or Studio. These courses should follow the requirements established for the Major program in the chosen artistic field. Students have the option of completing the Major program in their chosen artistic field by taking one additional full credit within that Major program - chosen in consultation with their program's Supervisor of Studies - rather than within the Elective Field of Study (see below). The completion of the Major program (and further concentration of elective courses) in the chosen artistic field is particularly valuable for students contemplating graduate study. Students electing to complete the Major should do so in consultation with the Supervisors of Studies in Arts Management and the chosen artistic field.

e) Elective Field of Study

A further five full credits - or four, for those students choosing to complete the Major program in their artistic field - chosen in consultation with the Supervisor of Studies. It is strongly recommended that students take HUMB 11H Critical Thinking, Reasoning and Decision Making, VPA A04H "Arts in a Pluralist Society" and VPA A06H "Planning for Equity and Diversity in Arts Organizations" (if not taken as a part of the Arts Management program requirements under b) above) as elective choices. The purpose of the elective field is to allow students some flexibility in shaping a degree to their interests and future needs and providing for a more broad-based liberal education.

Courses in the first two years of the program

The first year of study would normally consist of VPA A10H, VPA B12H or VPA B14H, one course from the artistic field (including VPA A06H, MGTA 03H and MGTA 04H), perhaps VPA A04H, NMEA 20H or CSCA 02H, and further courses in the artistic management field and/or electives (preferably including HUMB 11H). Students will also normally take the Co-op Work Prep Course in the fall session.

The second year of study would normally consist of five full credits to include VPA B05H, VPA B06H, VPA B12H or VPA B14H, VPA A06H or NMEA 20H or CSCA 02H (if not taken in the first year), and a balanced mixture of management, artistic and elective courses.
VPAA103H Introduction to Arts Management
An introduction to the theories and practices of arts management primarily within the not-for-profit sector. It is a general survey course that will introduce the broad context of arts in Canadian society and provide an overview of the artistic and administrative issues currently faced by the arts and cultural community.

VPAB12H3 Marketing and Communications in the Arts and Cultural Sector
This course facilitates an understanding of the knowledge and skills required for an arts manager to be responsive to varied market groups and changing market environments and successfully bring art and audiences together. Topics will include segmentation, branding, market research, promotion, media relations and community outreach.
Prerequisite: VPAA101H

VPAB13H3 Financial Management for Arts Managers
An introduction to financial management issues faced by arts and cultural managers. The topics include an introduction to basic accounting concepts, financial statement preparation and analysis, internal control and management information systems, budgeting and programming, cash and resource management, and various tax-related issues.
Exclusion: MGTE50H3
Prerequisite: VPAA101H & [VPAB12H3 or VPAB14H3]

VPAB14H3 Fundraising and Resource Development in the Arts and Cultural Sector
This course provides an overview of practical skills and knowledge required by arts managers in the area of raising and developing required resources. Topics will include donor and sponsor development, grant writing, direct mail requests, and the integration of fundraising with marketing, planning, and human resource development.
Prerequisite: VPAA101H

VPAC13H4 Planning and Project Management in the Arts and Cultural Sector
This course provides a broad foundation of project management and planning knowledge and skills. Topics such as project and special event management (including tours, festivals, etc.), and strategic and business planning (including entrepreneurship) will be discussed in the context of organizational processes.
Prerequisite: VPAA101H & VPAB12H3 & VPAB14H3

VPAC15H3 Cultural Policy
A survey of the principles, structures and patterns of cultural policy and arts funding, both nationally and internationally. The course will explore a wide range of cultural policy issues, addressing both the subsidized arts and cultural industries sectors, and exploring the strengths and weaknesses of particular policy approaches.
Prerequisite: VPAB12H3

VPAC16H3 Legal and Human Resources Issues in Arts Management
This course is a study of legal and practical human resource issues for arts management perspective. Topics will include copyright, freedom of expression and censorship, artist and cultural worker contract negotiation and administration, employment law, labour relations and collective bargaining, advocacy, and Health and Safety issues in the performing arts, gallery and museum environments.
Limited enrolment: 38
Prerequisite: One B-level course in Arts Management.

VPAD12H3 Senior Seminar in Arts Management
A synthesis of students’ prior academic studies and cooperative work experience as they prepare to enter the world of arts management. Students will lead an academic class discussion on an important arts management related topic and will actively participate in a major arts management project.
Prerequisite: VPAC13H3 & one, preferably two, work terms (COPC01H1)

to both student and supervisor in traditional or emerging subjects related to the field of Arts Management.
Limited enrolment: 6
Exclusion: MGT100H
Prerequisite: At least 1 FCE in Arts Management at the C-level. Written consent and approval of a formal proposal in the approved format must be obtained from the supervising instructor and Program Supervisor by the last date of classes in the previous academic semester.

Drama

The Drama Program has been devised to serve students who intend to major or minor in Drama, students who intend to specialize in Visual and Performing Arts, and students who have a casual interest in drama and theatre.

We offer two types of courses that complement each other: theoretical and practical. The theoretical courses are in the history of theatre and in special aspects of theatre history and theory. In the practical courses, students become acquainted with all aspects of theatre production in studio situations, both as actors and as technicians. Admission into the practical side of the program is by interview. Participation in public productions at U of T Scarborough is strongly encouraged.

Guidelines for 1st year course selection
Students who intend to complete a Drama program should include VPAAD45H1, VPAD101H & VPAD12H3 in their 1st year course selection.

The Drama Study Guide is available at:
http://www.mhs.utoronto.ca/71Thumas/VPA/Drama/studyguide/

MAJOR PROGRAM IN DRAMA
Supervisor of Students: P. Spuntukis (416-287-7168). Email: spuntukis@ms.utoronto.ca

Program Requirements
Students must complete seven full credits as follows:

1. VPAD101H Collaborations in the Visual and Performing Arts
2. VPAD102H Introduction to Performance I
VPAD103H Introduction to Performance II
VPAD104H Intermediate Workshop in Performance I
3. VPAD106H Studies in Theatre History I: From the Greeks to 1642
VPAD111H Studies in Theatre History II: From 1642 to World War One
VPAD121H Studies in Modern and Contemporary Theatre
VPAD123H Theatre in Canada
or
VPAD141H Introduction to Asian Theatre Traditions
MINOR PROGRAM IN DRAMA
Supervisor of Studies: D. Speridakos (416-287-7168) Email: speridakos@utsc.utoronto.ca

Program Requirements
Students must complete four full credits as follows:
1. VPA405H Collaborations in the Visual and Performing Arts
2. VPD001H Introduction to Performance I
VPD002H Introduction to Performance II
And at least two of the following courses: VPD010H, VPD011H, VPD012H, VPD013H, VPD014H

Note: Students who do not qualify for VPD010H should take at least four of the following courses: VPD010H, VPD011H, VPD012H, VPD013H, VPD014H

1.5 additional credits in Drama, one full credit of which must be at the C- or D-level.

VPD001H Introduction to Performance I
This course introduces students to performance in its broadest application. It investigates a wide range of performance practices and theories, including traditional Western approaches to basic acting technique and contemporary performance practices informed and inspired by the visual arts, music, dance and theatre, as well as codified and ritualized approaches to performance from around the world. In a workshop environment students will learn a variety of theatrical techniques that will inspire individual creativity.
Exclusion: DMR260Y, VPA313Y
Prerequisite: Note: Permission to enrol will be given based on an interview with the T Scarborough VPA-Drama Program teaching staff.

VPD002H Introduction to Performance II
A continuation of VPD001H, with emphasis on the fundamentals of characterization and interpretation of text.
While continuing with exercises and improvisations, students will also begin to work on scripts, learning to analyze text and sub-text and to develop a character by exploring motivation, defining objectives and establishing physical action.
Exclusion: VPA313Y
Prerequisite: VPD001H and permission of the instructor

VPD020H Intermediate Workshop in Performance I
This course is intended for students who wish to continue the study of acting for the stage in greater depth.
Exercises, discussions, and an increasingly more challenging range of monologues and scenes will be used as vehicles for exploring characterization and the acting process.
Exclusion: VPA313Y
Prerequisite: VPD013H or [VPA313Y or [VPD013H & VPA302H] and permission of the U of T Scarborough VPA-Drama Program Teaching Staff

VPD021H Intermediate Workshop in Performance II
A continuation of VPD020H, with an emphasis on more advanced performance techniques.
Exclusion: VPA311Y
Prerequisite: [VPD011H or (VPA311Y)] and permission of the instructor

VPD023H Technical Production I
An introduction to the technical elements of theatre production.
Students will receive a basic grounding in the fundamentals of stage management, stage lighting, sound operation, set building, scenic painting and general technical practice.
Exclusion: (VPA313Y), DMR254Y

VPD030H Experiencing the Live Theatre
Discovering the special nature of various forms of live theatre.
Students will attend six professional productions in a variety of theatres in Toronto, and write reviews of their theatre-going experiences. In lectures and seminars students will study contemporary theatrical practices from the perspective of playwrights, performers, etc.

VPD050H Studies in Theatre History I: From the Greeks to 1542
A study of theatre history from classical Greece until the closing of the theatres in England. Using a thematic rather than chronological approach, this course will examine Western theatre within the given period, as well as in terms of the social and cultural function of theatre as an art form.
Exclusion: (VPAD206H), DMR260H, DMR329H

VPD051H Studies in Theatre History II: From 1542 to World War One
A study of theatre history from the Renaissance, through the rise of modernism. Using a thematic rather than a chronological approach, this course will examine Western theatre within the given period, as well as in terms of the social and cultural function of theatre as an art form.
Exclusion: (DMR260H)

VPD120H Intermediate Workshop in Performance II
A continuation of VPD020H, with an emphasis on more advanced performance techniques.
Exclusion: VPA311Y
Prerequisite: [VPD011H or (VPA311Y)] and permission of the instructor

VPD123H Technical Production II
An examination of the development of professional theatre in Canada from 1945 to the present.
Special attention will be paid to the development of the major theatrical festivals, the regional theatre movement, the rise of alternative theatre, and current theatrical trends.
Exclusion: (VPA324H), DMR266H

VPD140H Introduction to Asian Theatrical Traditions
An introduction to some of the major theatrical traditions of Asia.
Students will read translations of plays and study some of the theoretical aspects of Oriental theatre in lectures and seminars. Recorded and visual materials will be used extensively.
Exclusion: (VPA325H)

VPD300H Intermediate Workshop in Performance Performance
A continuation of the exploration of advanced performance techniques begun in VPD020H.
Exclusion: DMR400Y, (VPA313H)
Prerequisite: [VPD031Y] or [VPD011H & VPD020H] & permission of the U of T Scarborough VPA-Drama Program Teaching Staff

VPD305H Directing for the Theatre
The practical study of basic stage directing techniques in a workshop atmosphere.
This course will provide students with the fundamental tools of the director’s craft, through an investigation of the principles of script analysis, composition and staging, director/actor communication and rehearsal technique, and will culminate in the presentation of short plays.
Limited enrolment: 10
Prerequisite: VPD011H & VPD020H plus 1 other FCE in Drama & permission of instructor
Music

The Music curriculum is designed for students who want to major or minor in Music or specialize in the Visual and Performing Arts, or for those whose interests are more general and who want to increase their experience and appreciation of music. Students who have taken music at high school or elsewhere will find a selection of historical, theoretical, and practical courses for study music from different historical periods and within different societal and cultural contexts. Students with no previous background can begin musical studies here by taking introductory and listening courses for which no previous musical experience is required. All students are invited to take advantage of the various opportunities that exist for practical music making, particularly the series of Performance courses.

Guidelines for 1st year course selection
Students who intend to complete a Music program should include VPA005H, VPA040H1 in their 1st year course selection.

The Music Study Guide is available at:
http://www.arts.utoronto.ca/~Thunrmdt/VPA/Music/studyguide/

Performance Courses
The following performance courses are available to all qualified faculty, staff and students (see note on a non-credit basis). Entrance is by interview/diagram held during Orientation or the first week of classes in Fall and Winter sessions. (Details are posted on the bulletin board outside AA-301 Music Studio and on the web Study Guide). Credit students should register for the course, but will be admitted only upon successful completion of the interview/diagram.

VPA040H1 Concert Choir Ia
VPA041H1 Concert Choir Ib
VPA043H1 Instrumental Ensemble Ia
VPA044H1 Instrumental Ensemble Ib
VPA045H1 Repertoire Choir I
VPA046H1 Repertoire Choir II
VPA047H1 Concert Choir IIIa
VPA048H1 Concert Choir IIIb
VPA049H1 Instrumental Ensemble Ila
VPA050H1 Instrumental Ensemble IIb
VPA051H1 Concert Choir IIIc
VPA052H1 Concert Choir IIIId
VPA053H1 Instrumental Ensemble IIIa
VPA054H1 Concert Choir I

General Interest Courses
Listening to Music, Music of the World's Peoples, Music for the Theatre, Jazz, Popular Music, Film Music, and the Repertory Choir assume no previous experience in music. In addition to Music of the World's Peoples, another half credit from this list can be used towards the Major Program, (with the exception of Listening to Music).

Major and Minor Program Courses
Students are required to take three of the four b-level courses, VPM8801L-VPMB801H "Topics in Music and Society," which cycle frequently during the three academic sessions. A-Level and C-Level Materials of Music courses are normally offered in the Fall session only; b-Level Materials is normally offered in the Winter session.
**MAJOR PROGRAM IN MUSIC AND CULTURE**

**Supervisor of Studies:** A. Sanger (416-828-7175)  Email: sanger@music.toronto.ca

**Program Requirements**
Students are required to complete seven full credits or as follows:

1. VPA402H Collaborations in the Visual and Performing Arts
2. VPM400H1S Introduction to Music I
3. VPM600H1S Introduction to Music II
4. VPM908H1S Materials of Music I
5. VPM909H1S Music of the World’s Peoples
6. VPM988H1S Materials of Music II
7. VPM989H1S Music of the World’s Peoples
   - One full credit from the sequence VPM686H1S to VPM687H1S.
   - One half credit chosen from the following courses:
     - VPM987H1S Music in Islamic Cultures
     - VPM987H2S Baltic Gamelan: Performance and Context
     - VPM987H3S Performing Arts of Asia
     - VPM989H1S Populous Music in a Cross-Cultural Context
   - One and one-half credits from VPM830H1S to VPM830H5S and VPM830H1S/81H1.
   - One full credit in Performance.

**MINOR PROGRAM IN MUSIC HISTORY**

**Supervisor of Studies:** A. Sanger (416-828-7175)  Email: sanger@music.toronto.ca

**Program Requirements**
Students are required to complete four full credits as follows:

1. VPA402H Collaborations in the Visual and Performing Arts
2. VPM400H1S Introduction to Music I
3. VPM600H1S Introduction to Music II
4. VPM908H1S Materials of Music I
5. VPM909H1S Music of the World’s Peoples
6. VPM988H1S Materials of Music II
7. VPM989H1S Music of the World’s Peoples
   - One full credit from the sequence VPM686H1S to VPM687H1S.
8. One half credit in VPM at the C-level.

**VPA673H1S Concert Choir I**
The practical study of a wide range of music from the choral repertoire, including performance in the U of T Scarboroug
Concert Choir, a chamber choir that performs regularly in various venues and general administration. This course aims to help students appreciate and understand music and its role in society and culture. Audio-visual materials are recommended. No previous musical experience is necessary.  Exclusion: VPA686H1S, VPA687H1S

**VPA674H1S Concert Choir II**
A continuation of VPA673H1S.  Exclusion: VPA686H1S, VPA687H1S

**VPA673H1S Instrumental Ensemble I**
A study of the basic materials, principles of design, and cultural significance of Western music, following the choral ensemble course in music at the university level.
   - Prerequisite: Royal Conservatory of Music Grade II Rudiments or equivalent.
   - One and one-half credits from VPM810H1S to VPM811H1S.

**VPA674H1S Instrumental Ensemble II**
A continuation of VPA673H1S.  Exclusion: VPA686H1S, VPA687H1S

**VPA673H1S Materials of Music I**
The basic materials of music from the Middle Ages to the present, including elementary harmony, musical forms, introductory analytical and compositional techniques andural training.  Exclusion: VPA908H1S
   - Prerequisite: Royal Conservatory Grade II (music rudiments) or equivalent

**VPA673H1S Listening to Music**
An introduction to the language of music for non-musicians through a survey of musical styles, genres and development of intelligent listening skills.  No previous musical experience is necessary.  Exclusion: VPA908H1S

**VPA673H1S Repertoire Choir I**
A practical study of music from the choral repertoire and an introduction to music theory.  Exclusion: VPA904H1S, VPA905H

**VPA673H1S Music of the World’s Peoples**
An introduction to music from different parts of the world, including folk, popular, religious and classical traditions. This course aims to help students appreciate and understand music as a global phenomenon, and its role in social and cultural life. Audio-visual materials are recommended. No previous musical experience is necessary.  Exclusion: VPA686H1S, VPA687H1S

**VPA673H1S Music Theory (II)**
A practical study of music from the choral repertoire and an introduction to music theory.  Exclusion: VPA904H1S, VPA905H

**VPA673H1S Music of the World’s Peoples**
An introduction to music from different parts of the world, including folk, popular, religious and classical traditions. This course aims to help students appreciate and understand music as a global phenomenon, and its role in social and cultural life. Audio-visual materials are recommended. No previous musical experience is necessary.  Exclusion: VPA686H1S, VPA687H1S

**VPA673H1S Performance and Context**
An introduction to the performance and general administration. This course aims to help students appreciate and understand music and its role in society and culture. Audio-visual materials are recommended. No previous musical experience is necessary.
VPM0870H3 Performing Arts of Asia
An exploration of music, dance and drama in East Asia, Southeast Asia and South-Central Asia with particular reference to religious life, classical genres, tribal and folk traditions and popular/contemporary developments.
Prerequisite: VPM0A0H1 or (VPA0A0H1)

VPM0861H3 Topics in Music and Society Before 1600
Selected topics in music and society up to 1600. Uses a thematic rather than a chronological approach to understand the historical, social, cultural, and political contexts of music-making in the Middle Ages and Renaissance, with an emphasis on how the music is interpreted today.
Limited enrolment: 40
Exclusion: (VPA0860H1)
Prerequisite: VPA0A0H1 or (VPA0A0H1) & VPM0A0H1 or (VPA0A0H1)

VPM0879H3 Topics in Music and Society from 1600-1900 I
Selected topics in music and society from 1600 to 1900. Uses a thematic rather than a chronological approach to understand the historical, social, cultural, and political contexts of music-making in the Baroque, Classical and Romantic eras, with an emphasis on how the music is interpreted today. Past topics include: "Musical Borrowing" and "Chamber Music".
Prerequisite: (VPM0A0H1 or VPA0A0H1) & VPM0A0H1 or (VPA0A0H1)

VPM0881H3 Topics in Music and Society from 1600-1900 II
Selected topics in music in society from 1600-1900. Uses a thematic rather than a chronological approach to understand the historical, social, cultural, and political contexts of music-making in the Baroque, Classical and Romantic eras, with an emphasis on how the music is interpreted today. Past topics include: "Music in Film" and "The Concerto".
Exclusion: (VPA0B3H1)
Prerequisite: VPA0A0H1 or (VPA0A0H1) & VPM0A0H1 or (VPA0A0H1)

VPM0892H3 Topics in Music and Society after 1900
Selected topics in music in society after 1900. Uses a thematic approach to understand modernistic and the competing artistic, social, cultural, and political contexts of music-making since the turn of the twentieth century.
Exclusion: (VPA0B9H1)
Prerequisite: (VPA0A0H1 or (VPA0A0H1) & VPM0A0H1 or (VPA0A0H1)

VPM0890H3 Materials of Music II
A continuation of VPM0A0H1.
Exclusion: (VPA0B9H1)
Prerequisite: VPA0A0H1 or (VPA0A0H1) or Royal Conservatory Grade IV harmony or equivalent.

VPM0893H3 Music for the Theatre
An introduction, across time and cultures, to how music is combined with other arts in the theatre.
Broad topics of study include opera, film music, puppet theatre, dance-drama, ballet and musicals. Students will study audio-visual materials and, where possible, attend live performances. No previous musical experience is required.
Exclusion: (VPA0B9H1)

VPM0894H3 Jazz
A history of jazz from the African and European roots to present day experiments. Surveys history of jazz styles, representative performers and contexts of performance. No previous musical experience is required.
Exclusion: (VPA0B9H1)

VPM0895H3 Repertoire Choir II
A continuation of VPM0A0H1.
Exclusion: (VPA0A0H1, VPA0B9H1)
Prerequisite: VPM0A0H1 or (VPA0A0H1)

VPM0896H3 Popular Music
An examination of the genres and history of twentieth-century popular music with particular attention to its social and commercial contexts. The course will focus on developments during the 1950s and 1960s including rock & roll, soul, folk-rock, and the British invasion - examining the performing styles and recordings of legendary "stars." No previous musical experience required.
Exclusion: (VPA0B9H1)

VPM0897H3 Film Music
An introduction to the techniques and history of music for films. A survey of the ways music is used in the cinema from its inception to the present day, with an emphasis on the collaboration between film composers and directors.
Prerequisite: VPM0A0H1

VPM0899H3 Popular Music in a Cross-Cultural Context
Popular music in a multi-cultural world. Development of popular music in a global context. Topics include mass media (recordings, film, radio, etc.), urbanization, social and political issues, pop icons, dance and cultural migration.
Prerequisite: VPA0A0H1 or (VPA0A0H1)

VPM0901H3 Concert Choir IVA continuation of VPM0B1H1.
Exclusion: (VPA0C9H1, VPA0C9H1)
Prerequisite: VPM0B1H1 or (VPM0B9H1)

VPM0902H3 Concert Choir II
A continuation of VPM0C7H0.
Exclusion: (VPA0C9H1, VPM0C7H0)
Prerequisite: VPM0C7H0

VPM0903H3 Instrumental Ensemble IIA continuation of VPM0B7H1.
Exclusion: (VPA0C9H1, VPA0C9H1)
Prerequisite: VPM0B7H1 or (VPM0B9H1) & (VPA0B9H1)
Corequisite: VPM0B7H1

VPM0904H3 Instrumental Ensemble IIIB continuation of VPM0C7H1.
Exclusion: (VPA0C9H1, VPA0C9H1)
Prerequisite: VPM0C7H1

VPM0898H3 Opera
A thematic approach to the study of opera. Students will study and analyze selected scores using libretti, scores, and audio-visual materials, and attend live productions where possible to enhance their appreciation of the art form and to develop their critical skills.
Exclusion: (VPA0A0H1)
Prerequisite: VPA0A0H1 or (VPA0A0H1) & [one course from the series VPM0B8H1-VPM0B9H1 or VPA0B9H1 or permission of instructor]

VPM0905H3 The Orchestra and its Music
A study of the changing musical, social, and economic contexts of the orchestra and the variety of music written for it. Evolving configuration of the ensemble; patronage and location (theatre, church, court, conservatory, city, etc.); representative examples of music from different periods; changing audiences and societies; mechanical reproduction.
Prerequisite: (VPA0A0H1 or (VPA0A0H1) & (one course from the series VPM0B8H1-VPM0B9H1 or (VPA0B9H1)

VPM0902H3 Topics in Canadian Music
A thematic approach to the study of music in Canada. Topics include the formation of Canadian musical identity, the development of artistic organizations and institutions, and detailed analyses of musical compositions.
Prerequisite: VPA0A0H1 or (VPA0A0H1) & (one course from the series VPM0B8H1-VPM0B9H1 or (VPA0B9H1)

VPM0903H3 Music and Gender
A study of women in music, and the role of gender studies in musical criticism. An exploration of the socio-cultural contexts of music-making by women, as works by composers, performers, and patrons in Western art music, jazz, and popular music, and the construction of gender in cross-cultural perspective.
Exclusion: HMU207H1
Prerequisite: VPA0A0H1 or (VPA0A0H1) & (WST0A01 & WST0A02) or (WST0A01V)

VPM0905H3 Beethoven
An examination of the iconic status of the composer through a study of his life and times, representative works, and current issues in Beethoven studies, including historically informed performance practice and socio-political uses of his music.
Prerequisite: VPM0B9H1 or (VPA0B9H1) & VPM0B8H1 or (VPA0B8H1)
VMPC080H3 Special Topics in Music and Culture
The investigation of an area of current interest and importance in musical scholarship. The topic to be examined will change from year to year and will be available in advance on the course website. Prerequisite: [VMPC080H1 or (VPA090H1)] & [one course from the series VMPC180H1, VMPC280H1 or (VPA089H1, VPA089H2, VPA090H1)]

VMPC080H3 Materials of Music III
Introduction to musical composition through the application of techniques studied in Materials of Music I and II. Students will be encouraged to develop their individual musical styles and to create original works. Exclusion: [VPA136H1, VPA137H1] Prerequisite: [VPA090H1 or (VPA090H1)]

Studio
The Studio curriculum is built around the idea that art is a means of expressing and understanding the human condition. It does not include courses in commercial or advertising art. The studio experience is intended to expand the student's perception of what art is, why and how it is made, and to develop the student's ability to understand and experience the challenges of contemporary art. Critical skills will expand along with practical skills.

The Studio Study Guide is available at:
http://www.stu.utoronto.ca/57/emundh/vpa/studio/studyguide/

Guidelines for 1st year course selection
VPSA20H3 Foundation Studies in Studio, which covers basic media and concepts through practice and discussion, must be taken with its co-requisite, VPSA10H1 & VPSA10H1, before advancing to other studio courses.

Students will be expected to purchase the materials necessary for each course. An estimate of the costs is available from the Program Supervisor or the instructor.

MAJOR PROGRAM IN STUDIO
Supervisor of Studies: T. Mars (416-287-7137) Email: mars@utsc.utoronto.ca

This program will give the student a full and broad exposure to the various processes of art-making and to recent developments in art criticism. It provides some preparation for teaching at the high school or elementary level.

We strongly urge students to take additional art history courses dealing with modern and contemporary art.

VMPS080H3, VMPS082H3 Independent Study in Music
A directed research, composition or performance course for students who have demonstrated a high level of academic maturity and competence. Students in performance combine a directed research project with participation in one of the performance ensembles (Concert Choir, Concert Band, Jazz Band).

Note: Students must obtain consent from the supervising instructor. Exclusion: [VMPS100H1, VMPS102Y, VMPS102Y] Prerequisite: At least one full credit in music at the C-level, not including credits in performance. Students in the Composition option must also have completed VMPC080H1. Students in the Performance/research option must also have completed VMPC110H1 or VMPC112H. Students are strongly advised to arrange their independent study well in advance of the beginning of the session.

Program Requirements
Students must complete eight full credits including:
1. VPPA05H1 Collaborations in the Visual and Performing Arts
2. VPPA140H1 Ways of Seeing: Introduction to Art Histories
3. VPPB359H1 Modern into Post-Modern Art
4. VPPB361H1 Space, Place and the Arts
5. VPSA70H1 Drawing I
6. VPSB74H1 Drawing II
7. At least one-half credit from:
   - VPSB10H1 Sculpture Concepts
   - VPSG10H1 Theory and Practice: Two-Dimensional Work
   - VPSG10H1 Theory and Practice: Three-Dimensional Work
   - VPSG10H1 Theory and Practice: Time-Based Media
8. One full credit at the D-level
9. 3.5 further credits from courses in VPS. Students may substitute 1 full credit from VPA or another discipline with the PRIOR written permission of the Program Supervisor.

MINOR PROGRAM IN STUDIO
Supervisor of Studies: T. Mars (416-287-7137) Email: mars@utsc.utoronto.ca

Program Requirements
Students are required to complete a total of four full credits as follows:
1. VPPA05H1 Collaborations in the Visual and Performing Arts
2. VPPA20H3 Foundation Studies in Studio
3. VPSA10H1 Drawing I
4. One-half credit from:
   - VPSB10H1 Sculpture Concepts
   - VPSG10H1 Theory and Practice: Two-Dimensional Work
   - VPSG10H1 Theory and Practice: Three-Dimensional Work
   - VPSG10H1 Theory and Practice: Time-based media
5. VPPA140H1 Ways of Seeing: Introduction to Art Histories
6. 1.5 FCEs is in VPS, one at the C- or D-level.

VPSA51H3 Painting I
An investigation of the basic elements and concepts of painting through experimentation in scale and content. Limited enrolment: 20 per section. Exclusion: [VPSB10H1, VPA010H1, VPA010H1] Prerequisite: [VPSA52H1 or (VPA025H1)] Corequisite: [VPSA50H1 or (VPSB79H1)]

VPSA52H3 Foundation Studies in Studio
An introduction to the importance of context and content in the making of contemporary art. Limited enrolment: 20 per section. Exclusion: [VPA130H1, VPA025H1] Corequisite: [VPA015H1 & VPSA70H1]

VPSA70H3 Drawing I
An investigation of the various approaches to drawing, including working from the figure and working with ideas. Limited enrolment: 20 per section. Exclusion: [VPSB79H1, VPA025H1] Corequisite: [VPSA52H1]

VPSA71H3 Introduction to Sculpture
This course introduces students to the use of three-dimensional materials and processes for creating sculptural objects. Traditional and non-traditional sculptural methodologies and concepts will be explored. Limited enrolment: 15. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs. Prerequisite: [VPSA52H1] & permission of instructor.
VPSA2H3 Introduction to Photography
An introduction to fundamental photographic concepts including depth, focus, stopped time, lighting and photographic composition in contrast to similar fundamental concepts in drawing and painting. A practical and historical discourse on the primary conceptual streams in photography including various documentary traditions, staged photograph and aesthetic approaches from photographic modernism to postmodernism.
Limited enrolment: 15. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs.
Prerequisite: VPSA62H & permission of instructor

VPSA3H3 Introduction to Video
An introduction to the basic principles of video shooting and editing as well as an investigation into different conceptual strategies of video art. The course will also provide an introduction to the history of video art.
Limited enrolment: 15. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs.
Prerequisite: VPSA62H & permission of instructor

VPSB2H3 Painting II
A continuation of Painting I with an emphasis on images and concepts developed by individual students.
Limited enrolment: 20
Exclusion: (VPA662H), VIS301H
Prerequisite: VPSA61H or (VPSB61H) or (VPA661H)

VPSB3H3 Sculpture Concepts
An investigation of the changes in sculpture in the 20th century with an emphasis on contemporary art.
Limited enrolment: 15
Exclusion: (VPA663H), VIS204H
Prerequisite: [VPSA62H or (VPA662H)] & VPSA70H & VPSA71H

VPSB68H3 Site-Specific Work
An exploration of the object and its relationship to specific space.
Limited enrolment: 20
Exclusion: (VPA668H), VIS208H
Prerequisite: [VPSA62H or (VPA662H)] & VPSA70H & VPSA71H

VPSB71H3 Books and Multiples
An exploration of the history and use of handmade books and multiples by visual artists.
Limited enrolment: 20
Exclusion: VIS212H
Prerequisite: [VPSB62H or (VPA662H)] & VPSA70H & VPSA71H or VPSA72H

VPSB74H3 Drawing II
A continuation of VPSA70H with an increased emphasis on the student's ability to expand her/his personal understanding of the meaning of drawing.
Limited enrolment: 20
Exclusion: VIS205H, (VPA674H)
Prerequisite: VPSA70H or (VPSB70H) or (VPA670H)

VPSB75H3 Photo-based Work
A studio course in digital photography that relates to the critical investigation of contemporary photo-based art.
Limited enrolment: 15
Exclusion: VIS218H
Prerequisite: VPSA62H & VPSA70H & VPSA72H

VPSB76H3 Intermediate Video
An exploration of the possibilities of electronic media in the visual arts.
Limited enrolment: 15
Exclusion: (VPA676H), VIS202H
Prerequisite: [VPSA62H or (VPA662H)] & VPSA71H & permission of instructor

VPSB77H3 Performance Art
An exploration of both the history and practice of performance art.
Limited enrolment: 15
Exclusion: VIS208H
Prerequisite: [VPSA62H or (VPA662H)] & (VPSB70H & VPSB78H & VPSA70H or [VPSA61H & VPSB62H & VPSA62H & permission of instructor]

VPSB78H3 Introduction to Lithography
An introduction to black and white stone lithography including a detailed investigation of materials and techniques.
Limited enrolment: 10
Exclusion: (VPA678H)
Prerequisite: VPSA62H or (VPA662H) or (VPA660Y)

VPSB79H3 Intermediate Lithography
A continuation of VPSB78H with an emphasis on multi-colour printing.
Limited enrolment: 10
Prerequisite: [VPSB78H or (VPA678H)] & permission of the instructor

VPSB80H3 Digital Studio Practice
An in depth investigation of digital imaging technologies for serious studio artists and new media designers. Emphasis is placed on advanced image manipulation, images in digital media, invisible rewatching and quality control techniques for fine art production. Project themes will be drawn from a critical analysis of contemporary printing and photo-based art.
Limited enrolment: 20
Prerequisite: [VPSA62H & VPSA70H & VPSA72H] or permission of instructor.

VPSB81H3 Installation
This studio seminar explores installation art in interior spaces, with a special focus on two-specific museum projects and architectural interventions. Student projects may incorporate a variety of media including photography, painting/drawing, video, audio and sculptural materials in works that expand the physical boundaries of art beyond the object.
Limited enrolment: 15
Exclusion: VIS204H
Prerequisite: VPSA71H

VPSC34H3 Painting III
An advanced course for students who are able to pursue individual projects in painting, with a focus on contemporary practice and theory.
Limited enrolment: 15
Definition: VIS301H
Prerequisite: VPSA61H & VPSB62H & 5.0 additional FCEs in Studio

VPSC55H3 Drawing III
An advanced course for students who are able to pursue individual projects dealing with the complex relationships between drawing and other art practices like installation, painting and mixed media.
Limited enrolment: 15
Exclusion: VIS305H
Prerequisite: VPSB74H & 3.0 additional FCEs in Studio.

VPSC56H3 Studio Practice
A supervised course focused specifically on the development of the student's work from initial concept through to the final presentation. Students may work in their choice of media with the prior written permission of the instructor.
Limited enrolment: 20
Exclusion: VIS331H
Prerequisite: At least one course at the B-level in VPS in the stated area of study and 3 full credits in VPS and permission of the instructor.

VPSC57H3 "Live!"
"Live!" investigates interdisciplinary modes of contemporary performance. Within a studio context, this course serves as an advanced exploration of 21st century Live Art. This interactive course explores the dynamics of time, space and existence, and asks fundamental questions about the body and performance. Same as VPPC265F.
Limited enrolment: 12 (6 students from Drama & 6 from Studio)
Exclusion: VPDQ36H
Prerequisite: [VPSB77H or (VPSB68H & VPDQ03H)] & permission of instructor.

VPSC58H3 Advanced Photography
Focusing on both theory and practice, this is a portfolio-based course aimed at the development of idiosyncratic photographic styles and subject matter. Printing and presentation will form an important part of this portfolio’s development. Students will research international networks, publications and institutions devoted to photographic discourse.
Limited enrolment: 15
Exclusion: VIS331H
Prerequisite: VPSB60H & VPSB75H
VPSD60H3 Advanced Studio Practice
An advanced course for students ready to work independently on their own projects. Students will be expected to work on their projects from conception to a final exhibit in the student-run gallery. Students may work in their choice of media with the written permission of the instructor.
Limited enrolment: 20
Exclusions: VISA401H, VISA402H, VISA403H, VISA404H
Prerequisites: [1 FCE from VPS60M4, VPS60M6, VPS60M7, VPS60M8] & [three additional FCEs in Studio at the B and C level] & permission of instructor.

VPSD56H3 Advanced Interdisciplinary Practice
An opportunity for students in VPS to explore aspects of contemporary interdisciplinary practice and theory. Students will make work in their choice of media with the written permission of the instructor.
Limited enrolment: 20
Exclusions: VISA401H, VISA402H, VISA403H, VISA404H
Prerequisite: [1 FCE from VPS60M4, VPS60M6, VPS60M7, VPS60M8] & [three additional FCEs in Studio at the B and C level] & permission of instructor.

VPSD56H3 Independent Studies in Studio: Advanced Level
This option is available in rare and exceptional circumstances to students who have demonstrated a high level of academic maturity and competence. Qualified students will have the opportunity to investigate an area of contemporary art that is of common interest to both student and supervisor.
Exclusion: VISA401H, VISA402H, VISA403H, VISA404H
(VPS4D3H1) (VPS4D6H1)
Prerequisite: At least 15 FCEs & completion of the major in studio & written permission of the instructor in the previous session.

Women's Studies (B.A.)
Faculty List
C. Bertrand-Jennings, L. E. L. (Paris), Ph.D. (Wayne State), Professor Emerita
A. Sevitt, B.A., M.A. (Windsor), Ph.D. (York, Canada), Professor
I. Carnegie, M.A. (Columbia), Associate Professor
M.B. Goldman, M.A. (Victoria), Ph.D. (Toronto), Associate Professor
P.C. Hsiao, B.A. (National Chiao-tung University, M.A. (Chinese Cultural University), M.A., Ph.D. (UCLA), Associate Professor
E. Savoia, M.A., Ph.D. (York, Canada), Associate Professor
D.M. James, B.A. (U.B.C.), M.A. (Michigan), Associate Professor
I. Lange, B.A., M.A. (Manitoba), Ph.D. (Toronto), Associate Professor
M. Lmaal, B.A. (Kanata), M.A., Ph.D. (Toronto), Associate Professor
K. McCarthy, B.A. (Toronto), Associate Professor
P. Schick, B.A. (McGill), M.A., Ph.D. (Toronto), Associate Professor
D.E. Klinken, Ph.D. (New York), Assistant Professor
E. Liddell, B.A. (Oberlin College), M.A. (Asbury), Ph.D. (Emory), Assistant Professor
M. O'Connell, B.A., M.A. (Ottawa), Assistant Professor
M. Mullen, B.A. (California), M.A., Ph.D. (Yale), Assistant Professor
T. Talmasheh, Ph.D. (York, Canada), Assistant Professor
G. Kuberman, B.A. (Manitoba), M.E.S. (York), Senior Lecturer
J. Meeks, Senior Lecturer
N. Johnston, M.A., Ph.D. (York, Canada), Lecturer
J. Limie, B.A. (Dalhousie), M.F.A. (York), Lecturer
P. Radta, M.A. (Masaryk, Czech Rep.), Ph.D. (Toronto), Lecturer

Discipline Representative: Until June 30: D.M. James (416-287-7170)
From July 1: C. Kuberman Email: c.kuberman@utoronto.ca
Women's Studies examines women's roles, women's work, and women's contributions past and present to society. Because men have been more dominant, the bulk of past scholarship has reflected a male perspective on the world and has focused on the activities and experiences of men. Women's Studies aims to redress this by providing new perspectives on women's activities and experiences. These perspectives are interdisciplinary in nature, drawing on work in such areas as Anthropology, Literature, Visual and Performing Arts, Geography, History, Linguistics, Philosophy, Psychology, Sociology, Environmental Science, and International Development Studies. Women's Studies is thus concerned with such issues as women's work and women's role in the family in different times and different societies; the
Women's Studies

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devlopment, transmission and perpetuation of ideas and attitudes about women; women's contributions to culture; and the particular concerns and problems of women today. Emphasis is placed on the diversity of women's lives around the world, particularly as these are shaped by race, ethnicity, class, age, sexual orientation, and disability. Women's Studies at U of T Scarborough puts special focus on women as members of different communities, such as ethno-cultural communities and neighbourhood communities in Canada and around the world, and an important aim of the Major and Minor Programs is to provide students with practical skills for working on women's issues on the community level. Students preparing for a career in research, teaching, administration, government, law, journalism or social work are encouraged to consider enrolling in a Women's Studies program; since these careers involve consideration of equity issues and often involve work on the community level, a background in Women's Studies would be a definite asset.

Guidelines for 1st year course selection

Students who intend to complete a Women's Studies program should include WSTA01H & WSTA02H in their 1st year course selection.

The Women's Studies Study Guide is available at: http://wwww .winstone .utoronto .ca/1runrmd/ Wornns_Stud/ studyguide/index.htm

MAJOR PROGRAM IN WOMEN'S STUDIES

Supervisor of Studies: Until June 30, C. Guberman. Email: c.guberman@utoronto.ca
From July 1: L. Carney (416-287-7171) Email: carney@seus.utoronto.ca

Program Requirements

Students must complete seven full credits as follows:

1. WSTA01H Introduction to Women's Studies
2. or

WSTA02H Women: Initiatives for Change
3. WSTB05H Current Research on Women's Issues
4. or

WSTB11H Race, Class and Gender
5. Two further credits from Women's Studies or from the list of courses in other disciplines which deal with women's/gender issues provided in #6 in the Major Program; at least one of these credits must be at the C- or D-level.

WSTA01H Introduction to Women's Studies

An introduction to the study of women around the world from an interdisciplinary perspective. Issues to be addressed will include: women's diversity locally and globally; patriarchal foundations; the dynamics of socialization, and the transmission and perpetuation of images of women. Exclusion: WSTA01Y, (NEW160Y), WGS160Y

WSTA02H Women: Initiatives for Change

An introduction to women's initiatives for change, past and current, which address issues concerning women. This course will survey initiatives from the individual to the international level and about change for women within the family, the workplace, and the community. Exclusion: WSTA01Y, (NEW160Y), WGS160Y

Prerequisite: WSTA01H or permission of the instructor

WSTB05H Current Research on Women's Issues

An examination of topical and critical research in women's issues from a cross-cultural and interdisciplinary perspective. This course will provide practice in critical analysis of contemporary issues as they affect women globally. Issues will be drawn from a range of disciplines, including history, sociology, education, literature, the arts and sciences. Prerequisite: [WSTA01H & WSTA02H] or permission of the instructor

WSTB11H Race, Class and Gender

An overview of the complex interactions among race, class and gender in traditional and modern societies. Drawing on both historical and contemporary patterns in diverse societies, the course offers feminist perspectives on the ways in which race, class, gender, and sexual orientation have shaped the lives of women and men. Exclusion: WSTA11Y

Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor.
WSTB12H3 Women: Issues of Violence and Safety
An analysis of violence against women and initiatives toward making communities safer, including strategies for prevention and education.
Exclusion: (NEW271Y), WGS271Y
Prerequisite: [WSTA01H & WSTA02H] or one half credit from the list provided in #6 in the Major Program] or (WSTA01Y) or permission of the instructor

WSTB13H3 Women and the Media
An interdisciplinary approach to feminist critiques of the media.
The representation of women will be examined in media such as film, television, videos, newspapers, magazines and radio.
Students will also develop a perspective on women's participation in, and contributions toward, the various media industries.
Exclusion: (NEW271Y), WGS271Y
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor

WSTB19H3 Women in the Cyberspace: Transnational Feminist Networks and Activism
While instrumental in promoting global feminist networks advocating women's equality across cultures, the Internet and new digital technologies also generate new waves of women's oppression.
Examine women's "place" in the cyberspace, this course will explore women's online agency, Ciff movements, and networks along with negative "virtualities" including pornography, trafficking, etc.
Prerequisite: WSTA01H or NMEA20H

WSTC10H3 Women and Development
How development affects, and is affected by, women around the world.
Topics may include labour and economic issues, food production, the effects of technological change, women organizing for change, and feminist critiques of traditional development models.
Exclusion: (WSTC10Y), (NEW425Y), WGS425Y
Prerequisite: [WSTA01H & A02H] or (WSTA01Y) or [IDS01H] or [IDS02H] or permission of the instructor

WSTC11H3 Applied Study in Women and Development
An examination of a critical problem within the global context as it affects women in their communities.
The class as a whole will determine the issue under consideration.
Exclusion: (WSTC10Y), (NEW425Y), WGS425Y
Prerequisite: WSTC10H

WSTC14H3 Women, Community and Policy Change
An examination of the impact of social policies on women's lives, from a historical perspective.
The course will survey discriminatory practices in social policy as they affect women and immigration, health care, welfare, and the workplace. Topics may include maternity leave, sexual harassment, family benefits, divorce, and human rights policies.
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor

WSTC16H3 Criminal Women: Gender, Justice and the Media
Examining popular media, detective fictions and films, students will investigate themes of criminality, gender and violence in relation to the social construction of justice.
Some criminal cases involving female defendants will also be analyzed to examine historical issues and social contexts. Debates in feminist theory and criminology will be discussed.
Limited enrolment: 40
Prerequisite: [WSTA01H and WSTA02H] or (WSTA01Y) or permission of the instructor

WSTC17H3 Woman Writers and Popular Literature
This course examines women's contributions as writers, editors, publishers, and readers, to popular literature in a variety of genres, and feminist strategies to examine their cultural and social significance.
Students will be introduced to theoretical approaches to North American and international reading communities, and women's writing in a global context.
Limited enrolment: 40
Prerequisite: [WSTA01H and WSTA02H] or ENG505H or permission of the instructor

WSTC18H3 Women and Family in South Asia
Are South Asian women helpless patriarchal victims? Or, are they active agents who negotiate with, and challenge gender, racial, and class oppression? We explore these issues within the differential encounters of men and women with imperialisms and capitalism, the modern family and society, and Third World feminism.
Prerequisite: [WSTA01H & WSTA02H] or permission of the instructor

WSTC20H3 Women and Environments
An examination of the impact the environment has on women's lives around the world. Current and historical perspectives. Topics will include the impact of environmental degradation on women's bodies; planning for safer places; global sustainable development; ecofeminism; the gender division of spaces.
Prerequisite: Two full credits in WST, or permission of the instructor

WSTC30H3 Selected Topics in Women's Gender Studies
An examination of a current topic relevant to women and gender studies.
Students will have the opportunity to explore recent scholarship in a specific current area which will vary from year to year. Participation in a related project/practicum in the community may be incorporated into the course.
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor

WSTC31H3 Selected Topics in Women's Gender Studies
An examination of a current topic relevant to women and gender studies.
Students will have the opportunity to explore recent scholarship in a specific current area which will vary from year to year. Participation in a related project/practicum in the community may be incorporated into the course.
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor

WSTC32H3 Selected Topics in Women's Gender Studies
An examination of a current topic relevant to women's and gender studies.
Students will have the opportunity to explore recent scholarship in a specific current area which will vary from year to year. Participation in a related project/practicum in the community may be incorporated into the course.
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or permission of the instructor

WSTD62H3 Women's Studies: Research and Methods
Students will design and conduct a qualitative research project about women. Field work is the basis of this course. It will also include an overview of the various phases of carrying out research: planning the research project, choosing appropriate methods for data collection, analyzing the data and reporting the results.
Prerequisite: [WSTA01H & WSTA02H] or (WSTA01Y) or WSTB05H and one and one-half credits taken from the courses listed in #6 and #7 in the Major Program.
Admissions

Re-enrolling University of Toronto Scarborough Students

Students previously registered at U of T Scarborough who wish to return after suspension or at absence of three or more consecutive sessions (at least 12 months) must submit an "Application To Re-Enroll" at the Registrar's Office. This form may be printed from our web site: www.utspace.utoronto.ca/registrar. Students who studied elsewhere during their absence from U of T Scarborough should apply to re-enroll well before the final deadline since we need official transcripts from the other institution(s).

Enrolment in most courses is on a first-come, first-served basis. In order to have the application processed in time to take advantage of the wider availability of courses when the "course selection period" begins, students are strongly advised to apply to re-enroll by the dates listed below:

- Late March for the Summer Session
- Mid-June for the Fall Session
- Mid-June for the Winter Session

Applications to re-enroll will be considered ONLY if received before classes begin in the session. For further information on re-enrollment, telephone 416-287-7001. See also the Overall Standing section of this Calendar.

Students who have a four-year degree conferred normally continue as Non-Degree Students. U of T Scarborough students who wish to start a second degree must apply, in writing, to the Assistant Registrar-Admissions by April 1.

Admissions

The following is a brief description of admission policies and procedures. Full information may be obtained from:

- Admissions and Awards or Admissions and Student Recruitment
  - University of Toronto
  - University of Toronto Scarborough
  - 315 Bloor Street West
  - 1265 Military Trail
  - Toronto, Ontario, Canada M5S 1A3
  - Toronto, Ontario, Canada M1C 1A4
  - Telephone: 416-978-2790
  - Telephone: 416-287-5729
  - website: www.adm.utoronto.ca
  - website: www.utspace.utoronto.ca/admissions

Applicants interested in graduate studies should contact the School of Graduate Studies:

- Website: www.sgs.utoronto.ca
- Telephone: 416-978-6014

Application Procedures and Deadlines

Most of the applications for U of T Scarborough programs are submitted to the Ontario Universities Application Centre for initial processing. Students who are currently enrolled full-time in an Ontario secondary school submit a 101 application. Details are available at secondary school guidance offices. Other applicants seeking full-time degree studies, except for applicants from other divisions of UofT (internal UofT transfers) will apply using a 105 application that is available on-line at the Ontario Universities Application Centre's website at www.ouscc.on.ca (telephone: 519-823-1940).

Internal UofT Transfer applications, Part-time Degree and Non-Degree on-line applications are available at the Admissions and Awards website: www.adm.utoronto.ca

Upon receiving the application from the OUAC, the University of Toronto's Admissions and Awards office sends the applicant a confirmation letter and Applicant Instructions Guide. Applicants are strongly advised to submit the application well in advance of the deadlines listed below:

- In particular, applicants to the following programs should apply before March 1:
  - Co-operative Programs, Joint Programs with Centennial College, Management Programs.
  - Many of these programs require a supplementary application (to be downloaded from the U of T Scarborough Admissions & Student Recruitment website).

Note to Applicants to Joint Programs with Centennial College:

Information about your application will be shared with the relevant Program Supervisor at Centennial College to evaluate your application.

- Applicants to the Concurrent Teacher Education Programs should apply well in advance of the February 1 deadline (an Applicant Profile, to be filled on-line at the Programs website, is required).

2007 Summer Session Deadline

- March 1 for Part-time degree and Non-Degree applications

2007/2008 Fall/Winter Session Deadlines:

Full-time degree study:

- February 1 for all applicants to the Concurrent Teacher Education Programs
- March 1 for 101 applications, for applicants who are currently enrolled full-time in a Ontario high school
- April 1 for 105D applications, for applicants who are residing in Canada or for applicants who are Canadian Citizens/Permanent Residents who reside outside Canada, who are not currently enrolled full-time in an Ontario high school
- April 1 for Internal UofT degree applications, for applicants who have registered in other divisions of UofT
- April 1 for 105F applications, for applicants who are residing within USA
- March 1 for 105F applications, for international applicants who reside outside Canada/USA

Other Applications:

- June 1 for Part-time Degree, Non-Degree or Visiting Student (Non-Degree) applying from other North American universities on a Letter of Permission

Non-Degree Students in Management

For information and deadlines, see the Department of Management web site at:

http://www.utspace.utoronto.ca/mgmt

General Admission Requirements to the University of Toronto Scarborough

for 2007-2008

Applicants from Ontario Secondary Schools Under 1999 OSS Diploma (4 year) requirements

- Applicants must present at least six (6) Grade 12 University (U) courses or University/College (M) courses
- One credit must be Grade 12 English ENG4U
- Applicants must present credits to satisfy any prerequisites of specific courses or specific programs in which they intend to enrol.
- Applicants must satisfy English Facility Requirements

Applicants from Ontario Secondary Schools under 1989 OSSD Diploma (3 year) requirements

- Applicants must be eligible to receive the Ontario Secondary School Diploma (OSSD)
- Applicants must present at least six (6) Ontario Academic Courses (OACs)
- One credit must be OAC English L1/11
- Applicants must present credits to satisfy any prerequisites of specific courses or specific programs in which they intend to enrol.
- Applicants must satisfy English Facility Requirements
English Faculty Requirements

Applicants may request the English Faculty Requirements brochure from Admissions and:

Awards or visit the website:
www.adm.utoronto.ca/adm_other_req/adm_english_faculty.htm

Phone 416-978-2190

1. Proof of adequate English facility is required of all applicants except for those, (i) whose first
   language is English, or (ii) who have studied full-time for at least four years in an English
   language school system located in a country where the first language is English, or (iii) whose
   first language is French and have studied for at least four years in the Canadian school years.

2. Applicants who are required to present proof of English facility shall be exempt from the
   normal admission requirement of having to present ENG4U English (or equivalent course).
   Such applicants are, however, encouraged to include English in their preparation for
   university. If English 12 U or OAC English 1 is completed as an extra credit, applicants will
   not be penalized by having the result included in their admission average if the grade is low.

3. Acceptable Tests/Qualifications and Required Scores
   • The Test of English as a Foreign Language (TOEFL). The minimum requirements are:
     Internet-Based Test - total score of 100 on a 22 on Writing
     Paper-Based Test - total score of 600 and 5.0 on TOEFL
     Computer-Based Test - total score of 250 and 5.0 on the Essay.
   • Michigan English Language Assessment Battery. The minimum requirement is an overall
     score of 85 with no part score below 80.
   • International English Language Testing System (IELTS). The minimum requirement is an
     overall band of 6.5, with no band below 6.
   • English Language Diagnostic and Assessment/Certificate of Proficiency in English (ELDA/COPE). The minimum requirement is an overall score of 5 with 2 in Writing and
     1 or 2 in the Reading and Listening sections.
   • Academic Preparation ESL Course completed at the University of Toronto, English
     Language School, School of Continuing Studies (http://learn.utoronto.ca/tep/esp/)
     The minimum requirement is a grade of B at the 60 (Advanced) level.
   • See the website (www.adm.utoronto.ca/adm/adm_other_req/adm_english_faculty.htm)
     for other acceptable tests and requirements.

Note: For an applicant who scores just below the minimum requirements who is otherwise well-
qualified for admission. Admissions and Awards will automatically consider other academic
evidence of English proficiency (for example, results in English courses).

Prerequisites

Students should choose Grade 12 University and/or University/College Preparation courses that
will fulfill the prerequisites for university courses and programs they intend to take. Review 6 of
T Scarborough brochures, the U of T Scarborough website or consult with Admissions and
Student Recruitment staff.

Examples:
• Management programs require MCB4U Advanced Functions and Introduction Calculus
• Computer Science programs require both MCB4U Advanced Functions and
   Introduction Calculus and MGA4U Geometry and Discrete Mathematics
• Most science programs require - MCB4U Advanced Functions and Introduction Calculus.
   Many science programs also require SCH4U Chemistry and SP64U Physics.

Mathematics Preparation

For programs that require calculus, applicants must complete a course similar to the Ontario
Calculus course (MCB4U Advanced Functions and Introduction Calculus) that includes the
following content: Concepts of advanced functions; introduces basic concepts of calculus;
investigation and application of the properties of polynomial, exponential, and logarithmic
functions; understanding of the mathematics connected to those of change; development of
facility with differential calculus as applied to polynomial, rational, exponential, and logarithmic
functions; problem solving in a range of applications. If your secondary school does not offer a
calculus course or Advanced Placement math in their curriculum, consult with Admissions and
Student Recruitment staff.

For programs that require algebra, applicants must complete a course similar to the Ontario
algebra course (Geometry and Discrete Mathematics MGA4U) that includes the following
content: Abstract mathematical topics and the solving of complex problems including geometric
and Cartesian vectors, and intersections of lines and planes in three-space and counting
techniques. Proving of results using mathematical induction. Development of an understanding
of proofs using deductive, algebraic, vector, and indirect methods.

Resulting from a revision of the Ontario high school mathematics curriculum, the mathematics
requirements will see some changes. For updates please refer to the Admissions and Student
Recruitment website: www.utsc.utoronto.ca/admissions.

Admission By Equivalent Certificate

The certificates listed below are considered acceptable for admission consideration. Applicants
must present courses to meet specific course and program prerequisites. Review the prerequisite
information given for Ontario applicants on our website and in our brochures to determine the
relevant prerequisites you need.

Applications from Other Canadian Provinces and Territories.

Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, North West
Territories, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan, Yukon - Grade 12
Quebec - 12 academic C.E.G.P. courses (Transfer credit is granted to candidates who have
completed more than the 12 academic required CEGEP courses.)

Note: Those who completed their high school studies in Canada prior to 1989 should contact
Admissions and Awards before applying to check entrance requirements.

Admission with Transfer Credit

Students who have completed work at other universities or at other Faculties or Schools of this
University may be considered for admission with advanced standing credit. Acceptance of
transfer credits among Ontario universities shall be based on the recognition that, while learning
experiences may differ in a variety of ways, their substance may be essentially equivalent in
terms of their content and rigor. Insofar as possible, acceptance of transfer credit should allow for
maximum recognition of previous learning experience in university-level courses.

Subject to degree, grade and program requirements, any course offered for credit by one
university shall be accepted for credit by another university when there is virtual equivalency in
course content.

Note: that students who are transferring to the University of Toronto Scarborough will be
required to complete at least half of their degree credits and half of their program requirements
at University of Toronto Scarborough students. (Students transferring from other divisions of
the University of Toronto are exempt from this degree requirement. However, limits on transfer
credit upon admission still apply.) Students must consult with the Program Supervisor before
taking courses required for the program at another campus.

Applications from Ontario Colleges of Applied Arts and Technology (CAAT)

Candidates who have completed a two-year CAAT diploma program with sufficient academic
content (or two years of a three-year CAAT diploma program) are eligible to be considered
for admission to the first year of a degree program. Up to two full credit equivalents will be
considered to transfer credit (effective 1997; the policy change is not retroactive).
2. Candidates who have completed a three-year CAAT diploma program are eligible to be considered for admission with up to five full credit equivalents as transfer credit.

3. Candidates who have completed a one-year CAAT diploma program (or one year of a two- or three-year CAAT diploma program) are normally eligible for consideration for admission. They must qualify for consideration by completing Grade 12 U/M courses (or equivalent).

Applicants from Centennial College who are applying for admission to a joint program at U of T Scarborough who have completed a corresponding program at Centennial College are asked to contact Admissions and Student Recruitment for further details. Also, see the Joint Programs website: www.uts.ccutoronto.ca/jprogs

Applicants holding the International Baccalaureate Diploma (IB) Candidates who have completed the Diploma with good results will be considered for admission. Those seeking admission to programs that require mathematics must present Higher Level Mathematics, Standard Level Mathematics or Mathematics Methods with the Calculus option. Transfer credit is awarded for most Higher Level subjects completed with a grade of 5, 6 or 7.


Applicants from the United States of America Candidates who have completed Grade 12 from an accredited high school with a high grade point average and good scores on the SAT Reasoning Test or ACT plus good results on three SAT Subject tests or AP exams (or combination thereof) will be considered. Transfer credit is awarded for several Advanced Placement tests with scores of 4 or 5.


Applicants with other qualifications Candidates who wish to apply for admission on the basis of work completed in other countries or on the basis of other qualifications should check our websites or write to Admissions and Awards, outlining their academic qualifications and intended area of study. Information on admission requirements for applicants from overseas is contained in the International Undergraduate Admission Bulletin available from Admissions and Awards.

Mature Students Applicants who do not hold the published admission requirements who are at least twenty-one years of age. Canadian citizens, permanent residents of Canada or Protected Persons (Conventive Refugees) and have been resident in Ontario for at least twelve months may be considered for admission as mature students. The applicants must complete, with high standing, (a) one of Woodsworth College’s Academic Bridging Program course or (b) two Grade 12 U/M courses completed after the student is 21 years of age. One course must be English ENG4U. Further information on the Academic Bridging Program is available at www.ww.cutoronto.ca or by contacting Woodsworth College (416-978-2415).

Students must receive permission from Admissions and Awards to qualify for consideration using these options. Note that students who wish to prepare for certain university programs such as management or science programs may have to do additional studies to ensure all of the prerequisites are attained.

Notes: (i) Status in Canada: An applicant who wishes to qualify as a Mature Student must be one of the following: a Canadian Citizen or Permanent Resident or officially recognized as a Protected Person (Convention Refugee) by Citizenship and Immigration Canada, admitted to and remaining in Canada (ii) Age: The applicant must be 21 years of age by October 1 of the Fall Session or by July 15 for the Summer Session.

Non-Degree Students
A Non-Degree Student is one who is taking courses at U of T Scarborough but who is not pursuing a University of Toronto’s Bachelor’s degree. Most Non-Degree students have completed degree studies and are taking further courses for their own interests or for professional preparation.

Visiting Student (Non-Degree) on a Letter of Permission
Students with valid Letters of Permission from other accredited North American universities may apply directly to U of T Scarborough to take courses for transfer credit at their own home university. Visiting Student status does not imply acceptance for Degree status or other Non-Degree student status. Call 416-287-7529 for applications or download the application from our website at www.uts.ccutoronto.ca/admissions

Senior Citizens
Canadian citizens or permanent residents of Canada who are at least 65 years of age by the first day of term may apply for admission as part-time Non-Degree Students. Normal admission requirements are usually waived. Tuition fees will be charged; limited bursary assistance may be available. Call the Assistant Registrar - Admissions at 416-287-7529 for information.

How Decisions Are Made
The specific average or standing required for admission varies from year to year. Students are selected by taking into consideration a wide range of criteria including school marks, distribution of subjects taken, performance in subjects relevant to the academic program selected and, for applicants to co-operative programs, teaching programs and joint programs, supplementary application information. While the University of Toronto recognizes that there may be valid reasons for a student to repeat a course, in general we urge students do as well as possible on their first attempt. In considering students for admission and scholarships, the University reserves the right to give preference to students whose marks are the result of a single attempt at each course.

Possession of minimum requirements does not guarantee acceptance. Because of space limitations, preference will be given to applicants with the best qualifications. Applications will be considered from candidates whose qualifications do not meet the normal requirements, but such candidates must offer written evidence of exceptional ability, or of extenuating circumstances. Applicants who matriculated prior to the current year are advised to contact Admissions and Awards for information. The University of Toronto reserves the right to determine whether or not credentials of degree-granting institutions in Ontario meet the standards for admission to University of Toronto programs.

Awards
All U of T Scarborough undergraduate degree students with excellent academic standing are considered for awards. Awards that require an application are highlighted. Where deadlines are not specified, ask staff in the Financial Aid & Awards Office (Room AA142), check the Awards bulletin board (located in the Meeting Place) and check the U of T Scarborough website for announcements. Some bulletin about awards are sent to current students by email. The official award record are on file in the Financial Aid & Awards Office. Students should also review the Financial Aid & Awards website at www.uts.ccutoronto.ca/finaid Scholarship Inquiries: 416-287-4709, Bursary/UTAPS Grant inquiries: 416-287-7001.

A general condition for holding an entrance or in-course award is that the student must register at the University of Toronto Scarborough in the following academic year with degree status. Students who have been awarded a scholarship, which is based on enrollment in a particular program of study, must continue in that program to receive the award. U of T Scarborough reserves the right to not award a scholarship, if, in a particular year, the academic achievement of the candidate is not of
high. For graduation awards, students who graduate at the fall convocation are considered for awards at the following spring convocation in competition with the spring graduates. Students who graduate with three-year degrees are not considered for in-course awards.

**Ontario Student Opportunity Trust Fund Awards (OSOTF)**

To qualify for consideration for awards listed below which are described as OSOTF awards, students must qualify for consideration for the Ontario Student Assistance Program (OSAP). Eligible candidates must be Canadian citizens or permanent residents and satisfy the Ontario Residency requirements as defined by OSAP.

**Admission Awards**

**Note:** The calendar is published in March. Check the Admissions and Student Recruitment website in September for updates to the scholarship program: [www.utm.utoronto.ca/admissions](http://www.utm.utoronto.ca/admissions). U of T Scarborough allocates entrance scholarships to students entering first year directly from secondary school. A limited number of awards are also available to students transferring from other universities with outstanding academic achievement. Successful applicants will be notified of awards received at the time they receive an offer of admission to the University. In considering students for scholarships, the University reserves the right to give preference to students whose grades are the result of a single attempt at each course.

**Entrance Scholarship applications can be found at [www.utm.utoronto.ca/admissions](http://www.utm.utoronto.ca/admissions). For financial need-based scholarships, applicants must complete a University of Toronto Advance Planning for Students (UTAPS) application at [www.adm.utoronto.ca/fas/UTAPS/default.htm](http://www.adm.utoronto.ca/fas/UTAPS/default.htm) to qualify. Applicants must be Canadian citizens or permanent residents of Canada.**

**The National Scholarship Program**

The University of Toronto National Book Award Program is intended to recognize and reward the very best Canadian secondary school students, regardless of which university those students choose to attend. These scholarships are designed to provide superior academic performance, original and creative thought, and exceptional achievement in a broad context. Canadian schools are invited to nominate one student to receive the Book Award.

Students selected as National Book Award winners have the opportunity to submit applications to the National Scholarship Program. In addition, students who identify themselves as meeting the scholarship criteria are invited to apply directly for the National Scholarship. On the basis of application criteria, about 30 students are selected as finalists.

The finalists are invited to be the guests of the University during the selection interviews held in the spring. In 2007, the University expects to award approximately 12 National Scholarships.

**The deadline for submission of Book Award nominations and National Scholarship applications is early October of the student’s final year of secondary school.**

**University of Toronto Scholars Program**

This program recognizes outstanding University of Toronto students in any first degree course, both on admission and during their course of study. Approximately 120 outstanding admission applicants are selected as University of Toronto Scholars. These awards have a value of $3,000 and may be held in any program of study at the University, in conjunction with admission awards that the students may receive from their faculty/college.

Awards under the University of Toronto Scholars Program are not renewable. Outstanding students, however, will be eligible for consideration for University of Toronto (in-course) Scholarships at the end of the first, second and third year of their programs. At U of T Scarborough, there are 18 of these awards at each level. These in-course awards are worth $1500 and are tenable with other in-course scholarships.

**Pimpmir Admission Scholarship**

Awarded to the student entering first year whose achievement in secondary school is considered to be the most outstanding. The scholarship is awarded in memory of Professor A.F. Wynn Pirie, a former Principal of U of T Scarborough.

**Frederick A. Urichart Admission Scholarships**

Eight scholarships are awarded to students entering first year on the basis of exceptional academic achievement in secondary school. The scholarships are awarded in memory of Professor Emeritus F.A. Urichart, a distinguished entomologist.

**University of Toronto Scarborough Admission Scholarships**

Secondary school applicants with excellent standing are considered for merit-based scholarships. Some scholarships have a financial need component. To be considered for awards that have a financial need component, complete a UTAPS application. **Deadline: March 9**

**University of Toronto Scarborough Alumni Admission Awards**

Awarded to students applying directly from secondary school who have demonstrated significant community service work and who have high academic achievement. Application required (see website for details). **Deadline: March 9**

**University of Toronto Scarborough Scholarship in Studio Art**

Awarded to a student applying to Humanities who intends to take a program in studio art, awarded on the basis of an excellent portfolio that focuses on exploration of concepts and media. Application required. Send a covering letter with slides or portfolio and a letter of recommendation from an instructor or arts professional to Admissions and Student Recruitment (see website for details). **Deadline: March 9**

**Canadian Federation of University Women (CFUW) Scarborough Entrance Scholarship**

Canadian Federation of University Women (CFUW) Scarborough Entrance Scholarship Awarded to a student graduating from a Scarborough area high school on the basis of academic achievement, outstanding leadership in his/her school or community and financial need (OSOTF). Application required (see website for details). Students must also complete a UTAPS application. **Deadline: March 9**

**The Scarborough Frank Faubert Scholarships**

Awarded to students entering first, second or third year in a degree program offered by the Department of Management on the basis of financial need. Eligible candidates are to be limited to graduates of high schools within the geographic limits of the Corporation of the City of Scarborough as it existed on December 31, 1997. (OSOTF). Complete a UTAPS application. **Deadline: March 9**

**Terry Litovitz Merit Award in Management**

Awarded to a student entering the Bachelor of Business Administration (BBA) degree program directly from secondary school on the basis of excellent academic achievement and demonstrated leadership in his/her school or broader community. Demonstrated leadership will be defined as someone who has evidence of one or more of the following: extra-curricular involvement in his/her high school (preference will be given to those actively involved in their student council), and/or active service in their community. Application required (see website for details). **Deadline: March 9**

**John Ball Alumni Entrance Scholarship**

Awarded to a student entering first year on the basis of academic excellence in the secondary school program.
Lo Family Scholarships
Awarded to students who are active leaders, are respected and considered to be well-rounded citizens in their school community, and who have demonstrated financial need. Applicants must submit a covering letter to outline their community activity and demonstrated leadership skills to Lo Family Scholarships, Admissions and Awards, 315 Bloor St. W., Toronto, ON, M5S 1A3. Deadline: April 30

Orrell Family Scholarship
Awarded to a student entering first year in the International Development Studies Co-op program on the basis of academic merit and financial need (OSOTF*). Complete a UTAPS application. Deadline: March 9

Paul Thompson Entrance Scholarship in Life Sciences
Awarded to a student entering first year in a Life Sciences program on the basis of academic excellence in the secondary school program. The scholarship is awarded in honour of Professor Thompson, a former Principal of UT Scarborough. Deadline: March 9

John H. Youssou Entrance Award in Life Sciences
Awarded to a student entering first year in a Life Sciences program directly from secondary school who has high academic achievement (minimum 80% average) and has demonstrated a high level of extra-curricular involvement in his/her school or community. Application required (see website for details). Students must also complete a UTAPS application. Deadline: March 9

UTSC Faculty and Staff Award
Awarded to a student based on academic excellence and financial need. Complete a UTAPS application. Deadline: March 9

UTSC GRADuate Legacy Award
Awarded to a student based on outstanding community service and academic achievement. The student must demonstrate leadership qualities in his/her volunteer role. Application required (see website for details). Deadline March 9

Frank M. Waddell Scholarship
Awarded to a student from Bram County, Ontario on the basis of academic excellence. Application required. Submit a letter indicating how the Bram County condition is met to Waddell Scholarship, Admissions and Awards, 315 Bloor St. W., Toronto, ON, M5S 1A3. Deadline: April 30

In-course Scholarships & Awards
NOTE: The calendar is published in March. At the time of printing, some award criteria may not be finalized. Check the Financial Aid & Awards website for updates to the scholarship program at www.ute atol on.on.ca/finaid

Undergraduate degree students are considered for in-course awards at the end of the session in which they complete their 5th, 10th and 15th full credit. Most award decisions are made in the summer for students who are eligible for consideration after the previous summer, fall and winter and summer sessions. It is the practice of the University of Toronto Scarborough Awards Committee to permit a student to hold only one major award. This gives more students an opportunity to be recognized for excellent achievement.

Ontario Student Opportunity Trust Fund Awards (OSOTF*)
To qualify for consideration for awards listed below which are described as OSOTF awards, students must qualify for consideration for the Ontario Student Assistance Program (OSAP). Eligible candidates must be Canadian citizens or permanent residents and satisfy the Ontario Residency requirements as defined by OSAP.

Automatically awarded:
University of Toronto Scholars Program
Outstanding undergraduate degree students will be considered for University of Toronto Scholars Program at the end of the first, second and third year of their programs. At UTSC, there are approximately 18 scholarships at each level. These in-course awards are worth $1500 and are available as other in-course awards.

University of Toronto Scarborough In-Course Scholarships
Awarded to students who have achieved a grade point average of 3.70 or better in their most recent year of full-time study or equivalent amount of part-time study. Students are considered in the final year of the session in which they complete their 3rd, 16th, and 15th credit.

A. D. Allen Scholarship
Awarded to the outstanding student in each year at University of Toronto Scarborough, in any field of study. The scholarships are awarded in memory of Dr. A. D. Allen, a former Principal of UT Scarborough.

Vincent Bladen In-course Scholarships
Two scholarships for each of first, second and third year are awarded on the basis of exceptional academic achievement. The scholarships are awarded in memory of Professor V. Bladen, a former member of the faculty in Economics.

University of Toronto Scarborough Honours List
University of Toronto Scarborough publishes annually on honours list, including the names of all degree students who have achieved a grade point average of 3.70 or better in their most recent year of full-time study or equivalent amount of part-time study. Students are considered for the honours list at the end of the session in which they complete their 5th, 10th, 15th and 20th credit. Other students may be nominated by the academic Department.

Harvey Bahiuk Award in Financial Accounting
Awarded to a student completing the third year of the Specialist Program in Management or Management and Economics with the highest grade (at least A) in MGTC30H and MGTC00H.

Jane Bancroft Scholarship in French
Awarded to a student who is entering the third or fourth year in a major or specialist program in French on the basis of outstanding achievement in French studies. A minimum of 4.0 full credit equivalents must be completed.

William Boardmore Memorial Prize in History
Awarded to the student completing the third year in the opinion of the members of the teaching staff in History, has excelled in the study of History. Awarded in the memory of William Boardmore, a History graduate of UTSC.

Bleden Prize in Economics
Awarded on the basis of an essay submitted by a student specializing in Management or Economics on any subject covered by a B, C- or D-level course in Economics.

Sandford Borins Scholarship in Public Management
Awarded to the student in a specialist program in Management who has achieved the highest grade in the course MGTC42H (Public Management).

Ryer Brody Prize in Entrepreneurship
Awarded to an undergraduate student enrolled in a Management program who has the highest grade in the course MGTC383 Entrepreneurship (minimum grade A minus).
Norman F. Brown Memorial Award in Humanities
Awarded to a student enrolled in the second or third year of a program in the Department of Humanities on the basis of excellent academic achievement.

Canadian Society for Chemistry Silver Medal
Awarded to a student entering the fourth year of a specialist program in Chemistry who has the highest grade in the program in third year.

Canadian Society for Chemistry, Toronto Section Book Prize
Awarded to the most improved student entering the fourth year of a specialist program in Chemistry.

Yvonne and John Chiu Award in Genetics
Awarded to a student enrolled in a Biological Sciences program who has the highest grade in BIOG1501H1S Transmission Genetics.

Neil H. Dobbs Award
Awarded to a student on the basis of financial need. Academic merit will also be considered. (OSOT*)

Keith and Amelia Ellis Award in Management and Economics
Awarded to a student entering third year in a degree program in the Department of Management on the basis of financial need. Preference will be given to a candidate who has shown a marked improvement in academic standing from year one to year two. (OSOT*)

Ernst & Young Scholarships in Commerce
Awarded to students in the third and fourth year Management program, who have successfully completed accounting courses. Financial need is also considered. (OSOT*)

Frank Faubert Scholarship in International Development Studies
Awarded to a student enrolled in the co-operative program in International Development Studies who is starting his/her work placement.

The Scarborough Frank Faubert Scholarships
Awarded to students entering first, second or third or fourth year in a degree program offered by the Department of Management on the basis of financial need. Eligible candidates are to be limited to graduates of high schools within the geographic limits of the Corporation of the City of Scarborough as it existed on December 31, 1997. (OSOT*)

Finnas Family Scholarship in Arts and Science
Awarded to a full-time student entering second year who is continuing in a Humanities, Life Sciences, Physical Sciences or Social Sciences program. Financial need must be considered and the recipient must be in good academic standing. (OSOT*)

Tom Hull Scholarship in Computer Science
Awarded to undergraduate or graduate students in Computer Science. The award will be based on financial need and will also take academic merit into account. (OSOT*)

Abram Krashinsky Prize in Music
Awarded for the best essay or original composition in a course in music offered at U of T Scarborough.

Abram Krashinsky In-Course Scholarship in Visual and Performing Arts
Awarded to a student enrolled in a program in the Visual and Performing Arts who (i) has completed at least 10 full credits and (ii) has achieved excellent standing in VPA courses.

Arthur Louden Scholarships
Awarded to one or more students enrolled in the Early Teacher Project (open to students enrolled in the Department of Physical and Environmental Science programs) on the basis of academic achievement (minimum 3.3 GPA).

The MacDonald Bursary
Awarded to a full-time degree student registered in second, third or fourth year who achieved at least a Grade B standing in the previous year. Financial need must be considered.

Mergson Scholarship in English
Awarded to an outstanding student who has completed the second year of the major or specialist program in English.

The Margaret H. McCoy Johnston Scholarship
Awarded to the student enrolled in a major or specialist program(s) in a modern language who, on entering the third or fourth year, has the highest grade point average in courses taken to satisfy the program(s). (Minimum GPA 3.2).

Tom McFaul Prize in Anthropology
Awarded to the outstanding student entering the final year of the major or the specialist program in Anthropology.

Esther Mitchell Prize in Chemistry
Awarded to a student entering the third year of a program in Chemistry, for achievement in the courses required for the program (a minimum of three full credits in Chemistry, including Analytical Chemistry, must be completed to be considered).

John S. Mall Prize in Canadian History
Awarded to the student with the highest standing in HIST400H1S Canadian History to 1885.

The Katherine Nagel Philosophy Prize
Awarded to the student in the major or specialist program in Philosophy before the beginning of the third or fourth year of study whose grades and performance in Philosophy, in the opinion of the faculty in Philosophy, have best demonstrated excellence in the subject.

Dr. Vivian Paskal Memorial Prize in Psychology
Awarded to a full-time student entering the fourth year of the specialist program in Psychology, on the basis of excellent academic achievement.

The William D. Peck Award in Biology
Awarded to a full-time student entering the second year of any program in the Biological Sciences on the basis of excellent achievement in BGYA01H1S and BGYA02H1S Introductory Biology courses (minimum 3.3 GPA/80%). Emphasis will be placed on the laboratory component of the course and overall contribution to the class.

John Pounder Prize in Astronomy
Awarded to a full-time student entering the third year of a Physical Sciences program on the basis of excellent achievement in ASTA01H1S, ASTA02H1S and one B- or C-level course in Astronomy.

Rahim & Hassen Canada Scholarship
Awarded to one or more students entering either (i) the third year of a major program in Chemistry or (ii) the third or fourth year of a specialist program in Chemistry. Financial need must be considered. Academic merit will also be considered. (OSOT*)

Ken Sercuk Bursary in Computer Science
Awarded to any student(s) in a Specialist or Major program in Computer Science. Financial need must be considered; academic merit will also be considered. (OSOT*)

Social Sciences In-Course Scholarship
Awarded to a student entering the second, third or fourth year of a program offered by the Department of Social Sciences on the basis of excellent academic achievement.
Ting Sum Tang Memorial Scholarship in Arts Management Co-op
Awarded to a student entering the fourth year of the Arts Management Co-op Specialist program on the basis of excellent academic achievement (minimum GPA 3.3/B+). The award will be given on the basis of achievement in a recent work placement. (Donated by the Federation of Chinese Canadian Professionals Ontario Education Foundation.)

Ting Sum Tang Memorial Scholarship in Cell & Molecular Biology
Awarded to a student entering the fourth year of a Cell and Molecular Biology Specialist program on the basis of excellent academic achievement (minimum GPA 3.3/B+). The award will be given to a student who has shown a commitment/contribution to their area of study through collaboration in class. (Donated by the Federation of Chinese Canadian Professionals Ontario Education Foundation.)

The Ali Tayyeb Scholarship
Awarded to a student who demonstrates excellent scholarship in Political Geography or studies of developing nations.

Karoline Thiel Prize in English
Awarded to the student who, in the year he/she completes the ENGB01H, ENGB02H, ENGB03H, ENGB04H sequence of courses, has the highest average in those four courses.

Stanley Kosta Todorow Scholarships
Awarded on the basis of academic excellence to one or more students registered in a Life Sciences or Physical Sciences program that leads to a Bachelor of Science degree.

Trenwith Computer Science Awards
To be awarded on the basis of financial need to three students—one entering each of second, third and fourth year of a computer science program. Academic merit will also be considered. (TRENTH*)

Andrew Tang Memorial Scholarship in Sinico-Canadian Studies
Awarded to the undergraduate, whose academic performance and extra-curricular activities in the areas of Chinese studies and Sinico-Canadian studies best exhibit commitment to Chinese-Canadian cultural and economic ties.

University of Toronto Scarborough Prize in Biology
Awarded to a full-time student entering the fourth year of a specialist program in Biological Sciences on the basis of excellent academic achievement. Emphasis will be placed on achievements in the third year of study.

The University of Toronto Women's Association Lois Dove Memorial Scholarship
Awarded to a student on the basis of excellent academic achievement in the third year of a four-year undergraduate degree program.

Ho Chok Wan Memorial Scholarship in Management
Awarded to a student entering second, third or fourth year in a Management program. Financial need must be considered in addition to academic merit. (OSOTF*)

Application/Nomination Required:
Applications are available in the Financial Aid & Awards Office (Room AA142) and on-line at www.utsc.utoronto.ca/financial

APUS Award for the University of Toronto's Sesquicentennial
Part-time undergraduate students who (a) have completed at least five full credits with a B average (GPA of 3.0) in the last five full credits, and (b) have demonstrated outstanding achievement or commitment in activities distinct from their University studies or have overcome adverse circumstances in order to attend University, may be considered. Applications available on-line at www.apus.utoronto.ca...
Flosa Family International Development Studies Placement Scholarship
Awarded to a student enrolled in the co-operative program in International Development Studies who is starting his or her work placement. Financial need must be considered.

Anita Fitzgerald Prize in Women's Studies
Awarded for the best essay in the area of Women's Studies. Instructors nominate essays.

Joan E. Foley Award
Awarded to a student, alumna, administrative staff member or faculty member who has made a significant contribution toward improving the quality of academic or extra-curricular student life on campus. Sponsored by the University of Toronto Alumni Association. Nomination required in December.

The C. K. Govind Excellence Award
Awarded to a full-time undergraduate student entering fourth year of study in an Integrative Biology or Neuroscience program. In addition to academic excellence (minimum cumulative GPA 3.5/B+), candidates must demonstrate a commitment to enhancing the lives of other people, by his/her volunteer work within the community. Open to Canadian citizens and permanent residents. Deadline: September 29

Gallant Y.T. Ho Scholarship in International Development Studies
Awarded to a student entering second, third or fourth year in the co-operative program in International Development Studies. Financial need must be considered in addition to academic merit. (OSOTT*)

International Development Studies Scholarship
Awarded to students enrolled in the co-operative program in International Development Studies who are starting their work placement. Financial need must be considered. (OSOTT*)

The Morris Krever History Prize
Awarded to a student entering the third year of the major or specialist program in History on the basis of academic performance (at least B+ standing) and financial need. Emphasis is placed on academic performance. Deadline: September 29

Lawrence B. Leverington Mentor Award
Awarded to a student entering the second, third or fourth year for outstanding musical ability in one of the following three areas: direction, composition or performance. The award recipient must be in good academic standing and must demonstrate financial need (OSOTT*). Nomination required. Deadline: September 29

Gavin Livesay Memorial Bursary
Awarded to a student enrolled in the co-operative program in International Development Studies returning from work placement to complete the fifth and final year, given on the basis of financial need. Where two or more students qualify on this basis, the students' contribution to the program and to U of T Scarborough will also be considered. (OSOTT*) Deadline: September 29

McClelland and Stewart Essay Prize in Canadian Studies
Awarded on the basis of an essay, 2,500 to 5,000 words in length, on a topic focusing on Canadian art, drama, music or literature. Essays are normally those submitted for course work and nominated by instructors. However, students may also submit a copy of their essays directly to the Chair of the Department of Humanities by April 28. Include a cover page showing full name, student number and the name of the course for which and professor to whom the essay was originally submitted.

Peter Mosen Prize in French
Awarded for the best undergraduate essay in French drama. Instructors nominate essays.

Joelita Nagy Scholastic Awards
Part-time students who have a GPA of at least 3.3 in the most recent five full credits who have completed the majority of their courses on a part-time basis may be considered. Sponsored by APUS. Applications available on-line at www.apus.utoronto.ca

Norton Institute Undergraduate Scholarship(s)
The scholarship is open to students in second or third year in the Faculty of Applied Science and Engineering, the Faculty of Arts and Science and U of T Scarborough on the basis of financial need, academic merit and an essay. Deadline: November 1

The Oxford University Press English Essay Prize
Awarded for the best essay written for an English course, in the past academic year. Instructors nominate essays.

The Prudential Insurance Company Ability Award
Awarded to an undergraduate student entering second, third or fourth year who has special educational needs due to a physical or learning disability who (i) has demonstrated outstanding leadership qualities in his/her school or community, (ii) is a Canadian Citizen or Permanent Resident, (iii) has a good academic record (minimum B average/3.0 GPA) and (iv) demonstrates financial need. Preference is normally given to full-time students. However, students who are not enrolled in a full-time course load may explain the reasons for carrying a part-time course load. (OSOTT*) Deadline: June 30

The Prudential Insurance Company Management and Economics Award
Awarded to full-time undergraduate students entering second, third or fourth year in a program in the Department of Management who has demonstrated outstanding leadership qualities in his/her school or community who (i) is a Canadian Citizen or Permanent Resident, (ii) has a good academic record (minimum B average/3.0 GPA) and (iii) demonstrates financial need. (OSOTT*) Deadline: June 30

The Prudential Insurance Company Scarborough Spirit Award
Awarded to a full-time undergraduate student entering second, third or fourth year who has demonstrated outstanding leadership qualities in his/her school or community who (i) is a Canadian citizen or permanent resident, (ii) has been a Scarborough resident for at least 5 years, (iii) is a graduate of a secondary school in Scarborough, (iv) has a good academic record (minimum B average/3.0 GPA) and (v) demonstrates financial need. (OSOTT*) Deadline: June 30

Brian David Rafford Memorial Scholarship in Management
Awarded to one or more students entering the third or fourth year of a Management program whose academic and athletic achievement, combined, best exhibit dedication to excellence (minimum B average/3.0 GPA). Deadline: September 29

Residence Life Scholarship
Awarded to a full-time undergraduate student entering second, third or fourth year, who are (i) returning to residence for the following year, (ii) have demonstrated a strong involvement in his/her residence community, (iii) have a good academic record (minimum B average/3.0 GPA), (iv) have completed at least 3.0 credits in each year they have been registered, (v) demonstrate financial need. Deadline: May 31

The Rouge Watershed Scholarship
Awarded to a student enrolled in an Environmental Science, Ecology or Geography program on the basis of excellent academic achievement, strong interest in environmental issues and active participation in environmental projects within the university or community. (OSOTT*) Financial need must be considered. Deadline: April 28

Scarbabout Campus Students’ Union Prizes
Awarded to a student in good academic standing entering the second, third or fourth year who has made an outstanding contribution to the academic, social or cultural life of UTSIC. Application or nomination required. Deadline: May 31
Scarborough-York Region Chinese Business Association Scholarship
Awarded to students enrolled in the co-operative program in International Development Studies who are starting the work placement. Financial need must be considered. (OSOT*)

SKF Canada Limited Scholarship
Awarded to a student enrolled in the co-operative program in International Development Studies who is starting the work placement. Financial need must be considered. Academic merit will also be considered. (OSOT*)

South Asian Alliance In-Course Award
Awarded to a student entering second, third or fourth year on the basis of academic merit and participation in U of T Scarborough extracurricular activities that enhance community spirit. Application or nomination required. Deadline: May 31

Wo Yee Sun Scholarship
Awarded to a student enrolled in the co-operative program in International Development Studies who is starting the work placement. Financial need must be considered. (OSOT*)

University of Toronto Scarborough Prizes in Creative Writing
Awarded on the basis of excellence in creative writing in poetry or short fiction. (1000 word maximum for poetry submission; 3000 word maximum for short fiction.) Submissions will be made to the Co-ordinator of the Writing Centre and must include a cover page showing full name of the student, student number, contact information and the name of the course for which the piece was originally submitted (if the piece was used in course work). Deadline: April 1

The Branko Vojnovic Uตล Scarborough AccessAbility Award
Awarded to an undergraduate student entering second, third or fourth year at U of T Scarborough who is registered with AccessAbility Services and/or has special educational needs due to a disability/challenge as defined under the human rights code, is in good academic standing and displays a drive for learning. Preference is given to students enrolled in Management programs. Nomination required. Deadline: May 31

Frank M. Waddell Scholarship
Awarded to a student from Brant County, Ontario on the basis of academic excellence.

Financial Need Based Bursaries/Grants and Financial Assistance Programs
University of Toronto Advance Planning for Students (UTAPS)
Students who are concerned about financing their university studies can obtain early information about government and other financial assistance by completing a UTAPS application. These applications are available on-line at http://www.advancetoronto.ca/ut/UTAPS/default.htm and should be completed by all Canadian citizens and permanent residents who have applied for admission to full-time studies at the University of Toronto. Students will receive notification of UTAPS eligibility with the offer of admission. All students with calculated net need above their government-funding maximum will be automatically assessed for UTAPS grant assistance throughout the year.

Government Financial Aid
The Ontario Student Assistance Program (OSAP) is available to Ontario residents who are Canadian citizens, permanent residents, or protected persons to assist with educational and living expenses. OSAP loans are interest-free and are non-repayable while the student remains enrolled in full-time studies. Information concerning the eligibility and assessment criteria may be obtained from: Ministry of Training, Colleges and Universities OSAP (website: http://osap.gov.on.ca) or the Financial Aid & Registrar’s Office, (416) 287-7001. OSAP application forms are available on-line at the Ministry’s website. It is recommended that returning students apply for OSAP assistance for the 2007-2008 Fall/Winter Sessions by May 31, and new students by June 30. Check with staff regarding Summer deadlines. Students from other Canadian provinces should apply through their provincial financial aid program. The Financial Aid & Registrar’s Office can provide addresses, and, in many cases, application forms.

University of Toronto Undergraduate Bursaries/Grants
Applicants must demonstrate financial need. Applications may be obtained from the Financial Aid & Awards or on-line at www.uts.oratoronto.ca/buraid. Review application for specific seasonal deadlines.

University of Toronto Work-Study Program
This program is funded by the University and the Ministry of Training, Colleges and Universities, and provides co-op, campus, part-time employment to students with financial need. Information and applications are available from the Advising, Career and Student Success Centre AR213.

N’Sheemah Child Care Bursary
Awarded to one or more students who have/have had a child/children at N’Sheemah child care facility on the basis of financial need. Bursary must be applied for at N’Sheemah. Application required. Deadline: July 30.

Scarborough Campus Students' Union Dollar for Daycare Grants
Awarded to full-time or part-time undergraduate students on the basis of financial need related to daycare expenses. Deadline: October/November. Applications are available in the Scarborough Campus Students' Union (SCSU) Office SL108.

Bursary for Students with Disabilities
Non-repayable assistance is available from the federal and provincial governments for OSAP recipients who have special educational expenses as a result of a disability. Information is available in AccessAbility Services S302.

University of Toronto Women's Association Bursary
Awarded on the basis of financial need. Submit a bursary application with a covering letter to Admissions and Awards, 315 Bloor Street West, Toronto, ON, M5S 1A3 by September 30. (OSOT*)

Graduation Awards
Automatically awarded:
Graduation With High Distinction and With Distinction
University of Toronto Scarborough students who have completed at least ten full-credits while registered at U of T Scarborough, at the University of Toronto's Faculty of Arts and Science or at the U of T Mississauga will graduate with high distinction if their cumulative grade point average is 3.50 or better and will graduate with distinction if their cumulative grade point average is between 3.20 and 3.49. Other students with a cumulative grade point average of 3.20 or better will be considered on an individual basis.

University of Toronto Scarborough Honours List
University of Toronto Scarborough publishes annually an honours list, including the names of all degree students who have achieved a grade point average of 3.70 or better in their most recent year of full-time study or equivalent amount of part-time study. Students are considered for the honours list at the end of the session in which they complete their 3rd, 10th, 15th and 20th credit.

Graduation Prizes in: Humanities; Life Sciences; Management & Economics; Computer & Mathematical Sciences; Physical & Environmental Sciences; and, Social Sciences
Awarded to the outstanding member of the graduating class in each of these areas of scholarship.
Albert Berry Graduation Prize in International Development Studies
Awarded to the outstanding student graduating from the specialist (co-operative) program in International Development Studies.

CGA Ontario Award for Excellence
Awarded to an outstanding graduating student completing a specialist program in Management (B.B.A) who has displayed excellent achievement in accounting, with an average of at least a B in MGIB03H, MGIC06H, MGTC07H and MGTC09H.

Gordon Cressy Student Leadership Award
To qualify for consideration, students must be in their final year, be in good academic standing and must have made a substantial contribution to their college, faculty, or the University as a whole. The award, established by the University of Toronto Alumni Association, requires a nomination by University of Toronto Scarborough. The nomination deadline is normally in January.

W.M. Dick Graduation Prize in History
Awarded to the outstanding student graduating in History, in a major or specialist program.

Ferrin Prize in Psychology
Awarded to the outstanding member of the graduating class who has completed the specialist program in Psychology.

Graduation Prize in Political Science
Awarded to the outstanding student graduating in a major or specialist program in Political Science.

Graduation Prize in Studio Art
Awarded to a student graduating in a studio art program who has demonstrated outstanding achievement in the studio courses.

Robert James Prize in Sociology
Awarded to the outstanding student graduating in Sociology in a major or specialist program.

The Marcar Graduation Prize in Public Policy
Awarded to the outstanding student in Public Policy, in a major or specialist program.

Orpheus Prize in Humanities
Awarded to an outstanding member of the graduating class who has completed either the specialist program in Arts and Culture, the major program in Art History, the major program in Drama, or the major program in Music and Culture.

The Bob Shirley Prize in Anthropology
Awarded to the outstanding student graduating in Anthropology, in a major or specialist program.

The Society of Chemical Industry Student of Merit Award
Awarded to a member of the graduating class who has completed a specialist program in Chemistry and achieved the highest standing in the final year (minimum GPA of 3.0/75%) having completed the degree within the normal number of years.

Ali Tayeb Prize in Geography
Awarded to the outstanding student graduating in Geography in a major or specialist program.

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Application/Nomination Required:
John H. Moss Scholarship
Exceptional all-round students graduating in the spring who intend to enter a graduate or second undergraduate degree program should request an application for this prestigious scholarship from the University of Toronto Alumni Association in the fall. The deadline is normally in early December.

The UTSC Letter Award
The award recognizes graduating students for significant contributions to improving the quality of student life at U of T Scarborough. More information may be obtained at the Office of Student Affairs or at the following website: www.utsc.utoronto.ca/~myuts Nomination required.

Academic Regulations

Student responsibility
Students are responsible for making themselves familiar with the information in this Calendar, particularly with this section, as well as instructions published periodically by the Registrar's Office. Students whose registration contravenes the regulations may be withdrawn from courses, regardless of when the contravention comes to light. Members of the Registrar's Office and the Academic Advising & Career Centre will assist students in interpreting the regulations and explaining their application in particular cases. Where appropriate, they will help those who encounter special difficulties to request special consideration.

Calendar changes
The information published in this calendar outlines the rules, regulations, curricula and Programs for the University of Toronto Scarborough. The publication of information in this Calendar does not bind the University to the provision of courses, Programs or facilities as listed herein. The University of Toronto Scarborough reserves the right to change without notice any information contained in this Calendar, including any rule or regulation.

The Web version of the Calendar at www.utsc.utoronto.ca is kept up-to-date with changes made after publication.

Enrollment limits
The University of Toronto Scarborough reserves the right to limit the number of registrants in any Program or course where the number of qualified students exceeds the teaching or other resources available.

Student Cards
All students are required to have a student card in order to write tests and exams, request transactions at the Registrar’s Office, obtain a UTORID account, use the Library, Computer Centre and Athletic facilities. Students who do not have a student card should obtain one from the Registrar’s Office. Cards are provided free of charge to all new students. A fee is charged to replace cards.

Students in debt to the University
University of Toronto Scarborough imposes the following academic sanctions on students in debt to the University:

- transcripts are not issued
- registration is refused
- registration is cancelled
- registration is refused to re-enrolling students (i.e. returning after suspension or after an absence of twelve months or more)

The following debts are taken into consideration when applying sanctions:

- tuition fees
- residence fees and other residence charges
- library fines
- tests made by colleges, faculties or the University
- health service accounts
- unreturned or damaged instruments, materials and equipment
- fees levied under the Code of Student Conduct
Student Web Service

University of Toronto student records are maintained by a student-friendly web-based system called ROSI. These records are shared with Degree Navigator, a web-based academic audit and advising system.

ROSI (www.rosi.utoronto.ca)

Students can access ROSI to:
- add and drop (cancel) courses
- waitlist for a course that is full
- add and change meeting sections
- check the status of course requests
- list courses on their record & print their personal timetable
- check to see if there is still room in a course
- check Registration Status
- add and drop Specialization, Major and Minor Subject POSIs
- access grades, GPAs and academic status
- display their academic record
- request a transcript or view their transcripts requests
- confirm their intention to graduate
- change or reactivate their PIN
- change address and telephone numbers
- change email address
- update notes of life and emergency contact information
- view personal information
- request direct deposit to bank account of any refunds
- view their fees account
- download and print T2202A tuition tax certificates
- list their ROSI transactions

Access to ROSI is through student number and a six-digit personal identification number (PIN). All PINs are set initially to year, month and day of birth (e.g. 880323 = March 23, 1988) and must be changed to one of the student’s own choice before access to ROSI is granted. Students accessing ROSI for the first time will be prompted to change PIN. Students should set their PIN reactivation feature - see below - for security there is a limit of three on the number of attempts that can be made to enter PIN. Students who exceed the limit will have their access to ROSI suspended. Students whose access has been suspended or who have forgotten their PIN can reactivate their PIN themselves. Students who have not set up PIN reactivation in advance should contact the Registrar’s Office immediately. Photo identification is required in order to restore access.

Student System Access Fee: Incidental fees include a Student System Access fee.

ROSI: Further information on ROSI is included in the registration material.

Degree Navigator (www.rosi.utoronto.ca)

Degree Navigator is a web-based academic audit and advising system which is accessed through the ROSI website using student number and ROSI PIN. Students can use it to:
- Check their progress towards their degree and program completion
- Do What if? assessments such as:
  o How do the courses they plan to take fit into their degree & program?
  o What if they switch from the major to the specialist
  o What if they switch to another area
  o The rules changed after they entered the program. Would it be better for them to follow the new rules?
- Check different sets of program requirements

Course key

All student information (e.g. courses, program enrolments) in Degree Navigator comes from ROSI and is refreshed once a day. Only U of T Scarborough and Faculty of Arts and Science students are currently available.

The software is still in development and there may be instances where the data is inconsistent. There is a ‘CONTACT US’ option in Degree Navigator which students can use. The University welcomes any comments or questions.

U of T Scarborough Registrar’s Office Home Page

Course key

1. The Subject Abbreviation
   The first three characters of the course code indicate, in an abbreviated form, the discipline or subject area of the course. ANA indicates a course in Anthropology; CHM indicates a course in Chemistry; HIS indicates a course in History.

2. The Course Level
   The fourth character of the course code indicates the level of the course with “A” indicating the most elementary level and “D” the most advanced.

3. The Course Number
   The fifth and sixth characters of the course code are course numbers. In most disciplines, these numbers have no significance, except to identify the course in a shorthand form.

4. Credit Value of a Course
   The seventh character of the course code indicates the credit value of a course as follows:

<table>
<thead>
<tr>
<th>Final Letter</th>
<th>Credit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Full Credit</td>
</tr>
<tr>
<td>H</td>
<td>Half Credit</td>
</tr>
</tbody>
</table>

5. Campus
   The “3” at the end of the code indicates a course on the Scarborough Campus of the University of Toronto.

6. Section Code
   Section code indicates the duration of the course. This information is not contained in the course code but is provided in the course timetable.

Note: Not all courses listed in this Calendar are offered each session (see the timetable at http://www.utsca.utoronto.ca/-timetable/).
Course selection

In selecting their courses, students must adhere to the following regulations:

1. Prerequisites and co-requisites for each course, as stated in the course description, must be met, unless waived by the instructor. The Registrar's Office does NOT require notification of a prerequisite waiver. However, when the course being waived is listed as a program requirement, students should discuss the matter in advance with their program supervisor.

2. Students may not register for credit in a course if they have already passed another course shown in the course description as an exclusion to that course. Note: The Faculty of Arts & Science and the UTM Calendars do not usually list U of T Scarborough courses as exclusions. Students taking such courses must check the U of T Scarborough Calendar for possible exclusions. Students who are in any doubt about whether or not an exclusion exists or whether or not a course can be used to meet a prerequisite of another course or can be applied to a program requirement should consult their program supervisor.

3. Students may not register for credit in a course if they have already passed that course. Students may re-register in a course they have taken, but failed. In the latter case, both registrations in the course are shown on the student's record, and both grades count in the student's grade point average.

4. Students may not register for credit in a course that is a specific prerequisite for a course they have already passed. In such cases, the course is shown on the student's record as "extra" (see the section of this Calendar on extra courses).

5. Where students may not register in a course for credit, they may register in it as an extra course. In such cases, the course is shown on the student's record but the grade is not included in the student's grade point average nor does the course count towards the degree. However, if appropriate, it may be used to meet program requirements that call specifically for it.

6. Students may normally select as many courses as they wish each session. Students should, however, note the following:
   - Full-time students are those students who register in at least 1.5 full credits in any session.
   - The usual load maximum for a full-time student in any session is 2.5 full credits.
   - Students who are on probation should read about course load restrictions and requirements in the "Overall standing" section of this Calendar.

Supervised Reading, Supervised Research and Independent Study Courses

Students in these courses work under the direction of a faculty member with whom they meet periodically or in whose laboratory they work. Students must obtain written permission of instructors before enrolling in them. (Forms are available from the Registrar's Office). Please note that some disciplines require submission of their own special application forms for courses of this type in addition to the Supervised Study form.
Course changes 379

Students who make changes through ROSI should end their transaction by listing their courses to ensure that the change has been processed properly. They will not receive written confirmation of the change but it will be recorded in the detailed transaction log kept by the University which can be accessed through ROSI. At the time students add a course to their record they are accepting responsibility for fees payment for it. Students who drop courses by the appropriate deadline may be entitled to a fees adjustment. (See the fees refund schedule and information published each semester by Student Accounts at http://www.arts.utoronto.ca/refunds.) Note: Exceptions to the university’s fees refund schedule are made only in the case of error on the university’s part.

Adding a course
Some courses have a restricted admission and may require approval before students are allowed to enrol in them. Restricted courses and the approval required are listed in the timetable at www.arts.utoronto.ca/timetable.

Changing meeting sections in a course
Students may change meeting sections in a course at any time provided that, if the change takes place after the deadline for adding the course, they have appropriate approval. Approval normally comes from the instructor of the new meeting section or from the course coordinator. Changes must be recorded at the Registrar’s Office through ROSI (until the last day to add the course) and on a section change request form from hereafter. Note: For some course sections, changes are not permitted on ROSI - these are listed in the timetable at www.arts.utoronto.ca/timetable.

Dropping a course
If students withdraw from a course by the appropriate academic deadline, no record of registration is shown on the student’s transcript. If students cease to complete course requirements but do not withdraw officially by the academic deadline, a grade based on the marks awarded (including a zero for any incomplete work) will be recorded.

Withdrawal from the session
Students who drop all their current courses and do not intend to enrol in any other course in that session (Summer, Fall or Winter) must cancel their registration through ROSI. Note: Refunds of incidental fees are determined by the date of the cancellation of registration and not the date on which the last course was dropped. Students dropping all their courses in a session may wish to speak to an Academic Advisor or Registrar’s Office staff about the academic and financial consequences of withdrawal.

Standing in a course
Grading scheme (as of September 1998)
Students are assigned a grade in each course, as follows (Grades earned prior to September 1998 remain as originally reported):

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point Value</th>
<th>Percentage Equivalent</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
<td>90-100</td>
<td>Excellent</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>85-89</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>80-84</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>77-79</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>73-76</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>70-72</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>67-69</td>
<td>Adequate</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>63-66</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td>60-62</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td>57-59</td>
<td>Marginal</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>53-56</td>
<td></td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
<td>50-52</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>No value</td>
<td>No value</td>
<td>Credit in a Credit-No-credit course</td>
</tr>
<tr>
<td>NR</td>
<td>0.0</td>
<td>0-40</td>
<td>Wholly Inadequate</td>
</tr>
<tr>
<td>NCR</td>
<td>0.0</td>
<td>No Value</td>
<td>No credit in Credit-No-credit course</td>
</tr>
</tbody>
</table>

Registration
Students are responsible for the accuracy of their own registration. When selecting, adding and dropping courses in ROSI, they should always list their courses upon completing the transaction. Registration consists of two basic steps:

1. Course selection, and
2. Fees payment (or an arrangement of a fee deferment).

Both must be completed by the appropriate deadlines in order to be considered a "registered" student and to retain a place in any course selected. (For deadlines and further information, see the Registration Guide or the Registrar’s Office website at http://www.arts.utoronto.ca/registrar.)

Note: Degree students who have completed 4.0 or more full credits must be in an appropriate combination of Subject POSIs before they may select courses. (This includes new students with transfer credits.)

Course selection
Courses may be selected through ROSI. (For regulations on course selection, see above.)

Fees payment
All fees are posted to the student’s financial account. Students may view their financial account on ROSI. Fee payment (or deferral of fees) must be made by the relevant deadline. Deadlines and information on the fees process is included in the Registration Guide and at www.arts.utoronto.ca/registrar. Students will receive a registration invoice detailing fees payable for their program of study. For further information go to www.arts.utoronto.ca or contact the Student Accounts, University of Toronto, 215 Huron St, Toronto, Ontario, M5S 1A2; telephone: 416-978-2142; fax: 416-978-5572; email: info.studentaccounts@utoronto.ca.

Program registration
All degree students with at least 4.0 credits are required to register on ROSI in their Specialist, Major or Minor Programs. Students may register only in Programs (Subject POSIs) offered by University of Toronto Scarborough. ROSI Subject POSIs codes can be found at www.arts.utoronto.ca/registrat. (For regulations governing Programs, see the Programs of Study section of this Calendar.)

Summer Session
Students who registered at U of T Scarborough in the 2006 Summer, the 2006 Fall or the 2007 Winter Sessions and who are not on suspension are automatically eligible to register and may pick up their registration packages in late March at the Registrar’s Office. Other students who want to register should contact the Registrar’s Office (see “Re-enrolling” in the Admissions section of this Calendar).

Fall & Winter Sessions
Students who registered at U of T Scarborough in the 2006 Fall, the 2007 Winter or the 2007 Summer Session and who are not on suspension are automatically eligible to register and may pick up their registration packages in late March at the Registrar’s Office. Other students who want to register should contact the Registrar’s Office (see “Re-enrolling” in the Admissions section of this Calendar).

Year of Study
The following is used to determine the year of study of degree students:

1st year - has fewer than 4 full credits
2nd year - has 4.0 to 8.5 full credits
3rd year - has 9.0 to 13.5 full credits
4th year - has 14.0 or more full credits

Course changes
Note: For ROSI hours on deadline dates, go to http://www.rosi.utoronto.ca/hours.html.

Students may add courses or drop courses without academic penalty through ROSI up to the dates stated in the Sessional Dates section of this Calendar. The deadlines for adding or dropping courses are strictly applied.
Grades of "P" and "NCR" are failing grades, yielding no standing in a course and no degree credit. Students are cautioned that a numerical score on an assignment is not deemed to be automatically equivalent to the corresponding letter grade.

Credit/No credit courses
In some courses, such as certain visual and performing arts courses, specific letter grades may not be assigned. Students may instead be graded on a Credit/No credit (CR/NCR) system. The grade of "No credit" is a failing grade. Where students earn a grade of "Credit" in a course, the course is not included in the grade point average; where students earn a grade of "No Credit", the course is included as an "F" (value zero) in the grade point average.

Agrestot standing
On petition, a grade of "Agrestot" (AE) may be assigned. This grade is assigned on the basis of work completed where medical or similar evidence demonstrates that a student is unable to complete course requirements within a reasonable time, and where a student has already completed at least 60% of the work of the course with a grade of C minus or better. Where a student is assigned Agrestot standing, the course counts as a credit but is not included in any grade point average. Students who require a letter grade will be expected to complete the work of the course.

Extra (EXT) courses
Extra courses are those courses in which students may not register for credit (see "Course Selection" above in this section of the Calendar). The course and its grade will appear on the student's transcript (designated as an extra course) but the grade is not included in the student's grade point average or does the course count towards the degree. However, if appropriate, it may be used to satisfy program requirements.

Other notations
The following have no grade point value and do not yield credit:

- WDR: Withdrawal by petition without academic penalty after the relevant deadline. (See "Special Consideration, Petitions and Appeals" below in this section of the Calendar.)
- GWR: Grade withheld pending review
- NGA: No grade available
- SOP: Standing deferred on the basis of incomplete course work because of medical or similar reasons.
- IPR: In progress

Overall standing

Grade point averages (GPAs)
1. A grade point average is calculated as follows: the grade points earned in each full credit course and one-half the grade points earned in each half-credit course are added together and this total is divided by the number of full credit equivalents taken.
2. A full-course grade point average is calculated on the basis of all courses taken in a given semester (Summer, Fall, Winter) having a grade point value.
3. A cumulative grade point average is calculated on the basis of all courses taken having a grade point value.
4. An annual grade point average is calculated on the basis of all courses taken in the Fall/Winter Sessions (September-May) having a grade point value. This is provided for information only and is not used for the assessment of academic status.
5. Semesters and cumulative grade point averages are calculated at the end of each semester and included on the student's academic record and transcript.

Determination of academic status

Note: The following rules apply to all students except visiing students whose academic status is not assessed or as indicated in "Determination of academic status for students admitted on condition", "Determination of academic status for re-enrolling students at University of Toronto Scarborough" and "Determination of academic status for students in the Certificate Program in Business" below.

Academic status will be determined as follows for students who have attempted at least three full credit equivalents since beginning their studies at the University of Toronto Scarborough or in other arts and science divisions of the University. It is determined at the end of each Session.

1. In good standing
   - Students who maintain a cumulative grade point average of 1.60 or better are said to be "in good standing".
2. On probation
   - Students who have attempted at least three full credit equivalents and have a cumulative GPA of less than 1.60 are placed on probation.
   - Students returning from suspension (see below and any provision in previous rules) shall be placed on probation again.
3. Probation cleared
   - Students may clear probation by achieving a cumulative GPA of 1.60 or better. Students who have cleared probation shall be said to be again "in good standing".
4. Probation continued
   - Students may continue on probation by achieving a sessional grade point average of at least 1.60 in each session until such time as they return to good standing.
5. Suspended or refused further registration
   - Students who, by the end of a given session, have not either cleared probation or achieved a sessional grade point average of at least 1.60 shall be liable for suspension or refusal of further registration as follows, regardless of the number of credits taken in the session:
   - Students who have incurred no previous suspension will be suspended for four months (one session).
   - Students who have previously incurred a four-month (one-session) suspension will be suspended for twelve months (three sessions).
   - Students who have previously incurred a twelve-month (three-session) suspension will be suspended for thirty-six months (nine sessions).
6. Students who have previously incurred a thirty-six-month (nine-session) suspension will be refused further registration.

Policies and procedures governing students on probation

1. Students placed on probation are required to take a course load that does not exceed 2.0 full credit equivalents per session.
2. Upon notification of probation, students enrolled in future sessions must drop all courses above the 2.0 full credit equivalent maximum. Failure to do so within 7 days of notification will result in the students being withdrawn from all courses. If a student petition successfully to reverse in courses after the registration deadline for the session, a late registration fee will be applied.
3. Students who are allowed to continue on probation because they have achieved a sessional grade point average of at least 1.60 may take a normal course load.
4. While on probation, students must meet with an advisor to discuss the reasons which led to the probation and to plan strategies to improve academic performance. (A list of appropriate advisors is available from the Registrar's Office.)

Determination of academic status for students admitted on condition

In certain circumstances, students who do not meet normal admission requirements may be admitted "on condition". The academic status of such students is determined according to the following rules:
1. The status of students admitted on condition will be assessed at the end of the session in which such students complete their third full-credit equivalent.
2. Where such students earn a cumulative grade point average of 1.60 or better, their conditional status will be removed, and they will be said to be "in good standing".
3. Where such students earn a cumulative grade point average of less than 1.60, they will be refused further registration.
Determination of academic status for re-enrolling students at UTSC

Students who have studied at other institutions since their last registration at U of T Scarborough must arrange for official transcripts of other post-secondary studies to be sent to the University of Toronto Scarborough upon application for re-enrolment. Performance in courses taken elsewhere (including other divisions of the University of Toronto) will be taken into consideration in determining whether to approve the application and whether to make any change in the student's academic status. Students who study at other universities without prior permission from University of Toronto Scarborough are unlikely to be eligible for transfer credit for such study. See also the section "Study at other universities".

Determination of academic status for students in the Certificate Program in Business

Academic status is determined at the end of each session as follows for all students who have completed at least two full credit equivalents since beginning their studies:

1. In good standing
   Students who maintain a cumulative grade point average of at least 2.0 are said to be in good standing.

2. Deferred registration
   Students who, at the end of a given session, have not achieved a cumulative GPA of at least 2.0 or better are refused further registration in the Certificate Program.

Grade Reports

Final grades and academic standing are made available through ROSI. Grades are available as soon as they have been submitted and approved. Academic standing is available in September, January, and May. Grade reports are mailed only to students who are on academic probation, suspended or refused further registration.

Study at other institutions or other divisions of the University of Toronto

Courses taken for credit by degree students while registered at the University of Toronto's Faculty of Arts and Science or at the University of Toronto at Mississauga are normally included in University of Toronto Scarborough grade point averages, as are all University of Toronto courses taken for credit while registered at University of Toronto Scarborough. Courses taken while registered at other institutions or other divisions of the University of Toronto are not normally included in grade point averages.

Courses on other campuses

Students are permitted to take up to 5.0 full credit equivalents in other arts and science divisions of the University of Toronto. No more than 1.0 of a student’s first 4.0 full credit equivalents in a U of T Scarborough student may be taken on another campus. Students may be withdrawn from courses after classes have started if their registration violates these rules. Students who first registered at U of T Scarborough in Fall 2002/Winter 2003 or earlier may, if they wish, follow the rules outlined in the 2002/2003 Calendar.

Note: The Faculty of Arts & Science and the UTSC Calendar do not usually list U of T Scarborough courses as excluding. Students taking such courses must check the U of T Scarborough Calendar for possible exclusions. Students who are in any doubt about whether or not an exclusion exists or whether or not a course can be used to meet a prerequisite of another course or can be applied to a program requirement should consult their program supervisor.

Note: Only programs offered by the University of Toronto Scarborough may be used to fulfill degree requirements.

Courses in Other Faculties

Students are not permitted to register for courses in Faculties other than the arts and science divisions of the University unless they have received permission by petition or unless the courses are required by their Specialist or Major Program.

Transfer to other Arts and Science Faculties

Students who are contemplating transfers to other divisions of the University should be aware that the University of Toronto Scarborough is in fact a separate faculty and rules covering students at University of Toronto Scarborough differ from those in the other arts and science divisions. Students are urged to consult the Office of Admissions and Awards at 315 Bloor Street West to establish how they will be affected by transferring from one arts and science division to another.

Study At Other Universities

Students who wish to take courses at another university and have credits transferred to U of T Scarborough must receive permission from U of T Scarborough to do so prior to taking the courses. Students who intend to count the courses towards Program requirements must also obtain the approval of the Program Supervisor, in writing. Students who study at other institutions without U of T Scarborough's approval in advance do so at their own risk since permission to transfer credit is not usually granted after the course has been taken. Duplication of previous study is not permitted. Students who study at another institution after leaving U of T Scarborough are required to supply official transcripts upon re-enrollment. Grades attained at other universities may affect a student's academic status.

There are three types of Programs where transfer credit is considered. A Letter of Permission allows a student to study at a university similar in setting to the University of Toronto and usually, students are studying on a part-time basis. The Study Elsewhere program allows a student to study full-time at an accredited university in a different cultural setting to enhance the student's educational experience. The program is called "Study Elsewhere" where we do not have exchange agreements in place with other universities. Where we do have exchange agreements with other universities, the program is called the Student Exchange Program. One advantage of a Student Exchange program is that students pay their regular tuition fees at the University of Toronto. As you will note below, the regulations governing the programs differ. Another option for studying abroad is through the Summer Abroad Program administered by Woodsworth College where Faculty of Arts and Science courses are being offered abroad. Woodsworth College welcomes applications from U of T Scarborough students. The limits specified above in the "Courses on other campuses" section of this Calendar apply.

Grades and Accountability

Students registering in courses offered by the University of Toronto receive grades in the usual manner. To receive credit for other courses, the student must earn one full grade higher than the minimum passing grade (i.e. a C minus or better at universities using a grading scale similar to that of the University of Toronto). Grades are not recorded on transcripts and are not included in any grade point averages. However, grades achieved may be taken into consideration for award eligibility (if achievement is excellent) or change in academic status (if achievement is poor). Students must arrange for the host university to send official transcripts to U of T Scarborough promptly after completion of their courses. Students who do not register or who withdraw without academic penalty must also arrange for a letter from the Registrar of the host university confirming this. Failure to meet this or the minimum grade requirement will result in the notation of "no credit" or "failure" being entered on the student's transcript at the University of Toronto.

Fees and Aid

Students on Letters of Permission or in a Study Elsewhere program pay the appropriate fees to the host university. (Students in Student Exchange programs pay tuition fees to the University of Toronto.) Students who would be eligible for financial assistance through the Ontario Student Assistance Program for study at U of T Scarborough may be eligible for similar assistance. Consult Admissions and Awards (315 Bloor Street W.) at 416-978-2199.

1. Letters of Permission
   Application available at: www.utsc.utoronto.ca/admissions
   Deadline to apply: Apply at least three weeks prior to the start of the course.
To take a course at another university, students must, in advance, apply for and receive a "Letter of Permission" from UTSC. Courses requested must be approved for degree credit at UTSC. In addition, the student must give reasons why the Letter of Permission is necessary. To be considered, a student must have completed the equivalent of 4.0 full credits in a subject of T Scarborough and be in good standing. A maximum of 5.0 full credits may be obtained on a Letter of Permission. If a student has received 5.0 or more full credits as transfer credits upon admission, it is unlikely that a Letter of Permission will be allowed. Letters of Permission are not normally granted for study at institutions within Toronto and surrounding regions. Only 1.0 full credit at the C level or D level will be permitted to be taken on a Letter of Permission. A student who completes the full credit(s) for the degree during the Winter Session may not apply to graduate at the June convocation but may apply for graduation at the November convocation. A fee will be charged for each Letter of Permission received.

Special Note: French Summer Immersion Programs

Explore - Second Language Summer Program (formerly the Summer Language Bursary Program) is administered by the Council of Ministers of Education, Government of Canada, in cooperation with the appropriate provincial department. In Ontario, this is the Ministry of Training, Colleges and Universities. Students interested in this five-week immersion Program (in Quebec or elsewhere in Canada) should complete the Explore forms promptly. For deadlines and requirements information, and to download the application form, please refer to the Program website at www.utexplorer.ca.

Consult with an Admissions and Student Recruitment staff member who does transfer credit evaluations and the Study-Elsewhere Supervisor in French about choosing three universities offering courses that most closely correspond to the curriculum at the University of Toronto. If you wish to be considered for transfer credit, choose degree level programs offered at "degree-granting" institutions (not colleges) and sponsored by Arts and Science type faculties (not professional faculties or schools of continuing education). Submit the form to the Registrar’s Office to verify registration and mail promptly to enhance your chances of obtaining your first choice of university. Once you know the university to which you have been accepted and at least three weeks before your departure, apply for a Letter of Permission. You will be advised of the level in which you must register in order to be eligible for the credit to be transferred.

2. Study Elsewhere Program

Application available at: www.utsc.utoronto.ca/admissions/

Deadline to apply: February 1

Students normally apply for a Study Elsewhere year during the third year of a four-year Program. However, students may apply after completing four full credits at UTSC. To be eligible for consideration, a student must normally have a cumulative grade point average of 2.5 or better. Students must normally return to T Scarborough to complete the final year of study. A maximum of 5.0 full credits will be considered for transfer. Since there may be limited information about foreign universities, students should begin their preparation early. Most often students register at the host university and follow its courses for credit. It is possible that students may arrange to take University of Toronto independent study or supervised reading courses under supervision from University of Toronto faculty.

The application requires details about the proposed courses and asks students to show how the intended studies will enhance their studies at UTSC. Students who intend to count the courses towards Program requirements must obtain the approval of the Program Supervisor before submitting the application. The application will be reviewed by the Study Elsewhere Committee.

3. Student Exchange Programs

Application available at: www.utsc.utoronto.ca/student-exchange

Deadline to apply: late February, for most programs

The University of Toronto operates several institutions wide student exchange programs, providing excellent opportunities for academic and cultural experiences abroad and in other regions of Canada. Students normally participate in the third year of the four-year honours degree program. To be eligible for consideration, a student must normally have a cumulative grade point average of 2.25 or better. Interested students apply through the International Student Exchange Office (ISPO). A typical application is comprised of an application form, academic transcripts, a resume and photos, and two reference letters.

Candidates who qualify for consideration are invited for interviews. Applicants are selected for nomination based on the whole application package, including the interviews. If nominated, the student is asked to complete an application which is then submitted to the host institution by the ISPO on behalf of the students. Though it rarely happens, partner institutions reserve the right to refuse nominated students. As the Hermeticus Castle Program (CUSAP) and the Study Abroad Program at Nantes are not exchange programs, the application procedure is different—contact ISPO for details.

If accepted, U of T Scarborough students must obtain approval from Program Supervisors and from the Admissions and Transfer Credit Officer at U of T Scarborough for courses they intend to take, using the Course Recommendation Form issued with the nomination package. Below is a list of institutions at which undergraduate programs are available.

International Programs:

Argentina

- Universidad Torcuato Di Tella

Australia

- Australian National University
- University of Melbourne
- University of New South Wales
- University of Queensland
- University of Sydney

Barbados

- University of the West Indies (Cave Hill)

China

- Chinese University of Hong Kong
- Tsinghua University
- University of Hong Kong

Denmark

- The University of Aarhus

England

- Ber经验值(4)ton Castle (CUSAP)
- Lancaster University
- University of Birmingham
- University of Leeds
- University of Manchester
- University of Nottingham

Estonia

- University of Tartu

Europe

- TASSEP, Trans-Atlantic Science Students Exchange Program, -Various schools

France

- Lyon 1 (Caudal Bernard University)
- Lyon 2 (Lumière University)
- Lyon 3 (Jean Moulin University)
- Ontario/Rhone-Alpes Program (a national program)
- Paris 1 (Panthéon-Sorbonne University)
- Sciences Po (Paris)
- Study Abroad Program at Nantes

Germany

- DAAD Scholarship Program
- Humboldt University at Berlin
- Ontario/Baden-Württemberg Program (a regional program)
- University of Bonn

Israel

- Hebrew University of Jerusalem Award Program
- Technion-Israel Institute of Technology-Tel Aviv University

Italy

- University of Siena
- University of Venice

Jamaica

- University of the West Indies (Mona)

Japan

- Kyoto University
- Nihon University
- Waseda University
### Academic transcripts

The academic transcript is the official statement of the academic record of each student.

**Contents:**
- General information on the student's academic record.
- Details of each course, including grades and status.
- Notes on special considerations, such as academic probation or suspension.

**Ordering Official Copies:**
- Students may obtain copies of their academic transcripts subject to reasonable notice and upon payment of a fee per transcript copy.
- Requests for transcripts are processed centrally at the University of Toronto Transcript Centre on the St. George Campus.
- Copies of transcripts may be requested via ROSI at the following address: [http://www.rosi.utoronto.ca](http://www.rosi.utoronto.ca).
- Telephone requests may also be made in person or by writing to the University of Toronto Transcript Production Centre, 100 St. George Street, Rooms 1006, Toronto, ON M5S 3G3.
- Payment by mail should take the form of a cheque or money order payable to "The University of Toronto".
- Telephone requests cannot be accepted. To prevent tampering, most institutional recipients insist that the transcript copy be sent directly to them.

**Unofficial Copies:**
- Students can obtain an unofficial copy of their academic history at no cost directly from the Student Web Service (ROSSI): [http://www.rosi.utoronto.ca](http://www.rosi.utoronto.ca).

### Examinations

Examinations are held at the end of each session. Students who make personal commitments during the examination period do so at their own risk. No special consideration will be given and no special arrangements made in the event of personal commitments. Information regarding dates and times of examinations will not be given by telephone. Students are responsible for reading the timetable carefully and appearing at the time specified. Students taking courses during the day may be required to write evening examinations and students taking evening courses may be required to write day examinations. Examinations may be held on any day of the week. Every effort will be made to avoid scheduling them on Sundays as this is against the regulations.

**The date of posting is normally no later than:**
- August examination period: Mid-July
- December examination period: Mid-November
- April examination period: Mid-March

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<th>Country</th>
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<td>Korea (South)</td>
<td>Kyungpook National University</td>
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<td>Austria</td>
<td>University of Innsbruck</td>
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<td>The Netherlands</td>
<td>Wageningen University</td>
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<td>New Zealand</td>
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<td>Switzerland</td>
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<td>Trinidad and Tobago</td>
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<td>University of Strathclyde</td>
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For further information, applications and an up-to-date list of current exchange programs, please contact:

International Student Exchange Office
Koffler Student Services Centre, Room 202
214 College St., Toronto, ON M5T 2Z9
Tel: 416-946-3138, Fax: 416-978-6110
E-mail: student.exchange@utoronto.ca
[www.utoronto.ca/student.exchangeprogram](http://www.utoronto.ca/student.exchangeprogram)

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**4. UofT Summer Abroad Programs**

University of Toronto Summer Abroad programs are administered by Woodsworth College in several countries or regions including Australia, Central Europe, China, Ecuador, England, France, Germany, Italy, Japan, Jordan, Mexico and Russia. Students take regular full-year UofT Faculty of Arts and Science undergraduate degree courses that are relevant to the host site. All courses are taught in English, with the exception of some language courses. Financial aid is available for most programs. Because the Summer Abroad programs offer regular UofT courses, the course code and final grade will appear on the student's record just as any other UofT course does.

For more information, contact:

Woodsworth College
119 St. George St. Room 231/233
Phone: 416-978-8713
e-mail: summer.abroad@utoronto.ca
website: [www.summerabroad.utoronto.ca](http://www.summerabroad.utoronto.ca)

**Note:** The limits specified above in the "Courses on other campuses" section of this Calendar apply to the Summer Abroad Program.
Examination timetable conflicts

Students scheduled to write two examinations at the same time should report their conflicts to the Registrar’s Office (Room AA142). Requests will normally be made for students to write both examinations on the same day, with a supervised break. Where the conflict involves a St. George Campus course, arrangements will normally be made for both examinations to be written at University of Toronto Scarborough. Requests for such arrangements must be made no later than two full weeks before the commencement of examinations and will not be considered after that time.

Students with three consecutive examinations

Students scheduled to write examinations in three consecutive time slots (these are morning, afternoon and evening) may request special arrangements. Requests for such arrangements must be made with the Registrar’s Office (Room AA142) no later than two full weeks before the commencement of examinations. Requests will not be considered after that time.

Accommodation for Religious Observances

The University has adopted a policy concerning accommodation for religious observances as they relate to the scheduling of examinations. Examination timetables are prepared with the observances of the major Christian denominations and of the Jewish observances of Rosh Hashanah, Yom Kippur and Passover in mind. Nevertheless, examination timetables may conflict with the religious observances of some students. A student for whom a religious observance makes it impossible by creed for him/her to be present for an examination should bring this fact to the Office of the Associate Dean immediately. The Associate Dean will make appropriate arrangements for re-scheduling the examination as necessary.

Special consideration regarding examinations

Students requesting special consideration because they are unable to write a final examination must submit a petition through the Registrar’s Office no later than the last day of the examination period. Petitions must be accompanied by a medical certificate or other appropriate supporting evidence. Please refer to the information concerning petitions and medical certificates in “Special consideration, petitions and appeals” below in this section of the Calendar.

Identification cards

Students will be required to identify themselves at examinations by means of their University of Toronto photo identification card (student card). Students who do not have this card should arrange to obtain one well in advance of the day of their first examination.

Use of calculators in tests and examinations

The University has a policy on the use of calculators in tests and examinations. Students should consult with instructors about whether the use of calculators is permissible in their course and, if so, which models are approved. The use of an unauthorized calculator may be treated as an academic offence.

Examination room regulations

1. All students are advised to read the section of this Calendar titled Code of Behaviour on Academic Matters.
2. Students are advised to arrive at the examination room at least fifteen minutes before the scheduled examination time. Invigilators will begin the actual examination at the scheduled time.
3. No persons shall be allowed in an examination room during an examination except the students writing the examination and those supervising it.
4. Candidates shall bring their photo identification cards (TCard) and place them in a conspicuous place on their desks. (Students registered in other Faculties or Colleges of the University shall bring their student cards.)

5. Bags and books are to be deposited in areas designated by the invigilator and are not to be taken to the examination desk or table. Students may dispose of their purses, pouches and wallets by placing them, closed, on the floor underneath their chairs.
6. The invigilator has the authority to assign seats to candidates.
7. No materials or electronic devices shall be brought into the examination room or used at an examination except those authorized by the Chief Presiding Officer or Examiner.
8. Unauthorized materials include but are not limited to: books, class notes, or aid sheets. Unauthorized electronic devices include but are not limited to: cellular telephones, laptop computers, programmable calculators, MP3 players (such as iPod), Personal Digital Assistants (“PDA” such as Palm Pilot or Blackberry), pagers, electronic dictionaries, Compact Disc Players, and Mini Disc Players.
9. Candidates shall not communicate with one another in any manner whatsoever while the examinations are proceeding.
10. Candidates bringing any unauthorized material into an examination room or who assist, or obtain assistance from other candidates or from an unauthorized source, are liable to be refused permission to write the remaining part of the examination or any subsequent examinations. Such candidates are also liable to penalties under the Code of Behaviour on Academic Matters (see the University of Toronto Policies section of this Calendar) including the loss of academic credit for the course, suspension, or expulsion from the University.
11. Candidates shall not be permitted to leave the examination room except under supervision until at least half an hour after the examination has commenced.
12. Candidates shall not leave the examination room within the first ten minutes of an examination, during which time they shall remain quietly seated at their desks.
13. At the conclusion of an examination all writing within the answer books shall cease. The invigilator may refuse to accept the papers of candidates who fail to observe this requirement.
14. Examination books and other material issued for the examination shall not be removed from the examination room without the authority of the invigilator.
15. At the conclusion of an examination all candidates must remain seated until all answer books have been collected. Candidates wishing to leave before the conclusion of an examination must also remain seated until their answer books are collected.

The University is not responsible for personal property left in examination rooms.

Special consideration, petitions and appeals

From time to time students may need to ask for special consideration in their academic work or for exceptions to be made to the academic regulations. Such requests normally arise as a result of their being affected by something outside their control, such as illness, accident or the death of a family member. Very occasionally students may find themselves in a situation not foreseen by the regulations or feel that they have been unreasonably affected by a deviation from University Policy or approved practice. If you find yourself in such a situation, it is important that you follow the appropriate procedures and meet any published deadlines.

Policies and deadlines for courses taken on other campuses may differ from those outlined below. See the Calendar of the Faculty of Arts & Science for regulations regarding its courses on the St. George Campus. You are responsible for observing the regulations governing any courses you take in other campuses. However, all University of T. Scarborough students must adhere to University of T. Scarborough deadlines for petitions and appeals, irrespective of the Campus on which the course is taken.

You should seek special consideration only when there are circumstances which are not only beyond your control but which you could not reasonably have anticipated or overcome and which have seriously affected your studies.
Special consideration, petitions and appeals

A. Term work

1. If:
   - you are unable to write a term test, or
   - your performance on a test is adversely affected by illness or other extenuating circumstances, or
   - you cannot submit term work by your instructor's deadlines
   speak with your instructor as soon as possible to request special consideration. This is granted at his or her discretion. If you wish to appeal your instructor's decision, speak with or write to the Chair of the Department offering the course.

2. If it is close to the end of term or session and you need an extension of time to complete term work or to write a term test, your instructor jointly with the Departmental Chair may give you an extension for up to a week after the last date to submit term work.

3. If you need more than a week's extension, you must submit a formal petition (see D below). If your petition is granted, you will be given a deadline by which to complete the work.

B. Final examinations

1. If illness or other extenuating circumstances prevent you from writing a final examination, you may request special consideration by means of a petition (See D Below). This must be submitted as soon as possible and no later than the last day of the examination period.

2. If you choose to write an examination, you may not petition to rewrite it. In truly exceptional circumstances such a significant illness that manifests itself during an examination, you may petition to defer the exam that you have begun. This would require both corroborative evidence from the examination invigilator and documentation from a health care professional.

   Note: This is in a change in policy which was pending approval of Governing Council at the time this Calendar went to press. Check the on-line Calendar at www.utm.utoronto.ca/course/calendar/ for updated information.

3. Deferred examinations for all University of Toronto Scarborough courses are held as follows:
   - exams deferred from April and May are held in the August examination period
   - exams deferred from August are held in the December examination period
   - exams deferred from December are held in the April/May examination period.

   Note: deferred examinations in other arts and science divisions of the University may be scheduled at times other than those listed above.

4. You must pay a fee to write any University of Toronto Scarborough deferred examination.

5. If you are given permission to write a deferred exam, you must indicate your intention to write it and pay the required fee by the deadline set. Failure to respond or to pay the fee will result in loss of privilege to sit the examination.

6. You are given only one opportunity to sit a deferred exam and are expected to be available for the entire deferred examination period.

7. If you miss a deferred exam, you may petition for an extension of time to write it; normally no other form of special consideration will be granted. Permission will be granted only under exceptional circumstances and when supported by strong documentation. A petition for an extension of time to sit a deferred examination will be considered only once.

8. Under truly exceptional circumstances, students who will unavoidably be outside the Toronto area during the special examination period may petition for permission to write at an outside centre. Such a petition must detail the reasons for the request and must be submitted at least three weeks prior to the beginning of the deferred examination period. Late requests cannot be accommodated.

C. Marks and Grades

1. Checking Marks: Term Work
   If you think that your mark on a term test or assignment has been calculated incorrectly, ask your instructor to discuss the mark. Do this as soon as possible and certainly before the end of the session. If you wish to appeal an instructor's decision about the grading of term work, speak with or write to the Chair of the Department offering the course.

2. Copies of final examinations
   Within ninety days of the relevant examination period you may obtain a photocopy of your final exam from the Registrar's Office. After that date, examinations are destroyed. A non-refundable fee is charged. Note: Occasionally, Departments may not release final examinations in particular courses – check the list posted in the Registrar's Office.

3. Clerical Check of Marks: Final Examinations
   If you think there is an error in the calculation of your final grade, within ninety days of the relevant examination period you may request a check of the calculation through the Registrar's Office on a form provided for this purpose. (It is not necessary to purchase a copy of your exam to make this request.) A fee is charged. If an error is discovered which results in a change of the final letter grade, your fee will be refunded. Whichever a grade is changed, the amended grade will stand whether it is higher or lower. Please note that before submitting any failing grade, instructors are required to re-read the final exam and recalculate the calculation of term and final marks.

4. Appealing Assigned Grades
   If you wish to appeal a mark on term work returned to you only after the end of term and after the instructor has submitted grades for the course, you may submit a formal petition (See D Below). This must be done within ninety days of the relevant examination period.

   If, after obtaining a copy of a final examination, you wish to request that it be re-read, you may submit a petition for re-reading (See D Below). You must do this within ninety days of the relevant examination period.

   When authorized, the re-reading is arranged by the Department offering the course, which also authorizes any change in grade. Normally the re-reading is done by the course instructor, unless you make a convincing argument that the work be re-read by another faculty member. Claims of prejudice must be supported in detail and wherever possible confirmed by a third party. Whenever a grade is changed, the amended grade will stand whether it is higher or lower.

5. Violations of the Grading Practices Policy
   (a) If you think an instructor has violated the Grading Practices Policy, discuss your complaint with the instructor. If the violation relates to the announced schedule of assignments or the marking scheme, you must do this no later than the fourth week of classes. If it relates to changes in or divergence from the announced marking scheme, you must do this before the end of the final examination period.
   (b) If this discussion does not result in a satisfactory solution, you may appeal the instructor's decision to the Chair of the Department offering the course. If this appeal does not resolve the problem, you may appeal to the Vice-Principal (Academic) & Dean of UTSC.

A non-refundable fee of $30.00 for each examination to be written at an outside centre is charged in addition to the regular deferred examination fee of $70.00. Students who are given permission to write an exam at an outside centre are also responsible for all costs of transportation, courier charges and other related expenses. Since these may exceed $110.00 per examination, students are advised to assess the total costs before petitioning.
D. Petitions

A petition is a formal request that an exception to an academic regulation be made in your case. You must have good reason to make such a request, and you must show that you have acted responsibly and with good judgment in observing the academic regulations to the extent possible. Please note that some academic matters cannot be petitioned, although sometimes these may be resolved with an instructor or a department offering a course.

Where a petition is justified, it must be filed by the appropriate deadline (see D. Below). Even if a petition has been filed by the deadline, it will not be considered if documentation is not provided within three weeks of its submission.

1. To enter a petition you must obtain from the Registrar's Office a petition form. Follow the instructions on the form and fill it out completely, including the Petitioner's Checklist. The petition form may also be downloaded from the Registrar's Office website.

2. If you think the issue is simple and the solution straightforward, you may not need advice or assistance with your petition. However, if there are complex academic issues involved you may want to speak first with your instructor, program supervisor, or discipline representative. If serious personal problems are involved, you should try to meet with an academic advisor in the Academic Career and Learning Skills Resource Centre or a personal counsellor in the Health and Wellness Centre. Do not let this recommendation interfere with your submitting your petition by the deadline.

3. Submit whatever documentation is necessary to support your request.
   (a) Medical certificates must show:
   • that you were examined at the time of illness
   • the degree of disability involved
   • the duration of the disability
   • the practitioner's professional opinion as to whether you should receive special consideration on academic grounds.
   You are urged to use the University of Toronto Student Medical Certificate for this purpose. A copy of the Student Medical Certificate may be downloaded from http://www.utoronto.ca/health/record.pdf
   Medical documentation for examinations missed because of illness must be obtained on the day of the examination whenever possible.
   (b) Statements from social workers, lawyers, clergy and other professionals must
   • state the nature and extent of the problem
   • give his or her professional opinion as to whether you should receive special consideration on the grounds documented in your petition.

4. Petitions for re-reading of final examinations and of term work returned to you after the end of a session and after the instructor has submitted grades for the course will be granted only if you
   • articulate clear grounds for reconsideration, addressing the substance of an answer in relation to the mark given it or otherwise identifying the nature of the alleged misvaluation;
   • show that the alleged misvaluation is of a substantial nature; in an objective answer, that a correct response has been counted as incorrect, or in a subjective or essay answer, that the response has been under-evaluated substantially. A photocopy of the examination must be submitted with the petition.

5. You will be notified in writing of the decision on your petition. The petitions office attempts to respond as quickly as possible, normally within three weeks of submission. Please do not inquire about the progress of your petition within that period. Complex cases and petitions submitted during very busy periods may take longer.

6. If your petition is granted, the following will be recorded on your transcript (academic record):
   • withdrawal from courses after the published deadline (WDR)
   • deferral of suspension ("suspension deferred")
   • award of unsatisfactory standing (AWS).

In cases of error on the part of the University, including violations of the Grading Practices Policy, withdrawal from courses is not recorded on the transcript.

E. Deadlines

The deadlines below apply to the University of Toronto Scarborough. Deadlines and policies for courses taken on other campuses may differ: see the appropriate Faculty Calendar.

1. Term Work
   • requests for special consideration on term assignments and term tests within the jurisdiction of the instructor: last day of classes
   • petitions to submit term assignments or write make-up term tests after the last day to submit term work (see the Calendar): last day of the examination period

2. Final Examinations
   Summer, Fall and Winter Sessions
   • petitions to write deferred examinations: last day of the examination period

3. Missed Deferred Examinations
   • requests to write a deferred examination which has been missed: last day of the relevant examination period

4. Errors in Course Registration or Withdrawal From Courses
   • petitions to correct errors in course registration or to withdraw from courses without academic penalty after the published deadline should be submitted as early as possible but not later than: January 31 (Fall Session courses); May 31 (Fall/Winter or Winter Session courses) September 30 (Summer Session courses)

5. Checking of Marks and Appeal of Grades
   • requests for checking of marks on term tests, essays and other term work made to the instructor of a course: last day of classes
   • petitions for reconsideration of term work returned to you after the end of terms: ninety days after the relevant examination period
   • requests for a photocopy of a final examination: ninety days after the relevant examination period
   • requests for recalculation of marks through the Registrar's Office: ninety days after the relevant examination period
   • petitions for re-reading of a final examination: ninety days after the relevant examination period
Policy on Access to Student Academic Records

1. Preamble

(a) Academic records of students are ultimately the property of the University, and it is the responsibility of the University to establish overall University policy in this area. This policy establishes university-wide aims, objectives, criteria and procedures which shall apply to the academic records of students of academic divisions of the University.

(b) The purpose of this policy is to combine consistency with flexibility in such a way as to ensure that:

(i) Students, alumni and former students are allowed at least a degree of access to their own academic records as is academically justifiable and administratively feasible.

(ii) A student's right to privacy in relation to his or her academic records is safeguarded as far as both internal university access and external public access are concerned.

(iii) There will be basic university-wide consistency in the kinds of information collected, recorded, filed and made available.

(iv) In keeping with the pluralistic nature of the University, academic divisions may retain some flexibility in the implementation and application of the policies established within this document.

(c) Individual divisional regulations and procedures on access to student academic records, including the statement in the divisional calendar concerning such, shall be

reported by the Provost to the Committee on Academic Policy and Programs. Any subsequent revisions shall also be reported.

(d) This policy supersedes the 1979 access policy for undergraduate student records and the 1981 access policy for graduate student records.

2. For the purpose of this policy:

(a) "student" means any person registered at the University for full-time or part-time study in a program that leads to a degree or post-secondary diploma or certificate of the University or in a program designated as a program of post-secondary study at the University by the Governing Council or other University body having delegated authority. On the date of an enquiry or request relevant to this policy, persons who have been registered within a period of two calendar years shall be included in the provisions which relate to "students".

(b) "alumni or alumni" means any person who has received a degree or post-secondary diploma or certificate from the University, or any person who has completed one year of full-time studies or the equivalent thereof as determined by the Governing Council, towards such a degree, diploma or certificate, and is no longer registered at the University.

(c) "former student" means any person who is not a student or an alumni or alumni who has been registered at the University in a program as defined in Section 2(a), and is no longer registered at the University.

(d) "academic division" means a college, school, institute, faculty or other division of the University that has academic autonomy (i.e. the right to administer its own degrees, diplomas, certificates and other programs of study), subject only to the authority of the Vice-President and Provost, the President and the Governing Council.

3. Definition of the official student academic record

The official student academic record refers to information relating to a student's admission to and academic performance at this University.

The "official student academic record" shall contain:

(a) (i) Personal information which is required in the administration of official student academic records such as name, student number, citizenship, social insurance number.

(ii) Registration and enrollment information.

(iii) Results for each course and academic period.

(iv) Narrative evaluations of a student's academic performance subsequent to his or her admission, used to judge his or her progress through an academic program.

(iv) Basis for a student's admission such as the application for admission and supporting documents.

(v) Results of petitions and appeals filed by a student.

(vi) Medical information relevant to a student's academic performance which has been furnished at the request or with the consent of the student concerned.

(v) Letters of reference which may or may not have been provided on the understanding that they shall be maintained in confidence.

(vii) Personal and biographical information such as address and telephone number.

The "official student academic record" shall be maintained by the University. For each type of information, academic divisions shall designate which document, form or medium contains the official version and how official copies of such information will be identified.

4. Access to official student academic records

(a) Access by a student

(i) A student may examine and have copies made of his or her official student academic record defined in Section 3 above, with the exception of those portions of the record which are the basis of referral (Section 3(b)(iv)) which have been provided or obtained on the expressed or implied understanding that they shall be maintained in confidence. A student may,
however, be advised of the identity of the authors of any confidential letters contained in his or her official academic record.

(b) A student’s request to examine a part of his or her official student academic record shall be made in writing and shall be complied with by the responsible authorities within a division. Such compliance shall occur within 30 days of receipt of the request, or within such lesser period as a division may determine.

(iii) A student has the right to challenge the accuracy of his or her official student academic record with the exception of the material specifically excluded in Section 4(a)(i) and to have his or her official student academic record supplemented with comments so long as the sources of such comments are identified and the official student academic record remains securely within the control of the academic division. Reference to such comments does not appear on reports such as transcripts or statements of results.

(iv) It is assumed that all documents relating to petitions and appeals (Section 3(8)(iii)) and not provided on the understanding that they shall be maintained in confidence will be retained within a division, and when needed by a student, will be made freely available. In addition, The Statutory Powers Procedure Act, 1971 of Ontario requires that where the good character, propriety of conduct or competence of a party is in issue in any proceeding in a tribunal to which the Act applies (such as the Academic Appeals Board of the Governing Council), the party is entitled to be furnished prior to the hearing with "reasonable information" of any allegation with respect thereto.

(b) Access by alumni and former students

(i) An alumnus or alumna or a former student may examine and have copies made of the portion of his or her official student academic record as defined in Section 3(a) above.

(ii) A request from an alumnus or alumna or a former student to examine the portions of the official student academic record as defined in Section 3(a) shall be made in writing and shall be complied with by the responsible authorities within a division. Such compliance shall occur within 30 days of receipt of the request, or within such lesser period as a division may determine.

(iii) An alumnus or alumna or a former student shall have the right to challenge the accuracy of his or her official student academic record only under such terms and conditions as the academic division may determine and publish in the divisional calendar.

(c) Access by University Staff and members of official University and divisional councils and standing committees

Members of the teaching and administrative staff of the University and members of official University and divisional councils and committees shall have access to relevant portions of an official student academic record for purposes related to the performance of their duties.

Access to medical information as defined in Section 3(a)(v) shall be granted to members of the teaching and administrative staff only with the prior expressed or implied consent of the student and, if applicable, in the case of a medical assessment, the originator (physician, etc.) of such. The Department of Alumni and Community Relations shall have access to appropriate personal information on students and alumni for the purpose of maintaining contact with alumni.

(d) Access by University campus organizations

Recognized campus organizations in the University of Toronto shall have access to the information referred to in Section 3(a)(v) as well as to the student’s address and telephone number of students named by that organization for the legitimate internal use of that organization. The Student’s Administrative Council, Graduate Students’ Union, Association for Part-time Undergraduate Students, and The Newspaper shall be entitled to publish and distribute within the University community a University-wide directory of students (including undergraduate, graduate, full-time and part-time) giving the sessional address and telephone number of students as long as there is a realistic provision for students to decline to consent to the disclosure of that information.

Names and addresses of students will also be provided to recognized campus organizations for the purpose of distributing information when all of the following conditions are met:

- The name and address information is not released to a third party.
- The name and address information is not used for commercial purposes.
- The organization proposes to distribute information which, in the opinion of the Assistant Vice-President (Planning) and University Registrar, the University would be willing to distribute if reimbursed by the organization.
- The information to be distributed is intended to provide information about the University and not primarily advertisements for non-University organizations.
- The campus organization agrees to use the name and address information only for the specific purpose for which it was provided.

(e) Access by others

(i) By the act of registration, a student gives implicit consent for a minimal amount of information to be made freely available to all enquirers:

- the academic division(s), degree program(s) and the session(s) in which a student is or has been registered;
- degree(s) received and date(s) of convocation.

(ii) Any other information contained in the official student academic record (including any comments generated under Section 4(a)(ii) but with the exception of the material specifically excluded in Section 4(a)(i)) shall be released to other persons or agencies only with the student’s prior expressed written consent, or on the presentation of a court order, or in accordance with the requirements of professional licensing or certification bodies, or the Ministry of Colleges and Universities (for an annual enrollment audit, or otherwise under compulsion of law). Requests granted to any persons or agencies outside the University for access to a student’s academic record shall be kept on file within a division. The release of the information concerning students and former students contained in the portions of the academic record as defined in Section 3(a)(v) shall also be governed by the above provisions.

(iii) General statistical material drawn from academic records not disclosing the identity of students, alumni and former students may be released for research and informational purposes authorized by the University by the academic division maintaining these records.

(iv) In the event that a student, alumni or alumna or a former student is deceased, the executors of his or her estate shall have access to the official student academic record under the same terms as would the individual if he or she were still living.

(f) Refusal of access

The University reserves the right to withhold access to the statements of results and transcripts of students, alumni and former students who have outstanding debts of obligations to the University in accordance with the Policy on Academic Sanctions for Students Who Have Outstanding University Obligations. The University may also choose not to release the official diploma to such persons nor to provide written or oral certifications of degree on their behalf.

3. Custody and retention of official student academic records

Academic records of students are normally under the custodial responsibility of the academic division. Every academic division maintaining official student academic records shall draw up plans for the eventual disposition of their records in
University Grading Practices Policy

Purpose

The purpose of the University Grading Practices Policy is to ensure:
(a) that grading practices throughout the University reflect appropriate academic standards;
(b) that the evaluation of student performance is made in a fair and objective manner against these academic standards;
(c) that the academic standing of every student can be accurately assessed even when courses have been taken in different divisions of the University and evaluated according to different grade scales.

Application of Policy

The Policy applies to all individuals and committees taking part in the evaluation of student performance in degree, diploma, and certificate credit courses (hereafter referred to as courses).

Amendment to Policy

Amendments to the Policy shall be recommended to the Academic Board.

Changes to the divisional regulations on grading shall be forwarded to the Committee on Academic Policy and Programs.

Distribution of Policy

A copy of the Grading Practices Policy as well as the description of the grade scales and the substance of divisional regulations indicated in Part II of this Policy shall be published in the Calendar of the division.

Similarly a copy shall be given to all students upon initial registration and to all instructors and others, including teaching assistants, involved in the evaluation of student performance.

The Policy is in three parts: Part I deals with grades, Part II outlines grading procedures to be adhered to in divisional regulations adopted as part of this Policy, and Part III is an administrative appendix available upon request from the Office of the Vice-President and Provost.

PART I: GRADIES

Grading of Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has performed the course materials.

1.2 Grades for each course shall be assigned with reference to the following meanings (which may be expanded in the divisional regulations under Part II):
(a) Excellent,
(b) Good,
(c) Adequate,
(d) Marginal,
(e) Inadequate.

Grades Scales

1.3 Once a judgement on the performance of the student has been made, the following grade scales are to be used:
(a) the refined letter grade scale A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F;
(b) the numerical scale of marks, consisting of all integers from 0 to 100;
(c) for graduate divisions only, a truncated refined letter grade scale in which FZ replaces the C, D and F grades in (a) above and
(d) the scales Honours/Pass/Fail and Credit/No Credit.

Grades vs. Scores

1.4 Grades should always be based on the approved grade scales. However, students may find that on any one evaluation they may receive a numerical or letter mark that reflects the score achieved on the test or essay. The cumulative scores may not be directly identified with the final grade. Grades are final only after review by the divisional review committee described below.

Grade Reporting

1.5 Grades will be assigned according to the numerical scale of marks referred to in 1.3(b) above, and converted to the refined letter grade scale of L(3a) above. In graduate divisions, grades may be assigned according to the truncated refined letter grade scale of L(3c) above. The H/PFL and CR/NCR scales of L(3d) above may also be used. However, the grades assigned in a course must all be from the same scale.

1.6 All non-grade designations used in reporting course results must correspond to the University-wide standard. A list of the currently approved designations and their meanings is given in the Appendices A.2.

1.7 The information in grade reports and transcripts must be communicated to the user, whether within or outside the University, in a clear and meaningful way. To that end, transcripts must include:
(i) an enrolment history, which traces chronologically the student's entire participation at the University,
(ii) a "grade point average" based on a 4-point scale for all undergraduate divisions (Note: grade point average values will be assigned as follows:

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PART II: GRADING PROCEDURES

Divisonal Councils shall forward to the Committee on Academic Policy and Programs charges in their grading procedures. Grading procedures may be adopted to divisional circumstances on the recommendation of the Committee on Academic Policy and Programs, but such procedures must be consistent with the principles in this Policy.

Grades shall be recommended by the instructor to the chair or division head. The grades shall then be reviewed and approved following the divisional review procedure. Grades shall not be reported or released to students as official until the divisional review procedure has been carried out. The divisional review constitutes final approval of grades except when grades are changed on appeal.

II.1 Divisional Review Committee

In each division, a committee chaired by the divisional head or a designate, and where appropriate, an additional committee structure, with the chairs (or their designates) of departments or other academic units of divisions serving as chairs shall:

(a) administer the implementation of the University Grading Practices Policy at the divisional level and oversee the general consistency of grading procedures with the division;
(b) approve and administer the University's specific regulations concerning the grade scale or scheme to be used, the assignment of non-grade designators for course work, classroom procedures and approved methods of evaluation;
(c) review, adopt and approve course grades recommended by instructors. The grades recommended for any individual student in the professional faculties may be adjusted according to his or her performance in the course or program as determined by the committee. The divisional committee has the final responsibility for assigning the official course grade.

II.2 Classroom Procedures

To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, divisional regulations governing classroom procedures must be consistent with the practices below:

(a) As early as possible in each course (and no later than the division's last date for course enrolment) the instructor shall make available to the class, and shall file with the divisional or department, the methods by which student performance shall be evaluated. This should include whether the methods of evaluation shall be essays, tests, examinations, etc., the relative weights of these methods in relation to the overall score, and the timing of each major evaluation.

(b) After the methods of evaluation have been made known, the instructor may not change them or their relative weights without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the division or the department.

(c) Student performance in a course shall be assessed on more than one occasion. No one essay, test, examination, etc., should have a value of more than 80% of the grade.

(d) In courses that meet regularly in a class there shall be an examination (or examinations) conducted formally under divisional supervision and worth (alone or in the aggregate) at least one-third of the final grade. Criteria for exemption may be determined by the division. The relative value of each part of an examination shall be indicated to the student. In the case of a written examination, the value shall be indicated on the examination paper.

(e) Commentary on assessed term work and time for discussion of it shall be made available to students.

(f) At least one piece of term work which is a part of the evaluation of a student performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for withdrawal from the course without academic penalty.

(g) Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's overall performance.

In formulating their own regulations divisions may add to items (a) to (g) and may adopt fuller or more specific provisions, for example in place of such terms as "a simple majority" (b), "one-third of the final grade" (d), or in particularizing the evaluation methods referred to in (a) and (b).

II.3 Procedures in the Event of Disruptions

Principles

The following principles shall apply in the event of disruption of the academic program:

(i) The academic integrity of academic programs must be honoured; and

(ii) Students must be treated in a fair manner recognizing their freedom of choice to attend class or not without penalty.

Procedures

(a) The Vice-President and Provost, or the Academic Board, shall declare when a disruption of the academic program has occurred. The Provost shall take steps to inform the University community at large of the changes to be implemented, and will report to the Committee on Academic Policy and Programs regarding implementation of the procedures and changes to the status of the academic programs.

(b) Individual instructors or multi-section co-ordinators responsible for courses that are disrupted shall determine, as the disruption proceeds, whether any changes to classroom procedures are needed to complete the course.

(c) Changes to the classroom procedures should, where possible, first be discussed with students prior to the class in which a vote of the students present on the proposed changes is to be taken. Changes agreed upon by consensus should be forwarded to the department or division with a report on the attendance at the class where the vote was taken.

(d) Where consensus on changes has not been arrived at, or where a vote is not feasible, the instructor, after the class discussion, will provide the divisional or department with multi-departmental facilities, with his (or her) recommendation, along with any results of any classroom votes. The chair or divisional head shall then make a decision.

(e) Where classes are not able to convene, the instructor, with the prior approval of the chair or divisional head, shall make changes deemed necessary to the classroom procedures. In the absence of the instructor such changes will be made by the divisional head and require the approval of the Provost. Where courses are to be cancelled, approval of the divisional council is required. If the divisional council cannot meet, approval of the divisional head, or in the absence of the division head, the approval of the Provost, is required.

(f) Students must be informed of changes to classroom procedures. This may be done by circulating the changes in writing to the class, posting in the departmental and faculty offices, reporting to the divisional council, as well as listing in the campus press. Students who request written notice of any changes made during the disruption.

(g) Where a declared disruption occurs in a specific course after the last date to drop courses for the academic term or session, students who do not wish to complete the course(s) during that term or session may, prior to the last day of classes, withdraw without academic penalty. Such students shall receive a full refund of the course tuition fee.

(h) Where students have not attended classes that are meeting, they nonetheless remain responsible for the course work and meeting course requirements. However, where possible, reasonable extension of deadlines for the course requirements, or provision...
of make-up tests shall be made and reasonable alternative access to material covered

(i) A student who considers that a disruption has unreasonably affected his or her grade in a course may appeal the grade following the procedures as set out in each division. If the petition is approved, the student’s original grade will be replaced by either an assessed grade or by a grade of CR/UNC, or as deemed appropriate in the particular circumstances.

II.4 Assessment in Clinical and Field Settings

Divisions may make reasonable exemptions to the classroom procedures described above in circumstances such as field or clinical courses where adherence to these procedures is not possible. Nevertheless, it is obligatory that the assessment of the performance of students in clinical or field settings should be fair, humane, valid, reliable and in accordance with the principles enunciated in the University Grading Practices Policy. Accordingly, where a student’s performance in a clinical or field setting is to be assessed for credit, the evaluation must encompass as a minimum:

(a) a formal statement describing the evaluation process, including the criteria to be used in assessing the performance of students and the appeal mechanisms available. This statement should be available to all students before or at the beginning of the clinical or field experience;

(b) a mid-way performance evaluation with feedback to the student;

(c) written documentation of the final assessment.

In addition, for such clinical and field experiences, divisions must that:

(d) clinical and field assessors are fully informed regarding University, divisional and course policies concerning evaluation procedures, including the specific assessment procedures to be applied in any particular field or clinical setting. Any exception from the above would require a divisional request with explanation for approval by the Governing Council.

II.5 Grade Review and Approval Process

The following principles and procedures shall govern the grade review and approval process.

(a) The distribution of grades in any course shall not be predetermined by any system of quotas that specifies the number or percentage of grades allowable at any grade level.

(b) However, a division may provide broad limits to instructors setting out a reasonable distribution of grades in the division or department. Such broad limits shall recognize that considerable variance in class grades is not unusual. The division may request an explanation of any grades for a course that exceed the limits and hence appear not to be based on the approved grade scales or otherwise appear anomalous in reference to the Policy. It is understood that this section shall only be used when the class size is thirty students or greater. Each division shall make known in the Divisional Calendar the existence of any such limits.

(c) The criterion that the Divisional Review Committee shall employ in its evaluation is whether the instructor has followed the University Grading Practices Policy. The Review Committee shall not normally adjust grades unless the consequences of allowing the grades to stand would be injurious to the standards of the University, or the class in general.

(d) Membership in the Divisional Review Committee may include students but should be limited to members of the divisional appeals committees.

(e) Where grades have been adjusted by a divisional committee, the students as well as the instructor shall be informed. On request, the students or the instructor shall be given the reason for the adjustment of grades, a description of the methodology used to adjust the grades, and a description of the divisional appeal process.

(f) Where a departmental review committee changes course grades, the faculty office shall be so informed. Having done so, the faculty office shall relay this information, upon request, to the students or the instructor with a description as to the reason for the change and the methodology used.

III.6 Every division shall establish divisional appeal procedures. Students may appeal grades according to the procedures established for that purpose in the division. The appeal may be made whether marks have been altered by the review process or not. These procedures shall be outlined in the divisional Calendar, and available upon request at the faculty or registrar’s office.

III.7 Student Access to Examination Papers

(a) All divisions shall provide access to copies of the previous year’s final examination papers and other year’s papers where feasible. Examinations

(b) All divisions shall provide students with the opportunity within a reasonable time to review their examination paper where feasible. A recovery fee shall be set to cover administrative costs including photocopying.

(c) All divisions shall provide, in addition to the customary re-reading of papers and the re-checking of marks, the opportunity for students to petition for the re-reading of their examination where feasible. A cost recovery fee shall be set and returned where appropriate.

III.8 Conflict of Interest

Where the instructor or a student has a conflict of interest, or is in a situation where a fair and objective assessment may not be possible, this should be disclosed to the chair or division head who shall take steps to ensure fairness and objectivity.

Code of Behaviour on Academic Matters

A. Preamble

The concern of the Code of Behaviour on Academic Matters is with the responsibilities of all parties to the integrity of the teaching and learning relationship. Honesty and fairness must inform this relationship, whose basis remains one of mutual respect for the aims of education and for those ethical principles which must characterize the pursuit and transmission of knowledge in the University.

What distinguishes the University from other centres of research is the central place which the relationship between teaching and learning holds. It is by virtue of this relationship that the University fulfills an essential part of its traditional mandate from society, and, indeed, from history: to be an expression of, and by so doing to encourage, a habit of mind which is discriminating at the same time as it remains curious, which is at once equitable and audacious, valuing openness, honesty and courtesy before any private interest.

This mandate is more than a mere pious hope. It represents a condition necessary for true enquiry, which is the University’s life blood. Its fulfillment depends upon the well being of that relationship whose partners define one another’s roles as teacher and student, based upon differences in expertise, knowledge and experience, though bound by respect, by a common passion for truth and by mutual responsibility to those principles and ideals that continue to characterize the University.

This Code is concerned, then, with the responsibilities of faculty members and students, not as they belong to administrative or professional or social groups, but as they co-operate in all phases of the teaching and learning relationship.

Such co-operation is threatened when teachers or students forsake respect for the office—and for others involved in learning—in favour of self-interest, when truth becomes a hostage
expediency. On behalf of teacher and student and in fulfillment of its own principles and ideals, the University has a responsibility to ensure that academic achievement is not obscured or undermined by cheating or misrepresentation, that the evaluative process meets the highest standards of fairness and honesty, and that irrelevant or even mischievous disruption is not allowed to thwart the educational process.

These areas are in which teacher and student necessarily share a common interest as well as common responsibilities.

B. Offences

The University and its members have a responsibility to ensure that a climate which might encourage, or conditions which might enable, cheating, misrepresentation or unfairness not be tolerated. To this end, all must acknowledge that seeking credit or other advantages by fraud or misrepresentation, or seeking to disadvantage others by disruptive behaviour is unacceptable, is any dishonesty or unfairness in dealing with the work or record of a student.

Wherever in this Code an offence is described as depending on "knowingly", the offence shall likewise be deemed to have been committed if the person might reasonably have to have known.

B.1. It shall be an offence for a student knowingly:

(a) to forge or in any other way alter or falsify any document or evidence required by the University, or to utter, circulate or make use of any such forged, altered or falsified document, whether the record be in print or electronic form;

(b) to use or possess an unauthorized aid or aids or obtain unauthorized assistance in any academic examination or term test or in connection with any other form of academic work;

(c) to persuade another person, or to have another person persuade, at any academic examination or term test or in connection with any other form of academic work;

(d) to represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism (for a more detailed account of plagiarism, see Appendix "A");

(e) to submit, without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or be being sought in another course or program of study in the University or elsewhere;

(f) to submit any academic work containing a purported statement of fact or reference to a source which has been fabricated.

It shall be an offence for a faculty member knowingly:

(a) to approve any of the previously described offenses;

(b) to evaluate an application for admission or transfer to a course or program of study by reference to any criterion that is not academically justified;

(c) to evaluate academic work by a student by reference to any criterion that does not relate to its merit, so the time within which it is to be submitted or to the manner in which it is to be performed.

It shall be an offence for a faculty member and student alike knowingly:

(a) to forge or in any other way alter or falsify any academic record, or to utter, circulate or make use of any such forged, altered or falsified record, whether the record be in print or electronic form;

(b) to engage in any form of cheating, academic dishonesty or misconduct, fraud or misrepresentation not herein otherwise described, in order to obtain academic credit or other academic advantage of any kind.

A graduate of the University may be charged with any of the above offences committed knowingly while he or she was an active student, when, in the opinion of the Provost, the offence, if detected, would have resulted in a sanction sufficiently severe that the degree would not have been granted at the time that it was awarded.

C. Procedures in Cases Involving Students

When the divisional level and the level of the University Tribunal, the procedures for handling charges of academic offenses involving students reflect the gravity with which the University views such offenses. At the same time, these procedures and those which ensure students the right of appeal represent the University's commitment to fairness and the cause of justice.

C.1.1. Divisional Procedures

Use: Where a student commits an offence, the faculty in which the student is registered has responsibility over the student in that matter. In the case of Scarborough [UTSC] and Erindale Colleges [UTM], the college is deemed to be the faculty.

No hearing within the meaning of section 2 of the Statutory Powers Procedure Act is required for the purposes of or in connection with any of the discussions, meetings and determinations referred to in section C.1.4. and such discussions, meetings and determinations are not proceedings of the Tribunal.

Where an instructor has reasonable grounds to believe that an academic offence has been committed by a student, the instructor shall so inform the student immediately after learning of the act or conduct complained of, giving reasons, and invite the student to discuss the matter. Nothing the student says in such a discussion may be used or receivable in evidence against the student.

If after such discussion, the instructor is satisfied that no academic offence has been committed, he or she shall so inform the student and no further action shall be taken in the matter by the instructor, unless fresh evidence comes to the attention of the instructor, in which case he or she may again proceed in accordance with subsection 2.

If after such discussion, the instructor believes that an academic offence has been committed by the student, or if the student fails or neglects to respond to the invitation for discussion, the instructor shall make a report of the matter to the department chair or through the department chair to the dean. (See also section C.1.4.)
When the dean or the department chair, as the case may be, has been so informed, he or she shall notify the student in writing accordingly, provide him or her with a copy of the Code and subsequently afford the student an opportunity for discussion of the matter. In the case of the dean being informed, the chair of the department and the instructor shall be invited by the dean to be present at the meeting with the dean. The dean shall conduct the interview. Before proceeding with the meeting, the dean shall inform the student that he or she is entitled to seek advice, or to be accompanied by counsel at the meeting, before making, and is not obliged to make, any statement or admission, but shall warn that if he or she makes any statement or admission in the meeting, it may be used or receivable in evidence against the student in the hearing of any charge with respect to the alleged offence in question. The dean shall also advise the student, without further comment or discussion, of the sanctions that may be imposed under section C.1.(b), and that the dean is not obliged to impose a sanction but may instead request that the Provost lay a charge against the student. Where such advice and warning have been given, the statements and admissions, if any, made in such a meeting may be used or received in evidence against the student in any such hearing.

If the dean, on the advice of the department chair and the instructor, or if the department chair, on the advice of the instructor, subsequently decides that no academic offence has been committed and that no further action in the matter is required, the student shall be so informed in writing and the student’s work shall be accepted for normal evaluation or, if the student was prevented from withdrawing from the course by the withdrawal date, he or she shall be allowed to do so. Thereafter, the matter shall not be introduced into evidence at a Tribunal hearing for another offence.

If the student admits the alleged offence, the dean or the department chair may either impose the sanction(s) that he or she considers appropriate under section C.1.(b) or refer the matter to the dean or Provost, as the case may be, and in either event shall inform the student is writing accordingly. No further action in the matter shall be taken by the instructor, the department chair or the dean if the dean imposes a sanction.

If the student is dissatisfied with a sanction imposed by the department chair or the dean, as the case may be, the student may refer the matter to the dean or Provost as the case may be, for consideration. If the student does not admit the alleged offence, the dean may, after consultation with the instructor and the department chair, request that the Provost lay a charge against the student. If the Provost agrees to lay a charge, the case shall then be referred to the Judicial Division of the Tribunal.

Normally, decanal procedures will not be examined in a hearing before the Tribunal. A failure to carry out the procedures referred to in this section, or any defect or irregularity in such procedures, shall not invalidate any subsequent proceedings of or before the Tribunal, unless the chair of the hearing considers that such failure, defect or irregularity resulted in a substantial wrong, detriment or prejudice to the accused. The chair will determine at the opening of the hearing whether there is to be any objection to an alleged defect, failure or irregularity.

No degree, diploma or certificate of the University shall be conferred or awarded, nor shall a student be allowed to withdraw from a course from the time of the alleged offence until the final disposition of the accusation. However, a student shall be permitted to use University facilities while a decision is pending, unless there are valid reasons for the dean to bar him or her from a facility. When or at any time after an accusation has been reported to the dean, he or she may cause a notation to be recorded on the student’s academic record and transcript, until the final disposition of the accusation, to indicate that the standing in it course and/or the student’s academic status is under review. A student upon whom a sanction has been imposed by the dean or the department chair under section C.1.(b) or who has been convicted by the Tribunal shall not be allowed to withdraw from a course so as to avoid the sanction imposed.

A record of cases disposed of under section C.1.(a) and of the sanctions imposed shall be kept in the academic unit concerned and may be referred to by the dean in connection with a decision to prosecute, or by the prosecution in making representations as to the sanction or sanctions to be imposed by the Tribunal, for any subsequent offence committed by the student. Information on such cases shall be available to other academic units upon request and such cases shall be reported to the dean by the Secretary of the Tribunal for use in the Provost’s annual report to the Academic Board. The dean may contact the Secretary of the Tribunal for advice or for information on cases disposed of under section C.1.(a) hereof.

Where a proctor or invigilator, who is not a faculty member, has reason to believe that an academic offence has been committed by a student at an examination or test, the proctor or invigilator shall inform the student’s dean or department chair, as the case may be, who shall proceed as if he or she were an instructor, by analogy to the other provisions of this section.

In the case of alleged offences not covered by the procedures above and not involving the submission of academic work, such as those concerning forgery or uttering, and in cases involving cancellation, recall or suspension of a degree, diploma or certificate, the procedure shall be regulated by analogy to the other procedures set out in this section.

C.1(b) Divisional Sanctions

In an assignment worth ten percent or less of the final grade, the department chair may deal with the matter if it

(i) the student admits guilt; and
(ii) the assignment of a penalty is limited to at most a mark of zero for the piece of work.

If the student does not admit guilt, or if the department chair chooses, the matter shall be brought before the dean.

One or more of the following sanctions may be imposed by the dean where a student admits to the commission of an alleged offence:

(a) an oral and/or written reprimand;
(b) an oral and/or written reprimand and, with the permission of the instructor, the re-submission of the piece of academic work in respect of which the offence was committed, for evaluation. Such a sanction shall be imposed only for minor offences and where the student has committed no previous offence;
(c) assignment of a grade of zero or a failure for the piece of academic work in respect of which the offence was committed;
(d) assignment of a penalty in the form of a reduction of the final grade in the course in respect of which the offence was committed;
(e) denial of privileges to use any facility of the University, including library and computer facilities;
(f) a monetary fine to cover the costs of replacing damaged property or misused supplies in respect of which the offence was committed;
(g) assignment of a grade of zero or a failure for the course in respect of which the offence was committed;
(b) suspension from attendance in a course or courses, a program, or an academic division or unit, or the University for a period of not more than twelve months. Where a student has not completed a course or courses in respect of which an offence has been committed, withdrawal from the course or courses without academic penalty shall be allowed.

The Provost shall, from time to time, indicate appropriate sanctions for certain offences. These guidelines shall be sent for information to the Academic Board and attached to the Code as Appendix "C".

2.1(a) Tribunal Procedures

A prosecution for an alleged academic offence shall be instituted by the laying of a charge by the Provost against the accused. This is done when the student does not admit guilt; when the sanction desired is beyond the power of the dean to impose; when the student has been found guilty of a previous offence; or when the student is being accused simultaneously of two or more different offences involving more than one incident.

No charge shall be laid except with the agreement of the dean concerned and of the Provost, after consultation between the Provost and the Discipline Counsel.

A charge shall be in writing, addressed to the accused, signed by or under the authority of the Provost and filed with the Secretary. It shall contain a statement that the student is charged with having committed an offence specified therein, with sufficient particulars of the circumstances to enable the student to identify the alleged act or conduct giving rise to the charge.

Upon receipt of a charge which appears to be in proper form, the member of the Tribunal designated to be the chair of the hearing and the Secretary shall immediately determine and give appropriate notice of a date, time and place for the hearing.

Withdrawal of a student from a course or program of study shall not prejudice or affect any prosecution before the Tribunal in respect of an alleged academic offence.

The proceedings at a hearing, including the evidence and the verdict of the panel shall be recorded by the Secretary by means of a tape recording, stenographic reporter or other reliable means.

The procedures of the Tribunal shall conform to the requirements of the Statutory Powers Procedure Act, Revised Statutes of Ontario, 1990, Chapter S. 22, as amended from time to time.

The Tribunal may, from time to time, by a majority of its members, make, adopt and modify rules governing its procedures which are not inconsistent with the provisions herein, and all such rules and modifications shall be reported to the Academic Board for information.
The duties of the Secretary and assistants shall be determined by the Senate and shall be performed by the Tribunal and reported to the Academic Board for information. Where anything is required by the Code to be done by or with the Secretary, it may be done by or with the Secretary or any of his or her assistants.

C.II (b) Tribunal Sanctions

One or more of the following sanctions may be imposed by the Tribunal upon the conviction of any student:

(a) an oral and/or written reprimand;
(b) an oral and/or written reprimand and, with the permission of the instructor, the resubmission of the piece of academic work in respect of which the offence was committed, for evaluation. Such a sanction shall be imposed only for minor offences and where the student has committed no previous offence;
(c) assignment of a grade of zero or a failure for the piece of academic work in respect of which the offence was committed;
(d) assignment of a penalty in the form of a reduction of the final grade in the course in respect of which the offence was committed;
(e) denial of privileges to use any facility of the University, including library and computer facilities;
(f) a monetary fine to cover the costs of replacing damaged property or missed supplies in respect of which the offence was committed;
(g) assignment of a grade of zero or a failure for any completed or uncompleted course or courses in respect of which any offence was committed;
(h) suspension from attendance in a course or courses, a program, an academic unit or division, or the University for such a period of time up to five years as may be determined by the Tribunal. Where a student has not completed a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed;
(i) recommendation of expulsion from the University. The Tribunal has power only to recommend that such a penalty be imposed. In any such case, the recommendation shall be made by the Tribunal to the President for a recommendation by him or her to the Governing Council. Expulsion shall mean that the student shall be denied any further registration at the University in any program, and his or her academic record and transcript shall record this sanction permanently. Where a student has not completed a course or courses in respect of which an offence has not been committed, withdrawal from the course or courses without academic penalty shall be allowed. If a recommendation for expulsion is not adopted, the Governing Council shall have the power to impose such lesser penalty as it sees fit.

Dissatisfaction with a decision of the Tribunal may be appealed to the Vice-President (Academic) and to the Senate of the University, in that order, in accordance with the provisions of the University's Regulations. The final appeal shall be to the Senate of the University.

The Tribunal shall have final authority in all cases of academic misconduct.

The Secretary of the Tribunal and his or her assistants shall be appointed by the Academic Board on the recommendation of the Provost.
The Discipline Appeals Board shall have power,
(a) to dismiss an appeal summarily and without formal hearing if it determines that the appeal is frivolous, vexatious or without foundation;
(b) in circumstances in which the Tribunal hearing the appeal considers it to be exceptional, to order a new hearing; and
(c) in any other case, to affirm, reverse, quash, vary or modify the verdict, penalty or sanction appealed from and substitute any verdict, penalty or sanction that could have been given or imposed at trial.

An appeal shall not be a trial de novo, but in circumstances which it considers to be exceptional, the Discipline Appeals Board may allow the introduction of further evidence on appeal which was not available or was not adduced at trial, in such manner and upon such terms as the members of the Board hearing the appeal may direct.

Where it is considered to be warranted by the circumstances, the Board may in its discretion, award costs of any proceedings on appeal, and may make orders as to the party or parties to and by whom and the amount and manner in which such costs are to be paid. An appeal operates as a stay of the decision appealed from unless the Senior Chair of the Tribunal, or on behalf of the Discipline Appeals Board, otherwise orders upon application by the accused or the Provost.

Code of Student Conduct

A. Preface

1. The University of Toronto is a large community of teaching staff, administrative staff and students, involved in teaching, research, learning and other activities. Student members of the University are adherent to a division of the University for the period of their registration in the academic program to which they have been admitted and as such assume the responsibilities that such registration entails.

2. As an academic community, the University governs the activities of its members by standards such as those contained in the Code of Behaviour on Academic Matters, which provides definitions of offences that may be committed by student members and which are deemed to affect the academic integrity of the University’s activities.

3. The University sponsors, encourages or tolerates many non-academic activities of its members, both on its campuses and away from them. These activities, although generally separate from the defined requirements of students’ academic programs, are a valuable and important part of the life of the University and of its students.

4. The University takes the position that students have an obligation to make legal and responsible decisions concerning their conduct as, or as if they were, adults. The University has no general responsibility for the moral and social behaviour of its students. In the exercise of its disciplinary authority and responsibility, the University treats students as free to organize their own personal lives, behaviour and associations subject only to the law and to University regulations that are necessary to protect the integrity and safety of University activities, the peaceful and safe enjoyment of University housing by residents and neighbours, or the freedom of members of the University to participate reasonably in the programs of the University and in activities in or on the University’s premises. Strict regulation of such activities by the University of Toronto is otherwise neither necessary nor appropriate.

Under some circumstances, such as when a student has not yet reached the legal age of majority, additional limitations on student conduct may apply.

5. University members are not, as such, immune from the criminal and civil laws of the wider political unit to which they belong. Provisions for non-academic discipline should not attempt to shelter students from their civic responsibilities nor add
unnecessarily to these responsibilities. Conduct that constitutes a breach of the Criminal Code or other statute, or that would give rise to a civil claim or action, should ordinarily be dealt with by the appropriate criminal or civil court. In cases, however, in which criminal or civil proceedings have not been taken or would not adequately protect the University's interests and responsibilities as defined below, proceedings may be brought under a discipline code of the University, but only in cases where such internal proceedings are appropriate in the circumstances.

6. The University must define standards of student behaviour and make provisions for student discipline with respect to conduct that jeopardizes the good order and proper functioning of the academic and non-academic programs and activities of the University or its divisions, that endangers the health, safety, rights or property of its members or visitors, or that adversely affects the property of the University or bodies related to it, where such conduct is not, for the University's defined purposes, adequately regulated by criminal and civil law.

7. Nothing in this Code shall be construed to prohibit peaceful assemblies and demonstrations, lawful picketing, or to inhibit freedom of speech as defined in the University.

8. In this Code, the word "punishment" includes lands, buildings and grounds.

9. In this Code, "student" means any person:
(i) engaged in any academic work which leads to the recording and/or issue of a mark, grade or statement of performance by the appropriate authority in the University or another institution; and/or
(ii) associated with or registered as a participant in any course or program of study offered by or through a college, faculty, school, centre, institute or other academic unit or division of the University; and/or
(iii) entitled to a valid student card who is between sessions but is entitled because of student status to use University facilities; and/or
(iv) who is a post-doctoral fellow.

10. In this Code, the words "University of Toronto" refer to the University of Toronto and include any institutions federated or affiliated with it, where such inclusion has been agreed upon by the University and the federated or affiliated institution, with respect to the premises, facilities, equipment, services, activities, students and other members of the federated or affiliated institution.

Note: The University of Toronto has agreed that, when the premises, facilities, equipment, services or activities of the University of Toronto are referred to in this Code, the premises, facilities, equipment, services and activities of the University of St. Michael's College, Trinity College and Victoria University are included.

11. In this Code, where an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person ought reasonably to have known.

12. This Code is concerned with conduct that the University considers unacceptable. In the case of student members of the University, the procedures and sanctions described herein shall apply, unless the matter is referred to, or is dealt with under other provisions for the discipline of students. In the case of the other members of the University, such conduct is to be dealt with in accordance with the established policy, procedures and agreements that apply to the members.

13. Subject to the conditions and considerations outlined in Section B, this Code is concerned with conduct arising in relation to a wide variety of activities and behaviours including, but not limited to, conduct related to the use of computers and other information technology and the use or misuse of alcohol. In principle, alleged offences that arise in relation to such conduct are not distinct from those that arise out of other activities that occur in the University community. Such activities may also be considered the commission of one or more offences and, in appropriate circumstances, may be dealt with under other University policies or regulations specific to the behaviour.

B. Offences

The following offences constitute conduct that shall be deemed to be offences under this Code, when committed by a student of the University of Toronto, provided that such conduct:
(i) has not been dealt with as a failure to meet standards of professional conduct as required by a college, faculty or school; and
(ii) is not specifically referred to in the jurisdiction of the University Tribunal, as in the case of offences described in the Code of Behaviour on Academic Matters, or to another disciplinary body within the University of Toronto, or in the case of sexual harassment as described in the Policy and Procedures: Sexual Harassment, or to a divisional disciplinary body, such as a residence council or a recreational athletics disciplinary body; or is covered under these policies but which is deemed by the head of the division to be more appropriately handled by the Code of Student Conduct; and
(iii) except as otherwise provided herein, occurs on premises of the University of Toronto or elsewhere in the course of activities sponsored by the University of Toronto or by any of its divisions; and
(iv) has not been dealt with under provisions for the discipline of students with respect to University offices and services whose procedures apply to students in several academic divisions, such as University residences, libraries or athletic and recreational facilities.

1. Offences Against Persons

(a) No person shall assault another person sexually or threaten any other person with sexual assault.
(b) No person shall otherwise assault another person, threaten any other person with bodily harm, or knowingly cause any other person to fear bodily harm.
(c) No person shall knowingly create a condition that unnecessarily endangers the health or safety of other persons.
(d) No person shall threaten any other person with damage to such person's property, or knowingly cause any other person to fear damage to his or her property.
(e) No person shall engage in a course of vexatious conduct that is directed at one or more specific individuals, and that is based on the race, ancestry, place of origin, colour, ethnic origin, citizenship, sex, sexual orientation, creed, age, marital status, family status, handicap, receipt of public assistance or record of offences of that individual or those individuals, and that is known to be unwelcome, and that exceeds the bounds of freedom of expression or academic freedom as these are understood in University policies and accepted practices, including but not restricted to, those explicitly adopted.

Note: Terms in this section are to be understood as they are defined or used in the Ontario Human Rights Code. Vexatious conduct that is based on sex or sexual orientation is considered an offence under the University's Policy and Procedures: Sexual Harassment. If the Sexual Harassment Officer believes, after consultation with relevant parties, that a complaint based on sex or sexual orientation would be better handled under the Code of Student Conduct, the Officer may refer the matter to the appropriate head of division.

(f) No person shall, by engaging in the conduct described in subsection (ii) below, whether on the premises of the University or away from the premises of the University, cause another person or persons to fear for their safety or the safety of another person known to them while on the premises of the University or in the course of activities sponsored by the University of Toronto or by any of its divisions, or cause another person or persons to be implicated in exercising the freedom to participate reasonably in the programs of the University and in activities in or on the University's premises, knowing that their conduct will cause such fear, or recklessly as to whether their conduct causes such fear.
2. Disruption
No person shall cause by action, threat or otherwise, a disturbance that the member knows obstructs any activity organized by the University of Toronto or by any of its divisions, or the right of another member or members to carry on their legitimate activities, to speak or to associate with others.

For example, peaceful picketing or other activity outside a class or meeting that does not substantially interfere with the communication inside, or impede access to the meeting, is an acceptable expression of dissent. And silent or symbolic protest is not to be considered disruption under this Code. But those that obstruct the conduct of a meeting or forceful blocking of access to an activity constitutes disruption.

3. Offences Involving Property
(a) No person shall knowingly take, destroy or damage premises of the University of Toronto.
(b) No person shall knowingly take, destroy or damage any physical property that is not her or his own.
(c) No person shall knowingly destroy or damage information or intellectual property belonging to the University of Toronto or to any of its members.
(d) No person, in any manner whatsoever, shall knowingly deface the inside or outside of any building of the University of Toronto.
(e) No person, knowing the effects or property to have been appropriated without authorization, shall possess effects or property of the University of Toronto.
(f) No person, knowing the effects or property to have been appropriated without authorization, shall possess any property that is not her or his own.
(g) No person shall knowingly cause a condition that unnecessarily endangers or threatens destruction of the property of the University of Toronto or of any of its members.

4. Unauthorized Entry or Presence
No person shall, contrary to the expressed instruction of a person or persons authorized to give such instruction, or with intent to damage or destroy the premises of the University of Toronto or damage, destroy or steal any property on the premises of the University of Toronto that is not her or his own, or without just cause knowingly enter or remain in or on any such premises.

5. Unauthorized Use of University Facilities, Equipment or Services
(a) No person shall knowingly use any facility, equipment or service of the University of Toronto contrary to the expressed instruction of a person or persons authorized to give such instruction, or without just cause.
(b) No person shall knowingly gain access to or use any University computing or internal or external communications facility to which legitimate authorization has not been granted. No person shall use any such facility for any commercial, disruptive or unauthorized purpose.
(c) No person shall knowingly mutilate, misplace, misfile, render unerodable any stored information such as books, films, data files or programs from a library, computer or other information storage, processing or retrieval system.

6. False charges
No person shall knowingly or maliciously bring a false charge against any member of the University of Toronto under this Code.

7. Aiding in the Commission of an Offence
No person shall counsel, procure, conspire with or aid a person in the commission of an offence defined in this Code.

8. Refusal to Comply with Sanctions
No person found to have committed an offence under this Code shall refuse to comply with a sanction or sanctions imposed under the procedures of this Code.

9. Unauthorized Possession or Use of Firearms or Ammunition
No person other than a peace officer or a member of the Canadian Forces acting in the course of duty shall possess or use any firearm or ammunition on the premises of the University of Toronto without the permission of the officer of the University having authority to grant such permission.

Note: The President of the University or another senior officer designated by the President has been given the authority to grant such permission for the premises of the University of Toronto under the authority of the Governing Council of the University. The President has designated the Vice-President, Business Affairs, who is the Chief Administrative Officer of the University to exercise this authority. Various officers of institutions federated with the University of Toronto have authority to grant such permission with respect to the premises of the federated institutions.

C. Procedures
1. General
(a) The University shall establish a centrally appointed pool of trained Investigating and Hearing Officers, who shall be available to the divisions, at the discretion of the head of the division, if that is considered appropriate or preferable for any reason.
(b) Each division shall appoint an Investigating Officer and a Hearing Officer, who may be student, staff or faculty member from that division.
(c) Whether the incident is investigated locally or centrally, every effort shall be made to conclude the case through to delivery of a final decision within the University within one year from the alleged incident of misconduct.
(d) Pursuant to the provisions of Section D., interim conditions may be imposed by the head of the division.
(e) For the purposes of confidential and central record keeping, a one-page summary of the outcome of all investigations, whether or not they have proceeded to a Hearing, shall be copied to the Judicial Affairs Officer in the Office of the Governing Council.
(f) Wherever possible and appropriate, informal resolution and mediation shall be used to resolve issues of individual behaviour before resort is made to formal disciplinary procedures.

2. Specific
(a) An Investigating Officer shall be appointed for a term of up to three years by the principal, dean or director (hereinafter called "head") of each faculty, college or school in which students are registered (hereinafter called "division"), for consultation with the elected student leader or leaders of the division, to investigate complaints made against student members of that division. Investigating Officers shall hold office until their successors are appointed. The head of the division shall appoint each investigator to determine the allegations.
(b) A Hearing Officer shall be appointed for a term of up to three years by the council of each division to decide on complaints under these Code made against student members of that division. Hearing Officers shall hold office until their successors are appointed.
(c) If the Investigating Officer is unable to conduct an investigation, or the Hearing Officer is unable to conduct a hearing, or where the head of the division believes on reasonable grounds that the appointed officer is inappropriate to conduct the particular investigation or chair a particular hearing, then the head of the division shall seek an appointment from the central pool for that particular case. If the head of the division intends to request either suspension from registration or expulsion from the University as a sanction in a particular case, or if the case appears to the head of the division to require a Hearing Officer with legal qualifications, then the Senior Chair of the University Tribunal may, on the application of the head of the division, appoint a legally qualified person as Hearing Officer for the particular case.

(d) Where the head of the division has reason to believe that a non-academic offence as defined in this Code may have been committed by a student member or members of the division, the Investigating Officer will conduct an investigation into the case. After having completed the investigation, the Investigating Officer shall report on the investigation to the head of the division. If the head of the division concludes, on the basis of this report, that the student or students may have committed an offence under the Code of Student Conduct, the head of the division shall have the discretion to request that a hearing take place to determine whether the student or students have committed the offence alleged.

(e) The hearing will be chaired by the Hearing Officer. The case will be presented by the Investigating Officer, who may be assisted and represented by legal counsel. If the right to legal counsel is waived, or after a hearing, the Hearing Officer will rule on whether the student or students have committed the offence alleged and may impose one or more sanctions as listed below. The accused student or students may be assisted and represented by another person, who may be legal counsel.

(f) Appeals against decisions of bodies acting under authority from the council of a division to hear cases arising out of residence codes of behaviour may be made to the Hearing Officer of the division, where provision therefore has been made by the council of the division.

(g) Appeals against the decision of the Hearing Officer may be made to the Discipline Appeals Board of the Governing Council.

(h) Where the head of a division has reason to believe that a non-academic offence may have been committed by a group of students including students from other divisions of the University, the head of the division may consult with the head of the other division or divisions involved and may then agree that some or all of the cases will be investigated jointly by the Investigating Officers of the divisions of the students involved and that some or all of the cases will be heard together by the Hearing Officers of one of the divisions agreed upon by the heads and presented by one of the Investigating Officers agreed upon by the heads.

D. Interim Conditions and Measures

1. Interim Conditions: Ongoing Personal Safety

In these cases where the allegations of behaviour are serious and, if proven, could constitute a significant personal safety threat to other students or members of the University community, the head of the division is authorized to impose interim conditions that balance the need of complainants for safety with the requirement of fairness to the respondent student. The interim conditions are to be in no way to be construed as indicative of guilt, and shall remain in place until the charges are disposed of under the Code’s procedures.

2. Interim Measures: Urgent Situations

In some circumstances, such as those involving serious threats or violent behaviour, it may be necessary to remove a student from the University. Where the head of the division has requested an investigation by the Investigating Officer, and the investigation is pending, the Vice-President & Provost (or delegate) may, on the advice of the head of the division, suspend a student or students temporarily for up to three working days if, in the opinion of the Vice-President & Provost (or delegate), there is reasonable apprehension that the safety of others is endangered, damage to University property is likely to occur, or the continued presence of the student(s) would be disruptive to the legitimate operations of the University. The student(s) shall be informed immediately in writing of the reasons for the suspension and shall be afforded the opportunity to respond. Any such suspension must be reviewed by the Vice-President & Provost (or delegate) within the three-day temporary suspension period, following a preliminary investigation, and either revoked or continued. If the suspension is continued, the student(s) may appeal to the Senior Chair (or delegate) or the Associate Chair (or delegate) of the University Tribunal, who shall hear and decide on the appeal within five days.

E. Sanctions

The following sanctions or combinations of them may be imposed upon students found to have committed an offence under this Code.

In addition, students found to have committed an offence may be placed on conduct probation for a period not to exceed one year, with the provision that one or more of the following sanctions will be applied if the conduct probation is violated:

1. Formal written reprimand
2. Order for restitution, rectification or the payment of damages.
3. A fine or bond for good behaviour not to exceed $500.
4. Requirement of public service work not to exceed 25 hours.
5. Denial of access to specified services, activities or facilities of the University for a period of up to one year.

The following two sanctions, which would directly affect a student’s registration in a program, may be imposed only where it has been determined that the offence committed

of such a serious nature that the student’s continued registration threatens the academic function of the University of Toronto or of any of its divisions or the ability of other students to continue their programs of study. Where the sanction of suspension and/or expulsion has been imposed on a student, the Vice-President & Provost (or delegate) shall have the power to record that sanction on the student’s academic record and transcript for a length of time as he or she considers appropriate.

A sanction of suspension shall be recorded on the student’s academic record and transcript for a period of five years. The following wording shall be used: “Suspension from the University for reasons of non-academic misconduct for a period of [length of suspension], [date].” A sanction of expulsion shall be permanently recorded on a student’s academic record and transcript. The following wording shall be used: “Expelled from the University of Toronto for reasons of non-academic misconduct, [date].”

6. Suspension from registration in any course or program of a division or any divisions for a period of up to one year.
7. Recommendation for expulsion from the University.

Memorandum on the Maintenance and Use of the Records of Non-Academic Discipline Proceedings

1. Keeping of Records

Records must be kept in all cases that have been the subject of an investigation and have resulted in the imposition of a sanction, whether or not the student has waived the right to a hearing. Likewise, a Record of the Proceedings of Non-Academic Discipline Proceedings must be kept in all cases that have proceeded to a Hearing.

2. Composition of Record

The Record of Proceedings on Non-Academic Discipline cases shall comprise:

(a) the written report of the Investigating Officers, if any;
(b) the Notice of Hearing (including the offence charged);
(c) documentary evidence filed at a Hearing;
(d) the decision of the Hearing Officer and the reasons therefor.
3. Storage of Records
The Records of the Proceedings of Non-Academic Discipline Hearings shall be stored in the office of the head of the division.

4. Records of the Investigating Officer
Where the investigation has not proceeded to a Hearing, the records and notes of the Investigating Officer shall be kept and may have a hearing on the decision to prosecute in a future case. Where a sanction has been imposed, a copy of the letter of sanction to the student shall be filed, in confidence, with the Judicial Affairs Officer, Office of the Governing Council.

5. Publishing of Records
Decisions of the Hearing Officer, including the name of the respondent, the offence and the sanction, shall be reported to the Vice-President & Provost, who shall convey the information, anonymously and in statistical form, annually to the University Appeals Board. A Hearing Officer or the Discipline Appeals Board may recommend to the Vice-President & Provost that the nature of the offence and the sanction be published in the University newspapers. Where circumstances warrant, they may also order the publication of the name of the person found to have committed the offence. The Vice-President & Provost shall have the discretion to withhold publication of the name of the person.

6. Use of Records
Records of previous convictions may be taken into account in imposing a sanction.

7. Tape Recordings of Hearings
The Hearing Officer shall ensure that a tape recording is made of all sessions of a Hearing. Such tape recordings shall be kept by the head of the division for at least 90 days after notice has been given of the decision of the hearing.

Memorandum of Procedures for Hearings Arising from the Code of Student Conduct

1. Complaints about the alleged commission of any offence under the Code of Student Conduct may be made in writing by any person ("the complainant") to the principal, dean or director ("the head") of the college, faculty or school ("the division") in which the student or students who are alleged to have committed the offence ("the accused") are or were registered.

2. The head of the division shall consider the written complaint and shall determine if the conduct complained of appears to fall under the Code of Student Conduct. If it does not appear to fall under the Code of Student Conduct, the head may take whatever other action he or she deems appropriate to the circumstances, including communication to the complainant of the conclusion he or she has drawn. Where a student's conduct comes to light after a student has left the University, the head of the division may decide to proceed, if the seriousness of the allegation warrants such action.

3. If the head of the division considers that the conduct complained of appears to fall under the Code of Student Conduct, he may request the Investigating Officer to conduct a discrete investigation of the case and to make a report to him or her.

4. If, on the basis of the report of the Investigating Officer, the head of the division concludes that the accused may have committed an offence under the Code of Student Conduct, he or she shall have the discretion to request that a hearing take place to determine whether the accused has committed the offence alleged.

5. To initiate a hearing, the head of the division shall give written notice to the accused indicating the nature of the complaint, the offence alleged and setting a date, time and place for a hearing to provide an opportunity for the accused to respond to the allegations made. The notice shall indicate that if the accused does not appear at the hearing, the hearing may proceed in the absence of the accused.

6. The hearing will be chaired by the Hearing Officer, who shall not have been involved in the investigation leading up to the decision to request a hearing, and who shall make a decision on the basis of evidence presented at the hearing.

7. Hearings shall be conducted in an informal manner, in accordance with the principles of natural justice, and the Hearing Officer shall not be bound to observe strict legal procedures. Procedural defects will not invalidate the proceedings unless there has been a substantial wrong or denial of natural justice.

8. The parties to the hearing are the head of the division, represented by the Investigating Officer, who may be assisted and represented by legal counsel, and the accused, who may be assisted and represented by another person, who may be a lawyer. Both parties shall be allowed to call, examine and cross-examine witnesses and present evidence and argument.

9. Hearings shall be open to members of the University unless the Hearing Officer decides there is sufficient cause to provide otherwise.

10. The Hearing Officer is not bound to conduct the hearing according to strict rules of evidence. Evidence may be received in written or oral form.

11. The Hearing Officer may take note of matters generally within the knowledge of members of the University community.

12. The accused may waive the right to a hearing under these procedures, in which case the Hearing Officer will rule on whether the accused has committed the offence alleged and impose one or more of the sanctions listed in the Code of Student Conduct.

13. After a hearing, the Hearing Officer shall rule on the complaint and, where the Hearing Officer finds that the accused has committed an offence, shall impose one or more of the sanctions listed in the Code of Student Conduct and give reasons for the decision. A copy of the letter to the student imposing the sanction shall be copied, in confidence, to the Judicial Affairs Officer, Office of the Governing Council.

14. The onus of proof is on the head of the division, who must show on clear and convincing evidence that the accused has committed the offence alleged.

15. Any penalty or remedy shall be stayed pending the outcome of any appeal to the Discipline Appeals Board.
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Turn left on Military Trail, (the first lights South of 401). 
Main Entrance and Drop-Off is on Military Trail, South of Ellesmere Road.

Long Term parking is in UTSC Parking or General Parking 1, North of Ellesmere Road.

Short Term and Visitor Parking is in Lot A, accessed from Main Entrance.
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