## Changes to the Calendar 2010-2011

The following changes have been made to the Calendar since its publication in April 2010.

<table>
<thead>
<tr>
<th>Page Number</th>
<th>Changes</th>
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</table>
| 8           | Senior Administrators of the University of Toronto Scarborough  
Change Vice-Dean, Undergraduate entry to:  
Acting Vice-Dean, Undergraduate  
• A. Schmuckler, B.A., Ph.D.  
Change the name associated with the Dean of Student Affairs to TBA.  
Add:  
Executive Director, Development and Alumni Relations  
• Zinaty, B.A., M.B.A.  
Add:  
Chair, Department of English  
• Bolus-Reichert, M.A., Ph.D.  
Add:  
Chair, Department of Philosophy  
• Kremer, B.Sc., Ph.D.  
Change the Chair of Physical & Environmental Sciences to: W.A. Gough, B.Sc., M.Sc., Ph.D.  
Change the Chair, Department of Social Sciences to: M.Hoffman, B.S., Ph.D. |
| 9           | U of T Scarborough Departmental Structure  
Add:  
Department of English:  
English  
Department of Philosophy:  
Philosophy  
Remove English and Philosophy from the Department of Humanities entry. |
| 33          | **ANTB20H**  
Add ANT204H to the exclusions |
| 37          | **ANTD15H** prerequisite  
Change **ANTC30H** to **ANTC33H**. |
| 39          | Specialist (Joint) Program in Applied Microbiology  
Delete the note at the end of the Mathematics requirement. |
| 45          | Specialist Program in Biodiversity, Ecology and Evolution  
Delete the note at the end of the Mathematics requirement. |
| 47          | Specialist Program in Cell and Molecular Biology  
Delete the note at the end of the Mathematics requirement. |
<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
<th>Changes</th>
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<tbody>
<tr>
<td>49</td>
<td>Specialist (Co-operative) Program in Cell and Molecular Biology</td>
<td>Delete the note at the end of the Mathematics requirement.</td>
</tr>
<tr>
<td>51</td>
<td>Specialist Program in Human Biology - Program Requirements</td>
<td>Delete &quot;including at least 6.0 credits at the C- or D-level of which at least 1.0 must be at the D-level&quot; from the first sentence. Delete the note at the end of the Introductory Calculus requirement.</td>
</tr>
<tr>
<td>52</td>
<td>Specialist Program in Human Biology - D-level Biology courses</td>
<td>Change BIOD34H to BIOD43H.</td>
</tr>
<tr>
<td>52</td>
<td>Specialist Program in Integrative Biology</td>
<td>Delete the note at the end of the Mathematics requirement.</td>
</tr>
<tr>
<td>56</td>
<td>Major Program in Biology</td>
<td>Delete the note at the end of the Mathematics or Statistics requirement.</td>
</tr>
<tr>
<td>66</td>
<td>Specialist Program in Biological Chemistry (last requirement)</td>
<td>Change: &quot;...(1.5 if BIOD95H, CHMD91H or PSCD10H...)&quot; To: &quot;...(1.5 if BIOD95H, CHMD91H, CHMD92H or PSCD10H...)&quot;</td>
</tr>
<tr>
<td>67</td>
<td>Specialist Program in Chemistry (last requirement)</td>
<td>Change to: 1.0 full credit chosen from: CHMD90Y Directed Research CHMD91H Directed Research or CHMD92H Advanced Organic Chemistry Lab Course PSCD10H Physical Sciences Project</td>
</tr>
<tr>
<td>76</td>
<td>Minor Program in Classical Studies</td>
<td>Requirement 5 - English courses: Change ENGB38H to ENGB30H.</td>
</tr>
<tr>
<td>77</td>
<td>CLAC05H</td>
<td>Add Same as IEEC52H. to the course description. Add IEEC52H to the exclusions.</td>
</tr>
<tr>
<td>77</td>
<td>CLAC22H</td>
<td>Add: Breadth requirement: History, Philosophy &amp; Cultural Studies.</td>
</tr>
<tr>
<td>94</td>
<td>Major Program in Diaspora &amp; Transnational Studies</td>
<td>Group B (Social Sciences) courses Change title of POLC96H to: State Formation and Authoritarianism in the Middle East Change title of POLC97H to: Protest Politics in the Middle East</td>
</tr>
<tr>
<td>101</td>
<td>ECMC11H</td>
<td>Add ECO374H &amp; ECO375H to the exclusions.</td>
</tr>
<tr>
<td>105</td>
<td>Specialist Program in English - Requirement 6</td>
<td>Change &quot;Among the 10.5 credits...&quot; to &quot;Among the 12.0 credits...&quot;.</td>
</tr>
<tr>
<td>114</td>
<td>ENGD26Y, ENGD27H &amp; ENGD28H</td>
<td>Change ENGC60H in prerequisite to ENGC86H and ENGC61H to ENGC87H.</td>
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</tr>
</tbody>
</table>
| 118  | Specialist Program in Environmental Biology  
Third & Fourth Year requirements: Change **EESD09Y** to **EESD09H** and **EESD10Y** to **EESD10H**. |
| 130  | Specialist Program in French - Program Requirements  
Change introductory sentence to: "This program requires 12.0 credits as follows including at least 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level:" |
| 136  | **FRED49H**  
Add **(FREC49H)** to the exclusions. |
| 142  | Specialist Program in Global Asia Studies  
Add the new courses **GASB33H, GASB34H, GASB35H, GASC33H, GASC34H & GASC43H** to the options in Requirement 2. |
| 143  | Major Program in Global Asia Studies  
Add the new courses **GASB33H, GASB34H, GASB35H, GASC33H, GASC34H & GASC43H** to the options in Requirement 2. |
| 144  | Minor Program in Global Asia Studies  
Add the new courses **GASB33H, GASB34H, GASB35H, GASC33H, GASC34H & GASC43H** to the options in Requirement 2. |
| 145  | **NEW COURSES**  
**GASB33H** Global Buddhism in Historical and Contemporary Societies  
**GASB34H** Culture and Society in Classical South Asia  
**GASB35H** The Japanese Empire: A Short History  
**GASC33H** Critical Perspectives in Global Buddhism  
**GASC34H** Texts and Learning in Classical South Asia |
| 145  | **GASC41H**  
Add *Same as IEEC21H*. to the course description.  
Add **IEEC21H** to the exclusions. |
| 146  | **NEW COURSE**  
**GASC43H** Colonialisms and Cultures in Modern East Asia |
| 146  | **GASC51H**  
Add: Breadth requirement: History, Philosophy & Cultural Studies. |
| 147  | Major Program in Health Studies, Requirement 2, Note  
Change **HLTC01H** to **HLTA10H**. |
| 152  | Major Program in History - Requirement 1  
Change "three C- or D-level courses" to "3.0 credits at the C- or D-level". |
| 155  | **HISC01H**  
Delete **(HISB01H)** from the exclusions. |
| 155  | **HISC03H**  
Add *Same as IEEC03H*. to the course description.  
Add **IEEC03H** to the exclusions. |
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| 156  | **HISC60H**  
Add *Same as IEEC51H.* to the course description.  
Add *IEEC51H* to the exclusions. |
| 156  | **HISC65H**  
Add: Breadth requirement: History, Philosophy & Cultural Studies. |
| 164  | International Development Studies - Guidelines for first year course selection  
Change *IEES10H* to *IEESA01H.* |
| 165  | Specialist Program in International Development Studies (B.A.)  
*Economics of Development*  
Change *IDSC05H* to *IDSC12H*  
*Politics and Policy*  
Change title of *POLB81H* to: Global Issues and Governance  
Change title of *POLC96H* to: State Formation and Authoritarianism in the Middle East  
Change title of *POLC97H* to: Protest Politics in the Middle East |
| 167  | Specialist (Co-operative) Program in International Development Studies (B.A.)  
Program requirements:  
Change the number of credits required for the program from 15.5 to 15.0. |
| 169  | **IDSC12H**  
| 170  | Major Program in Intersections, Exchanges, Encounters in the Humanities  
Program Admission - Delete requirement for a letter of recommendation. |
| 171  | Major Program in Intersections, Exchanges, Encounters in the Humanities  
Revised program requirements.  
Revised titles for some of the Themes, Perspectives & Exchanges courses. |
| 171  | **IEEB01H & IEEB02H**  
Course description: Delete: "Required course for all IEE majors."  
Prerequisite: Delete: "& restricted to IEE majors". |
| 172  | **IEEB03H**  
Course description: Delete: "Required course for all IEE majors."  
Prerequisite: Delete: "& restricted to IEE majors". |
| 172  | **IEEC01H**  
Corequisite: Delete: "& restricted to IEE majors". |
| 172  | **IEEC03H , IEEC21H , IEEC31H**  
Major change in courses |
| 172  | **IEEC22H**  
Change corequisite for IEE students to: At least one of *IEEB01H, IEEB02H* or *IEEB03H*. |
| 172  | **DELETED COURSE**  
**IEEC04H** |
| 172  | **IEEC11H & IEEC12H**  
Change corequisite to: For IEE students, at least one of *IEEB01H, IEEB02H* or
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<td>173</td>
<td>IEEC32H, IEEC51H, IEEC52H</td>
<td>Major change in courses</td>
</tr>
<tr>
<td>173</td>
<td>IEEC41H, IEEC71H</td>
<td>Change corequisite for IEE students to: At least one of IEEB01H, IEEB02H or IEEB03H.</td>
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<tr>
<td>173</td>
<td><strong>DELETED COURSES</strong></td>
<td></td>
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<tr>
<td>174</td>
<td>IEEC81H</td>
<td>Major change in course</td>
</tr>
<tr>
<td>174</td>
<td><strong>DELETED COURSE</strong></td>
<td></td>
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<tr>
<td>186</td>
<td>LIND29H</td>
<td>Change prerequisite to: [LINB20H &amp; one sociolinguistics course at the C-level (e.g. LINC27H, LINC28H or LINC30H)] or permission of instructor.</td>
</tr>
<tr>
<td>207</td>
<td>Specialist Program in Mathematics &amp; Its Applications - Computational Physical Sciences stream</td>
<td>Requirement 3: Change MATS34H to MATD34H.</td>
</tr>
<tr>
<td>227</td>
<td><strong>NEW COURSE</strong></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>PHLC51H</td>
<td>Add MATC09H to the exclusions.</td>
</tr>
<tr>
<td>234</td>
<td>Specialist Program in Natural Sciences</td>
<td>Change the entry to: &quot;This program is currently under review and new enrolment in it has been suspended indefinitely. Degree students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar.&quot;</td>
</tr>
<tr>
<td>235</td>
<td>Major Program in Physical Sciences</td>
<td>Change the entry to: &quot;This program is currently under review and new enrolment in it has been suspended until 2011/12. Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should speak to the program supervisor.&quot;</td>
</tr>
</tbody>
</table>
| 236  | Specialist Program in Physics and Its Applications | Change the entry to: "This program is currently under review and new enrolment in it has been
suspended until 2011/12. Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should speak to the program supervisor."

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<thead>
<tr>
<th>237</th>
<th>Major Program in Astrophysics and Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change the entry to: &quot;This program is currently under review and new enrolment in it has been suspended until 2011/12. Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should speak to the program supervisor.&quot;</td>
</tr>
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<tr>
<th>239</th>
<th>Specialist Program in Political Science Requirement 4</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Change title of POLB81H to: Global Issues and Governance</td>
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<tr>
<th>240</th>
<th>Major Program in Political Science Requirement 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change title of POLB81H to: Global Issues and Governance</td>
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</tbody>
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<tr>
<th>240</th>
<th>Major Program in Public Policy - Requirement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change: &quot;...at least 0.5 must be at the C-level&quot; to &quot;...at least 0.5 must be at the C- or D-level&quot;</td>
</tr>
<tr>
<td></td>
<td>Add POLB11H, SOCD23H &amp; SOCD31H to the options.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>243</th>
<th><strong>NEW COURSE</strong> POLB11H Statistics for Politics and Public Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title &amp; description change.</td>
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</table>

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<thead>
<tr>
<th>244</th>
<th><strong>NEW COURSE</strong> POLC65H Political Strategy and Policy Entrepreneurship</th>
</tr>
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<tr>
<td></td>
<td>Title &amp; description change.</td>
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</table>

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<tr>
<th>246</th>
<th>POLC97H</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title &amp; description change.</td>
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<thead>
<tr>
<th>246</th>
<th>POLD41H</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change title to: Advanced Topics in Politics.</td>
</tr>
<tr>
<td></td>
<td>Add &quot;&amp; permission on instructor&quot; to the prerequisites.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>283</th>
<th>VPHA46H</th>
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<tbody>
<tr>
<td></td>
<td>Add FAH105H to the exclusions.</td>
</tr>
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<tr>
<th>285</th>
<th>VPHB74H</th>
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<tbody>
<tr>
<td></td>
<td>Add FAH274H to the exclusions.</td>
</tr>
</tbody>
</table>

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<tr>
<th>296</th>
<th>VPMC84H</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Add Same as IEEC81H. to the course description.</td>
</tr>
<tr>
<td></td>
<td>Add IEEC81H to the exclusions.</td>
</tr>
</tbody>
</table>

<p>| 303 | Minor Program in Theatre and Performance Studies Requirement 2 - Note: Change VPDB14H to ENGC07H. |</p>
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<tr>
<td>309</td>
<td>WSTC19H</td>
<td>Add <em>Same as IEEC32H.</em> to the course description. Add <em>IEEC32H</em> to the exclusions.</td>
</tr>
<tr>
<td>310</td>
<td>WSTC21H</td>
<td>Add <em>Same as IEEC31H.</em> to the course description. Add <em>IEEC31H</em> to the exclusions.</td>
</tr>
<tr>
<td>329</td>
<td>C. Marks and Grades- #2 &amp; 4</td>
<td><em>Copies of final examination:</em> [ Add the Note to: Some departments do not permit copying of final examinations for particular courses. In these cases, students will be given procedures for alternate arrangements via eService. Appealing assigned grades: 2nd paragraph Change &quot;obtaining&quot; to &quot;reviewing&quot;.</td>
</tr>
<tr>
<td>329</td>
<td>D. Petitions: 2nd paragraph</td>
<td>Add the following to at the end of the paragraph: (three business days for requests to add a course late.)</td>
</tr>
<tr>
<td>330</td>
<td>D. Petitions - #4</td>
<td>Delete the last sentence from the 2nd bullet. Add a 3rd bullet: ✽ support your argument with evidence or documentation submitted with the petition as well as a copy of the final examination (when available). See section on &quot;Copies of final examinations&quot; above.</td>
</tr>
<tr>
<td>331</td>
<td>Special consideration, petitions and appeals - F. Appeals</td>
<td>Add: 1. You may appeal denial of a petition to the Sub-committee on Standing. Such appeals must be commenced no later than ninety days after the decision being appealed has been posted in eService. An appeal is commenced by filing a Notice of Appeal on the form provided for this purpose through the Office of the Registrar, Room AA142. You will be notified, via eService, as to when your appeal will be heard. Change the original 1. to 2. and change the first &amp; second sentences sentence to: You may appeal a decision of the Sub-committee on Standing to the Sub-committee on Academic Appeals. Such appeals must be commenced no later than ninety days after the decision being appealed has been communicated to you via eService. Change the original 2. to 3. and make &quot;Full information...(Telephone: 416-946-7663)&quot; part of 3.</td>
</tr>
<tr>
<td>105</td>
<td>Specialist Program In English: Program Requirements</td>
<td>Delete: Among the 12.0 credits required for the Specialist, at least 3 full credits must be at the C-level and 1 full credit at the D-level</td>
</tr>
<tr>
<td>257</td>
<td>PSYB32H : Exclusion</td>
<td>Change to: PSY240H, PSY340H</td>
</tr>
<tr>
<td>257</td>
<td>PSYB51H : Exclusion</td>
<td>Change to: PSY280H</td>
</tr>
<tr>
<td>258</td>
<td>PSYC12H : Exclusion</td>
<td>Change to: PSY320H, PSY322H</td>
</tr>
<tr>
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<tr>
<td>258</td>
<td>PSYC18H</td>
<td>Exclusion Change to: PSY494H, (PSY394H)</td>
</tr>
<tr>
<td>259</td>
<td>PSYC25H</td>
<td>Exclusion Change to: JLP315H</td>
</tr>
<tr>
<td>259</td>
<td>PSYC31H</td>
<td>Exclusion Change to: PSYC32, PSY393H</td>
</tr>
<tr>
<td>259</td>
<td>PSYC35H</td>
<td>Exclusion Change to: PSY337H <strong>remove PSY339H exclusion</strong></td>
</tr>
<tr>
<td>259</td>
<td>PSYC36H</td>
<td>Exclusion Change to: PSY343H</td>
</tr>
<tr>
<td>260</td>
<td>PSYC39H</td>
<td>Exclusion Change to: PSYC53H, PSY328H, PSY344H</td>
</tr>
<tr>
<td>260</td>
<td>PSYC55H</td>
<td>Exclusion Change to: PSY493H, (PSY393H)</td>
</tr>
<tr>
<td>260</td>
<td>PSYC58H</td>
<td>Exclusion Change to: PSY379H</td>
</tr>
<tr>
<td>260</td>
<td>PSYC85H</td>
<td>Exclusion Change to: PSY450H, (PSY300H)</td>
</tr>
<tr>
<td>261</td>
<td>PSYD17H</td>
<td>Exclusion Change to: PSY473H, (PSY373H)</td>
</tr>
<tr>
<td>217</td>
<td>NROD60H</td>
<td>Exclusion Change to: <strong>remove PSY390 exclusion</strong></td>
</tr>
<tr>
<td>217</td>
<td>MATB44H</td>
<td>Corequisite Remove: MATB24H as a corequisite</td>
</tr>
<tr>
<td>119</td>
<td>Specialist Program in Environmental Geosciences Change Supervisor Information to: Maria Dittrich</td>
<td></td>
</tr>
<tr>
<td>117</td>
<td>Specialist Program in Environmental Biology Change Supervisor Information to: Marney Isaac</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>ENGB60H</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
<tr>
<td>108</td>
<td>ENGB61H</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
<tr>
<td>113</td>
<td>ENGC86H</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
<tr>
<td>113</td>
<td>ENGC87H</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
<tr>
<td>116</td>
<td>ENGD97H / ENGD99H</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
<tr>
<td>116</td>
<td>ENGD98Y</td>
<td>Office Room Number Have HW525A replaced with HW431</td>
</tr>
</tbody>
</table>
Breadth Requirement

Reference to "categories 3 and 5" and "categories 1 and/or 2" in the last paragraph are meant to read "categories c and e" and "categories a and/or b" respectively.

Major Program in Statistics
Change Supervisor Information to: Mahinda Samarakoon

Minor Program in Statistics
Change Supervisor Information to: Mahinda Samarakoon

Major Program in Theatre and Performance Studies
Change email to: taps-program-supervisor@utsc.utoronto.ca

Minor Program in Theatre and Performance Studies
Change email to: taps-program-supervisor@utsc.utoronto.ca

F. Appeals
Replace this:

1. You may appeal denial of a petition to the Sub-committee on Standing. Such appeals must be commenced no later than ninety days after the decision being appealed has been posted in eService. An appeal is commenced by filing a Notice of Appeal on the form provided for this purpose through the Office of the Registrar, Room AA142. You will be notified, via eService, as to when your appeal will be heard.

2. You may appeal a decision of the Sub-committee on Standing to the Academic Appeals Committee of Governing Council. Such appeals must be commenced no later than ninety days after the decision being appealed has been communicated to you via eService. An appeal is commenced by filing a Notice of Appeal to the Director or Coordinator of Appeals, Discipline and Faculty Grievances on the form provided for this purpose. The Coordinator, Appeals, Discipline and Faculty Grievances is responsible for managing the administration of the Academic Appeals Committee.

3. Full information may be obtained from:
Office of Appeals, Discipline and Faculty Grievances
Office of the Governing Council
Room 106, Simcoe Hall
St. George Campus (Telephone: 416-946-7663)

With this:

The Registrar (or designate) has adjudicatory power over petitions. Students who are not satisfied with the decision made by the Registrar (or designate) on a petition may appeal the decision to the Sub-committee on Standing. Such appeals must be commenced no later than ninety days after the decision being appealed has been posted in eService. An appeal is commenced by filing a Notice of Appeal on the form provided for this purpose through the Office of the Registrar, Room AA142. You will be notified, via eService, as to when your appeal will be heard.

Students, who have had an appeal to the Sub-committee on Standing denied, may appeal the decision to the Sub-committee on Academic Appeals. You must file a
Notice of Appeal on the form provided for this purpose by the Secretary to the Committees of Council & Academic Integrity Officer, Room AA433, no later than ninety days after the decision being appealed has been communicated to the student in writing. You will be informed, in writing, of the Committee's decision.

Students who are not satisfied with the decision made by the Sub-committee on Academic Appeals may submit an appeal to the Academic Appeals Committee of Governing Council. You must file a Notice of Appeal to the Office of the Governing Council; Judicial Affairs Office on the form provided for this purpose no later ninety days after the decision being appealed has been communicated to the student in writing. The normal time for a hearing and response at this level of appeal may extend from several months to almost a year.

For full information contact:
The Academic Appeals Committee of the Governing Council
University of Toronto
Simcoe Hall, Room 106
27 King's College Circle
Toronto, ON M5S 1A1
Telephone: 416-978-6576

Published Wednesday November 3rd, 2010    Section last updated Wed Nov 3, 2010
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Calendar

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


2010/2011

1265 Military Trail, Toronto, Ontario, Canada, M1C 1A4
www.ubc.utoronto.ca
GREETINGS FROM THE PRINCIPAL

Welcome to the 2010/11 academic year at U of T Scarborough (UTSC). Our campus is experiencing a strong period of growth and renewal as we focus on our role as a regional comprehensive university. As part of the University of Toronto's tri-campus system, we are recognized for our research, teaching and for our ability to connect students to the workforce through a strong experiential learning platform.

New and emerging areas of study at the undergraduate and graduate level are enhancing our academic offerings and responding to the needs of our students. Unique Masters and PhD programs are also being developed in particular areas in science, the environment, humanities and business. We continue to pursue excellence inside and outside the classroom, lab, studio and lecture hall. As a result, many of our programs are recognized here at home and around the world.

We offer the University’s only formal co-operative programs including the highly sought-after Bachelor of Business Administration degree. Our joint programs with Centennial College address the value placed on blending theory and practice. The Concurrent Teacher Education Program (CTEP) was developed in collaboration with the Ontario Institute for Studies in Education (OISE) at U of T and provides a direct route to becoming a school teacher in the fields of Chemistry, Mathematics, Physics and French. We are firmly committed to creating a student experience for you that will be personally and professionally fulfilling. We’re adding faculty, addressing space shortages and have great plans for new buildings and facilities that will further stimulate lifelong learning here.

The $78 million Instructional Centre Complex will be a welcome addition to our learning space when it opens in 2011 on the northern area of our campus. It will enhance our academic space by 25 per cent and is a strong investment in the student experience. The Pan American Games to be held in Toronto in 2015 provides a tremendous opportunity for UTSC to offer improved athletics and wellness space on a world-class scale.

Our campus is thriving and establishing itself as a centre for intellectual, cultural and scholastic exchange. You are part of a transformative time in the life of UTSC. Take advantage of the many opportunities that are being created for you. I trust your time with us will be richly rewarding.

Best wishes for a successful year,

Franco J. Vaccarino, Ph.D.
Principal, University of Toronto Scarborough
Vice President, University of Toronto
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For updates to this Calendar, check www.utsc.utoronto.ca/calendar. Please note that not all courses listed in this Calendar are offered every year. For course timetables, visit www.utsc.utoronto.ca/timetable.
Statement of Institutional Purpose

Below is an extract of the University of Toronto’s Statement of Institutional Purpose. To see the statement in its entirety, please refer to Governing Council website at: http://www.governingcouncil.utoronto.ca/policies.htm.

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 of its abilities its fundamental mandates of 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 ongoing 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: Sexual Harassment, its Employment Equity Policy and the Human Rights Code of the Province of Ontario.

Important Notices

1. Changes in Programs of Study (Subject Pasts) and/or Courses
   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 not, however, be liable for any loss, damages, or other expenses that such changes might cause.
   For each program of study offered by the University through the Faculty, the courses necessary to complete the minimum requirements of the program will be made available annually. We must, however, reserve the right otherwise to change the content of courses, instructors and instructional assignments, enrolment limitations, prerequisites and corequisites, grading policies, requirements for promotion and timetables without prior notice.

2. Regulations and Policies
   As members of the University of Toronto community, students assume certain responsibilities and are guaranteed certain rights and freedoms.
   The University has several policies that are approved by the Governing Council and which apply to all students. Each student must become familiar with the policies. The University will assume that he or she has done so. The rules and regulations of the Faculty are listed in this Calendar. In applying to the Faculty, the student assumes certain responsibilities to the University and the Faculty and, if admitted and registered, shall be subject to all rules, regulations and policies cited in the Calendar, as amended from time to time.
   All University policies can be found at: http://www.governingcouncil.utoronto.ca/policies.htm
   Those which are of particular importance to students are:
Important Notices 5

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

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

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 their 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, damage, or other expense that such limitations or withdrawals might cause.

4. Copyright in Instructional Settings
If a student wishes to tape-record, audio-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. Note: Specific tuition and fees information can be found at www.utoronto.ca

7. Notice of Collection of Personal Information
The University of Toronto respects your privacy. Personal information that you provide to the University is collected pursuant to section 24(1) of the University of Toronto Act, 1971. It is collected for the purpose of administering admission, registration, academic programs, university-related student activities, activities of student societies, financial assistance and awards, graduation and university advancement, and for the purpose of statistical reporting to government agencies. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act. If you have questions, please refer to www.uri.ca or contact the University Freedom of Information and Protection of Privacy Coordinator at 416.946.7380, Murrinich Building, Room 201, 12 Queen’s Park Crescent West, Toronto, ON, MSS 1A8.

An expanded version of this Notice can be found at http://www.utoronto.ca/policy/nocs.htm

8. Separate Calendars are published by the Faculty of Arts and Science and by the University of Toronto Mississauga. Students are reminded that the University of Toronto Scarborough is a separate faculty of the University and that rules governing 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 and 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 the calendar, including any rule or regulation. 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 Quick Links at www.utc.utoronto.ca for the most up-to-date copy of this Calendar. You will also find any amendments to the Calendar posted there.

Please note that, as of 2010/11, the University of Toronto Scarborough plans to discontinue its practice of giving a hard copy of the Calendar to returning students. Hard copies will continue to be made available to new students.

11. ACADEMIC OFFENCES ARE A SERIOUS MATTER. See the Code of Behaviour on Academic Matters at http://www.governingscouncil.utoronto.ca/policies.htm

12. Class attendance
Class attendance is an important aspect of university studies. Though it is not mandatory, students are likely to place themselves at a distinct disadvantage if they do not attend. They cannot expect any special consideration on the grounds of non-attendance. In particular, newly admitted students who are unable to attend during the first two weeks of classes are strongly advised to consider waiting until a future session before beginning their studies. (New students who decide to wait until a future session should contact Admissions and Student Recruitment to arrange a formal deferral of the Offer of Admission.)

13. Official correspondence
Students are responsible for ensuring that ROSI contains a valid postal address and a university-issued email address (see the Policy on Official Correspondence with Students at http://www.governingscouncil.utoronto.ca/policies.htm).

Note: Email is the University’s primary method of communicating with students regarding registration, ROSI notices, student accounts and other important business. All U of T students are provided with a campus email address through the UTORemail service. Setting up a UTORemail account is mandatory for all University of Toronto students.


14. Procedures for rescheduling exams cancelled because of winter weather
If the campus is closed because of inclement weather for a day or part of a day during the December exam period, all missed examinations will be rescheduled on the first Saturday of the Winter term. For each rescheduled exam, the time and room location will be the same as for the originally scheduled examination. A notice to this effect will be posted on the UTSC homepage and the campus Snow Line.

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. Please refer to the Registrar's Office website at www.utsc.utoronto.ca/registrar for other important registration, financial and petition deadlines.

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

2010 Summer Session

Friday, April 30
Last day to pay fees.

Monday, May 3
Classes begin in Y & F courses.

Sunday, May 9
Last day for students writing deferred examinations in August to adjust their current course load.

Sunday, May 16
Last day to add Y and F courses.

Monday, May 24
Victoria Day → University closed.

Monday, June 7
Last day to drop F courses without academic penalty and have them removed from the transcript.

Tuesday, June 8 - Monday, June 14
Last week of classes in F courses. (Final examinations will be held in a class period during this week.)

Wednesday, June 16
Last week to drop UTSC F courses and have them remain on the transcript with a grade of LWD indicating withdrawal without academic penalty. Requests must be submitted before the final exam is held. 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. (Note: See http://www.utoronto.ca/registrar for dates for courses on other campuses.)

Monday, June 14
Last day for submission of term assignments in F courses.

Tuesday, June 15
Classes begin in S courses.

Tuesday, June 29 - Friday, July 2
Reading Week. (Classes continue on other campuses.)

Thursday, July 1
Canada Day → University closed.

Friday, July 2
Presidential holiday → University closed.

Monday, July 5
Classes resume in Y & S courses. Last day to add S courses. (Note: See http://www.utoronto.ca/registrar for exceptions made for courses on other campuses.)

Sunday, July 11
Last day to drop Y courses without academic penalty and have them removed from the transcript.

Friday, July 30
Last day of classes and last day for submission of term assignments in Y & S courses.

Civic holiday → University closed.

Last day to confirm intention to graduate at the 2010 Fall Convocation.

Study Break.

Tuesday, August 3
2010 Winter deferred examinations.

Friday, August 6
Last day to drop Y & S courses and have them remain on the transcript with a grade of LWD indicating withdrawal without academic penalty.

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. (Note: See http://www.utoronto.ca/registrar for dates for courses on other campuses.)

Final examinations in Y & S courses.

Saturday, August 7 - Friday, August 20
2010 Fall Convocation. Check “Ceremony Dates” at www.convocation.utoronto.ca for the date of the UTSC ceremony.

November TBA
2010 Fall Convocation.
2010 Fall Session
Tuesday, August 17
Monday, September 6
Monday, September 13
Sunday, September 19
Sunday, September 26
Monday, October 11
Sunday, November 21

Monday, November 29
Monday, December 6

Tuesday, December 7
Wednesday, December 8
Thursday, December 9
Tuesday, December 21
Wednesday, December 22
Sunday, January 2
Tuesday, February 15

Last day to pay fees.
Labour Day → University closed.
Classes begin in F and Y courses.
Last day for students writing deferred examinations in December to adjust their current course load.
Last day to add F and Y courses.
Thanksgiving Day → University closed.
Last day to drop F courses without academic penalty and have them removed from the transcript.
Last day for submission of term assignments in F courses.
Last day of classes in F courses.

Study Break.

2010 Summer deferred examinations.

Last day to drop UTSC F courses and have them remain on the transcript with a grade of "W" indicating withdrawal without academic penalty.
After this date grades are recorded on transcripts whether course work is completed or not (with a "W" assigned for incomplete work) and they are calculated into GPAs.
(Note: See http://www.utsa.utoronto.ca/registrar for dates for courses on other campuses.)
Final examinations in F courses.

December break → University closed.

Last day to confirm intention to graduate at the 2011 Spring Convocation.

2011 Winter Session
Wednesday, December 1
Monday, January 10
Sunday, January 16
Sunday, January 23
Tuesday, February 12
Monday, February 21

Monday, February 21
Friday, February 25
Monday, February 28
Sunday, March 27
Friday, April 8
Saturday, April 9
Monday, April 11
Saturday, April 16
Sunday, April 17
Monday, April 18

Final examinations in S and Y courses.
Last day of classes in S and Y courses.

Friday, April 8
Saturday, April 9
Monday, April 11

Additional comments:

Final examinations in S and Y courses.

2010 Fall deferred examinations.

Last day to drop UTSC S and Y courses and have them remain on the transcript with a grade of "W" indicating withdrawal without academic penalty.
After this date grades are recorded on transcripts whether course work is completed or not (with a "W" assigned for incomplete work) and they are calculated into GPAs.
(Note: See http://www.utsa.utoronto.ca/registrar for dates for courses on other campuses.)
Final examinations in S and Y courses.

Good Friday → University closed.
Presidential Holiday → University closed.

2011 Spring Convocation. Check "Ceremony Dates" at www.convocation.utoronto.ca for the date of the UTSC ceremonies.
Examination schedules
Examination schedules are posted on the web at http://www.utsb.utoronto.ca/registrar as soon as they are finalized.
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 (including deferred examinations) and term tests 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.

Officials of the University of Toronto
A list of officials of the University of Toronto can be found at: http://www.governingcouncil.utoronto.ca/AssetFactory.aspx?id=3894

Senior Administrators of the University of Toronto Scarborough
Principal (U of T Scarborough) & Vice-President (U of T)
Franco J. Vaccarezza, Ph.D.

Dean & Vice-Principal (Academic)
Rick Halpern, Ph.D.

Vice-Principal, Research
Malcolm M. Campbell, M.A., Ph.D.

Vice-Dean, Undergraduate
John Scherk, B.Sc., M.Sc., Ph.D.

Vice-Dean, Graduate Education & Program Development
W.A. Gough, B.Sc., M.Sc., Ph.D.

Assistant Dean
Lesley Lewis, B.A., M.I.Sc.

Chief Administrative Officer
Ken McLellan, B.A., M.B.A.

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

Chief Strategy Officer
Andrew Artizzzam, B.A., M.B.A.

Interim Registrar & Director of Enrollment Services
Rita Pearsall

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

Chair, Department of Biological Sciences
Greg Vanlerberghe, B.Sc., M.Sc., Ph.D.

Chair, Department of Computer & Mathematical Sciences
Vassos Hadziallaos, B.S.E., Ph.D.

Chair, Department of Humanities

Chair, Department of Management
Michael Knutinsky, S.B., M.Sc., Ph.D.

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

Chair, Department of Psychology
John Basile, B.A., Ph.D.

Chair, Department of Social Sciences
Ted Relph, B.A., M.Phil., Ph.D.
### U of T Scarborough Departmental Structure

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### University of Toronto Scarborough: Past, Present & Future

The University of Toronto (U of T), founded in 1827, has degree-granting authority from the Province of Ontario. It is a member of the Association of Universities and Colleges of Canada, the Association of Commonwealth Universities, and one of only two Canadian members of the Association of American Universities. U of T Scarborough (UTSC) is one of three campuses of U of T (St. George, University of Toronto Mississauga (UTM) are the others).

UTSC was founded in 1964. Campus facilities have continued to expand since inception. 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. In 1990, the West Village residence complex opened, followed by the NSHS/Pediatric Child Care Centre and the Leigha Lee Brownes Studio Theatre.

The growth and expansion of scholarship and research continue at a rapid pace. We now have more than 10,000 students and almost 600 faculty and staff. UTSC continues to attract world-class scholars and has recently strengthened its academic leadership. The Academic Resource Centre, Joan Foley Hall, an apartment style residence, and the Doris McCarthy Gallery opened in 2003. The following year, the Management Building and the Student Centre were opened. In 2005, the Arts and Administration building was opened. The new Science Building was officially opened in 2008. Development is now centred on the North Campus. Cranes hover around the corner of Military Trail and Ellesmere Roads as the Instructional Centre Complex is constructed. It is expected to open in 2011 and will increase our academic space by 25 per cent. Meanwhile, the recent announcement of the Pan American Games, to be hosted by Toronto in 2015, represents a tremendous opportunity for our campus to develop a world-class athletics facility.

In 2002, in recognition of the tri-campus nature of the University, the UTSC Principal became a Vice President of the University as well. Since the summer of 2003, UTSC has operated on a trimester system, with three equal sessions each year. This system enhances opportunities for year-round study. Beginning with three academic divisions (Humanities, Sciences and Social Sciences), the academic portfolio has continued to evolve. In 2007, two new Departments were formed: the Department of Biological Sciences and the Department of Psychology. UTSC currently has seven Departments - Biological Sciences, Computer and Mathematical Sciences, Humanities, Management, Physical and Environmental Sciences, Psychology and Social Sciences. These departments are working diligently to enhance academic offerings and the infrastructure needed to maintain and sustain them.

The campus offers 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. The
Concurrent Teacher Education Program (CTEP) was introduced in 2007. This program draws on the expertise of OISE, 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.

In addition, new and emerging areas of study are being developed at both the undergraduate and graduate level, including new Masters and PhD programs in a range of disciplines. Research is a central component of the core mission of our university. As such, the newly appointed Vice-Principal Research is actively bolstering innovation and the research enterprise at UTSC by enhancing research funding, identifying innovative areas of research, facilitating research operations, focusing on undergraduate and graduate research opportunities and investing in research infrastructure.

Writing at U of T Scarborough

Effective writing is foundational to the academic experience. Good thinking demands good writing; good writing reflects both sound learning 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.

Academic Resources and Student Services

U of T Scarborough Library

Website: http://main.library.utoronto.ca/index.shtml
Library Circulation & Loans
416-287-7482
Library Reference Desk
416-287-7481
Library Information Line
416-287-7500 (pre-recorded information)
Library Research & Instruction
416-287-7499 or 416-287-5665 (appointments)
TCard Office
416-287-5660

Instruction

The expert team of Librarians assists students with their assignments and research. In particular, students may meet with a Librarian to receive personalized research assistance. Classroom and group instruction are also available by appointment.

Library Hours

Hours vary during the term. The Library offers 24 hour service during midterms and exam periods. Please check the website or phone 416-287-7500.

Collections

The Library’s vast array of resources in electronic, print and other formats (maps, slides, CDs, DVDs, films, etc.) support U of T Scarborough’s curriculum and research needs. Many course items, both electronic and print, are available through course reserves. Library materials held at other U of T libraries are just a click away in the Library catalogue.

Study space

Students are invited to use the library for research and study purposes. A variety of study spaces are available to suit your requirements: ubiquitous wireless access, quiet, single study carrels, group tables, group study rooms, ultra quiet study space and media viewing facilities. The Library’s Sun Informatics Commons features over 100 networked workstations providing access to electronic collections held by the University of Toronto Libraries.

T-Card

The TCard Office, located in the Library, issues TCards for faculty and staff, re-issues student TCards, and handles the cash-to-card transactions.
The Centre for Teaching and Learning
Website: http://www.utsc.utoronto.ca/ctl/index.html

CTL General Information  416-287-7504
English Language Development  416-287-7502
Faculty Teaching Consultation  416-287-7660
Facilitated Study Groups  416-287-7504
Educational Technology  416-287-7520
Math & Statistics Learning Centre  416-287-5667
Information Literacy Research Skills & Instruction  416-287-7208
Presentation Skills  416-287-7208
Service Learning  416-287-7557
Teaching Assistant & Graduate Student Support  416-287-4787
Writing Option  416-287-4792
Writing Centre  416-287-7480

The Centre for teaching and learning works with faculty, students, teaching assistants and staff to promote, support and enhance teaching and learning at U of T Scarborough.

For students, CTL addresses a diversity of student needs by supporting the student learning process. This includes instruction in writing (The Writing Centre), information literacy & research skills instruction, presentation skills instruction, quantitative analysis assistance (mathematics, statistics and data interpretation needs) via the Math & Statistics Learning Centre and a wide array of English Language Development programs to strengthen oral and written communication skills. Individual appointments are supplemented with drop-in help sessions, editing clinics, group seminars, workshops and online resources. Summer Learning Institutes assist newly admitted students to make a successful academic transition to U of T Scarborough.

CTL assists faculty with all aspects of course design and implementation, and can include in-course presentations. Core expertise is available for help with (1) Teaching Best Practices, (2) Teaching Assistant Training, (3) Assignment design/implementation/grading strategies in oral and written communication, data analysis, research and information literacy and personal and professional development as a teacher. CTL also supports innovative faculty projects that facilitate improved learning outcomes. Services include faculty orientation programs, portfolio construction assistance, teaching consultations, lunch-time lecture series, teaching grants and awards, publications on teaching and learning, and support for teaching and learning scholarship.

For teaching assistants, CTL provides an annual TA conference, teaching consultations and a program of seminars and workshops that lead to a certificate through the Teaching Assistants Training Program (TATP).

Information & Instructional Technology Services
Website: http://its.utsc.utoronto.ca/

ITS Faculty/Staff Help Desk:  416-287-7618
ITS Student Support Office  416-287-7301

ITS is responsible for information technology and audio visual services at U of T Scarborough. ITS designs and maintains the campus computer network and core IT services, provides campus-wide Help Desk support, advises on customized IT solutions, and supports equipment in electronic classrooms and videoconferencing facilities.

For students, ITS provides network connectivity in student residences and maintains wireless network on campus. ITS administers over 500 public workstations in 10 computing labs and in Informatics Commons. Over 100 computer workstations are available 24/7.

Users can also find computing kiosks dispersed throughout the campus for an easy access to information.

ITS staff are members of U of T Scarborough’s Instructional Technology Group—a team of web developers and multimedia specialists that supports instructional technology and Web development on the campus, including U of T Scarborough’s intranet (http://intranet.utsc.utoronto.ca).

Office of Student Affairs
Student Affairs 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 and Wellness Centre
- Dept. of Student Life & International Student Centre
- Physical Education and Athletics
- Office of Student Affairs
- Student Housing and Residence Life

The Office of Student Affairs provides administrative oversight and accountability to all departments within the division. It upholds the values of the community held mission statement and 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 & 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. The Office also provides specialized IT support to departments and some student initiatives. The Dean of
Academic Resources and Student Services

Student Affairs is a Notary Public and provides these services free of charge to members of the UTSC community. The Dean also chairs the Academic Student Travel & Conference Fund. The Dean of Student Affairs is a member of College Council, Planning & Budget and Academic Committee. The Dean is also a member of the Principal’s Executive Group.

Contact Information:
Office of Student Affairs
Student Centre, SL-157
Phone: 416-288-4760
Email: staff@utsc.utoronto.ca
Website: www.utsc.utoronto.ca/staff

Department of Student Life
The Department of Student Life strives to enhance the student experience at U of T Scarborough and provide our campus community with meaningful opportunities for development within an anti-oppressive framework. Our programs aim to engage students in expressive dialogue and challenge assumptions about themselves and the world around them. The Department of Student Life offers opportunities to network on-campus and build meaningful connections with the surrounding community.

The Department of Student Life supports students in their personal and academic success. Our Peer Education Model aims to empower students to take control of their own development and grow as leaders. Our programming engages and supports students during every step of their university career and beyond. First year will bring the welcome of Orientation events, the guidance and support of the First Year Experience Program, and the exploration that comes with the CONNECT First Year Leadership Certificate. Subsequent years offer the continued opportunity to engage in the over 100 annual activities connected to the Leadership Development Program including development seminars, Perspective on Leadership, Global and Community Leadership Series, Inside the Leader’s Circle, and Dialogues. Outreach initiatives such as the RMANI Mentorship Program, the Alumni Mentorship Program, the First Generation Project and Reading Week outreach activities connect students within the broader community.

The Department of Student Life also provides official recognition and support to over 190 student organizations, and serves as the primary liaison between student organizations and the university. The Department provides the campus’ student leaders with professional advice in the areas of organizational development, project management, event planning, budgeting and sponsorship, succession planning and more. The Department also administers the U of T Scarborough Letter Awards and the Campus Life Awards.

For more information on the Department of Student Life, please visit our website.

Contact Information:
Student Centre, SL-157
Phone: 416-288-4760
Email: studentlife@utsc.utoronto.ca
Website: www.utsc.utoronto.ca/studentlife

International Student Centre @ U of T Scarborough
The International Student Centre (ISC), Department of Student Life, 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 the following areas:

- **International Students, Exchange Students & Newcomers to Canada**
  Advising and referral on Citizenship & Immigration Canada regulations, international student advising, tax filing assistance, orientation and transition activities for new students, cultural programming, and referrals to university and community services.

- **English Conversation Partners (ECP)**
  This service provides non-native English speakers with an opportunity to improve communication skills and confidence in conversational English in a fun, safe and non-academic setting.

- **International Student Mentorship Program (ISMP)**
  ISMP allows new international students to learn about, and become adjusted to, university life at U of T Scarborough, and develop a network of friends and resources on campus. Student Mentors will assist new international students with their academic, social and cultural transition to U of T Scarborough.

- **Study Abroad**
  Information about U of T’s recognized opportunities to study in another country and earn credit towards your degree. Visit the ISC for information on Student Exchange, Study Elsewhere, Summer Abroad or the Explore Program.

Our programs and services are open to all students. For more information about the ISC visit our website.

Contact Information:
Student Centre, SL-151
Tel: 416-287-7518
Email: isc@utsc.utoronto.ca
Web: www.utsc.utoronto.ca
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 counsellors and academic advisors.
- Front line resource specialists who can provide information and referrals.
- Career Centre Online: exclusive electronic job postings for U of T students.
- Special events, such as a Professional and Graduate Schools Fair, a Summer Job Fair and a Volunteer and Internship Fair.
Come see us in AC233 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 endeavour to protect the individuals’ privacy, confidentiality and autonomy.

The University re-affirms 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 as early as possible with the Service in order to put accommodations in place. Students must present relevant and up-to-date documentation, as outlined on the website, from an appropriate health care professional.

AccessAbility Services
Services are provided to students who have a mental health disability, learning disability, attention deficit disorder, acquired brain injury, physical, sensory (hearing/vision), or chronic health condition (e.g. epilepsy, cancer, bowel disorder) as well as students who have temporary disabilities such as a broken dorment arm.

Students who register and utilize the services will not be identified on their transcript as receiving accommodations. Information disclosed to the service is confidential and is disclosed with the students permission. The service provides a wide range of support, including:
- learning disability assessments
- assistive technology assessments and equipment
- learning strategy support
- test and examination accommodations
- note taking services
- sign language interpreters, computerized note-taking
- advice and information on disability issues
- liaison to University and off-campus agencies

Voice/TTY: 416-287-7560
Room: SW 302
Email: ability@utsı.utoronto.ca
Website: www.utsı.utoronto.ca/ability
Financial Aid & Awards
The University of Toronto Scarborough provides on-site financial aid and services for full-time students through its Financial Aid & Awards Office (FAO). This office helps students access programs to help them pay their educational costs. The FAO administers the Ontario Student Assistance Program (OSAP) and the Work Study Plan. In addition, the FAO administers bursaries, in-class scholarships and graduation awards. The FAO also helps student who may require help with an emergency situation of a financial nature. The staff help students make sound financial decisions through individual or group counselling. Students who receive student loans from other provinces can access assistance and support from our office.

Financial aid programs for students pursuing their degree on a part-time basis are administered through the Financial Aid Office located at the St. George campus; however the FAO handles inquiries and provides a full range of assistance.

The Financial Aid & Awards Office is located in the Registrar's Office (Room AA142). For basic inquiries about our programs and services, visit our office. To book an appointment with a Financial Aid Advisor, use the service on the Registrar's Office webpage at: www.utoronto.ca/registrar. Detailed information about the various financial aid programs and our scholarships and awards is available at this website.

Health & Wellness Centre
Hours: Monday - Friday: 9:00 a.m. - 4:45 p.m.
Room #: SL 270 (Student Centre)
Telephone #: 416-287-7065
E-mail: health-services@utsc.utoronto.ca
Website: http://www.utsc.utoronto.ca/wellness

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**: 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 physician-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.

N'sheemahns: Child Care Centre
Hours: Monday - Friday: 7:30 a.m. - 6:00 p.m.
E-mail: childcare@utsc.utoronto.ca
Website: www.utsc.utoronto.ca/childcare

Your child can be as close as your next lecture hall at N’sheemahns (pronounced Sub-ee-mahns) 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, sins and talkies 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 chef, 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 volunteer parents and two U of T Scarborough appointees. Assistance with fees is available through a bursary for U of T Scarborough students, as well as a child care subsidy from the City of Toronto. For more information about the Centre, or to arrange for a visit, please contact the Director, Joanne Quinn at 416-287-7624.

Office of the University Ombudsperson
As part of the University’s commitment to ensuring that the rights of its individual members are protected, the University Ombudsperson investigates complaints from any member of the University not handled through regular University channels. The Ombudsperson is independent of all administrative structures of the University and is accountable only to the Governing Council. In handling a complaint, the Ombudsperson has access to all relevant files and information and to all appropriate University officials. All matters are treated in strict confidence, unless the individual involved approves otherwise. The Ombudsperson offers advice and assistance and can recommend changes in academic or administrative procedures where this seems justified. For additional information, please visit our website at: www.utoronto.ca/ombudsperson or phone 416-978-4874.
The services of the Office are available by appointment at all three U of T campuses. For an appointment, please phone 416-946-3485 or e-mail us at embako.personal@utoronto.ca. McFarland Building, 12 Queen's Park Crescent West, Room 102, Toronto M5S 1B8.

Athletics & Recreation

Hours:
Monday - Friday - 7:45 a.m. - 9:30 p.m.
Saturday - Sunday - 7:45 a.m. - 6:00 p.m.
(Hours are adjusted during exam periods, Christmas holidays & summer months)

Main Office:
R247

General Information: 416-287-7099
E-mail: athletics@utoronto.ca
Website: http://www.uta.utoronto.ca/athletics

Our mission is: “We strive to create a respectful and inclusive environment that promotes opportunity and overall well-being through physical activity”. The focus of the Department is to encourage participation in a broad spectrum of programs and activities. We offer various combinations and levels of intramural sports, inter-house leagues, 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 Cardio Theatre space, Cycle-fit Room; The Pullundi Gymnasium - a double gym for basketball, volleyball, badminton, ball hockey, indoor soccer, indoor cricket etc.; Touching Studio - for instructional and fitness classes; Athletics Lounge - study space, table tennis; seven air-conditioned North American squash courts, Golf “practice tee”;
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 saunas, athletic service counter offering program and membership information as well as playing equipment rentals and various supplies.

University of Toronto Scarborough Community Police

A Special Constable Service

Office Location
SW304 (Science Wing)

Emergency:
416-287-7333

General:
416-287-7398

E-mail:
communitypolice@utsc.utoronto.ca

Website:
www.uta.utoronto.ca/communitypolice

UTSC Patrol (formerly Walk Safe):
416-287-7022

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

The members of the U of T Community Police are Special Constables. They are sworn peace officers who are on duty 24 hours a day, 365 days a year to serve the University community. They work in partnership with the University community to provide a safe and secure environment in which to carry out daily activities.

The U of T Scarborough Community Police is the initial response agency for all emergencies and crimes occurring on the Scarborough campus and should be notified immediately of any situation that jeopardizes the safety of any community member, or that threatens to disrupt the operations of the University.

The U of T Scarborough Community Police should be informed of ALL matters involving threats to personal safety and security, violations of federal, provincial or municipal laws or University policies.

Examples of these would include:

- attempts to injure others or self
- medical emergencies
- alcohol related emergencies
- threats
- assaults
- noise complaints
- damage to property
- theft of property
- possession of drugs or weapons
- any other situation that looks suspicious or causes concern.

The U of T Scarborough Community Police co-ordinate community and safety programs such as the UTSC Patrol, and the Lone Worker Program. The UTSC Patrol Program will provide you with an escort to any part of the campus at any time during the day or night, for transport or from your vehicle or public transportation. The Lone Worker Program will assist you in being comfortable working on any part of the campus at any time. The UTSC Special Constable Service also issues Crime Alerts and Community Information Bulletins and provides crime prevention and personal safety education and consultation. These bulletins are also listed on the UTSC Campus Police website at http://www.uta.utoronto.ca/police/
In an emergency on campus the Special Constables can be contacted by calling 416-287-7333 or for non-emergency matters at 416-287-7398. The U of T Community Police can also provide pay duty officers to address security concerns for all special functions.

Registrar’s Office
The Registrar’s Office is the place to visit for help with registration, to request letters or forms which confirm your status at the university and to get answers for many of your general questions about academic regulations, degree requirements and re-enrolment for those students who are returning after suspension or a 12-month absence. We also produce student cards (TCards) for new students. Some of our services and processes can be requested online using eService (see the web address below). Our office is located in Room AA142 of the Arts and Administration building. The telephone number is 416-287-7091. For office hours see our website:

- Our website at http://www.uts.cc.utoronto.ca/registrar
- Interactive FAQ service at: http://www.uts.cc.utoronto.ca/askus
- Student Web Services at: http://www pos.utoronto.ca
- eService at: http://www.uts.cc.utoronto.ca/erservice

Student Housing & Residence Life
The University of Toronto Scarborough residence system offers you a comfortable home away from home. Our mission is to provide residence students with a “living and learning” environment that supports the academic mission of the university and offers students a variety of opportunities to enhance their university experience both inside and outside the classroom.

Our Residence Life program is designed to assist students with the transition to university and to support their success throughout their time on campus. We strive to foster a learning community committed to a high standard of mutual respect and understanding that celebrates diversity.

Our community is supported by Residence Advisors, senior students living in residence, who serve as a community support network that strives to make the residence environment enjoyable, relaxing, and conducive to learning. The Student Residence Council is a group of student leaders in residence who organize events and services for residents.

Our fully furnished townhouses and apartments with well-equipped kitchens, are located minutes from the academic buildings and the Residence Centre (RC), our large, furnished common area. There are 114 self-contained townhouses and 55 self-contained apartments, accommodating 767 students; with four to six students in each house and four students in each apartment suite. Single and shared bedrooms are available. Rooms and apartments are assigned as either all female or all male for new students. Common laundry rooms are available throughout the residences. Five houses and one apartment are specially designed as barrier free accommodations for students with Accessibility requirements.

Residence is guaranteed to all full-time first-year students who are offered admission and who respond to all residence application deadlines and meet all deposit requirements. Part-time students and those who receive late offers are advised to contact Student Housing & Residence Life for further information although there is no guarantee that they will receive accommodation on campus. Accommodation is available for fall, winter and summer sessions. We encourage you to visit the campus during the summer and to tour residence.

For more information, contact:
Student Housing & Residence Life, University of Toronto Scarborough, 1265 Military Trail, Toronto, ON, M1C 1A4
Telephone: 416-287-7393
Fax: 416-287-7667
E-mail: residences-office@uts.cc.utoronto.ca
Web site: www.uts.cc.utoronto.ca/residences

Sexual Harassment Office
The University’s Sexual Harassment Policy covers harassment based on sex and sexual orientation and applies to students, staff and faculty members. The University of Toronto does not tolerate any form of sexual harassment and is actively endeavouring to provide an environment free of it. All forms of sexual harassment, from verbal abuse to unwanted touching to homophobic insult are covered by the University’s policy. The Sexual Harassment Officer provides education to the community, administers the formal complaint procedure and offers 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 agree 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 events or to file a complaint, contact the Sexual Harassment Office (telephone 416-978-3909). Further information is available at www.utoronto.ca/sexhar.

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

Scarborough Campus Students’ Union (SCSU)
Phone: 416-287-7047
Website: www.scssu.ca

The SCSU is your elected student body, representing all students at the University of Toronto Scarborough. It advocates on behalf of students on issues such as the cost of education, academic issues and unifying the student voice to best represent their needs.
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, login to Degree Navigator at www.rosi.utoronto.ca. For more information about Degree Navigator see the Student Web Service section of this Calendar.

Degree Requirements

The following requirements apply to all degree students who first completed courses as University of Toronto Scarborough degree students in the 2010 Summer Session or in a subsequent session.

To qualify for the degree, students must:
1. Pass at least twenty full credits.
2. Of the twenty credits, at least six full credits must be at the C-level and/or D-level, with at least one full credit at the D-level.
3. Of the twenty credits, at least one half credit must come from each of the following five categories. See the course description for the category to which the course belongs:
   a. Arts, literature and language
   b. History, philosophy and cultural studies
   c. Social and behavioural sciences
   d. Natural sciences
   e. Quantitative reasoning
4. Programs:
   a. For a Bachelor of Business Administration, complete a specialist program in Management or in Economics for Management Studies.
   b. For an Honours B.A. or an Honours B.Sc., complete:
      i. one Specialist Program, or
      ii. two Major Programs, or
      iii. one Major Program and two Minor Programs.
5. Combinations of programs used to meet the program requirement must include at least twelve different full credits.
6. 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.
Honours B.A. and Honours B.Sc. Degrees

The type of Honours degree students receive is determined by the Program(s) completed. See the program list in the Guide to Programs and Courses Offered 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 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.

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 at University of Toronto Scarborough students. Students transferring from other divisions of the University of Toronto are exempt from this requirement.

Students began their degree program at UTSC:

- Prior to the 2010 Summer Session, should refer to the degree requirements outlined in the 2009/10 Calendar.
- Prior to the 1999 Summer Session may, if they wish, complete the degree requirements outlined in the 1998-99 Calendar.
- Prior to the 1986 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.

Three-Year Degree

UTSC has discontinued the three-year degree. Students who began their degree program at UTSC prior to the 2004 Summer Session may still choose to complete a three-year degree. For three-year degree requirements, see the 2008/09 Calendar.

Upgrading Three-Year Degrees

For information on upgrading three-year degrees, see the 2008/09 Calendar.

"Second Degree" Requirements

Students beginning a second degree are normally exempted from first year of the degree requirements by being granted five (5.0) credits, regardless of the number of previous degrees. Students who hold a B.A., B.Sc. or B.A.Sc. from the University of Toronto will be considered for admission in a second degree Program only of a different type (e.g., students with a B.A. degree may only complete a B.A. or B.Sc. degree). Application for admission to a second degree Program is made through the Assistant Registrar-Admissions. Before applying, students are urged to consider if a second degree is actually required for their purposes, for example, a make-up year as a non-degree student may satisfy admission requirements for graduate school.

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 ECMA01H, ECMA05H, MGTA05H, and MGTA06H.
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 ROSI 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 Guide to Programs & Courses Offered section of this Calendar. Only programs offered by the University of Toronto Scarborough may be used to meet the degree requirements.

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

Specialist Programs

Specialist Programs normally consist of twelve to sixteen full credits, including at least four full credits at the C- and/or D-level, of which one full credit must be at the D-level. They 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

Major Programs normally consist of seven to eight full credits, including at least two at the C- and/or D-level. They 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

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

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 averages 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 Vice-Dean and must be submitted at least eight months prior to the session in which the student expects to graduate.

Co-operative Programs

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

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 an 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 their degree requirements. 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 Degree 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.
Co-operative Programs

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 Program.

When Program requirements are changed, students may elect to satisfy the requirements in effect when the student first completed 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 credit or 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
   • accredit 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.

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

8. 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.

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

10. 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. Students currently registered in Programs that have been withdrawn will be able to complete their Programs within a specified time frame. U of T Scarborough will either offer the courses necessary for them to complete Program requirements or will make other appropriate arrangements such as course substitutions. Students should consult with the relevant Supervisor of Studies or the Chair of the Department in which the Program was offered.

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 25.0 normally required for a degree. For this reason, some co-op programs may take up to five years to complete.

No student may enrol in more than one co-op program and all co-op students must be registered at U of T Scarborough in order to maintain their co-op status. For a listing of co-op programs, the academic supervisors, and the sponsoring academic Department, see the Guide to Programs & Courses 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.utspace.utoronto.ca/admissions
Enrolment in co-op programs is limited. Admission is granted on the basis of applicants’ academic performance and their interest, experience and potential ability. The Supplementary Application will indicate what information is required in addition to the academic record and it may include a statement of interest, information about volunteer and work experience and extracurricular activities.
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.utspace.utoronto.ca/subject/post

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 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. 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. The credits earned for successful work term completion are in addition to the 20 credits required for the degree.

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., Honours 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 2.5 (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 reports;
• Register as a full-time student during study terms (i.e., a course load in each study term of at least 1.5 full credits 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 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 credits and have a cumulative GPA (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 GPA 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 credits 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.
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, which 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.utsc.utoronto.ca/jprogs

- Specialist (Joint) Program in Applied Microbiology
- Specialist (Joint) Program in Environmental Science and Technology
- 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. Applicants are required to complete a Supplementary Application available at the Admissions and Student Recruitment website: www.utsc.utoronto.ca/admissions

Enrollment in joint programs is limited.

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

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 enrolled 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
University of Toronto Scarborough Language Citation

The Language Citation is intended to provide an incentive to students who are interested in intensive study of a particular language but who cannot or who do not necessarily wish to complete a Specialist, Major or Minor Program in the language. It is neither a substitute for a program in the language nor does it impede students wishing to complete such a program. It simply acknowledges language proficiency on the student’s transcript.

Requirements for the Language Citation

The Citation may be earned in any language, modern or ancient, in which there is sufficient advanced training at the University of Toronto Scarborough.

1. Students must complete two full credits in the language beyond the introductory level and must achieve a final grade of at least B- in each of the courses that make up those two credits.

2. The two full credits may be language instruction or may be other courses (e.g. literature courses) where instruction is in the language to be assessed.

Students normally take one full credit at the introductory level. Those who already have proficiency in a language and wish to proceed directly to courses beyond the introductory level should consult the relevant program supervisor about appropriate placement.

Similarly, students who wish to include courses taken in a country where the language is spoken should consult the relevant program supervisor about appropriate study abroad options.

Assessment of the Language Citation

The Language Citation will be assessed at the point of graduation. To apply for a Citation, students should contact the Department of Humanities in advance of graduation, presenting the Department with a copy of their academic record (produced from ROSE through the Student Web Services) and indicating the courses they would like considered in the assessment. (For more information, contact language-coordinator@uacs.utoronto.ca or french-program-supervisor@utoronto.ca.)

The Language Citation will consist of a notation in the U of T Scarborough section of the university transcript that reads: "Completed the requirements of the Language Citation in [Name of Language]."

Guide to Programs & Courses Offered

Programs (also known as Subject Post) and course descriptions are listed by discipline in the Programs and Course Descriptions section of this Calendar.

Programs

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

Notes:

- Application procedures for current students are available at: www.uacs.utoronto.ca/subjectpost
- Tuition amounts vary with different University programs. Please consult the Student Accounts website at www.feas.utoronto.ca for further information.

The following is a list of programs currently offered by U of T Scarborough. Co-op ✅ = Co-operative option available CTEP ✅ = Eligible anchor subject in the Concurrent Teacher Education Program.

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<thead>
<tr>
<th>Area</th>
<th>Department</th>
<th>Program</th>
<th>Type</th>
<th>Degree</th>
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<td>BA</td>
<td>✓</td>
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**Suspension of enrollment**
Enrollment in the following programs has been suspended indefinitely while reviews are conducted. Students who first enrolled at UTSC as a degree student prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar for program requirements.

- The science versions of the Specialist and Major Programs in International Development Studies.
- The Interfaculty Combination Program in International Development & Environmental Studies.
- The Major Program in International Studies.
- The Major Program in Media Studies.
- The Major Program in Religion.

**Courses**
See also the “Course Selection” section of this Calendar and “How to Read a Course Description” below.

### Exclusions, Prerequisites and Corequisites

#### 1. Exclusions
Students may not register for credit in a course which lists as an exclusion a course they are currently taking or have already passed. (This includes credit awarded for work at other institutions.) Courses are not always mutually exclusive, so it is important to check the entries for both courses when one lists the other as an exclusion. Where students enrolled in an excluded course, the second course will be marked as an extra course (see “Standing in a Course” in the Registration section of this Calendar) and, although it will appear on the transcript, it will not count towards the degree.

**Notes:**

a) Students should be aware that ROSI does not automatically check for exclusions. Although courses will be identified as extra courses as soon as the exclusion is discovered, this could happen without warning at any time during the student's studies at U of T Scarborough.

b) Although they may not appear in this Calendar, some Faculty of Arts & Science or U of T Mississauga courses may be exclusions of U of T Scarborough courses and vice versa. Similarly, some U of T Scarborough courses, particularly ones that are no longer in the curriculum, may not appear in this Calendar as exclusions. If U of T Scarborough, U of T Mississauga and Faculty of Arts & Science courses have similar titles or content, contact the Department Office offering the course(s) to determine if the course(s) conflict is so similar that the courses should be considered as exclusions. It is always good practice to consult an academic advisor or program supervisor before taking courses on other campuses.

#### 2. Prerequisites
Students must have passed the prerequisite course before enrolling in the course being described. Instructors are permitted to waive prerequisites if they find there are adequate grounds for so doing. The Registration 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—a program exception form may be necessary. If a student registers in a course without meeting its prerequisite and without obtaining a specific waiver; the student may be withdrawn from the course at any time without warning. Students who are not withdrawn from the course remain in it at their own risk; for lack of the prerequisite is not grounds for special consideration. Students who complete courses for which they have obtained a waiver of specific prerequisites may not subsequently obtain credit for the less-advanced prerequisite courses. Students may not register for credit in a course that is a specific prerequisite for a course they have already passed. In these instances, the course will be counted as "extra" (see the section of this Calendar on extra courses).

#### 3. Corequisites
Students must either already have passed the corequisite course, or must enroll in it at the same time as they take the course being described. Instructors are permitted to waive corequisites if they feel that there are adequate grounds for so doing. If
students register in a course without meeting its prerequisite, or if they withdraw from the co-required course without obtaining a specific waiver of the co-requisite, they may be withdrawn from the course at any time. Students who are not withdrawn from the course remain in it at their own risk for lack of the co-requisite is not grounds for special consideration.

4. Prerequisites in Square Brackets
   Square Brackets are used in prerequisites to indicate aggregate or alternate choices example: [ECMB01H or ECMB02H] & [ECMB03H or ECMB04H]

5. Recommended
   In addition to prerequisites and corequisites, other background material or courses that enhance a student's understanding of a course may be listed in the course description as "Recommended".

6. Exclusions, Prerequisites and Corequisites in Parentheses
   Some exclusions and some prerequisite and co-requisite courses are enclosed in parentheses; example (MGTC65H). This indicates that the course is no longer in the curriculum. Students who have already passed an excluded course contained in parentheses may not take the course being described. Students who have completed, in a previous session, a prerequisite or corequisite course contained in parentheses may make use of the course to meet the requirements of the course being described.

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.

WebOption Courses
   Some U of T Scarborough courses have webOption sections intended to provide enhanced flexibility with respect to how and when students attend lectures. These sections are normally created by teaching instructors as they give their traditional lectures, then posting these taped lectures, along with any slides shown in class, on the Internet for students to watch online. Thus, students can make these classes fit their lives and their schedules.

Credit/No Credit
   Effective with the 2010 Summer Session, UTSC degree students may select up to 1.0 full credit of their degree credits to be assessed on a Credit/No Credit basis. Students must choose this mode of assessment no later than the last day to enroll in the relevant course. Once the deadline has passed, students may not under any circumstances reverse this decision.

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

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

   Students may exercise this option to a total of 1.0 full credit within the total number of credits required for a degree. Note: This option is available only for UTSC courses. The choice is not restricted to year or level of course. This option is not available to UTSC non-degree students or to students from other faculties/divisions of the University of Toronto.
How to Read a Course Description

**MGT** is the course discipline or subject area of the course; in this case Management.

C indicates the level of the course ("A" indicates the most elementary level and "D" the most advanced); in this case "C" indicates a third year course.

**T1** course number that identifies the course in shorthand form. In most disciplines the number has no significance.

Exclusion: A course with content too similar to another for credit to be given for both. In this case, you may not take MGT71H for credit, if you are taking or have already passed MGT73H. See detailed description of exclusions in “Courses” section above.

**Corequisite:** A course you must take at the same time as this course (unless you have passed it previously). To enroll in MGT71H you must also enroll in MGT91H. See detailed description of corequisites in “Courses” above.

**Prerequisite:** A course you need to take before you are qualified to take this one. To take MGT71H you must first pass ECM91H or ECM90Y and MGT80H or MGT30H or MGT02Y. See detailed description of prerequisites in “Courses” section above.

**MGTC71H**

Indicates the course credit value:

- H = half credit (0.5)
- Y = full credit (1.0)

MGTC71H3

- the campus identifies
- "3" indicates a course held at UTSC

**MGTC71H3**

*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 each type of derivative security is introduced, its applications in investments and general risk management will be discussed.

*Limited enrolment: 50*

*Exclusion:*

- **MGTC40H3**

*Prerequisite:*

- [ECMB01H3 or ECM90Y] & [MGTC80H3 or (MGTC03H3 or (MGTC02Y3))]

*Corequisite:*

- MGTC91H

*Brackets [ ] groups courses; () indicates a course that is no longer offered*
African Studies
(B.A.)

Faculty List:
N. Korotseva, M.A., Ph.D. (Toronto), Associate Professor
J. Ndagijicire, M.A. (Montreal-UQAM), Ph.D. (Montreal-UQAM), Associate Professor
S. J. Rockel, M.A., Ph.D. (Toronto), Associate Professor
M. Assiff, B.A. (Hassan II), M.A., Ph.D. (Case Western Reserve), Lecturer

Program Director: S. Rockel (416-287-7147) Email: rockel@utsc.utoronto.ca

African Studies is an interdisciplinarian integration of innovative programs based in Humanities at UTSC. The program's foundation lies in the unique structure and particular strengths of Humanities as it reaches out to the Social Sciences and beyond. African Studies aims to offer students' knowledge and experience from different perspectives in relation to the second largest, in some respects most complex but least understood continent, and its peoples and their diaspora. It encourages students to engage with and explore ideas and material concerning African histories, cultures, economies, political systems, artistic expression and systems of belief. In many program courses Africa, its peoples and their cultures are situated in relation to the wider world. The study of interconnections over long periods of time with Europe, Asia, and the American highlights Africa's central role in world history. Several courses concentrating on recent periods and the current era challenge students to think beyond the stereotypes of Africa as marginal to the processes of globalization. Throughout the program students explore the exciting recent developments in our understanding of African civilizations, thought, political and religious systems, and histories of slavery, colonialism, racism, and nationalism. A number of courses emphasize modern African, Caribbean, and African-American cultural and artistic responses to modernity, racism, and liberation, as well as struggles for security and development. The program as a whole challenges students to think in new innovative directions about Africa in all of the disciplines and to reject preconceived myths and stereotypes that permeate mainstream and popular cultures in the West. As in other Humanities based programs at UTSC, students with an African Studies minor will gain strong skills in critical analysis, research, writing and communications. The program aims to go further to encourage an awareness of the relationships between the production and application of knowledge and the wider forces of global change, as well as a love of intellectual challenges.

Students who intend to complete the African Studies program should include AFRS01H in their first year course selection. Certain elective courses (e.g. ENGDS9H, ENGDS3H) are non-African Studies prerequisites. This may require that you take more than 4.0 credits to complete the program. If you are interested in taking one of them, check the prerequisites carefully before deciding what courses to select.

MINOR PROGRAM IN AFRICAN STUDIES
Program Supervisor: S. Rockel (416-287-7145) E-mail: rockel@utsc.utoronto.ca

Program Requirements
Students must complete four full credits, as follows:

1. AFRS01H Africa: An Introduction
2. 1.0 credit from the following (students should check course descriptions for prerequisites):
   - ANTIB0H Culture and Society in Africa
   - HISBS0H Africa in the Nineteenth Century
   - HISBS1H Twentieth Century Africa
3. 2.0 credits from the list below; at least 1.0 credit must be at the C- or D-level (students should check course descriptions for prerequisites):
   - ANTIB0H Culture and Society in Africa (if not used in Requirement 2)
   - ANTIC02H African Cultures and Societies in the Caribbean
   - CLAC04H Environment, Society and Economy in Polynesia and Roman Egypt
   - ENGB17H Contemporary Literature from the Caribbean
   - ENGC72H Contemporary Literature from Africa
   - ENGDS2H Topics in African Literature
   - ENGDS8H Topics in African Literature
   - ENGD61H James Baldwin, the African American Experience, and the Liberal Imagination
   - ENGD62H Rap Poetics
   - FREA1H Language Practice I
   - FREA2H Language Practice II
   - FREB1H Language Practice III
   - FREB3H Language Practice IV
   - FREB1SH Francophone Literature
   - FREC7H Special Topics in Linguistics: Pidgin and Creole Languages
   - FRED1H Advanced Topics in Literature: Haitian Migrant Literature in Quebec
Anthropology

B.A. (B.Sc.)

Faculty List

F. O. Burton, B.Sc., M.A., (NYU), Ph.D. (CUNY), Professor Emerita
G. Gillison, B.A., (McGill), Ph.D. (CUNY), Professor
M. Lombech, B.A. (McGill), M.A., Ph.D. (Michigan), F.R.S.C., Professor
B. Bamford, B.A. (Toronto), M.A. (McMaster), M.A., Ph.D. (Virginia), Associate Professor
A. Sawchuk, B.A., M.A. (McMaster), Ph.D. (Toronto), Associate Professor
M. McIlaidhe, B.A. (New Mexico), M.A. (Toronto), B.A. (New Mexico), Associate Professor
M. Cuming, B.A. (York), M.A. (Dalhousie), Ph.D. (York), Assistant Professor
D. Dimov, B.Sc. (National University of Singapore), M.Sc., Ph.D. (London School of Economics), Assistant Professor
G. Desvar, B.Sc., M.A. (Toronto), Ph.D. (Cape Town), Assistant Professor
A. Karp, B.A., M.A. (Toronto), Ph.D. (California, Davis), Assistant Professor
L. McRae, B.A. (McMaster), M.A., Ph.D. (Indiana), Assistant Professor
T. Orchard, B.Sc. (Victoria), Ph.D (Toronto), Assistant Professor
J. A. Pagé, B.S. (University of California - Irvine), M.A., Ph.D. (University of Texas - Austin), Assistant Professor
D. Young, B.A., M.A., New Brunswick, Ph.D. (Toronto), Assistant Professor

Discipline Representative: TBD

Undergraduate Counsellor: J. Robertsin Email: social-sciences-counsellor@utoronto.ca

Anthropology is the study of humankind, dealing with the origins, 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 and with the humanities. 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 people and cultures. Because of its vast subject matter, Anthropology is traditionally divided into four subject fields: Socio-cultural Anthropology, Physical Anthropology, Anthropological Linguistics, and Archaeology. At the present time, University of Toronto Scarborough offers courses within the first two areas, but the third is now also offered in the Humanities.

Students intending to complete a program in Anthropology must take ANT401H and ANT402H within their first year in order to prepare them for more advanced courses. Students normally elect whether to pursue the Socio-Cultural stream (which leads to a B.A.)
degree) or the Biological Anthropology stream (which leads to a B.Sc. degree) during their second year of study. All courses in Biological Anthropology carry a science credit.

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

Co-op Contact: askcoop@arts.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 Biological Anthropology 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 at: www.arts.utoronto.ca/subjectpost. 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 9.0 full credits including at least 5.0 credits in Anthropology. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

**Course Requirements**

Students must complete the requirements for the Specialist Program in Anthropology. Study of a foreign language is recommended. Within the 10.0 credits in Anthropology required for the Co-op Program, they must concentrate at least 4.0 credits in ONE of the following fields: Biological Anthropology 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. Students are encouraged 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 (ANTC40H, ANTC40H, ANTD31H, 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 12.0 full credits, as indicated below.

1. ANTA01H Introduction to Anthropology: Becoming Human
2. ANTA02H Introduction to Anthropology: Society, Culture and Language
3. At least 3.5 credits from among the following:
   - ANTB14H Biological Anthropology: Beginnings
   - ANTB15H Contemporary Human Evolution and Variation
   - ANTB104H Ethnography and the Comparative Study of Human Societies
   - ANTB20H Culture, Politics and Globalization
4. 9.5 credits at the B-level or above, of which 4.0 credits should be at the C- or D-level, including at least 1.0 at the D-level.

**Note:** Students pursuing the Socio-Cultural stream must ensure that as part of Requirement 3, they complete:

- a) At least 1.0 credit in area studies courses ANTB16H, ANTB16H, ANTB16H, ANTB16H, ANTD07H.
- b) 1.0 credit in Ethnographic method: ANTC06H & ANTD06H.
- c) Courses in Anthropological Linguistics (i.e. LINC27H & IEELC11H) may be counted towards fulfilling Requirement 3.

For a B.Sc. at least 7.5 of the credits required for the program must be science credits.
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 the human condition.

Program Requirements
The Program requires completion of 3.0 full credits in Anthropology including:

1. ANTA01H Introduction to Anthropology: Becoming Human
   ANTA02H Introduction to Anthropology: Society, Culture and Language
2. At least 1.5 credits from among the following:
   ANTB14H Biological Anthropology: Beginnings
   ANTB15H Contemporary Human Evolution and Variation
   ANTB16H Ethnography and the Comparative Study of Human Societies
   ANTD18H Culture, Politics and Globalization
3. 5.5 credits at the B-level or above, of which at least 3.0 credit must be at the C- or D-level.
   Note: Students pursuing the Socio-Cultural stream must ensure that as part of Requirement 3, they complete:
   a) At least 1 FCE in area studies courses ANTB05H, ANTB16H, ANTB18H, ANTB65H, ANTD07H
   b) ANTC06H
   c) Courses in Anthropological Linguistics (i.e. LINC27H & IEEC11H) may be counted towards fulfilling Requirement 3.

For a B.Sc., at least 5.5 of the credits required for the program must be science credits.

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 4.0 full credits as follows:

1. ANTA01H Introduction to Anthropology: Becoming Human
   ANTA02H Introduction to Anthropology: Society, Culture and Language
2. At least 1.5 credit from among the following:
   ANTB14H Biological Anthropology: Beginnings
   ANTB15H Contemporary Human Evolution and Variation
   ANTB16H Ethnography and the Comparative Study of Human Societies
   ANTD18H Culture, Politics and Globalization
3. 5.5 additional credits in Anthropology, of which 1.0 credit must be at the C- or D-level.

SPECIALIST PROGRAM IN MEDICAL ANTHROPOLOGY (B.A./B.Sc.)
The Specialist Program in Medical Anthropology has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in the program are able to complete it.

ANTA10H3 Introduction to Anthropology: Becoming Human
An introduction to Biological/Physical Anthropology and Archaeology.
Concentrates on the origins and evolution of human life, including both biological and cultural aspects, from the ancient past to the present.
Exclusion: ANT100Y, ANT101H

ANTA102H3 Introduction to Anthropology: Society, Culture and Language
An introduction to socio-cultural anthropology.
Address the concepts of culture, society, and language and the anthropological perspective on cultural difference and societies of varying scale. Family, economic, political, and religious systems are illustrated from a variety of the world's cultures.
Exclusion: ANT100Y, ANT102H

ANTA105H3 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 ethnoculture, conservation, green consumerism, the concept of 'wilderness', and what happens when competing and differentially empowered views of the non-human world collide.
Exclusion: Social & Behavioural Sciences
Prerequisite: [ANTA101H & ANTA102H] or permission of the instructor.
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<th>Course Code</th>
<th>Course Title</th>
<th>Course Details</th>
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<tr>
<td>ANTB09H3</td>
<td>Culture and Society in Africa</td>
<td>An overview of the range and diversity of African social institutions, religious beliefs and rituals, kinship, political and economic organization, pre-colonial, colonial and post-colonial experience. Area course. Breadth requirement: Social &amp; Behavioural Sciences Prerequisite: [ANTA01H &amp; ANTA02H] or permission of the instructor</td>
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<tr>
<td>ANTB08H3</td>
<td>Culture through Film and Media</td>
<td>How is culture represented through visual media, from ethnographic and documentary films, to feature films, television, and new media? How do various communities re-vision themselves through mass, independent, or new media? This course investigates media and its role in the contemporary world from a socio-cultural anthropological perspective. Breadth requirement: Social &amp; Behavioural Sciences Limited enrolment: 120 Prerequisite: ANTA01H &amp; ANTA02H</td>
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<tr>
<td>ANTB14H3</td>
<td>Biological Anthropology: Beginnings</td>
<td>This course surveys humanity's origin. The synthetic theory of evolution, its principles, processes, evidence and application underlie 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. Breadth requirement: Natural Sciences Exclusion: ANTA03Y Prerequisite: [ANTAO1H &amp; ANTA02H] or permission of the instructor</td>
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<tr>
<td>ANTB15H3</td>
<td>Contemporary Human Evolution and Variation</td>
<td>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. Breadth requirement: Natural Sciences Exclusion: ANTA03Y Prerequisite: [ANTAO1H &amp; ANTA02H] or permission of the instructor</td>
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<tr>
<td>ANTB16H3</td>
<td>Canadian Cultural Identities</td>
<td>This course explores the creation or invention of a Canadian national identity in literature, myth and symbolism, mass media, and political culture. Ethnographic accounts that consider First Nations, regional, and immigrant identities are used to complicate the dominant story of national unity. Area course. Breadth requirement: Social &amp; Behavioural Sciences Prerequisite: [ANTAO1H &amp; ANTA02H] or permission of the instructor</td>
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<tr>
<td>ANTB18H3</td>
<td>Development, Inequality and Social Change in Latin America</td>
<td>This course addresses Latin American systems of inequality in relation to national and transnational political economy, from colonialism to neoliberalism; how ideas of race, culture, and nation interact with development thinking and modernization agendas; and how the poor and marginalized have accommodated, resisted, and transformed cultural and political domination. Area course Breadth requirement: Social &amp; Behavioural Sciences Limited enrolment: 60 Exclusion: (ANTC08H) Prerequisite: ANTA01H &amp; ANTA02H</td>
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<tr>
<td>ANTB19H3</td>
<td>Ethnography and the Comparative Study of Human Societies</td>
<td>This course introduces students to the theory and practice of ethnography, the intensive study of people's lives as shaped by social relations, cultural beliefs, and historical forces. Various topics, including religion, economics, politics, and kinship introduce students to key anthropological concepts and theoretical developments in the field. Breadth requirement: Social &amp; Behavioural Sciences Exclusion: ANTA01H &amp; ANTA02H or permission of the instructor</td>
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<tr>
<td>ANTB20H3</td>
<td>Culture, Politics and Globalization</td>
<td>This course is a further examination of approaches to the study of human cultural diversity in an interconnected world. Through ethnographic accounts and documentary films, students examine the effects of globalization through the political dimensions of culture and the global flows of technology, religion, kinship networks, migration, capital and crime. Breadth requirement: Social &amp; Behavioural Sciences Exclusion: ANTA04Y Prerequisite: ANTA01H &amp; ANTA02H</td>
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<tr>
<td>ANTB22H3</td>
<td>Primate Behaviour</td>
<td>A general introduction to the study of the life ways of non-human primates with particular emphasis on observing and recording primate behaviour. Readings and lectures develop the context in which observations are analyzed. Tools of recording and analysis are practiced and presented in seminars. Science credit Breadth requirement: Social &amp; Behavioural Sciences Exclusion: (ANBI02Y) Prerequisite: ANTA01H</td>
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<tr>
<td>ANTB64H3</td>
<td>The Anthropology of Food: Consuming Passions</td>
<td>This course examines the social significance of food and foodways from the perspective of cultural anthropology. We explore the beliefs and behaviours surrounding the production, distribution and consumption of food, and the role of food in shaping or revealing cultural relations, identities, political processes, and form of globalization. Breadth requirement: Social &amp; Behavioural Sciences Limited enrolment: 150 Exclusion: (ANTC04H) Prerequisite: ANTA01H &amp; ANTA02H</td>
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ANTB580H1 An Introduction to Pacific Island Societies
Introduces the cultures and peoples of the Pacific. Examines the ethnography of the region, and the unique contributions that Pacific scholarship has made to the development of anthropological theory. Explores how practices of exchange, ritual, notions of gender, death and images of the body serve as the basis of social organization. Area course.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: (ANTC08H1)
Prerequisite: ANTA01H & ANTA02H

ANTC08H1 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 & ANTA01H & ANTA02H & one B-level full credit in Anthropology.

ANTC07H3 Material Worlds
This course explores the intersection of the social and the material by examining the role of objects in making worlds. We examine the relationship between people, culture, and "things" through topics such as commodification and consumption, collecting and representation, technology and innovation, art and artifacts, and the social life of things. Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H1

ANTC08H3 Families: Kinship and Marriage from a Cross-Cultural Perspective
This course explores Anthropological approaches to kinship and family arrangements. In addition to examining the range of forms that family arrangements can take cross-culturally, we also examine how kinship configurations have changed within our own society in recent years. Topics to be covered include trans-national adoption, "mail-order-brides", new reproductive technologies and internet dating.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTA01H, ANTA02H, ANTB19H & ANTB20H

ANTC18H3 Anthropological Perspectives on Development
A critical probe of the origins, concepts, and practices of development in cultural perspective. Attention is paid to how forces of global capitalism interact with local systems of knowledge and practice.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 or permission of the instructor

ANTC11H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTC08H1

ANTC12H3 Research on the Social Behaviour of Non-Human Primates
This course concentrates on field techniques in the study of non-human primates. Field work is two weeks within the semester. Daily routine: dawn to dusk, evening analysis, some free time. Evaluation: participation, preliminaries research, field notes, log book and seminar or paper. Science credit.
Breadth requirement: Natural Sciences
Prerequisite: ANTB22H1 or (ANTB22Y) & permission of the instructor

ANTC14H3 Feminism and Anthropology
Examines why, when, and how gender inequality became an anthropological concern by tracing the development of feminist thought in a comparative ethnographic framework.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H1 or permission of the instructor

ANTC15H3 Genders and Sexualities
Complements and extends ANTC14H1 by exploring cultural constructions of male and female in a range of societies and institutions.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H1 or permission of the instructor. ANTC14H1 recommended

ANTC16H3 The Foundation and Theory of Human Origins
The study of human origins in light of recent approaches surrounding human evolution. This course will examine some of these, particularly the process of species, with specific reference to the emergence of Homo. Fossils will be examined, but the emphasis will be on the interpretations of the process of hominisation through the thoughts and writings of major workers in the field. Science credit.
Breadth requirement: Natural Sciences
Exclusion: (ANT332Y)
Prerequisite: ANTA01H or ANTA02H or permission of the instructor
ANTC1TH3 Human Origins: New Discoveries
The study of human origins in light of recent approaches surrounding human evolution. New fossil finds present new approaches and theory. This course will examine some of these, particularly the process of speciation and homininization with specific reference to the emergence of Homo. Labs permit contact with fossils in casts. Science credit.
Breadth requirement: Natural Sciences
Exclusion: (ANTC31YY)
Prerequisite: [ANTA01H & ANTA02H] or permission of the instructor

ANTC18H3 Urban Anthropology
Urban spaces, neighborhoods, and institutions have at different times been the focus of ethnographic studies of cities. In this course we will examine the role of culture, cultural diversity, space and performance in urban institutions.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: ANTB19H1 & ANTB20H

ANTC19H3 Producing People and Things: Economics and Social Life
This course examines economic arrangements from an anthropological perspective. A key insight to be examined concerns the idea that by engaging in specific acts of production, people produce themselves as particular kinds of human beings. Topics covered include gifts and commodities, consumption, global capitalism and the importance of objects as cultural mediators in colonial and post-colonial encounters.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H

ANTC20H3 Gifts, Money and Morality
What limits exist or can be set to commodified relations? To what extent can money be transformed into virtue, private goods into the public "Good"? We examine the anthropological literature on gift-giving, systems of exchange and value, and sacrifice. Students may conduct a short ethnographic project on money in our own society, a subject at once obvious and mysterious.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H

ANTC23H3 Primate Sexuality
This course will review primate socio-sexual behaviour from an evolutionary perspective. Following a broad survey of mating patterns in the primate order, specific topics will be discussed, including male and female mating strategies, mate choice and sperm competition. Taxonomic groups of focus will include primates, monkeys, apes and humans.
Science credit.
Breadth requirement: Natural Sciences
Prerequisite: ANTB22H

ANTC25H3 Anthropology and Psychology
How are we to understand the relationship between psychic universals and diverse cultural and social forms in the constitution of human experience? Anthropology's dialogue with Freud, cultural construction and expression of emotions, personhood, and self.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTA01H & ANTA02H. ANTB19H1 & ANTB20H are recommended

ANTC31H3 Ritual and Religious Action
The nature and logic of ritual. Religious practices and projects; the morphic of religion, power, morality, and history in the contemporary world.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: [ANTB19H1 & ANTB20H]

ANTC32H3 Political Anthropology
Can ethnographic research help us make sense of various political situations and conflicts around the world? In this course we will review different approaches to power and politics in clinical and current anthropology. We will consider notions of the state, political agency and power, civil society, authoritarianism and democracy.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H1 & ANTB20H

ANTC33H3 Conceptualising Religion
Anthropological approaches to the origin and function of religion, and the nature of symbiosis, myth, ritual, society, spirit possession, and cosmology, with primary references to the religious worlds of small-scale societies.
Social & Behavioural Sciences
Exclusion: (ANTC30H3)
Prerequisite: ANTB19H1 & ANTB20H

ANTC34H3 The Anthropology of Transnationalism
This course considers dimensions of transnationalism as a mode of human society and site for cultural production. Topics covered include transnational labour migration and labour circuits, return migration, the transnational dissemination of electronic imagery, the emergence of transnational consumer publics, and the transnational movements of refugees, kinship networks, informal traders and religions.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: ANTB19H1 & ANTB20H

ANTC35H3 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 analyses will be included. Science credit.
Breadth requirement: Quantitative Reasoning
Exclusion: ECMB09Y, ECMB11H, PSYB07H, SOCB06H, STARB2H
Prerequisite: ANTA01H & ANTA02H. ANTB15H1 is recommended
ANTC4013 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 interrelationships among them. Emphasis is given to constructing various demographic measures of mortality, fertility and immigration and their interpretation.
Science credit.
Breadth requirement: Quantitative Reasoning
Prerequisite: (ANTC391H) or permission of the instructor

ANTC4134 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.
Breadth requirement: Natural Sciences
Prerequisite: [ANTB141H & ANTB151H] or [BIOA001H & BIOA002H]

ANTC4213 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.
Breadth requirement: Natural Sciences
Prerequisite: ANTC414H or permission of instructor

ANTC4713 Human and Primate Comparative Osteology
A "hands-on" laboratory course which introduces students to analyzing human and nonhuman primate skeletal remains using a comparative framework. The course will cover the gross anatomy of the skeleton and dentition, as well as the composition and microstructure of bone and teeth. The evolutionary history and processes associated with observed differences in human and primate anatomy will be discussed.
Science credit.
Breadth requirement: Natural Sciences
Exclusion: ANTB34H, ANTB34Y
Prerequisite: ANTB41H

ANTC4813 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) osteometric description; (4) nonmetric trait description; (5) methods of estimating age at death and sex; (6) quantitative analysis of metric and nonmetric data; and (7) paleopathology.
Science credit.
Breadth requirement: Natural Sciences
Limited enrolment: 40
Exclusion: ANTB34H, ANTB34Y
Prerequisite: ANTC471H or permission of instructor

ANTC5013 Fieldwork in Social and Cultural Anthropology
An investigation of how social-cultural anthropologists collect data and conduct fieldwork. Students complement reading and lectures on method with gaining first-hand experience in carrying out various techniques of anthropological research including interviewing, collecting life histories, participant observation, and project design. We also consider what it means to carry out ethically responsible research.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40 with preference given to students in specialists in anthropology and international development studies.
Prerequisite: ANTB191H & ANTB201H & at least 0.5 credit at the C-level in socio-cultural anthropology

ANTC5113 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 illness and biomedicine, mental illness, social roots of disease, innovations in health care delivery systems.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: [ANTB141H & ANTB201H] or permission of the instructor

ANTC6213 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, ANTC611H, 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.
Breadth requirement: Natural Sciences
Prerequisite: [ANTB141H & ANTB151H] or permission of the instructor
ANTC66H3 Anthropology of Tourism
This course explores the global cultural phenomenon 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 intersection of travel, authenticity and modernity.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80
Prerequisite: ANTB19H1 & ANTB20H1

ANTC67H3 Foundations in Epidemiology
Epidemiology is the study of disease and its determinants in populations. It is grounded in the biomedical paradigm, statistical reasoning, and that risk is context specific. This course will examine such issues as: methods of sampling, types of controls, analysis of data, and the investigation of epidemics.
Science credit
Breadth requirement: Quantitative Reasoning
Prerequisite: [Any B-level course in Anthropology or Biology] & any statistics course.

ANTC68H3 Deconstructing Epidemics
Colonization, globalization and socio-ecological factors play an important role in origin, maintenance and emergence of old and new infectious diseases in human populations such as yellow fever, cholera, influenza, SARS, issues of co-morbidity, the epidemiological transition, syndemics and the impact of global warming on the emergence of new diseases are discussed.
Science credit
Breadth requirement: Natural Sciences
Prerequisite: [Any B-level course in Anthropology or Biology] & any statistics course.

ANTD01H3 The Body in Culture and Society
An ethno-ographic inquiry into the culturally configured human body as a reservoir of experiential knowledge, focus of symbolism, and site of social, moral, and political control.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: ANTB19H1 & ANTB20H1 plus at least 1.0 credit at the C-level in socio-cultural anthropology.

ANTD04H3 The Anthropology of Violence and Suffering
This course examines the social life of violence, its cultural production and political effects in a global perspective. It asks how social worlds are made and unmade through, against, and after violent events, how violence is remembered and narrated, and how ethnography might respond to experiences of suffering, trauma, and victimhood.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: ANTB19H1 & ANTB20H1 & at least one additional C-level course in socio-cultural anthropology.

ANTD05H3 Advanced Fieldwork Methods in Social and Cultural Anthropology
This course provides students with experience in carrying out ethnographic research in the Greater Toronto Area. Working with the Center for Ethnography, students define and execute a research project of their own design. This course culminates in an original research paper which will be read by at least two faculty members.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 15
Prerequisite: ANTB19H1 & ANTB20H1 & ANTC60H1 & at least two additional C-level courses in socio-cultural anthropology.

ANTD06H3 Reading Ethnography
This course considers the reading and writing of ethnography - the classic genre of socio-cultural anthropology. We examine what differentiates ethnography from other forms of research and how to distinguish ethnographic works of high quality. Also considered are the politics of representation, including how ethnographic writing may reflect unequal relationships of power.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: ANTB19H1 & ANTB20H1 & at least two additional C-level courses in socio-cultural anthropology.

ANTD07H3 Advanced Regional Seminar
This course allows students to examine particular culture areas at an advanced level. Regions to be covered may include South Asia, East Asia, the Muslim World, Latin America, The Pacific, Europe, and North America. Specific case studies from the regions will be used to highlight theoretical and ethnographic issues.
Limited enrolment: 25
Prerequisite: ANTB19H1 & ANTB20H1 & at least one previous area course & at least one additional C-level course in socio-cultural anthropology.

ANTD13H3 Frontiers of Anthropology: A Biological Perspective
An advanced seminar course primarily for majors and specialists in biological anthropology. Topic to be announced. Limited enrolment: 25
Prerequisite: ANTB14H1 & ANTB15H1 & at least one C-level course in biological anthropology.

ANTD15H3 Frontiers of Socio-Cultural Anthropology
An advanced seminar course primarily for majors and specialists in anthropology. Topic to be announced. Prerequisite: ANTB19H1 & ANTB20H1 & (ANTC30H1 & ANTC31H1) or two other comparable C-level courses.
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: gastric 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.
Breadth requirement: Natural Sciences
Prerequisite: ANT060H and one C-level full credit in Physical Anthropology.

ANTD17H3 Medical Osteology: Public Health Perspectives on Human Skeletal Health
This seminar course will examine the clinical, epidemiological and public health literature on osteoporosis and other conditions impacting skeletal health. The course will also explore the potential economic impacts of osteoporosis on Canada's health care system given emerging demographic changes.
Science credit
Breadth requirement: Natural Sciences
Prerequisite: ANT47H & ANT48H

ANTD22H3 Theory and Methodology in Primatology
This seminar course will examine current socio-ecological theory in primatology and explore different methods for studying and sampling primate behavior.
Science credit
Limited enrolment: 25
Prerequisite: ANT223H & ANT23H

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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTB19H & ANTB20H & at least 1.0 credit the C-level in socio-cultural anthropology

ANTD25H3 Medical Primatology: Public Health Perspectives on Zoonotic Diseases
This course will examine the social and cultural contexts of animal-to-human disease transmission globally, and the public risks associated to zoonoses present here in Canada. The course will incorporate both anthropological and epidemiological perspectives.
Science credit
Breadth requirement: Natural Sciences
Prerequisite: ANTB14H & ANTB15H & HLTA01H & [ANTC35H or SOCB86H or STAB22H]

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 & ANT01H, & ANTA03H & 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.

Applied Microbiology (formerly Industrial Microbiology)
(B.Sc.)

Faculty List
S.A. Brent, B.Sci., M.Sc., Ph.D. (Toronto), Lecturer

SPECIALIST (JOINT) PROGRAM IN APPLIED MICROBIOLOGY
Supervisor: S. Brent Email: applied-microbiology@utsc.utoronto.ca
This UTSC-Centennial College joint specialist program combines theory and technical experience in areas related to applied and industrial microbiology. The UTSC courses provide students theoretical and academic depth in cell and molecular biology, biochemistry and microbiology, while Centennial's courses provide irreplaceable applied and practical experience. Project work, in consultation with faculty, allows students to develop skills in laboratory research and techniques, report writing and presentation. By taking courses at both UTSC and Centennial, students are able to earn a UTSC Honours B.Sci. degree and quality for a Biotechnology
Technologist--Industrial Microbiology Diploma from Centennial College. Graduates from this program are well trained to take positions in the food, chemical, pharmaceutical, cosmetic and other related industries. This includes positions in product development, product production and sales management. Opportunities also exist in government and environmental agencies, as well as the option to pursue graduate work.

**Program Admission**

Students should register for Centennial courses using ROSI. However, to complete the registration process, you must follow up the ROSI registration process by contacting (via email) the Centennial College Biotechnology Coordinator, Allan Richardson (allanr@centennialcollege.ca). Once you have provided him with your course selections, you are then formally registered at Centennial. Registration in Centennial courses does not begin until the second year of the program. For additional information about admission to this program, see the "Joint Programs with Centennial College" section of this Calendar.

**Program Requirements**

This program consists of 16.0 required credits (9.5 at UTSC and 6.5 at Centennial). Since a total of 20 credits are required to complete a UTSC degree, students taking this program should additionally take 4.0 credits of UTSC elective courses. It is advised that, including electives, students should plan to take 3 credits in each year of their four year degree. Students should note that they may also be able to accelerate completion of their program and degree by taking advantage of summer course offerings at UTSC. Note that courses with the designators HMC and STE are taught at Centennial College’s MP Science and Technology Centre campus, located within 5 minutes walking distance of the UTSC campus.

**Required Courses and Suggested Course Sequence**

**First Year**

1. **0.5 Credit in Introductory Biology Courses:**
   - BIOA0H1 Introductory Biology: Part I
   - BIOA0H2 Introductory Biology: Part II

2. **1.0 Credit in Chemistry**
   - CHMA1H1 Introductory Chemistry I: Structure and Bonding
   - CHMA1H2 Introductory Chemistry II: Reactions and Mechanisms

3. **1.0 Credit in Mathematics**
   - Choose from:
     - (MATA20H3) & (MATA21H3) Calculus A & B (Discontinued after the 2009/2010 academic year)
     - MATA30H3 & MATA35H3 Calculus I & Calculus II for Biological Sciences

4. **0.5 Credit in Statistics or Computer Science**
   - Choose from:
     - STAT22H3 Statistics I
     - PSYB07H3 Data Analysis in Psychology
     - CSCA0H3 Introduction to Computer Programming
     - CSCA20H3 Computer Science for the Sciences
     - PSICB57H7 Introduction to Scientific Computing

**Second Year**

2. **2.0 Credits of Biology Core Courses and Lab**
   - BIOB1H1 Cell Biology
   - BIOB1H2 Molecular Aspects of Cellular and Genetic Processes
   - BIOB1H1 Cell and Molecular Biology Laboratory
   - BIOB40H3 Ecology

1. **1.0 Credit of Organic Chemistry Courses**
   - CIMB41H3 Organic Chemistry I
   - CIMB42H3 Organic Chemistry II

2. **2.0 Credits of Industrial Microbiology Courses at Centennial**
   - IMCB10H3 Microbiology Basics
   - IMCB20H3 Microbial Techniques
   - IMCB30H3 Lab Instrumentation
   - IMCB40H3 Food Microbiology
Third Year
2.0 Credits of Biology/Microbiology Courses
BIOC12H1 Biochemistry I: Proteins and Enzymes
BIOC15H1 Genetics
BIOC17H1 Microbiology: The Bacterial Cell
EESC30H1 Microbial Biogeochemistry

2.5 Credits of Industrial Microbiology Courses at Centennial
*IMCB00H1 Microbiology Project
*STEB00H1 Analytical Chemistry and Applications
*IMCB00H1 Pharmacological Microbiology
*IMCB00H1 Food Chemistry
*IMCB00H1 Biochemistry and Applications I

Fourth Year
1.0 Credit of Advanced Biology courses
Choose from:
BODI17H1 Seminars in Cellular Microbiology
BODI21H1 Molecular Biology Laboratory I: Host, Vectors and Cloning
BODI22H1 Molecular Biology Laboratory II: Nucleic Acids and Proteins
BODI25H1 Genomics
BODI26H1 Fungal Biology and Pathogenesis
EDES15H1 Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments

2.0 Credits of Industrial Microbiology Courses at Centennial
IMCC00H1 Advanced Microbiology Project
IMCC02H1 Microbial Genetics
IMCC03H1 Biochemistry and Applications II
IMCC04H1 Environmental Microbiology

B. Complementary Elective Courses (optional)
When selecting electives, students may wish to consider the following courses that may be complementary to their program.
HULTA0H1 Plagues and Peoples
HULTB0H1 Health and the Urban Environment
BIOB03H1 Mammalian Physiology I
BIOB03H1 Plant Physiology
BIOB05H1 Evolution
BIOC05H1 Environmental Toxicology

* a minimum of 60% is required in courses marked with an asterisk in order to maintain standing in the program.

IMCB01H3 Microbiology Basics
Basic principles of microbiology including study of microscopic organisms (bacteria, viruses, protozoa, 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 Applied Microbiology or the Joint Program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Exclusions: IMCB01H may not be taken after or concurrently with BIOC17H1, MBY376H1 or MGY377H1.
Prerequisite: BIAA01H & BIAA02H

IMCB02H3 Microbial Techniques
Practical applications of the concepts covered in IMCB01H.
Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Exclusions: IMCB02H may not be taken after or concurrently with BIOC17H1, MBY376H1 or MGY377H1.
Prerequisite: BIAA01H & BIAA02H
Corequisite: IMCB00H1

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 Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: CHMA10H & CHMA11H
IMCB04IH Food Microbiology
An introduction through theory and laboratory 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 Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB01IH

IMCB09IH Microbiology Project
Practical experience in locating, collecting, and interpreting scientific information for the purpose of designing laboratory procedures. Students work individually under faculty supervision in a lab setting to perform the laboratory procedures and record the results and present a formal report. Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB01IH & IMCB02H

IMCB06IH 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 Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB04IH

IMCB07IH Food Chemistry
The principles of food preparation science including HACCP, organoleptic evaluation and survey techniques, 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 Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: CHMB04IH

IMCB05IH 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 soup, testing of food oils, identification of sugars, paper chromatography of amino acid, titration of amino acids, and isolation of cousin from milk. Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Exclusion: IMCB09IH may not be taken after or concurrently with BIOC121H or BCH310H
Prerequisite: CHMB04IH

IMCC01IH 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 Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB05IH & IMCB06IH

IMCC02H Microbial Genetics
Basic genetics using microorganisms, with concepts verified through lab experiments. Isolating and identifying nucleic acids, observing gene function, and effecting simple gene transfers. Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB06IH

IMCC03IH Biochemistry and Applications II
Biochemistry and the theory of evolution; evidence for, and condition of, life during ancient times. Products, importance, function, classification, and control of enzymes. Energy balances of glycolysis and anaerobic/aerobic metabolism of carbohydrates and fats. Application of biochemistry to the growth and control of microorganisms and higher living forms. Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Exclusion: IMCC03H may not be taken after or concurrently with BIOC131H or BCH310H
Prerequisite: IMCB08IH

IMCC04IH Environmental Microbiology
- During this course, students will study the basic principles of environmental microbiology through lectures and laboratory experiments including soil sampling and nutrient cycling. Students will also explore the application of biotechnology to environmental issues including bioremediation and the benefits and risks that genetically modified organisms pose to the environment. Limited to students in the Joint Program in Applied Microbiology.
Breadth requirement: Natural Sciences
Prerequisite: IMCB06IH

STEB07IH Analytical Chemistry and Applications
See the Environmental Science and Technology section of this Calendar for a full course description.
Astronomy

(B.Sc.)

Faculty List
P. Artyomowicz, 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. Lowham, B.Sc. (Toronto), M.Sc., Ph.D. (York, Canada), Assistant Professor
J. Bayer Carpi, B.Sc. (Los Andes, Bogota)
M.Sc., Ph.D. (Toronto), Lecturer

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 understanding of the universe and man as 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 discovered in orbit around other stars in our Galaxy. In addition there has recently been a significant trend towards the integration of many of the ideas of modern high energy physics into astronomy, with particularly interesting developments concerning ideas about the very first seconds in the evolution of our universe.

The full range of modern astronomical topics is covered in the introductory courses ASTA01H and ASTA02H. For students wishing to further their study in astronomy, there are a number of B-level courses, which are integral components of a number of the Physical Sciences Specialist Programs. In addition, the course ASTB03H is intended for students who have taken no previous astronomy, and covers the history of modern astronomy. It is intended to provide a historical perspective on modern astronomy, and by example, an introduction to the evolution of a number of modern scientific areas. Similarly, as more planets are discovered there continues to be an even stronger collaborative effort with disciplines such as chemistry and biology to discover the possible origins of life.

Science Engagement Courses

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.

MAJOR PROGRAM IN ASTROPHYSICS AND PHYSICS

See the Physics section of this Calendar for program requirements.

SPECIALIST PROGRAM IN NATURAL SCIENCES

See the Physical Sciences section of this Calendar for program requirements.

SPECIALIST PROGRAM IN PHYSICAL AND MATHEMATICAL SCIENCES

See the Physical Sciences section of this Calendar for program requirements.

SPECIALIST PROGRAM IN PHYSICS AND ITS APPLICATIONS

See the Physics section of this Calendar for program requirements.

ASTA01H Introduction to Astronomy and Astrophysics I: The Sun and the Planets

The solar neighbourhood provides examples of astronomical bodies that can be studied by both ground-based and space vehicle-based-observational instruments. The astronomical bodies studied range from cold and rocky planets and asteroids to extremely hot and massive bodies, as represented by the sun. This course considers astronomical bodies and their evolution, as well as basic parts of physics, chemistry, etc., required to observe them and understand their structure. The course is suitable for both science and non-science students.

Breadth requirement: Natural Sciences
Exclusion: AST101H

ASTA02H Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets

This course uses the basis developed in ASTA01H to extend consideration to all stars, galaxies and the universe. The structure and evolution of stars and galaxies is considered, with our own galaxy, the Milky Way, providing the opportunity for a detailed study of a well-observed system. Even this system challenges us with many unanswered questions, and the number of questions increases with further study of the universe and its large-scale character. Current models and methods of study of the universe will be considered. The course is suitable for both science and non-science students.

Breadth requirement: Natural Sciences
Exclusion: AST121H, AST201H
Prerequisite: ASTA01H
ASTB03H3 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.
Prerequisite: Natural Sciences
Exclusion: AST230H

ASTB21H3 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 Newtonian gravitation's inverse square force law. The use of the Euler-Lagrange equations to describe such mechanical systems will be considered.
Prerequisite: AST100H & AST102H & MAT136H or MAT137H & PHY121H
Exclusion: 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 ("minor 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. The bibliography is dependent upon the topic selected.
Exclusion: AST425H
Prerequisite: ASTA01H & ASTA02H & 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: Natural Sciences
Prerequisite: ASTB21H & MATB41H
Exclusion: MATB42H

Biological Sciences (B.Sc.)

Faculty List
J.W. Gard, B.A. (Mount Allison), Ph.D. (McGill), Professor Emeritus
C. Nalewajko, B.Sc., Ph.D., D.Sc., (University College London), Professor Emeritus
J.C. Rösch, B.Sc. (Abderdeen), Ph.D. (Shelfield), D.Sc. (Abderdeen), F.R.S.C., Professor Emeritus
J.C. Silver, B.Sc., Ph.D. (CUNY), Professor Emeritus
A.S. Weatherby, B.Sc. (London), M.Sc. (Tasmania), Ph.D. (Glasgow), Professor Emeritus
G.R. Williams, B.Sc., Ph.D., D.Sc. (Liverpool), F.R.S.C., Professor Emeritus
J.H. Youso, B.A. (Victoria), M.Sc. (McGill), Ph.D. (Western Ontario), Professor Emeritus
R. Roome, B.Sc. (Calgary), Ph.D. (British Columbia), Professor
L.R. Brown, B.Sc. (Carleton), Ph.D. (Texas), Professor
M.M. Campbell, B.Sc., Ph.D. (Guelph), M.A. (Oxon), Professor
H.J. Landecker, B.Sc. (Utrecht), Ph.D. (British Columbia), Professor
G.C. Wetherbee, B.Sc., M.Sc. (Western Ontario), Ph.D. (Queens), Professor
D.D. Williams, B.Sc. (New Zealand), Dip. Ed. (Liverpool), M.Sc., Ph.D. (Waterloo), D.Sc. (Wales), Professor
M.C.B. Andrade, B.Sc., (Simon Fraser), M.Sc. (Toronto), Ph.D. (Cambridge), Associate Professor
R.R. Fitchen, B.Sc., M.Sc., (Toronto), Ph.D. (Carleton), Associate Professor
R.E. Harrison, B.Sc., (Waterloo), M.Sc., (Manitoba), Ph.D. (Toronto), Associate Professor
C.A. Hasenkamp, B.Sc., (Loyola), M.Sc., Ph.D. (Florida State), Associate Professor
A.C. Mason, B.Sc., (Guelph), M.Sc., Ph.D. (Toronto), Associate Professor
S.G. Reid, B.Sc., Ph.D. (Ottawa), Associate Professor
C.D. Riggs, B.Sc., (North Carolina), Ph.D. (Florida State), Associate Professor
M.M. Ains, B.Sc., M.Sc. (Western), Ph.D. (McGill), Assistant Professor
M.W. Cudak, B.Sc., M.Sc., (Winsdor), Ph.D. (Tennessee), Assistant Professor
M.J. Fitzpatrick, B.Sc., M.Sc., (Brock), Ph.D. (Toronto), Assistant Professor
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S. Gazzarrini, B.Sc., M.Sc., Ph.D. (Tubingen), Assistant Professor
N.R. Lewis, B.Sc., M.Sc. (Toronto), Ph.D. (Cornell), Assistant Professor
J.E. Nash, B.Sc. (Aberdeen), M.Sc., Ph.D. (Manchester), Assistant Professor
M.R. Terheggen, B.Sc., Ph.D. (U.B.A., Buenos Aires, Argentina), Assistant Professor
K.C. Welch, B.Sc. (Trinity University), M.A., Ph.D. (Santa Barbara), Assistant Professor
R. Zhao, B.Sc., Peking University, Ph.D. (Chinese Academy of Agricultural Sciences), Assistant Professor
A. Ashok, B.Sc. (Sheffield), Ph.D. (Brown), Lecturer
S.A. Bruni, B.Sc., M.Sc., Ph.D. (Toronto), Lecturer
K.N. Persaud, B.Sc. (Toronto), B.Ed. (Western Ontario), Ph.D. (McMaster), Lecturer

Associate Chair Undergraduate (until June 30, 2010): S. Reid Email: spreid@utsc.utoronto.ca

Overview

Biological Sciences offers five specialist programs that include Biodiversity, Ecology and Evolution, and Molecular Biology (with or without the Co-op option); Human Biology; and Integrative Biology. The Biodiversity, Ecology and Evolution specialist (BEES) program provides a foundation for understanding how ecology and evolution shape species, communities, and ecosystems. In the cell and Molecular Biology programs students explore the cellular and subcellular mechanisms underlying life processes. The Human Biology specialist program emphasizes the biology of the human species and is tailored for students who wish to pursue a career in a health-related field. The Integrative Biology specialist program addresses biological questions in a multidisciplinary fashion, with course work in a range of biology sub-disciplines.

Biological Sciences also offers one major program, one minor program and two joint specialist programs. The major program in Biology allows students to combine their studies in biology with studies in either an unrelated program or in a complimentary major program such as neuroscience, environmental science, biological chemistry, health studies or psychology. The minor program in Biology is intended for students who have an interest in biology, but wish to focus their studies in a different discipline. Two joint specialist programs are also offered by Biological Sciences in collaboration with Centennial College. These include the joint specialist program in Applied Microbiology and the joint specialist program in Paramedicine. Both joint programs include a combination of university courses and courses taken at the neighbouring Centennial College campus.

Students are advised to consult the specific program requirements for their degree, and, if necessary, to meet with the appropriate program supervisor for advice on completion of their program requirements. In some instances courses from other University of Toronto campuses or other institutions may be used to satisfy program requirements, but such substitutions must be pre-approved by the program supervisor. Students are encouraged to check the information that follows thoroughly. Other useful information can be found on the Department of Biological Sciences website at http://www.utsc.utoronto.ca/biosci

Admission to Biological Sciences programs

Students apply to one or more Biological Sciences programs after completion of a minimum of 4.0 full credits, including 1.0 credit in Biology, 1.0 credit in Chemistry, and 0.5 credit in Mathematics or Statistics and with a cumulative grade point average (GPA) of at least 2.0. Application for admission is made to the Registrar through ROSI, in April/May and July/August. See the UTSC Registrar’s web site for information on program (Subject POS) selection at: www.utsc.utoronto.ca/subjectpos

Pre-program supervision in Biological Sciences

Biological Sciences has a pre-program supervisor available to advise students who have not yet chosen a program (primarily 1st year students) on degree and program related matters. Please contact Sean Rammattan at rammattan@utsc.utoronto.ca, Room SW 241D or 416-287-7404 if you have questions of this nature.

Enrolment in Biological Sciences courses

Priority access to B, C and D level Biology courses is given to students enrolled in Biological Sciences specialist and major programs 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 opened up to other students by the third week of the registration period.

Important note about Biological Sciences courses codes

Effective 2010-2011, the first three characters of Biological Sciences course codes have changed from BGY to BIO. The rest of the code remains the same. For example, BIOA01H3 is now the new equivalent of the former BGYA01H3.

Science Engagement courses

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.
SPECIALIST PROGRAM IN BIODIVERSITY, ECOLOGY AND EVOLUTION

Supervisor: M. Andrade Email: biodiversity@utsc.utoronto.ca

This program presents a foundation for understanding how ecology and evolution shape organismal features (from morphology and physiology to behaviour) and the structure and function of communities and ecosystems. Ultimately these processes determine the broad patterns of organization of life on earth and biodiversity. The challenges to biodiversity are daunting. Habitat destruction, biological invasions and climate change are causing loss of species and disruption of ecosystems worldwide. BEEs graduates will be well trained to understand and actively seek solutions to these problems. This program will show how ecological and evolutionary perspectives can be used to understand and predict the outcome of dynamic interactions among organisms, populations, species, and communities. Students will be well trained to take positions in government agencies, consulting firms or NGOs, able to continue with graduate studies in science for academic careers; or able to pursue careers in business or law related to environmental issues, stewardship and sustainable development.

Program Requirements

This program consists of 14.5 required credits. Since a total of 20 credits are required to complete a four year degree, students taking this program should additionally take 5.5 credits of elective courses. It is advised that, including electives, students should plan to take 5 credits in each year of their four year degree.

A. Required Courses

First Year

1.0 Credit of Introductory Biology Courses
BIOA01H Introductory Biology: Part I
BIOA02H Introductory Biology: Part II

1.0 Credit of Introductory Chemistry Courses
CHMA11H Introductory Chemistry I: Structure and Bonding
CHMA12H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit in Mathematics
Choose from:
(MATA20H & MATA21H) Calculus A & B (Discontinued after the 2009/2010 academic year)
MATA30H & MATA35H Calculus I & Calculus II for Biological Sciences

Note: Starting in the 2010-2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA30H) must take the preparatory, non-credit course at UTSC prior to enrolling in MATA30H

0.5 Credit in Physics
Choose from:
PHYA11H Introduction to Physics I
PHYA12H Introduction to Physics II

0.5 Credit in Computer Science
Choose from:
CSCA40H Introduction to Computer Programming
CSCA42H Computer Science for the Sciences
PSCB57H Introduction to Scientific Computing (this course could also be taken in second year)

Second Year

3.0 Credits of Biology Core Courses
BIOB11H Cell Biology
BIOB12H Molecular Aspects of Cellular and Genetic Processes
BIOB33H Mammalian Physiology I
BIOB34H Plant Physiology
BIOB50H Ecology
BIOB51H Evolutionary Biology

0.5 Credit of Biology Core Labs
BIOB52H Ecology and Evolutionary Biology Laboratory

0.5 Credit in Statistics
Choose from:
STATB2H Statistics I
PSYB07H Data Analysis in Psychology

0.5 Credit in a Minor Field
Choose from:

0.5 Credit in a Minor Field
Choose from:
Biological Sciences

Third Year
2.0 Credits of C-level Ecology and Evolution Foundation Courses
BIOC161H Evolutionary Genetics and Genomics
BIOC580H Macroevolution
BIOC591H Advanced Population Ecology
BIOC611H Community Ecology and Environmental Biology

Third/Fourth Year
4.5 credits of C- & D-level courses from Bins 1 and 2 below. This must include at least one credit from each bin and at least one credit total at the D-level.

Bin 1: C- & D-level Ecology and Evolution Courses
Choose from:
BIOC511H Tropical Marine Ecology and Evolution
BIOC521H Ecology Field Course
BIOC551H Biological Consequences of Global Change
BIOC531H Conservation Biology
BIOC555H Environmental Toxicology
BIOC571H Advanced Field Course in Ecology
BIOC571H Genetics
BIOC521H Senior Seminar in Biodiversity and Conservation Biology
BIOC601H Spatial Ecology
BIOC605H Causes & Consequences of Biodiversity
EESC304H Biodiversity and Biogeography

Bin 2: C- & D-level Organismal Biology Courses
Choose from:
BIOC541H Animal Behaviour
BIOC621H Role of Zoos in Conservation
BIOC621H Fungal Biology & Pathogenesis
BIOC331H Comparative Environmental Physiology
BIOC371H Biology of Plant Stress
BIOC543H Exercise Physiology
BIOC545H Animal Communication
BIOC533H Special Topics in Behavioural Ecology
EESC301H Microbial Biochemistry

B. Senior Research Courses (optional)
Students interested in graduate research are encouraged to take one or more of the independent research courses offered in Biological Sciences as part of their degree.
BIOD950H Supervised Study in Biology
BIOD98Y Directed Research in Biology
BIOD99Y Directed Research in Biology

C. Complementary Elective Courses (optional)
This list of courses from other departments complements a degree in Biodiversity, Ecology and Evolution and hence students may want to consider these courses as potential electives. Please note that some of these courses require prerequisites not included in this program. Students are not required to take any of these courses; they are provided for guidance only.
EESA101H Human Health and the Environment
EESD150H Feeding Humans - The Cost to the Planet
EESD151H Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
GGRA02H The Geography of Global Processes
GGRA03H Geographic Information Systems (GIS) and Empirical Reasoning
GRGR201H Environmental Conservation and Sustainable Development
NROB801H Neuroanatomy Laboratory
NROC48H Neurobiology
NROC61H Learning and Motivation
NROC64H Sensory and Motor Systems
PSYA01H Introductory Psychology: Part I
PSYA02H Introductory Psychology: Part II
PSYB45H Behaviour Modification: Origins and Applications
PSYB864H An Introduction to Physiological Psychology
SPECIALIST PROGRAM IN CELL AND MOLECULAR BIOLOGY
Supervisor: C. Haselkamp
Email: cell-and-molecular-biology@tsc.utoronto.ca

The Cell and Molecular Biology program strives to help students construct a broad foundation of knowledge across the major disciplines of biology in the first two years of study, and combine this knowledge with an increasingly analytical and reflective approach to learning. Upon this base students deepen their knowledge of biological processes that occur at the cellular and molecular level through the course work of their third and fourth years. This is a laboratory-rich program that integrates an understanding of chemical and physical processes with our complex biological systems. Because of broad training in biology and rigorous cross training in cognate disciplines graduates are well positioned to apply to professional and graduate schools or work in a broad range of government regulatory agencies, clinical or research-focused industries and other careers that require the union of strong analytical and technical skills.

Program Requirements
This program consists of 13.5 required credits.

First Year
1.0 Credit of Introductory Biology Courses
BIOA01H Introductory Biology: Part I
BIOA02H Introductory Biology: Part II

1.0 Credit of Introductory Chemistry Courses
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit in Mathematics
Choose from:
(MATA20H) (MATA21H) Calculus A & B (Discontinued after the 2009/2010 academic year)
MATA30H & MATA35H Calculus I & Calculus II for Biological Sciences
MATA30H & MATA50H Calculus I & Calculus II for Physical Sciences
Note: Starting in the 2010-2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA30H), must take the preparatory, non-credit course at UTSC prior to enrolling in MATA30H.

1.0 Credit in Physics
Choose 0.5 credit from:
PHYA10H Introduction to Physics IA
PHYA11H Introduction to Physics IB
Choose 0.5 credit from:
PHYA21H Introduction to Physics IA
PHYA22H Introduction to Physics IB

0.5 Credit in Statistics
Choose from:
STAB22H Statistics I (this course could also be taken in second year)
PSYB07H Data Analysis in Psychology (this course could also be taken in second year)

Second Year
3.0 Credits of Biology Core Courses
BIOR100H Cell Biology
BIOR111H Molecular Aspects of Cellular and Genetic Processes
BIOR340H Mammalian Physiology I
BIOR341H Plant Physiology
BIOR550H Ecology
BIOR551H Evolutionary Biology

0.5 Credit of Biology Core Labs
BIOR121H Cell and Molecular Biology Laboratory

1.0 Credit of Organic Chemistry Courses
CHMB411H Organic Chemistry I
CHMB421H Organic Chemistry II
### Biological Sciences

#### Third Year
**2.0 Credits of Biology C-level Courses**
- BIOC12H1 Biochemistry I: Proteins & Enzymes
- BIOC13H1 Biochemistry II: Bioenergetics and Metabolism
- BIOC15H1 Genetics
- BIOC17H1 Microbiology: The Bacterial Cell
- BIOC23H1 Practical Approaches to Biochemistry

#### 0.5 Credit in Computer Science
Choose from:
- CSCA20H1 Introduction to Computer Programming
- CSCA20H4 Computer Science for the Sciences
- PSYC25H1 Introduction to Scientific Computing

Computer science might be taken in an earlier year.

#### Third/Fourth Year
**0.5 Credit of Cognate Biology Courses**
Choose from:
- BIOC19H1 Animal Developmental Biology
- BIOC21H1 Vertebrate Histology: Cells and Tissues
- (BGVC22H3) Vertebrate Histology: Organs
- BIOC23H1 Molecular Aspects of Plant Development
- BIOC27H1 Biology of Plant Stress

#### Fourth Year
**0.5 Credit in Advanced Molecular Techniques**
BIO231H1 Molecular Biology Laboratory I: Hunt, Vectors and Cloning

#### 0.8 credit of D-level Research-oriented "Cell & Molecular" Course Work
Choose from:
- BIO317H1 Seminars in Cellular Microbiology
- BIO322H1 Molecular Biology Laboratory II: Nucleic Acids and Proteins
- BIO323H1 Special Topics in Cell Biology and Molecular Genetics
- BIO325H1 Genomics
- BIO372H1 Molecular Endocrinology
- BIO389H1 Supervised Study in Biology
- BIO398Y1 Directed Research in Biology

**Note:** Any of these courses not used to satisfy this requirement may be used to fulfill the "0.5 Credit of Cognate Biology Courses" requirement.

**Note:** Students should review the depth and breadth requirements for their degree when selecting their elective courses.

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

*Supervisor: C. Haenkkamp*  *Email: cell-and-molecular-biology@ms.uottawa.ca*

**Group Contact:** mcoop@ms.uottawa.ca

The Cell and Molecular Biology program strives to help students construct a broad foundation of knowledge across the major disciplines of biology in the first two years of study, and combine this knowledge with an increasingly analytical and reflective approach to learning. Upon this base students develop their knowledge of biological processes that occur at the cellular and molecular level through the course work of their third and fourth years. This is a laboratory-rich program that integrates an understanding of chemical and physical processes with our complex biological systems. Because of broad training in biology and rigorous core training in the major disciplines, graduates are well positioned to apply to professional and graduate schools or work in a broad range of government regulatory agencies, clinical or research-focused industries, and other careers that require the union of strong analytical and technical skills.

The co-op option of the Cell and Molecular Biology program complements and punctuates academic course work with full-time work terms in research laboratories, 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.arts.uottawa.ca/register](http://www.arts.uottawa.ca/register). The minimum qualifications for entry are 5.6 credits including BIOA01H1, BIOA02H1, CHMA10H1, CHMA11H1, [MATA20H3 & MATA21H3] or [MATA30H3 & MATA35H3 or MATA36H3], [PHYA10H3 or PHYA11H3] plus a cumulative GPA of at least 2.75.
Program Requirements
This program consists of 13.5 required credits plus two work-terms.

A. Course Requirements

First Year

1.0 Credit of Introductory Biology Courses
BIOA01H Introductory Biology: Part I
BIOA02H Introductory Biology: Part II

1.0 Credit of Introductory Chemistry Courses
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit in Mathematics
Choose from:
(MATA20H & (MATA21H) Calculus A & B (Discontinued after the 2009/2010 academic year)
MATA30H & MATA31H Calculus I & Calculus II for Biological Sciences
MATA30H & MATA36H Calculus I & Calculus II for Physical Sciences

Note: Starting in the 2010-2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA30H), must take the preparatory, not-for-credit course at UTSC prior to enrolling in MATA30H

1.0 Credit in Physics
Choose 0.5 credit from:
PHYA10H Introduction to Physics IA
PHYA11H Introduction to Physics IB

Choose 0.5 credit from:
PHYA20H Introduction to Physics IIA
PHYA21H Introduction to Physics IIB

0.5 Credit in Statistics
Choose from:
STAB2H Statistics I (this course could also be taken in second year)
PSYB07H Data Analysis in Psychology (this course could also be taken in second year)

Second Year

3.0 Credits of Biology Core Courses
BIOB10H Cell Biology
BIOB11H Molecular Aspects of Cellular and Genetic Processes
BIOB30H Mammalian Physiology I
BIOB31H Plant Physiology
BIOB50H Ecology
BIOB51H Evolutionary Biology

0.5 Credits of Biology Core Labs
BIOB12H Cell and Molecular Biology Laboratory

1.0 Credit of Organic Chemistry Courses
CHMB41H Organic Chemistry I
CHMB42H Organic Chemistry II

Third Year

2.5 Credits of Biology C-Level Courses
BIOC22H Biochemistry I: Proteins & Enzymes
BIOC33H Biochemistry II: Bioenergetics and Metabolism
BIOC35H Genetics
BIOC37H Microbiology: The Bacterial Cell
BIOC23H Practical Approaches to Biochemistry

0.5 Credit in Computer Science
Choose from:
CSCA08H Introduction to Computer Programming
CSCA20H Computer Science for the Sciences
PSYC27H Introduction to Scientific Computing

Computer science might be taken in an earlier year and will enhance Coop placement options
Third/Fourth Year

0.5 Credit of Cognate Biology Courses
Choose from:
- BIOC191 Animal Developmental Biology
- BIOC21H Vertebrate Histology: Cells and Tissues
- BIOC22H Vertebrate Histology: Organs
- BIOC31H Molecular Aspects of Plant Development
- BIOC37H Biology of Plant Stress

Fourth Year

0.5 Credit in Advanced Molecular Techniques
BIOC21H, Molecular Biology Laboratory II: Host, Vectors and Cloning

0.5 Credit of D-level Research-Oriented “Cell & Molecular” Course Work
Choose from:
- BIOC27H Seminar in Cellular Microbiology
- BIOC22H Molecular Biology Laboratory II: Nucleic Acids and Proteins
- BIOC23H Special Topics in Cell Biology and Molecular Genetics
- BIOC25H Genomics
- BIOC27H Molecular Endocrinology
- BIOC29H Supervised Study in Biology
- BIOC98Y Directed Research in Biology

Note: Any of these courses not used to satisfy this requirement can be used to fulfill the 0.5 Credit of Cognate Biology Courses.

Note: Students should review the depth and breadth requirements of their degree when selecting their elective courses.

B. Work Term Requirements

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 both an oral and written report 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 10.0 credits, including BIOC40H, BIOC40I, CHMA10H, CHMA11H, [MATA30H & MATA31H] or [MATA30H & MATA31H] or [MATA36H] or [PHYA10H or PHYA11H] or [BIOC18H, BIOC19H, BIOC25H, CHMB44H, CHMB45H]. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels, and seminars in campus and industry settings along with seminars covering resumes, cover letters, job interviews, and all aspects of employment, prior to their first work term.

To be eligible for their second work term placement, students must have completed at least 12.5 credits which must include [BIOC12H & BIOC15H] or [BIOC13H & BIOC17H] and have received a satisfactory evaluation for their performance and for their reports on their first work term. Completion of Statistics and Computer Science course work, before the second placement, is highly recommended.

SPECIALIST PROGRAM IN CONSERVATION BIOLOGY

The specialist program in Conservation Biology has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in the program are able to complete it. Students who had intended to enroll in the program in 2010/11 might want to consider the new specialist program in Biodiversity, Ecology & Evolution.

SPECIALIST (CO-OPERATIVE) PROGRAM IN CONSERVATION BIOLOGY

The specialist (co-operative) program in Conservation Biology has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in the program are able to complete it.
SPECIALIST PROGRAM IN HUMAN BIOLOGY

Program Requirements

This program consists of 15.5 credits including at least 6.0 credits at the C- or D-level of which at least 1.0 must be at the D-level.

Required Courses and Suggested Course Sequence

First Year

1.0 Credit of Introductory Biology Courses
- BIOA01H Introductory Biology: Part I
- BIOA02H Introductory Biology: Part II

1.0 Credit of Introductory Chemistry Courses
- CHMA08H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit of Introductory Calculus Courses
- MATA38H1 & MATA24H6 Calculus A & B (Both courses discontinued after the 2009/2010 academic year)
- MATA39H1 & MATA39H6 Calculus I & Calculus II for Biological Sciences

Note: Starting in the 2010/2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA39H1), must take the preparatory, not for credit course at UTSC prior to enrolling in MATA39H.

1.0 Credit of Introductory Physics Courses
- PHYA11H1 Introduction to Physics I
- PHYA22H1 Introduction to Physics II

1.0 Credit of Introductory Psychology Courses
- PSYA10H1 Introductory Psychology: Part I
- PSYA20H1 Introductory Psychology: Part II

Second Year

3.0 Credits of Biology Core Courses
- BIOB10H1 Cell Biology
- BIOB11H1 Molecular Aspects of Cellular and Genetic Processes
- BIOB30H1 Mammalian Physiology I
- BIOB31H1 Plant Physiology
- BIOB30H1 Ecology
- BIOB31H1 Evolutionary Biology

1.0 Credit of Biology Core Labs
- BIOB20H1 Animal Physiology Laboratory
- BIOB30H1 Human Development and Anatomy Laboratory

1.0 Credit of Organic Chemistry Courses
- CHMB41H1 Organic Chemistry I
- CHMB42H1 Organic Chemistry II

Third/Fourth Years

3.5 Credits of C-level Biology Courses

Choose From:
- BIOC31H Biochemistry I: Proteins and Enzymes
- BIOC33H Biochemistry II: Bioenergetics and Metabolism
- BIOC35H Genetics
- BIOC16H Evolutionary Genetics and Genomics
- BIOC17H Microbiology: The Bacterial Cell
- BIOC19H Animal Developmental Biology
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BIOC22H Vertebrate Histology: Cells and Tissues
BIOC22H Vertebrate Histology: Organs
BIOC33H Maternal Physioligies: Lecture and Laboratory
BIOC34H Consequences of Global Change
BIOC53H Environmental Toxicology

1.0 Credit of D-level Biology Courses
Choose From:
BIOD17H Seminars in Cellular Microbiology
BIOD26H Fungal Biology and Pathogenesis
BIOD27H Molecular Endocrinology
BIDO29H Pathobiology of Human Disease
BIDO33H Comparative Environmental Physiology
BIDO41H Exercise Physiology
BIDO51H Pathologies of the Nervous System

0.5 Credit in Statistics
Choose From:
STAB22H Statistics I
PSYB07H Data Analysis in Psychology

0.5 Credit in Psychology
Choose From: Any B-, C- or D-Level Psychology Course

SPECIALIST PROGRAM IN INTEGRATIVE BIOLOGY
Supervisor: K. Persaud Email: integrative-biology@utsc.utoronto.ca

In today’s rapidly changing world, the development of solutions to combat some of the most pressing global challenges such as climate change, emerging diseases, hunger and species extinction, requires an integrative approach in which expertise is drawn from disparate biological and other disciplines. The specialist program in Integrative Biology provides the student with a solid knowledge base in key core and foundational areas of biology while also providing a breadth of knowledge to support more specialized studies and focused training in a range of disciplines (for examples, see below under “Routes to Specialization”). Students who complete this program will be well positioned for a career in many aspects of the biological sciences or to undertake further studies at the professional or graduate level.

Program Requirements
This program consists of 14.5 required credits including at least 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level. Since a total of 20 credits are required to complete a four year degree, students taking this program should additionally take 5.5 credits of elective courses. It is advised that, including electives, students should plan to take 5 credits in each year of their four year degree.

A. Required Courses
First Year
1.0 Credit of Introductory Biology Courses
BIOA01H Introductory Biology: Part I
BIOA02H Introductory Biology: Part II

1.0 Credit in Chemistry
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit in Mathematics
Choose from:
(MATA20H1 & MATA21H1) Calculus A & B (Discontinued after the 2009/2010 academic year)
MATA30H1 & MATA33H1 Calculus I & Calculus II for Biological Sciences

Note: Starting in the 2010-2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA30H1) must take the preparatory, not-for-credit course at UTSC prior to enrolling in MATA30H

0.5 Credit in Physics
Choose from:
PHYA101H Introduction to Physics IA
PHYA11H Introduction to Physics IB
0.5 Credit in Computer Science
Choose from:
- CSCA08H1 Introduction to Computer Programming
- CSCA20H1 Computer Science for the Sciences
- PSCB57H7 Introduction to Scientific Computing (this course could also be taken in second year)

**Second Year**

### 3.0 Credits of Biology Core Courses

- BIOB1H1 Cell Biology
- BIOB1H1 Molecular Aspects of Cellular and Genetic Processes
- BIOB3H1 Mammalian Physiology I
- BIOB3H1 Plant Physiology
- BIOB5H1 Ecology
- BIOB5H1 Evolutionary Biology

### 0.5 Credit of Biology Core Labs
Choose from:
- BIOB2H1 Cell and Molecular Biology Laboratory
- BIOB2H1 Animal Physiology Laboratory
- BIOB3H1 Human Development and Anatomy Laboratory
- BIOB5H1 Ecology and Evolutionary Biology Laboratory

### 0.5 Credit in Statistics
Choose from:
- STA22H3 Statistics I
- PSYB07H7 Data Analysis in Psychology

**Third Year**

### 1.5 Credits of Biology Foundation Courses

- BIOC1H1 Genetics
- BIOC17H1 Microbiology: The Bacterial Cell
- BIOC24H1 Animal Behaviour

**Third/Fourth Year**

### 0.5 Credit of Advanced Courses in Physiology, Biochemistry and Neurobiology

Choose from:
- BIOC12H1 Biochemistry I: Proteins and Enzymes
- BIOC13H1 Biochemistry II: Bioenergetics and Metabolism
- BIOC23H1 Practical Approaches to Biochemistry
- BIOC33H1 Mammalian Physiology I: Lecture and Laboratory
- BIOC34H1 Mammalian Physiology II: Lecture
- BIOC65H1 Environmental Toxicology
- ANTC37H1 Foundations in Epidemiology
- NIOC34H1 Neuroethology
- NIOC36H1 Learning and Motivation
- NIOC44H1 Sensory and Motor Systems
- PSYC31H1 Clinical Neuropsychology
- BIOD27H1 Molecular Endocrinology
- BIOD29H1 Pathobiology of Human Disease
- BIOD43H1 Exercise Physiology
- BIOD63H1 Pathologies of the Nervous System
- NIOD57H1 Psychology of Aging

### 0.5 Credit of Advanced Courses in Ecology and Conservation

Choose from:
- BIOC35H1 Tropical Marine Ecology and Evolution
- BIOC52H1 Ecology Field Course
- BIOC58H1 Consequences of Global Change
- BIOC79H1 Advanced Population Ecology
- BIOC83H1 Macroevolution
- BIOC61H1 Community Ecology and Environmental Biology
- BIOC62H1 Role of Zoon in Conservation
- BIOC63H1 Conservation Biology
- BIOC67H1 Advanced Field Course in Ecology
EES04H1 Biodiversity and Biogeography
BIOD52H1 Senior Seminar in Biodiversity and Conservation Biology
BIOD60H1 Spatial Ecology
BIOD66H1 Causes and Consequences of Diversity

0.5 Credits of Advanced Courses in Genes and Development
Choose from:
BIOC16H1 Evolutionary Genetics and Genomics
BIOC19H1 Animal Developmental Biology
BIOC1HH1 Plant Development
BIOD28H1 Special Topics in Cell Biology and Molecular Genetics
BIOD25H1 Genomics
BIOD28H1 Molecular Biology Lab I: Host, Vectors & Cloning
BIOD25H2 Molecular Biology Laboratory II: Nucleic Acids and Proteins

0.5 Credits of Advanced Courses in Organismal Biology
Choose from:
BIOC21H1 Vertebrate Histology: Cells and Tissues
(BOGC22H1) Vertebrate Histology: Organs
ANTC12H1 Research on the Social Behaviour of Non-Human Primates
ANTC68H1 Deconstructing Epidemics
EESC30H1 Microbial Biogeochemistry
BOD17H1 Seminars in Cellular Microbiology
BIOD22H1 Fungal Biology and Pathogenesis
BIOD33H1 Comparative Environmental Physiology
BIOD37H1 Biology of Plant Stress
BIOD45H1 Animal Communication
BIOD53H1 Special Topics in Behavioural Ecology

3.0 Credits of Additional C- or D-Level Biology Courses
Choose from:
Any BIO (or formerly BGY) C- or D-level courses offered by the department.

Note that NROC34H1 (Neurobiology), EESC04H1 (Biodiversity and Biogeography) and EESC30H1 (Microbial Biogeochemistry) may also be used toward fulfilling this requirement, if not already used toward fulfilling one of the other requirements above.

B. Routes to Specialisation (optional)
A key advantage of the specialist program in Integrative Biology is the ability for students to readily specialise in areas of particular interest. Please note that students are not required to follow any of these suggested routes. They are provided for guidance only.

- For students with a particular interest in "The Impact of Environment and Climate Change on the Biology of Ecosystems", you should consider including some or all of the following courses in your program: BIOC52H1 (Ecology and Evolutionary Biology Lab), BIOC52H1 (Ecology Field Course), BIOC58H1 (Consequences of Global Change), BIOC59H1 (Advanced Population Ecology), BIOC63H1 (Community Ecology and Environmental Biology) and BIOC71H1 (Advanced Field Course in Ecology).

- For students with a particular interest in "The Conservation and Biodiversity of Organisms", you should consider including some or all of the following courses in your program: BIOC51H1 (Tropical Marine Ecology and Evolution), BIOC62H1 (Role of Zoos in Conservation), BIOC63H1 (Conservation Biology), BIOD52H1 (Senior Seminar in Biodiversity and Conservation Biology), BIOD60H1 (Spatial Ecology) & BIOD66H1 (Causes and Consequences of Biodiversity).

- For students with a particular interest in "Animal Physiology", you should consider including some or all of the following courses in your program: BIOC55H1 (Animal Physiology Laboratory), BIOC33H1 or BIOC34H1 (Mammalian Physiology I), BIOC33H1 (Comparative Animal Physiology), BIOC43H1 (Exercise Physiology) & BIOC29H1 (Pathobiology of Human Disease).

- For students with a particular interest in "Ecophysiology", you should consider including some or all of the following courses in your program: BIOC65H1 (Environmental Toxicology), EESC30H1 (Microbial Biogeochemistry), BIOC33H1 (Comparative Environmental Physiology) & BIOC37H1 (Biology of Plant Stress).

- For students with a particular interest in "Infection and Disease or Clinically-Oriented Topics", you should consider including some or all of the following courses in your program: BIOC33H1 (Human Anatomy and Development), BIOC33H1 or BIOC34H1 (Mammalian Physiology I), ANT75H1 (Foundations in Epidemiology) or ANT76H1 (Deconstructing Epidemics), BIOC21H1 (Vertebrate Histology: Cells and Tissues), BIOC65H1 (Pathologies of the Nervous System), BIOC29H1 (Pathobiology of Human Disease), BIOC65H1 (Fungal Biology and Pathogenesis), BIOD75H1 (Seminars in Cellular Microbiology) & BIOC25H1 (Genomics).
• For students with a particular interest in "Plant and Microbial Biology", you should consider including some or all of the following courses in your program: BIOC31H (Plant Development), EESC30H1 (Microbial Biogeochecmistry), BIOD75H (Seminar in Cellular Microbiology) and BIOD77H (Biology of Plant Stress).

• For students with a particular interest in "Behavioural Biology" you should consider including some or all of the following courses in your program: NROC34H1 (Neuroethology), BIOD33H1 (Special Topics in Behavioural Ecology), BIOD45H1 (Animal Communication) & NROC61H1 (Learning and Motivation).

• For students with a particular interest in "Behavioural Genetics", you should consider including some or all of the following courses in your program: BIOC16H1 (Evolutionary Genetics and Genomics), NROC34H1 (Neuroethology), BIOD25H1 (Special Topics in Behavioural Ecology), BIOD23H1 (Special Topics in Cell Biology and Molecular Genetics), BIOD25H1 (Genomics), BIOD21H1 (Molecular Biology Lab I: Host, Vectors & Cloning), BIOD22H1 (Molecular Biology Laboratory II: Nucleic Acids and Proteins) and BIOD45H1 (Animal Communication).

• For students with a particular interest in "The Evolution of Development" (a.k.a. "evo/dev"), you should consider including some or all of the following courses in your program: BIOC16H1 (Evolutionary Genetics and Genomics), BIOC19H1 (Animal Developmental Biology), BIOC21H1 (Plant Development), BIOC23H1 (Special Topics in Cell Biology and Molecular Genetics), BIOD23H1 (Genomics), BIOD21H1 (Molecular Biology Lab I: Host, Vectors & Cloning), BIOD22H1 (Molecular Biology Laboratory II: Nucleic Acids and Proteins), BIOC12H1 (Biochemistry I: Proteins and Enzymes), BIOC13H1 (Biochemistry II: Bioenergetics and Metabolism), BIOC22H1 (Practical Approaches to Biochemistry) and BIOC33H1 (Mammalian Physiology II: Lecture and Laboratory) or BIOC34H1 (Mammalian Physiology II: Lecture).

C. Complementary Elective Courses (optional)

When selecting electives, students may wish to consider the following courses that may be complementary to their program. However, keep in mind that minimum breadth requirements must be met to complete a degree.

ANTC17H1 Human Origins: New Discoveries
ANTC23H1 Primate Sexuality
ANTC41H1 Environmental Stress, Culture and Human Adaptability
ANTC47H1 Human and Primate Comparative Osteology
ANTC49H1 Advanced Topics in Human Osteology
ANTC61H1 Medical Anthropology: Illness and Healing in Cultural Perspective
ANTC62H1 Medical Anthropology: Biological and Demographic Perspectives
ANTD10H1 Biomedical Anthropology
ANTD17H1 Medical Osteology, Public Health Perspectives on Human Skeletal Health
ANTD32H1 Medical Primatology: Public Health Perspectives on Zoonotic Diseases
CHMC37H1 Bio-Orgnic Chemistry
EESB161H1 Feeding Humans - The Cost to the Planet
HISC40H1 History of Animals and People
HLC303H1 Politics of Canadian Health Policy
IEEC3H1 Defining the Human I
IEEC4H1 Defining the Human II
NROC61H1 Learning and Motivation
NROC63H1 Neuroscience Laboratory
NROC64H1 Sensory and Motor Systems
NROC69H1 Synaptic Organization and Physiology of the Brain
NROC66H1 Advanced Neuroscience Laboratory
PHIL89H1 Biomedical Ethics
POLC35H1 Canadian Environmental Politics
PSYC42H1 Drugs and the Brain
PSYD52H1 Genes, Brain and the Development of Mind
STAC52H1 Experimental Design
MAJOR PROGRAM IN BIOLOGY

Supervisor: K. Pireau kpiereau@utoronto.ca

Biology is the study of life and this major program in Biology is meant to provide students with a solid basic knowledge of this vast discipline, while also allowing the student to tailor their program in the upper years toward one or more of biology’s many sub-disciplines. Many of the world’s most important and timely issues (medical science and disease, conservation and biodiversity, food and energy supplies) are issues that require citizens to have a firm understanding of biological principles and practices. To complete their degree, students should combine their major program in biology with a minor program (or two minor programs) in another related or unrelated discipline.

Program Requirements
This program consists of 8.0 required credits.

First Year
1.0 Credit of Introductory Biology Courses
BIOA10H Introduction to Biology: Part I
BIOA20H Introduction to Biology: Part II

1.0 Credit in Chemistry
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

0.5 Credit in Mathematics or Statistics
Choose from:
(MATA20H1) Calculus A (Discontinued after the 2009/2010 academic year)
MATA30H1 Calculus I
STAT231H Statistics I (this course could also be taken in second year)
PSYB30H3 Data Analysis in Psychology (this course could also be taken in second year)

Note: Starting in the 2010-2011 academic year, students who have not taken grade 12 Calculus and Vectors (a requirement for MATA30H1) must take the preparatory, non-credit course at UTSC prior to enrolling in MATA30H1

Second Year
3.0 Credits of Biology Core Courses
BIOB10H1 Cell Biology
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
BIOB30H3 Mammalian Physiology I
BIOB31H3 Plant Physiology
BIOB50H3 Ecology
BIOB51H3 Evolutionary Biology

0.5 Credit of Biology Core Labs
Choose from:
BIOB12H3 Cell and Molecular Biology Laboratory
BIOB12H1 Animal Physiology Laboratory
BIOB32H3 Human Development and Anatomy Laboratory
BIOB52H3 Ecology and Evolutionary Biology Laboratory

Third Year
1.5 Credits of Additional C-Level Biology Courses
Choose from:
Any BIO C-level courses offered by the department.

Note that: NROC34H1 (Neurobiology), EESC34H1 (Biodiversity and Biogeography) and EESC34H3 (Microbial Biogeochemistry) may also be used toward fulfilling this requirement.

Fourth Year
0.5 Credit of Additional D-Level Biology Courses
Choose from:
Any BIO D-level courses offered by the department. Note that this includes the Biology Supervised Studies and Directed Research courses (BIO49H5, BIO498Y & BIO499Y).
MINOR PROGRAM IN BIOLOGY
Supervisor: K. Paraiso. Email: integrative-biology@uottawa.ca

Program Requirements
This program must include one credit from the introductory biology courses (BIOA01H & BIOA02H) plus 3.0 other credits in Biology, of which at least one credit must be at the C- or D-level.
Note: the NROC54H (Neuroethology), EESC308H (Biometry and Geographic Biogeography) and EESC309H (Microbial Biogeography) may also be used toward fulfilling this requirement.

SPECIALIST (JOINT) PROGRAM IN APPLIED MICROBIOLOGY
See the Applied Microbiology section of this Calendar for program requirements.

SPECIALIST (JOINT) PROGRAM IN PARAMEdicINE
See the Paramedicine section of this Calendar for program requirements.

OTHER PROGRAMS WITH BIOLOGY CONTENT
Note that Biological Sciences courses are also used to fulfill some requirements in the following major or specialist programs:
Biochemistry, Biological Chemistry, Environmental Science, Health Studies, Natural Sciences and Neuroscience. Please see the detailed program descriptions elsewhere in this calendar.

BIOLOGICAL SCIENCES COURSES

Important note about Biological Sciences course codes
Effective 2016-2017, the first three characters of Biological Sciences course codes have changed from BGY to BIO. The rest of the code remains the same. For example, BIOA01H3 is the new equivalent of the former BGYA01H3.

BIOA01H3 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 excretion, metabolism and transport processes, and aspects of plant cell structure and function; the diversity of life is emphasized throughout.
Note that both BIOA01H and BIOA02H must be completed prior to taking any other Biology course. The suggested course sequence is BIOA01H followed by BIOA02H, but taking these courses in either order is acceptable.
Breadth requirement: Natural Sciences
Exclusion: (GYA01H)

BIOA02H3 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 speculation.
Note that both BIOA01H and BIOA02H must be completed prior to taking any other Biology course. The suggested course sequence is BIOA01H followed by BIOA02H, but taking these courses in either order is acceptable.
Breadth requirement: Natural Sciences
Exclusion: BIOA05Y, (GYA02H)

BIOB10H3 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 extracellular matrix will also be detailed in the context of cell interactions with the environment.
Breadth requirement: Natural Sciences
Prerequisites: BIOA01H & BIOA02H & CHMA11H & CHMA11H

BIOB10Y3 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 extracellular 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, cell cycle 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 BIOB10Y and BIOB11H.
Breadth requirement: Natural Sciences
Exclusion: BIOB10Y, BIOB11H, (GYB10H), (GYB10Y), (GYB111H), BIOA24H, BIOA41H, (BIO25Y)
Prerequisites: BIOA01H & BIOA02H & CHMA10H & CHMA11H
BIOB31H3 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 and signal transduction.
Breadth requirement: Natural Sciences
Exclusion: BIOB10Y, (BIOY109Y), (BIOY111H), BIO240H1, (BIO250Y)
Prerequisite: BIOB11H1

BIOB32H3 Animal Physiology Laboratory
This course examines physiological mechanisms that control and co-ordinate the function of various systems within the body. The laboratory exercises examine properties of digestive enzymes, characteristics of blood, pharmacological regulation of heart rate, kidney function, nerve function and action potentials, sympathetic transmission, skeletal muscle function and mechanoreception.
Breadth requirement: Natural Sciences
Exclusion: BIOY122H, BIO252Y1, BIO270H1, BIO271H1, (ZOO252Y1)
Corequisite: BIOB30H1

BIOB33H3 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.
Breadth requirement: Natural Sciences
Exclusion: ANA200Y, ANA300H1, (BIOY33H1)
Prerequisite: BIOA01H1 & BIOA02H1

BIOB38H3 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.
Breadth requirement: Natural Sciences
Exclusion: (BIOY38H1)
Prerequisite: BIOA01H1 & BIOA02H1

BIOB39H3 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 hormonal and environmental cues.
Breadth requirement: Natural Sciences
Exclusion: BIO251Y1, (BIO251Y1), (BIOY33H1)
Prerequisite: BIOA01H1 & BIOA02H1

BIOB51H3 Evolutionary Biology
Students learn about development of evolutionary theory, maintenance of genetic variation, mechanisms of evolutionary change, adaptation, and current research topics in evolution.
Breadth requirement: Natural Sciences
Exclusion: (BIOY51H1)
Prerequisite: BIOA01H1 & BIOA02H1

BIOB52H3 Ecology and Evolutionary Biology Laboratory
An introduction to field, lab and computational approaches to ecology and evolution. Laboratories will explore a variety of topics, ranging from population genetics to community ecology and biodiversity. Some lab exercises will involve outdoor field work.
Breadth requirement: Natural Sciences
Exclusion: (BIOY52H1)
Prerequisite: BIOA01H1 & BIOA02H1
Corequisite: BIOB51H1
BI0C13H3 Biochemistry II: Bioenergetics and Metabolism

A lecture course that introduces cellular metabolism, the process by which living organisms extract and utilize energy from their environment. Topics include: bioenergetics; oxidative phosphorylation; aspects of carbohydrate, lipid and amino acid metabolism; regulation of metabolism; and, the integration of metabolable pathways.

Breadth requirement: Natural Sciences
Exclusion: BCHE210H, BCHE222Y, CHMB310H (BGVC13H3)
Prerequisite: ([BI0B10H & BI0B11H] or [BI0B10Y] & CHMB41H & CHMB42H)

BI0C15H3 Genetics

Topics for this lecture and laboratory (or project) course include: a brief review of DNA structure, transcription, and translation; inheritance and its chromosomal basis; gene interactions; sources and types of mutations and the relationship of mutation to genetic disease and evolution; genetic dissection of biological processes; genetic technologies and genomic approaches.

Breadth requirement: Natural Sciences
Exclusion: (BGVC15H3, BI0B26H, BI0B265H)
Prerequisite: ([BI0B10H & BI0B11H] or [BI0B10Y] & [MATA21H] or [MATA35H] or [MATA36H] or [MATA37H] or [PSYB07H] or [STAR22H])

BI0C16H3 Evolutionary Genetics and Genomics

This course will discuss modern genetic and genomic techniques used to understand the maintenance of genetic variation in nature. Topics include DNA sequence evolution, molecular phylogenetics, methods of detecting selection, sequence alignments, and comparative genomics.

Breadth requirement: Natural Sciences
Exclusion: (BGVC16H3)
Prerequisite: BI0B51H
Recommended preparation: BI0C15H3

BI0C17H3 Microbiology: The Bacterial Cell

This course presents an overview of the microbial world and introduces the students, in more detail, to the physiological, cellular and molecular aspects of bacteria. The laboratory will illustrate principles and provide training in basic microbiological techniques essential to microbiology and to any field where recombinant DNA technology is used.

Breadth requirement: Natural Sciences
Exclusion: (BGVC17H3, MOY377H, MBB377H)
Prerequisite: ([BI0B10H & BI0B11H] or [BI0B10Y]) or ([BI0B26H & BI0B265H]) or (one of BI0B122H or BI0B123H or BI0B124H or BI0B125H)

BI0C19H3 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 erythropoiesis, lens development in the eye, spermatogenesis and myogenesis. Particular reference will be given to the concept that regulation of gene expression is fundamental to development.

Breadth requirement: Natural Sciences
Exclusion: (BGVC19H1, CRB328H)
Prerequisite: ([BI0B10H & BI0B11H] or [BI0B10Y])
BIOD23H3 Vertebrate Histology: Cells and Tissues
A study of the structure of cells and the various tissue types which make up the vertebrate body: epithelium, connective, muscle, nervous, blood, and lymphatic. Emphasis is placed on how form is influenced by function of the cells and tissues. Breadth requirement: Natural Sciences Exclusion: ANA300Y, (BGCY221H) Prerequisite: (BIOB110H or BIOL110Y) & BIOL210H

BIOD23H3 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: spectrophotometry, chromatography, electrophoresis, radioisotopes, enzyme assay and protein purification. Students will be expected to solve numerical problems involving these and related procedures. Breadth requirement: Natural Sciences Exclusion: BCH370H, BCH371H, (BGCY230H) Prerequisite: BIOL212H & BIOC12H Corequisite: BIOC13H

BIOD23H3 Molecular Aspects of Plant Development
A lecture course focused on molecular mechanisms of plant development covering a range of subjects including but not limited to: Embryogenesis, seed development and germination. Plant hormones: hormone perception, signal transduction pathways and mutant analysis. Molecular control of vegetative development: meristems identity, function and regulation. Flowering time: the floral model and homoeotic mutations. Breadth requirement: Natural Sciences Exclusion: CSS340H, (BIO340H), (BGCY319H) Prerequisite: [BIOB100H & BIOL110Y] or BIOL100Y & BIOL210H

BIOD23H3 Mammalian Physiology II: Lecture and Laboratory
This course will cover the physiology of the human respiratory, cardiovascular, renal and digestive systems. Topics include endocrine function, ECG, blood fluid pressure, regulation, pulmonary mechanics, gas transfer and transport, the control of breathing, sleep-related breathing disorders, kidney function, ion regulation, water balance, acid-base balance and digestive function and regulation. Breadth requirement: Natural Sciences Limited enrolment: Priority will be given to students enrolled in the Human Biology and Paramedic programs. Additional students will be admitted only if space permits. Exclusion: BIOC43H, (BGCY330H), (BGCY340H), PSL100Y, PSL300H, PSL330H, PSL332Y Prerequisite: BIOL300H & BIOL330H

BIOD23H3 Mammalian Physiology II: Lecture
The lecture component of BIOC43H is identical to that described above for BIOC33H. Students will complete a series of computer-simulated laboratory exercises (on their own time) instead of practical lab sessions. Breadth requirement: Natural Sciences Exclusion: BIOC33H, (BGCY330H), (BGCY340H), PSL200Y, PSL300H, PSL330H, PSL332Y Prerequisite: BIOL300H

BIOC50H3 Macroevolution
An overview of recent developments in evolutionary biology that focus on large-scale patterns and processes of evolution. Areas of emphasis may include phylogenetic reconciliation, historical biogeography, the origins of evolutionary novelty, speciation, and patterns of diversification and extinction in the fossil record. Breadth requirement: Natural Sciences Exclusion: EEB302H Prerequisite: BIOL50H & BIOL51H

BIOC51H3 Tropical Marine Ecology and Evolution
A field-based course with 5 lectures at UTSC and 1 week at Bocas del Toro Marine Station in Panama. Ecological and evolutionary topics will be covered for coral reef, estuarine, mangrove and open ocean habitats. Student will be evaluated for their ability to conduct research and convey scientific information. Breadth requirement: Natural Sciences Limited enrolment: 15 Exclusion: (BGCY519H), (BGCY539H) Prerequisite: BIOL50H, BIOL51H, BIOL52H & permission of instructor. Note: Interested students should contact the instructor (Professor N. Lovelock) 9 months before the start of the course, and must be able to place a deposit towards the cost of airfare and accommodation.

BIOC52H3 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, behavioral ecology, and physiological ecology. Both aquatic and terrestrial environments will be the "field" laboratories. Occasional weekend field trips are mandatory (e.g., Sockeye Hike). Offered in alternate years. Breadth requirement: Natural Sciences Limited enrolment: 15 Exclusion: EEB305H, (BGCY520H), (BIOL550H) Corequisite: BIOL50H & BIOL51H

BIOC54H3 Animal Behaviour
Survey of the study of animal behaviour, emphasis on understanding behavioural patterns in the context of evolutionary theory. Topics include sexual selection, parental care, social behaviour, conflict and hypothesis testing in behavioural research. Breadth requirement: Natural Sciences Exclusion: EEB322H, (BGCY540H), (BIO3022H) Prerequisite: BIOL50H & BIOL51H

BIOC58H3 Biological Consequences of Global Change
A lecture and tutorial course that addresses the key environmental factor that will dominate the 21st Century and life on the planet: Global Climate Change. The course will examine the factors that influence climate, from the formation of the earth to the present time, how human activities are driving current and future change, and how organisms, populations, and ecosystems are and will respond to this change. Finally, it will cover human responses and policies that can permit an adaptive response to this change. Breadth requirement: Natural Sciences Exclusion: EEB429H, ORG314H, (BGCY58H), (BIO428H) Prerequisite: BIOL50H & BIOL51H
BIOCS9H3 Advanced Population Ecology
The study of the interactions that determine the distribution and abundance of organisms on the earth. The topics will include an understanding of organism abundance and the factors that act here: population parameters, demographic techniques, population growth, species interactions (competition, predation, herbivory, disease), and population regulation. It will include an understanding of organism distribution and the factors that act here: dispersal, habitat selection, species interactions, and physical factors. Offered in alternate years.
Breadth requirement: Natural Sciences
Exclusion: EEB319H1 (BIOC599H3), BIO319H1
Prerequisite: BIOC50H1 & BIOC51H1 & BIOC52H1

BIOC61H3 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.
Breadth requirement: Natural Sciences
Exclusion: EEB321H1, BIOC321H1, BIOC61H1
Prerequisite: BIOC50H1

BIOC82H3 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 behavioural enrichment in captive animals; zoos and public involvement/education; endangered species in Canada; and habitat restoration.
Breadth requirement: Natural Sciences
Limited enrolment: 50
Exclusion: BIOC66H1
Prerequisite: BIOC50H1 & BIOC51H1

BIOC36H3 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 give one seminar and/or write one term paper.
Breadth requirement: Natural Sciences
Exclusion: EEB36H1, BIOC36H1, BIOC36H1
Prerequisite: BIOC50H1 & BIOC51H1

BIOCS89H3 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.
Breadth requirement: Natural Sciences
Exclusion: BIOC58H1 & CHMA1H1 & CHMA1H1
Prerequisite: BIOC50H1 & BIOC51H1 & permission of the instructor.

BIOCS89H3 Biology Team Research
This course is meant to provide an introduction to academic research. A group of 3-5 students work together to develop a research proposal and/or implement a research project under the general guidance of a faculty researcher. Students meet regularly with a graduate student and attend several skill development sessions. Components of assessment are determined prior to project commencement, but may be based on student contribution over the term and a final written product.
Prerequisite: (1) Enrolment in a UTSC major or specialist subject POS offered by Biological Sciences & (2) (BIOC10H1 & BIOC11H1 or BIOB10H1 & BIOB11H1) & (3) No more than 12.5 credits overall & (4) a cumulative GPA of at least 3.0 & (5) acceptance of the application by a faculty member (the form may be downloaded from the website: www.utsa.toronto.ca/cit/Science_Engagement/index.html and should be emailed to scieng@utsa.toronto.ca.

BIOCT17H3 Seminars in Cellular Microbiology
An overview of the most significant advances in cellular microbiology. The curricula will include the study of mechanisms of bacterial pathogenesis, including virulence factors, bacterial attachment and invasion of mammalian cells. The cellular mechanisms involved in the recognition and elimination of pathogenic bacteria will be also studied.
Breadth requirement: Natural Sciences
Limited enrolment: 35
Exclusion: BIOCT17H
Prerequisite: BIOC10H1 & BIOC17H
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BIOC21H3 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 bioinformatics.

Breadth requirement: Natural Sciences
Limited enrolment: 48
*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.
Exclusion: BGYD21H3
Prerequisite: BIOC12H3 & BIOC13H or BIOC13H or [IMC30H3 & IMC30H3 for Applied Microbiology students only]
Corequisite: BIOC12H3 (Note: Although listed as a corequisite, it is recommended that BIOC12H3 be taken in advance of BIOD21H3)

BIOC22H3 Molecular Biology Laboratory II: Nucleic Acids & Proteins
A laboratory course offering 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.

Breadth requirement: Natural Sciences
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 as space permits.
Exclusion: BGYD22H3
Corequisite: BIOD21H3

BIOC23H3 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 cell biology phenomena. Student seminars will follow a series of lectures and guest speakers and journal club discussions.

Breadth requirement: Natural Sciences
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 as space permits.
Exclusion: BGYD23H3
Prerequisite: BIOC15H3 or BIOC12H3 or IMC30H3 (for Applied Microbiology students only)

BIOC25H3 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, a survey of genome projects, genomic variation, functional genomics, transcription profiling (microarrays), database mining and extensions to human and animal health and biotechnology.

Breadth requirement: Natural Sciences
Limited enrolment: 60
Exclusion: BGYD25H3
Prerequisite: BIOC15H3
Corequisite: BIOC13H (Note: Although listed as a corequisite, it is recommended that BIOC13H be taken in advance of BIOD25H3)

BIOC26H3 Fungal Biology and Pathogenesis
A lecture and tutorial based course designed to provide an overview of the fungal kingdom and the properties of major fungal pathogens that contribute to disease in animals (including humans) and plants. This course will address the mechanisms and clinical implications of fungal infections and host defense mechanisms. Topics include virulence factors and the treatment and diagnosis of infection.

Breadth requirement: Natural Sciences
Limited enrolment: 50
Prerequisite: BIOC17H3

BIOC27H3 Molecular Endocrinology
A lecture/seminar/discussion class on contemporary topics in endocrinology. The course provides a basic knowledge of endocrine systems encompassing hormone biosynthesis, metabolism, and physiologic 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.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Exclusion: BGYD27H3
Prerequisite: BIOC20H3 & BIOC21H3
Recommended preparation: BIOC33H3 or BIOC34H

BIOC29H3 Pathobiology of Human Disease
This lecture/seminar format course will critically examine selected topics in human disease pathogenesis. Infectious and inherited diseases including those caused by human retroviruses, genetic defects and bioterrorism agents will be explored. Discussions of primary literature will encompass pathogen characteristics, genetic mutations, disease progression and therapeutic strategies.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Prerequisite: BIOC15H3
Corequisite: BIOC17H3
**BIOC33H3 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. Topics include breathing, endocrine physiology, nutrition/feeding, energetics, thermal regulation, hibernation and ionic/cosmic regulation.

Breadth requirement: Natural Sciences
Exclusion: (BIOYD33H1)
Prerequisite: BIOC33H1 or BIOC34H

**BIOC37H3 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 defense; 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.

Breadth requirement: Natural Sciences
Limited enrolment: 35
Exclusion: (BIOYD37H1)
Prerequisite: [(BIOBIO1H1 & BIOC11H1) or BIOB10Y1] & BIOC31H

**BIOC43H3 Exercise Physiology**
A lecture and seminar discussion course covering integrative human and comparative animal exercise physiology. Topics will include muscle physiology, neurophysiology, metabolism, energetics, thermoregulation and biomechanics. These topics will be considered within evolutionary and ecological contexts. Students will be expected to give a brief oral presentation on recently published primary research involving exercise physiology.

Breadth requirement: Natural Sciences
Limited enrolment: 35
Exclusion: HMB472H
Prerequisite: BIOC33H1 or BIOC43H

**BIOC45H3 Animal Communication**
Theoretical and biological aspects of communication in non-human animals; communication behavior; decision-making and signal design; evolution of communication.

Breadth requirement: Natural Sciences
Exclusion: BIOYD45H1
Prerequisite: BIOC30H1 & BIOC50H1 & BIOC51H & BIOC54H

**BIOC51H3 River Ecology**
The course will begin with an introduction to stream hydrology 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.

Breadth requirement: Natural Sciences
Limited enrolment: 20
Exclusion: (BIOYD51H1)
Prerequisite: BIOC50H1 & BIOC51H

**BIOC52H3 Senior Seminar in Biodiversity and Conservation Biology**
A senior-level seminar course to further students' exposure to biodiversity and conservation biology in scientific literature. Students will read assigned papers then present them to the class and participate in discussions.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Exclusion: (BIOYD52H1)
Prerequisite: BIOC53H

**BIOC53H3 Special Topics in Behavioural Ecology**
An exploration into current topics in the field of behavioural ecology, the study of the evolutionary and ecological influences on animal behaviour. Topics may include sexual selection and conflict, social behaviour, communication, and behavioural mechanisms. Emphasis will be on current research and the quantitative and qualitative reasoning underlying behavioural ecological theory.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Exclusion: EEB460Y, BIOYD53H1, BIOY490Y
Prerequisite: BIOC54H

**BIOC60H3 Spatial Ecology**
The study of how space and scale influence ecological patterns and species coexistence. The course will cover three main topics: 1) spatial dynamics, such as spatial spread and dispersal models; 2) species coexistence and metapopulation/mesocommunity, neutral and lottery models; and 3) spatial analysis of ecological communities. Basic concepts will be applied to ecological problems such as species invasions, reserve design and understanding threats to island biodiversity.

Priority will be given to students enrolled in the specialist program in Biodiversity, Ecology and Evolution.

Breadth requirement: Natural Sciences
Exclusion: BIOYD60H1
Prerequisite: BIOC50H1 & STAB22H1 & [BIOC59H or BIOC61H]
BIO059H3 Pathologies of the Nervous System

An intensive examination of selected pathologies affecting the nervous system such as Alzheimer and Parkinson disease, multiple sclerosis, stroke, and affective disorders. These pathologies will be examined from an integrative perspective encompassing the pathogenesis, resulting symptoms, and current therapeutic approaches. This course requires critical examination of research articles.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Exclusion: (BIO065H1, BIO065H3)
Prerequisite: [BIOB11H1 or BIOB10Y1] & [one of NROC6H1 or NROC6H4 or NROC6H9]

BIO069H3 Causes and Consequences of Biodiversity

This course will combine lecture and student paper projects and presentations to explore the evolutionary and ecological processes that generate patterns of biological diversity as well as how species interactions and ecosystem function are affected by diversity. Of key interest will be how invasions, climate change, and habitat destruction affects diversity and function.

Breadth requirement: Natural Sciences
Limited enrolment: 30
Prerequisite: BIO051H1 & [BIOC59H1 or BIOC61H1]

BIO095H3 Supervised Study in Biology

This course is designed to permit intensive examination of the primary literature of a select topic. 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 SW420B that is to be completed and signed by the intended supervisor, then returned to SW420B. At that time, the student will be provided with an outline of the schedule and general requirements for the course. 5 sessions of group instruction will form part of the coursework.

Exclusion: (BGYD03H1, BGYD09H1)
Prerequisite: Satisfactory completion of 12.5 full credits, 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 BIO095H, with the same instructor as for BIO099Y or BIO099X, the student and instructor must provide a plan that goes beyond the work of those courses.

BIO099H3 Directed Research in Paramedicine

This course is designed to permit intensive examination of clinical databases or published literature/reports related to emergency medicine or paramedicine. Students will

Chemistry

Faculty List
A.J. Kreeger, B.A. (Cornell), Ph.D. (Illinois), F.R.S.C., Professor Emeritus
R.A. McClelland, B.Sc., Ph.D. (Toronto), Professor Emeritus
J. Thompson, B.A. (Cambridge), Professor Emeritus
T.T. Tiwel, B.S. (Georgia Inst. Tech.), Ph.D. (Harvard), Professor Emeritus
A. Walker, B.Sc., Ph.D. (Nottingham), Professor Emeritus
D. E. Cornock, B.A., M.A.Sc. (Toronto), Ph.D (California Inst. of Tech.), Professor
D.I. Donelson, B.Sc. (Carleton), Ph.D. (Carleton), Professor

analyse data from these sources to address a fundamental question or concern related to patient treatment and/or outcomes from the point-of-view of "best practice" procedures in emergency medicine or paramedicine. A quantitative or statistical analysis of the problem is expected. In addition to examining the question or concern from a clinical treatment perspective, students are expected to gain an appropriate level of understanding of the physiology, anatomy, pharmacology and epidemiology underlying the question that they are addressing. The project will culminate in a written report and possibly in oral presentation.

Students will work under the supervision of an emergency medicine/paramedicine practitioner/professional researcher who will guide the research. Students must also report to a UTSC faculty member who will serve as a co-supervisor.

In order to enrol in this course students must seek an individual who will supervise the research and then obtain permission from the UTSC Paramedicine Program Supervisor.

Prerequisite: Minimum of 15.0 credits including PMDC54Y & PMDC54H & [PSYB107H or STAR223H] & PSYC306H

BIO099Y3 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 SW420B that is to be completed and signed by the intended supervisor, and returned SW420B. At that time, the student will be provided with an outline of the schedule and general requirements for the course. 10 sessions of group instruction will form part of the coursework.

Exclusion: CSB498Y, EEB498Y, (BIOY001Y), (BIOY098Y), (BIOY060Y), (ZOO498Y)
Prerequisite: Satisfactory completion of 13.5 full credits, of which at least four must be Biology B- or C-level courses and permission of the instructor.

BIO099X3 Directed Research in Biology

Identical to BIO099Y but intended as a second research experience. In order to be eligible for BIO099X, with the same instructor, the student and the instructor will have to provide a plan of study that goes beyond the work of BIO099Y.

Exclusion: CSB499Y, EEB499Y, (BIOY025Y), (BIOY099Y), (BIOY040Y), (ZOO499Y)
Prerequisite: Satisfactory completion of 13.5 full credits, of which at least four must be Biology B- or C-level courses and permission of the instructor.
Co-ordinator of First Year Studies in Chemistry: E. Sauer (416-287-7209) Email: esauer@utsc.utoronto.ca

Chemistry can be viewed as both a challenging intellectual pursuit and a powerful, practical tool for developing and handling the resources of our contemporary society. A sound knowledge of the fundamental concepts of chemistry is useful to any student in the Physical and Environmental or Life Sciences. The Chemistry Handbook, which is available on the Web, outlines the teaching and research activities of the Chemistry faculty and offers a wide range of informal advice on undergraduate activities.

The basic courses in chemistry are CHMA10H1 and CHMA11H1 which must be taken by those who wish to take further chemistry courses or who require chemistry for another science.

Completion of CHMA10H1 and CHMA11H1 permits students to take any of the B-level courses in Chemistry. These are divided according to the following sub-disciplines: Inorganic Chemistry, Analytical Chemistry, Physical Chemistry, Environmental Chemistry and Organic Chemistry. Thereafter, one can proceed to advanced-level courses at the C- and D-level.

Students who wish to enrol in St. George 400-series courses should note that completion of the following groups of courses, together with their co-requisite and prerequisites, will normally ensure admission to the St. George courses indicated, provided that B standing or permission of the instructor is obtained.

To Enter St. George Series 430 Complete U of T Scarborough Courses
CHMA10H1
CHMA11H1
CHMB1H1
CHMB11H1 &
CHMC1Y
To Enter St. George Series 440 (except 447) Complete U of T Scarborough Courses
CHMA10H1
CHMA11H1
CHMA4H1
CHMB19H1
CHMB2H1
CHMB4H1 &
CHMC2H1/CHMC4H1

Note: Timetabling constraints usually preclude U of T Scarborough C-level and St. George 400-level courses being taken in the same year.

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 [PHYA10H1 or PHYA11H1] & [PHYA21H1 or PHYA22H1] early in their Programs. Thus, the suggested first-year Program in Chemistry includes CHMA10H1, CHMA11H1, MATA30H1, MATA35H1 or MATA31H1, [PHYA10H1 or PHYA11H1] & [PHYA21H1 or PHYA22H1]. Students interested in Biological Chemistry or Biochemistry should also include BBAA1H1 & BBAA2H1.

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 science experimental learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.
SPECIALIST PROGRAM IN BIOLOGICAL CHEMISTRY

Supervisor: W. Restivo (416-287-7222) 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 full credits:

First Year:
- BION101H Introduction to Biology: Part I
- BION202H Introduction to Biology: Part II
- CHMA101H Introduction to Chemistry I: Structure and Bonding
- CHMA111H Introduction to Chemistry II: Reactions and Mechanisms
- MATA30H1 Calculus I
  [MATA39H1 Calculus II for Biological Sciences or MATA36H1 Calculus II for Physical Sciences or MATA37H1 Calculus II for Mathematical Sciences]
- PHYA101H Introduction to Physics IA
  [PHYA211H Introduction to Physics IA or PHYA221H Introduction to Physics IB]

Note: MATB41H1 is a prerequisite for CHMC21H1 and MATA36H1/MATA37H1 is a prerequisite for MATB41H1. MATA36H1/MATA37H1 is strongly recommended over MATA35H1 in order that future course selection is not compromised.

Second Year:
- BIOR101H Cell Biology
- BIOR111H Molecular Aspects of Cellular and Genetic Processes
- BIOR212H Laboratory for Cell and Molecular Biology
- CHMB301H Introduction to Inorganic Chemistry
- CHMB401H Organic Chemistry I
- CHMB402H Organic Chemistry II

Second or Third Year:
- CHMB101H Techniques in Analytical Chemistry
- CHMB201H Chemical Thermodynamics and Elementary Kinetics
- CHMB211H Chemical Structure and Spectroscopy

Third Year:
- BIOC120H Biochemistry I: Proteins and Enzymes
- BIOC231H Biochemistry II: Bioenergetics and Metabolism
- BIOC233H Practical Approaches to Biochemistry
- CHMC401H Bio-Orgainc Chemistry

Third or Fourth Year:
- CHMC111H Principles of Analytical Instrumentation
- CHMC311H Intermediate Inorganic Chemistry
- CHMC411H Organic Reaction Mechanisms or CHMC421H Organic Synthesis

Fourth Year:
- PSCD201H Current Questions in Mathematics and Science
  At least 0.5 credit from the following:
- BIOD903H Supervised Study in Biology
- BIOD910Y Directed Research in Biology
- BIOD99Y Directed Research in Biology
- CHMD910Y Directed Research
- CHMD911Y Directed Research
- CHMD921H Advanced Organic Chemistry Lab Course
- PSCD101H Physical Sciences Project

And, in addition years 1.0 full credit (1.5 if BIOD953H, CHMD911H or PSCD101H is taken) from the following list:
- MATB41H1 Techniques of Calculus of Several Variables I
- CHMB551H Environmental Chemistry
- PSCB571H Introduction to Scientific Computing
- Or any other C- and D-level Chemistry or PSC courses, and C- or D-level BIO courses for which [BIOR101H & BIOR111H] is a prerequisite.
SPECIALIST PROGRAM IN CHEMISTRY

Supervisor: S. Dalili (416-287-7215) Email: adallili@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 full credits as follows:

First Year:
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms
MATA30H1 Calculus I
[MATA35H1 Calculus II for Physical Sciences or MATA37H1 Calculus II for Mathematical Sciences]
PHYA10H1 Introduction to Physics I
PHYA12H1 Introduction to Physics IIA or PHYA22H1 Introduction to Physics IIB
and
1.0 full credit chosen from:
ASTA1H1 Introduction to Astronomy and Astrophysics I: The Sun and Planets
ASTA2H1 Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
BIOA0H1 Introductory Biology: Part I
BIOA0H2 Introductory Biology: Part II
EERA0H1 Environmental Hazards
EERA0H1 Introduction to Planet Earth
MATA20H1 Linear Algebra I
PSCB1H7 Introduction to Computing
STAB2H1 Statistics I

Second Year:
CHMB1H1 Techniques in Analytical Chemistry
CHMB2H1 Chemical Thermodynamics and Elementary Kinetics
CHMB2H1 Chemical Structure and Spectroscopy
CHMB3H1 Introduction to Inorganic Chemistry
CHMB4H1 Organic Chemistry I
CHMB4H2 Organic Chemistry II
MATH4H1 Techniques of Calculus of Several Variables I

Third Year:
CHMC1H1 Principles of Analytical Instrumentation
CHMC1H1 Analytical Instrumentation
[CHMC2H1 Intermediate Physical Chemistry or CHMC2H1 Topics in Biophysical Chemistry]
CHMC3Y1 Intermediate Inorganic Chemistry
[CHMC4H1 Organic Reaction Mechanisms or CHMC4H1 Organic Synthesis]

Fourth Year:
PSCD1H2 Current Questions in Mathematics and Science
and
2.0 full credits chosen from:
CHMC4H1 Advanced Inorganic Chemistry
CHMC4H2 Organic Synthesis or CHMC4H1 Organic Reaction Mechanisms
Any D-level or 400-level CHM course.
Other D-level courses upon approval of Program Supervisor.
and
1.0 full credit chosen from:
CHMD9Y1 Directed Research
CHMD9H3 Directed Research
CHMD9H3 Advanced Organic Chemistry Lab Course
PSCD1H1 Physical Sciences Project
MAJOR PROGRAM IN CHEMISTRY
Supervisor: S. Mikhailichenko  Email: mikhailichenko@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 full credits:

First Year:
CHMA1H Introductory Chemistry I: Structure and Bonding
CHMA1LH Introductory Chemistry II: Reactions and Mechanisms
MATA3H Calculus I
[MATA3JH Calculus II for Biological Sciences or MATA36H Calculus II for Physical Sciences or MATA37H Calculus II for Mathematical Sciences]

Note: PHYA1H Introduction to Physics IA or PHYA11H Introduction to Physics IB or PHYA12H Introduction to Physics 2B or PHYA21H Introduction to Physics 2B

Second and Later Years:
4.5 full credits in Chemistry, of which 2.0 must be at the C- or D-level. One of these C- or D-level half credits must include a laboratory.""

** Students should note that if they are going to select CHMB20H/CHMB21H, then MATA3H, MATA36H/MATA37H, PHYA10H & PHYA21H are prerequisites, if CHMC21H is chosen, CHMB20H, CHMB21H and MATH41H are prerequisites.

MAJOR PROGRAM IN BIOCHEMISTRY
Supervisor: L. Tao (416-287-7220) Email: l.tao@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 full credits:

First Year:
BIOA01H Introductory Biology: Part I
BIOA02H Introductory Biology: Part II
CHMA1H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

Second and Later Years:
BIOB11H Cell Biology
BIOB11H Molecular Aspects of Cellular and Genetic Processes
BIOB12H Cell & Molecular Biology Laboratory
BIOC12H Biochemistry I: Proteins & Enzymes
BIOC13H Biochemistry II: Bioenergetics & Metabolism
BIOC23H Practical Approaches to Biochemistry
CHMB16H Techniques in Analytical Chemistry
CHMB11H Organic Chemistry I
CHMB12H Organic Chemistry II
[CHMC41H Organic Reaction Mechanisms or CHMC42H Organic Synthesis]

CHMC47H Bio-Organic Chemistry

And 0.5 credit from the following:
CHMB00H* Chemical Thermodynamics and Elementary Kinetics
CHMB01H* Chemical Structure and Spectroscopy
CHMB02H Introduction to Inorganic Chemistry
CHMB56H Environmental Chemistry
CHMC11H Principles of Analytical Instrumentation
CHMC16H Analytical Instrumentation
CHMC21H Topics in Biophysical Chemistry
CHMC21Y Intermediate Inorganic Chemistry
[CHMC42H Organic Synthesis or CHMC43H Organic Reaction Mechanisms]

* If CHMB20H/CHMB21H are chosen, MATA3H, MATA36H/MATA37H, PHYA10H & [PHYA21H or PHYA22H] are required.
SPECIALIST PROGRAM IN ENVIRONMENTAL CHEMISTRY

See the Environmental Science section of this Calendar for program requirements.

SPECIALIST PROGRAM IN NATURAL SCIENCES

See the Physical Sciences section of this Calendar for program requirements.

CHMA103H1 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 with a particular emphasis on organic and biological molecules. This course includes a three-hour laboratory every other week.

Breadth requirement: Natural Sciences
Exclusion: CHM138H1, CHM139H1, CHM140Y, CHM151Y
Prerequisite: Grade 12 Chemistry & [Grade 12 Advanced Functions or Calculus]
Corequisite: None, but [MAT200H1 & (MAT211H1) or (MAT308H1 & [MAT358H1 or MAT368H1 or MAT378H1])]
are strongly recommended. MAT308H1 & [MAT358H1 or MAT368H1 or MAT378H1] are required for some higher level and other Physical and Environmental Sciences courses.

CHMA113H1 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 redox equilibria will be covered and some reactions of organic molecules will be introduced. This course includes a three-hour laboratory every other week.

Breadth requirement: Natural Sciences
Exclusion: CHM138H1, CHM139H1, CHM140Y, CHM151Y
Prerequisite: CHMA103H1
Corequisite: None, but [MAT200H1 & (MAT211H1) or [MAT308H1 & [MAT358H1 or MAT368H1 or MAT378H1]]
are strongly recommended. MAT308H1 & [MAT358H1 or MAT368H1 or MAT378H1] are required for some higher level and other Physical and Environmental Sciences courses.

CHMB103H1 Techniques in Analytical Chemistry
An introduction to the principles and methods of classical analysis and the provision of practical experience in analytical laboratory techniques. The course deals primarily with quantitative chemical analysis. Classical methods of volumetric analysis, sampling techniques, statistical handling of data are studied, as well as a brief introduction to spectrochemical methods.

This course includes a four-hour laboratory every other week.

Breadth requirement: Natural Sciences
Exclusion: CHM217H1
Prerequisite: CHMA103H1 & CHMA113H1
Recommended: CHMB51H1

CHMB120H3 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.

Breadth requirement: Natural Sciences
Exclusion: CHM222H1, CHM225Y
Prerequisite: [CHMA103H1 & CHMA113H1] & MAT308H1 & [MAT358H1 or MAT368H1 or MAT378H1]. Note that PHY211H and MATB41H are prerequisites for the C-level physical chemistry courses.

CHMB213H3 Chemical Structure and Spectroscopy
Atomic structure and spectra; term symbols and their meaning, valence bond theory: LCAO-MO, molecular spectroscopy.

Breadth requirement: Natural Sciences
Exclusion: CHM222H1, CHM225Y
Prerequisite: CHMB201H1. Note that this implies all the prerequisites for that course as well.

CHMB313H3 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 biochemically important inorganic compounds.

Breadth requirement: Natural Sciences
Prerequisite: CHMA103H1 & CHMA113H1

CHMB413H3 Organic Chemistry I
Chemical bonding and an introduction to aliphatic and aromatic compounds. Conformational analysis and stereochemistry. Free radical reactions of alkenes. Chemistry of aromatics, dienes, and alkyne. Substitution and elimination reactions.

This course includes a four-hour laboratory every other week.

Breadth requirement: Natural Sciences
Exclusion: CHM138H1, CHM151Y, CHM247H1, CHM249H1
Prerequisite: CHMA103H1

CHMB423H3 Organic Chemistry II
Spectroscopy of organic compounds. Acidic substitution. Chemistry of carbonyl compounds. An introduction to the chemistry of biologically important compounds, including heterocycles, carbohydrates, amino acids, and neurotransmitters.

This course includes a four-hour laboratory every other week.

Breadth requirement: Natural Sciences
Exclusion: CHM151Y, CHM247H1, CHM249H1
Prerequisite: CHMA113H1 & CHMB413H3
CHMC11H Principles of Analytical Instrumentation
An introduction to the workings and application of modern analytical instrumentation. A range of modern instrumentation including NMR spectroscopy, Mass Spectrometry, Microscopy, Light Spectroscopy (visible, Ultra Violet, Infrared, Fluorescence, Phosphorescence), X-ray, Chromatography and electrochemical separations will be addressed. Principles of measurement, detection of photons, electrons and ions; instrument and experiment design and application; noise reduction techniques and signal-to-noise optimization will be covered.
Breadth requirement: Natural Sciences
Exclusion: CHM317H
Prerequisite: CHMB11H & CHMB21H
Recommended: CHMB20H & CHMB21H

CHMC15H Analytical Instrumentation
A laboratory course to complement CHMC11H, 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.
Breadth requirement: Natural Sciences
Exclusion: CHM317H
Prerequisite: CHMC11H

CHMC20H Intermediate Physical Chemistry
Basic statistical mechanics and applications to thermodynamics and kinetics; intermolecular interactions; concepts in reaction dynamics.
Breadth requirement: Natural Sciences
Prerequisite: CHMB20H & CHMB21H & MATB41H & PHYA21H

CHMC23H 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, colloidal chemistry; polymers and bio-polymers, bonding structure and statistical mechanics; physical chemistry of membranes, active transport and diffusion; excitation (bio)chemical reactions.
Breadth requirement: Natural Sciences
Prerequisite: CHMB20H & CHMB21H & MATB41H

CHMC32H Intermediate Inorganic Chemistry
A more detailed discussion (than in CHMB33H) 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 course is six hours in duration and occurs every week.
Breadth requirement: Natural Sciences
Prerequisite: CHMB16H & CHMB33H & CHMB41H & CHMB42H

CHMC41H Organic Reaction Mechanisms
Theory and mechanisms of organic reactions; principles of structure, introduction to aromaticity, spectroscopy and polymers. Theoretical bonding. The laboratory experiments are designed to complement the topics covered in lectures. Offered in odd numbered years, alternating years with CHMC42H.
This course includes a four hour laboratory every week.
Breadth requirement: Natural Sciences
Exclusion: CHMD41H
Prerequisite: CHMB41H & CHMB42H

CHMC42H Organic Synthesis
Principles of synthesis organic and functional group transformations, compound stereo-chemistry, spectroscopy and structure elucidation. Offered in even numbered years, alternating years with CHMC41H.
This course includes a four hour laboratory every week.
Breadth requirement: Natural Sciences
Exclusion: CHM34H
Prerequisite: CHMB41H & CHMB42H

CHMC44H Bio-Organic Chemistry
The chemistry of heterocycles; nucleic acids, terpenes, steroids and other natural products; amino acids, proteins and carbohydrates; introduction to enzyme structure and catalysis.
This course includes a 4 hour laboratory every week.
Breadth requirement: Natural Sciences
Exclusion: CHM34H
Prerequisite: CHMB41H & CHMB42H

CHMB39H3 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. Normally only for individuals who have completed fifteen full credits, including at least one C-level Chemistry courses, and who are pursuing one of the Chemistry Programs.
CHMD591H3 Introduction to Green Chemistry

The twelve principles of green chemistry will be discussed in the context of developing new processes and reactions (or modifying old ones) to benefit society while minimizing their environmental impact. Examples will be taken from the recent literature as well as from industrial case studies.

Breadth requirement: Natural Sciences
Limited enrolment: 15
Prerequisite: CHMB31H3 & [CHMC43H1 or CHMC42H1]
Recommended preparation: CHMC31Y

CHMD90V3 CHMD91H3 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 CHMD90V and 130 hours in CHMD91H. 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 CHMD90V or CHMD91H but not both.
Prerequisite: Permission of the instructor.

Note for students planning to register in CHMD90V or CHMD91H

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 one 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 full credits in total including at least 1 full credit of C-level CHM courses containing a lab component (i.e., CHMC16H, CHMC33Y, CHMC41H1, CHMC42H1, BIOC23H1) and have a minimum grade of 60% in CHM44H1 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 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.

CHMD92H3 Advanced Organic Chemistry Laboratory Course

A lab course designed to introduce students to modern synthetic methods while performing multi-step syntheses. The course will consist of two, six hour lab days every week. Students will develop practical skills by working with important reactions taken from pharmaceutical chemistry and the chemistry of naturally occurring substances.

Breadth requirement: Natural Sciences
Limited enrolment: 10
Exclusion: CHMD90V, CHMD91H
Prerequisite: One of CHMC41H, CHMC42H or CHMC31Y
City Studies

(B.A.)

Faculty List
J. Hemmigan, B.A., M.A. (Western Ontario), Ph.D. (Ohio State), Professor
J. Merritt, B.A. (Queen's), M.A. (Western), Ph.D. (Tulane), Professor
E. C. Regehr, B.A., M. Phil. (London), Ph.D. (Tulane), Professor
M. L. Kohn, B.A. (Williams College), M.A., Ph.D. (Cornell University), Associate Professor
A. Somers, B.A. (Nova Scotia College of Art and Design), M.Sc., Ph.D. (Lund), Associate Professor
S. C. Buc, B.A. (Guelph), M.A., Ph.D. (York), Assistant Professor
D. Silver, B.A. (Berkeley), M.A., PhD. (Chicago), Assistant Professor

Undergraduate Counsellor: J. Roopnarine
Email: social-sciences-counsellor@ute.c.uottawa.ca

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 appraising, 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 livability 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 1.0 full credit from the courses listed in Requirement 1 of the Major Program in City Studies within their first 4.0 credits

Note: It is Department policy that students without the prerequisite 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 a total of 7.0 full credits.

1. Introduction to Social Science Thought (1.0 full credit from among the following):
   - ANA00H Introduction to Anthropology: Becoming Human
   - ANA00H Introduction to Anthropology: Culture, Society and Language
   - HLT01H Plagues and Peoples
   - POL51H Critical Issues of Canadian Democracy or POL/I05H Canada's Political Institutions
   - One other A-level half-course in Political Science
   - SOCA01H Introduction to Sociology I
   - SOCA02H Introduction to Sociology II
   - GGR04H The Geography of Global Processes
   - GGR09H Cities and Environments
   - [ECMA01H Introduction to Microeconomics or ECMA02H Introduction to Microeconomics: A Mathematical Approach]
   - [ECMA05H Introduction to Macroeconomics or ECMA06H Introduction to Macroeconomics: A Mathematical Approach]

2. Core courses (1.0 full credit)
   - CITB01H Canadian Cities and Planning
   - CITB02H Foundations of City Studies

3. City Studies Fundamentals of (at least 2.0 full credits from among the following):
   - CITC03H Real Estate and the City
   - DTS001H Introduction to Diaspora and Transnational Studies I
   - DTS002H Introduction to Diaspora and Transnational Studies II
   - EES005H Environmental Hazards or EES006H Introduction to Planet Earth
   - GGR05H Urban Geography
   - GGR06H Social Geography
   - GGR07H Geographies of Disease
   - GORC07H Location and Spatial Development
   - GORC08H Health and the Urban Environment
   - SOC344H Urban Sociology: Macro-Analysis
   - SOC345H Urban Sociology: Micro-Analysis
   - WSTB12H Women: Issues of Violence and Safety
4. Methods (at least 1 full credit from among the following):
   [SOC206H Social Statistics or STAB2H Statistics 1]
   [GGRA308H GIS and Empirical Reasoning or (EESA068H) GIS for the Beginning Student or EESC303H Geographic Information Systems and Remote Sensing]
   SOC223H Practicum in Qualitative Research Methods
   SOC337H Practicum in Quantitative Research Methods

5. Applications (at least 2.0 full credits from among the following):
   (ANTC399H) Foundation and Theoretical Issues in Anthropological Demography
   ANTC461H Methods and Analysis in Anthropological Demography
   CITC301H Urban Communities and Neighbourhoods Case Study: East Scarborough
   CITC302H Learning in Community Service
   CITC310H Selected Issues in City Studies
   CITD01H City Issues and Strategies
   EJESC21H Urban Environmental Problems of the Greater Toronto Area
   ENGDI99H Topics in the Victorian Period
   GGRC302H Population Geography
   GGRC304H Urban Residential Geography
   GGRC318H Urban Political Geography
   GGRC319H Urban Transportation Policy Analysis
   GGRC320H The Toronto Region
   GGRR099H Feminist Geographies
   HISC32H The Emergence of Modern America, 1877-1933
   HISC36H People in Motion: Immigrants and Migrants in U.S. History
   (HISD308H) Topics in American Urban History: New York City
   POLC33H Canadian Environmental Politics
   POLC668H Public Policy Making
   POLC676H Public Policy in Canada
   SOCCD02H Collective Behaviour
   SOCCD04H Social Movements
   SOCCD26H Sociology of Urban Growth
   WSTC14H Women, Community, and Policy Change
   WSTC20H Women and Environments

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
Co-op Contact: mco@ucv.mcmaster.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 and Gender 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, week 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 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.ucv.mcmaster.ca/subject/post. The minimum qualifications for entry are 4.0 credits including 1.0 from the courses listed in Requirement 1 of the Major Program in City Studies 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 areas I (Introduction to Social Science Thought), II (Fundamentals of City Studies), and III (Methods). Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term. 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.

CITB01H3 Canadian Cities and Planning

After reviewing the history of urban and regional planning in Canada, this course considers alternative ideological models of public choice, the role of the planner, the instruments of planning, tools for the analysis of planning, and planning in the context of the space economy.

Breadth requirement: Social & Behavioural Sciences
Exclusion: [GGBR09H]
Recommended preparation: Completion of Requirement 1 of the Major Program in City Studies

CITB02H3 Foundations of City Studies

A review of the major characteristics and interpretations of cities, urban processes and urban change as a foundation for the Program in City Studies. Ideas from disciplines including Anthropology, Economics, Geography, Planning, Political Science and Sociology, are examined as ways of understanding cities.

Breadth requirement: Social & Behavioural Sciences
Prerequisite: At least 4.0 credits, of which at least 2.0 must be in AN, ECON, GGR, POL or SOC

CITC01H3 Urban Communities and Neighbourhoods

Case Study: East Scarborough

This course engages students in a case study of some of the issues facing urban communities and neighbourhoods today. Students will develop both community-based and academic research skills by conducting research projects in cooperation with local residents and businesses, non-profit organizations, and government actors and agencies.

Breadth requirement: Social & Behavioural Sciences
Exclusion: GGBR41H if taken in the 2008 Fall Session
Prerequisite: CITB01H & permission of instructor

CITC02H3 Learning in Community Service

This will be a service learning course based in Scarborough communities in which students learn about community issues first-hand by volunteering for community-based organizations. Student evaluation will be based on completion of volunteer hours and grading of student journals that will: 1. Describe the service work; and 2. Reflect on the service work and relate it to lectures and required readings.

Limited enrolment: 30
Prerequisite: CITB01H & permission of instructor
Recommended preparation: CITC01H

CITC03H3 Real Estate and the City

Operation of property markets; cities as markers 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.

Breadth requirement: Social & Behavioural Sciences
Exclusion: [GGBR10H]
Prerequisite: CITB01H & [ECMB01H or ECMB02H]

CITC10H3 Selected Issues in City Studies

Examination of one or more current issues in cities. The specific issues will vary depending on the instructor.

Breadth requirement: Social & Behavioural Sciences
Prerequisite: CITB01H & CITB02H

CITD01H3 City Issues and Strategies

This course is designed as a culminating City Studies course in which participants are able to showcase the application of their research skills, and share their professional and disciplinary interests in a common case study. Lectures and guests will introduce conceptual frameworks, core questions and conflicts. Students will be expected to actively participate in discussions and debates, and produce shared research resources. Each student will prepare a substantial research paper as a final project.

Limited enrolment: 25 per section
Prerequisite: Completion of the Major Program in City Studies requirements (1) Introduction to Social Science Thought, (3) Fundamentals of City Studies, & (4) Methods.
Classical Studies
(B.A.)

Faculty List
J. Wardle, M.A. (Can., Ph.D. (Toronto), Associate Professor Emeritus
M.E. Irwin, B.A., M.A., Ph.D. (Toronto), Associate Professor Emeritus
K. Blooum, B.A., M.A., Ph.D. (Laval and Nice), Assistant Professor

Program Director: K. Blooum Email: kblooum@utoronto.ca

Classical studies is a multidisciplinary field which introduces the students to the study of the ancient Greek and Roman worlds. It involves disciplines such as history, literature, religion, languages and linguistics, art history, archaeology, and philosophy and pertains to the study of wide areas of Europe, North Africa and Asia over several millennia (ca. 2000 B.C.-700 A.D.).

The classical world was in essence Greek and Roman. Yet it was also a complex, heterogeneous, permeable, mixed and constantly evolving world in which the Greeks and the Romans have always been intertwined with other peoples and cultures. Classical studies at UTSC offers students both a thorough examination of the main features of the Greek and Roman civilizations and a substantial introduction to the other peoples and cultures which were part of or interacted with it. In most courses the ancient written sources are studied in translation.

Guidelines for 1st year course selection
Students who intend to complete the Minor program in Classics should include CLAA00H & CLAA06H in their 1st year course selection. Students are also strongly encouraged to take HUMA01H (Exploring Key Questions in Humanities) as early as possible in their studies.

MINOR PROGRAM IN CLASSICAL STUDIES
Program Supervisor: K. Blooum (416-287-7158) Email: classics-program-supervisor@utoronto.ca

Program Requirements
Students must complete four full credits, as follows:

1. Introduction
CLA004H The Ancient Mediterranean World

2. History and Culture
CLA005H History and Culture of the Greek World
CLA006H History and Culture of the Roman World

3. Mythology and Religion
CLA06H Ancient Mythology I: Greece and Rome
CLA22H Religions of the Ancient Mediterranean

4. Literature (0.5 credit from the following courses)
CLAC1H Classical Literature I: Poetry
CLAC2H Classical Literature II: Prose

5. Electives (1 full credit from the following courses):
Classical Studies
CLA06H Ancient Mythology I: Mesopotamia and Egypt
CLA008H Greek and Latin for Scientists
CLA009H The Classical World in Film
CLA06H Selected Topics in Classical Literature
CLA22H Selected Topics in Classical Civilization
CLA06H Environment, Society, and Economy in Prehistoric and Roman Egypt
CLA06H Classical Literature I: Poetry if not taken as a required course
CLA06H Classical Literature II: Prose if not taken as a required course
CLA06H Multiculturalism and Cultural Identities in the Greek and Roman Worlds
CLA06H Water Management in the Ancient Mediterranean World

Art History
VPHB41H The Human Figure in Greek Art (8th-4th cent. B.C.)
VPHB42H Ancient Art and Architecture (ca 900 B.C.-300 A.D.)
VPHB70H Religion in the Arts: The Judeo-Christian Traditions
VPHC40H Topics in Art of the Ancient World
VPHC30H The Silk Routes
English
ENGB38H1 Classical Myth and Literature
ENGC16H1 The Bible and Literature I
ENGC27H1 The Bible and Literature II
ENGC26H1 Drama: Tragedy
ENGC27H1 Drama: Comedy

Languages
LGGA50H1 Introductory Latin I
LGGA51H1 Introductory Latin II
LGGA54H1 Introductory Sanskrit I
LGGA57H1 Introductory Sanskrit II
LGGB54H1 Intermediate Sanskrit I
LGGB55H1 Intermediate Sanskrit II

Music
VPMC39H1 Orpheus

Philosophy
PHILB10H1 Political Philosophy: Ancient Greece and the Middle Ages
PHILB31H1 Introduction to Ancient Philosophy

Religion
(RLGB01H1) The "Holy Book" in Judaism, Christianity and Islam
(RLGC01H1) The Five Books of Moses
(RLGC02H1) The Gospels
(RLGC03H1) Paul and the Invention of Christianity
(RLGC04H1) Hindu Epic
RLGC05H1 The Qur'an in Interpretive and Historical Context

Anthropology
(ANTB04H1) Artifacts and Prehistory
(ANTB12H1) Introduction to World Prehistory: The Rise of Civilization

Note: Students who were enrolled at UTSC prior to the 2009 Summer Session may substitute one of CLAA02H1 or CLAA03H1 for CLAA00H1 in Requirement 1. Students who have both CLAA02H1 & CLAA03H1 may substitute one of the courses for CLAA04H1 in Requirement 1.

CLAA04H1 The Ancient Mediterranean World
An introduction to the main features of the ancient civilizations of the Mediterranean world from the development of agriculture to the spread of Islam. Long term socio-economic and cultural continuities and ruptures will be unchallenged, while a certain attention will be dedicated to evidences and disciplinary issues.
Breadth requirement: History, Philosophy & Cultural Studies

CLAA05H1 Ancient Mythology I: Mesopotamia and Egypt
A study of Mesopotamian and Egyptian mythologies. Special attention will be dedicated to the sources through which these representational patterns are documented and to their influence on Mediterranean civilizations and arts.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: CLAA05H1 may not be taken after or concurrently with NMC38H1

CLAA06H1 Ancient Mythology II: Greece and Rome
A study of Greek and Roman mythologies. Special attention will be dedicated to the sources through which these representational patterns are documented and to their influence on Mediterranean civilizations and arts.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: CLAA06H1 may not be taken after or concurrently with NMC38H1

CLAA07H2 History and Culture of the Greek World
A survey of the history and culture of the Greek world from the Mycenaean period to the Roman conquest of Egypt (ca 1500-30 BC). Special attention will be dedicated to the nature, variety and limits of the available evidences, to socio-cultural interactions as well as to historical processes of continuities and ruptures.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: CLAA07H2
CLA208H History and Culture of the Roman World
A survey of the history and culture of the ancient Roman world, from the emergence period to the Justinian dynasty (ca. 800 BC-600 AD). Special attention will be dedicated to the nature, variety and limits of the available evidence, to socio-cultural interactions as well as to historical processes of continuities and ruptures.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: CLA221H
Recommended preparation: CLA105H

CLA209H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: CLA388H
Recommended preparation: CLA105H or CLA106H or (CLA102H) or (CLA103H)

CLA201H 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
Breadth requirement: Arts, Literature & Language
Exclusion: CLA300H
Prerequisite: One full credit in Classics or in English or another literature

CLA202H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: One full credit in Classics or History

CLA205H Environment, Society and Economy in Ptolemaic and Roman Egypt
This course provides a review of the environmental, social and economic features of Egypt from 332 BC to 642 AD.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Any 5 full credits including 1 full credit in Classical Studies or History.
Recommended preparation: CLA105H & CLA106H

CLA211H Classical Literature I: Poetry
An examination of the main genres, authors and works of ancient Greek and Latin poetry, with particular emphasis on epic, drama and lyric. Attention will be dedicated to the study of how these works reflect the socio-cultural features of Classical Antiquity and influenced later literatures. Texts will be studied in translation.
Breadth requirement: Arts, Literature & Language
Prerequisite: One full credit in Classics or English
Recommended preparation: CLA106H & CLA111H

CLA212H Classical Literature II: Prose
An examination of the main genres, authors and works of ancient Greek and Latin prose. History, rhetoric, biography, letters and the novel will be studied. Attention will be dedicated to the study of how these works reflect the socio-cultural features of Classical Antiquity and influenced later literatures. Texts will be studied in translation.
Breadth requirement: Arts, Literature & Language
Prerequisite: One full credit in Classics or English
Recommended preparation: CLA106H & CLA111H

CLA223H Religions of the Ancient Mediterranean
A comparative study of the Mesopotamian, Egyptian, Phoenician and Punic, Celtic, Palmyrene, Persian, Greco-Roman and Judeo-Christian religious beliefs and practices. Special attention will be dedicated to how they document the societies and cultures in which they flourished.
Exclusion: CLA366H, NMC380Y
Prerequisite: One full credit in Classics or Religion
Recommended preparation: CLA105H & CLA106H

CLA243H Multiculturalism and Cultural Identities in the Greek and Roman Worlds
A critical examination of multiculturalism and cultural identities in the Greek and Roman worlds. Special attention will be dedicated to the evidences through which these issues are documented and to their fundamental influence on the formation and evolution of ancient Mediterranean societies and cultures.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: One full credit in Classics or History
Recommended preparation: CLA105H & CLA106H

CLA209H Water Management in the Ancient Mediterranean World
This seminar type course addresses issues related to the relationships between ancient Mediterranean societies and their hydric environments in the Mediterranean from 3000 BC to 600 AD.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 15
Prerequisite: Any 11 full credits including 2 full credits in Classical Studies or History.
Recommended preparation: CLA105H & CLA106H

LGGS05H1 Introductory Latin I
LGGS05H2 Introductory Latin II
LGGS04H3 Introductory Sanskrit I
LGGS05H4 Introductory Sanskrit II
LGGS05H5 Intermediate Sanskrit I
LGGS05H6 Intermediate Sanskrit II
See the Languages section of this Calendar for full course descriptions.
Cognitive Science

Faculty List
A. Kokila, A.B., M.A., Ph.D. (UCLA); Professor Emeritus
M.C. Smith, B.A. (Toronto), Ph.D. (MIT); Professor Emeritus
J. M. Kennedy, B.Sc., M.Sc. (Bellarm), Ph.D. (Cornell), University Professor
R.I. Binnick, B.A. (CUNY), M.A., Ph.D. (Chicago); Professor
G. Hirst, B.A., B.Sc. (Monash), M.Sc. (A.N.U., U.B.C.), Ph.D. (Brown); Professor
S. Jordam, B.A. (New Brunswick), M.A., Ph.D. (Waterloo), Professor
M.A. Schmuckler, B.A. (SUNY-Binghamton), Ph.D. (Cornell); Professor
W.E. Seager, M.A. (Alberta), Ph.D. (Toronto); Professor
G.S. Crec, B.A., M.A., Ph.D. (Western), Associate Professor
S. Sedivy, B.A. (Toronto), Ph.D. (Pittsburgh); Associate Professor
R. Smyth, B.A. (Carleton), M.Sc. (Alberta), Ph.D. (Alberta); Associate Professor
G. Blake, B.A., M.A. (York); Ph.D. (Toronto); Assistant Professor

Supervisor of Studies: J. Jocimov. Email: jocimov@un.utoronto.ca

The Specialist and the Major Programs in Cognitive Science have been withdrawn. Students currently enrolled in these programs will be able to complete them.

CoGG291H3
CoGG294H3
CoGG104H3 Supervised Study in Cognitive Science
Supervised reading or research project.
These courses provide an opportunity to pursue advanced study in a specialized area following the appropriate scheduled courses and in close consultation with the supervisor. They are not intended as a substitute for scheduled advanced courses. They are intensive research projects intended to provide laboratory/field experience in data collection and analysis. Projects must be completed over 7 consecutive terms. Regular consultation with the supervisor is necessary, and extensive data collection and analysis will be required. Such a project will culminate in a written research report.
Students must first find a supervisor before the start of the academic term in which the project will be initiated. They must then obtain an permission form from the Department of Psychology’s website (www.unc.utoronto.ca/psych/undergraduate) that is to be completed and signed by the intended supervisor, and returned to the Psychology Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course, including the structure of the required log-books.
Students seeking supervision off campus are further advised to check the appropriateness of the proposed advisor with the Program Supervisor. If the proposed supervisor is not appointed to the Psychology faculty at UTSC then a secondary advisor, who is appointed at UTSC, will be required.
Limited enrolment: Students are advised that they must obtain consent from the supervising instructor before registering for these courses.
Prerequisite: 3.0 credits at the B- or C-level in CoG and/or LIN and/or PSY & permission of the supervisor.

Note: Normally students need a cumulative GPA of at least 2.7 for permission to be granted.

Computer Science

Faculty List
W.H. Freight, B.Sc. (U.B.C.), M.Sc., Ph.D. (Toronto); Professor
D.J. Fuest, B.Sc. (Queen’s), M.Sc., Ph.D. (Toronto); Professor
V. Hazbi, B.E. (Princeton), Ph.D. (Harvard); Professor
G. Hirst, B.A., B.Sc. (Monash), M.Sc. (A.N.U., U.B.C.), Ph.D. (Brown); Professor
M. Molloy, B.Math, M.Math (Waterloo), Ph.D. (Carnegie Mellon); Professor
N. Kousis, B.Sc. (Patras), M.Sc. (Montreal), Ph.D. (Toronto), Associate Professor
B. Schroeder, M.Sc. (Sarbrucken), Ph.D. (Carnegie Mellon); Assistant Professor
M. Cheng, B.Sc. (Toronto), Senior Lecturer
R. Panzer, B.Sc., M.Sc., Ph.D. (Toronto), Senior Lecturer
A. Rosselot, B.Sc. (McGill), M.Sc., Ph.D. (Toronto); Senior Lecturer
A. Bretschneider, B.Sc., M.Sc. (Queen’s), Ph.D. (Toronto); Lecturer
C. Janes, B.Sc., M.Sc. (Toronto), Lecturer
M. Szamosi, B.A. (Budapest), M.Sc. (Harvard), Lecturer
K. Win-Bunting, B.A. (Toronto), Lecturer

Associate Chair: W.H. Freight (416-287-7208)

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 text. 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 is 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 impossibly computable 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 Enrollment: Because of pressures of demand for places, it has been necessary to place enrollment 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 CSCB07H, are limited enrollment 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 CSCB07H.
- 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 Course
For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN COMPUTER SCIENCE
This program has three streams:

1. Comprehensive Stream
2. Information Systems Stream
3. Software Engineering Stream

Program Admission
Each year, up to 90 students are admitted to the three 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 Calculus & Vectors and Advanced Functions.
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 4.0 full credits) will be accepted on the basis of their 1st 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 2.0 and for this year it will not be greater than 2.8.
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 40 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 successfully 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 co-requisites are satisfied.

Many Computer Science courses are offered both at U of T Scarborough and at the St. George campus. When a course is offered at both campuses in a given session, U of T Scarborough students are expected to take that course at U of T Scarborough. 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 both campuses.
### 1. Comprehensive Stream

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

This stream requires 14.5 full credits.

#### Writing requirement

(Should be completed by the end of second year)


#### A-level courses

- CSCI01H Introduction to Computer Programming
- CSCI02H Introduction to Computer Science
- CSCI03H Mathematical Expression and Reasoning for Computer Science
- MATA20H Linear Algebra I
- MATA50H Calculus I
- MATA70H Calculus II for Mathematical Sciences

#### B-level courses

- CSCI05H Software Design
- CSCI06H Software Tools and Systems Programming
- CSCI07H Introduction to the Theory of Computation
- CSCI08H Computer Organization
- CSCI09H Design and Analysis of Data Structures
- MATB24H Linear Algebra II
- MATB45H Techniques of the Calculus of Several Variables I
- MATB46H Techniques of the Calculus of Several Variables II
- STAB52H Introduction to Probability

#### C-level courses

- CSCI01H Principles of Programming Languages
- CSCI02H Introduction to Databases
- CSCI03H Numerical Algebra and Optimization
- CSCI04H Numerical Approximation, Integration and Ordinary Differential Equations
- CSCI05H Computability and Computational Complexity
- CSCI06H Operating Systems
- CSCI07H Algorithm Design and Analysis

#### D-level courses

- CSCI08H Social Impact of Information Technology

#### Elective courses

**Note:** In selecting the 2.5 credits needed to meet this requirement, student must include at least one D-level (400-level) course.

- Two of (additional courses related to the practice of computing)
  - CSCI09H Programming on the Web
  - CSCI08H Analysis and Design of Information Systems
  - CSCI07H Microprocessor Systems
  - CSCI08H Software Engineering
  - CSCI11H Machine Learning and Data Mining
  - CSCI12H Computer Graphics
  - CSCI13H Computer and Network Security
  - CSCI14H Database System Technology
  - CSCI25H Computer Networks
  - CSCI21H Introduction to Neural Networks and Machine Learning
  - CSCI22H Microprocessor Software
  - CSCI04H Introduction to Artificial Intelligence
  - CSCI05H Human-Computer Interaction
  - CSCI45H Operating Systems Design and Implementation
  - CSCI45H Computational Linguistics
  - CSCI45H Compilers and Interpreters

Two of (additional fundamental mathematics courses):

- MATB43H Introduction to Analysis
- MATB44H Differential Equations I
- MATC31H Groups and Symmetry
MATC151H Introduction to Number Theory
MATC341H Complex Variables
MATC361H Chaos, Fractals and Dynamics
MATD9003H Fields and Groups
CSC4501H Computational Methods for Partial Differential Equations
CSC4601H High Performance Scientific Computing

One of (additional courses related to the theory of computing):
MATB011H Linear Programming and Optimization
MATC399H Introduction to Mathematical Logic
MATC161H Coding Theory and Cryptography
MATC321H Graph Theory and Algorithms for its Applications
MATC441H Introduction to Combinatorics
CSC4381H Compatibility and Logic
CSC4481H Formal Languages and Automata
CSC465H Formal Methods in Software Design

2. Information Systems Stream

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

Note: Due to enrollment 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 16.0 full credits.

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

A-level courses
CSCA081H Introduction to Computer Programming
CSCA491H Introduction to Computer Science
CSCA451H Mathematical Expression and Reasoning for Computer Science
MATA231H Linear Algebra I
MATA301H Calculus I
MATA371H Calculus II for Mathematical Sciences
MGT1031H Introduction to Management I
MGT1041H Introduction to Management II

B-level courses
CSCB107H Software Design
CSCB109H Software Tools and Systems Programming
CSCB361H Introduction to the Theory of Computation
CSCB151H Computer Organization
CSCB131H Design and Analysis of Data Structures
MATB241H Linear Algebra II
MATB411H Techniques of the Calculus of Several Variables I
MATB421H Techniques of the Calculus of Several Variables II
STAB2H1 Introduction to Probability
MGTB201H Managing People in Organizations
MGTB201H Managing Groups and Organizations

C-level courses
CSCC401H Analysis and Design of Information Systems
CSCC431H Introduction to Databases
CSCC433H Computability and Computational Complexity
CSCC691H Operating Systems
CSCC731H Algorithm Design and Analysis

D-level courses
CSCD001H Social Impact of Information Technology
CSCD051H Software Engineering
CSCD031H Database System Technology
Elective courses, all levels
One of (additional courses in scientific computing):
CSCC3681 Numerical Methods
CSCC5081 Numerical Algebra and Optimization

Two of (additional courses related to the practice of computing):
CSCC0961 Programming on the Web
CSCC3851 Microprocessor Systems
CSCD111H Machine Learning and Data Mining
CSCD181H Computer Graphics
CSCD2791 Computer and Network Security
CSCD3881 Computer Networks
CSCD321H Introduction to Neural Networks and Machine Learning
CSCD721H Microprocessor Software
CSCD845H Introduction to Artificial Intelligence
CSCG405H Formal Methods in Software Design
CSCG499H Operating Systems Design and Implementation
CSCG485H Computational Linguistics
CSCG498H Compilers and Interpreters

One of (additional courses related to business and computing):
CSCG4748 or (CSCD548H) The Business of Software
MATB061H Linear Programming and Optimization
MGTC748H Analysis for Decision-Making

3. Software Engineering Stream
Supervisor of Studies: R. Pascer (416-287-7679) Email: pascer@utm.utoronto.ca
This stream requires 14.5 full credits

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

A-level courses
CSCA081H Introduction to Computer Programming
CSCA481H Introduction to Computer Science
CSCA651H Mathematical Expression and Reasoning for Computer Science
MAT7391H Linear Algebra I
MAT7301H Calculus I
MAT7379H Calculus II for Mathematical Sciences

B-level courses
CSCB079H Software Design
CSCB091H Software Tools and Systems Programming
CSCB361H Introduction to the Theory of Computation
CSCB581H Computer Organization
CSCB631H Design and Analysis of Data Structures
MATB241H Linear Algebra II
MATB441H Techniques of the Calculus of Several Variables I
MATB442H Techniques of the Calculus of Several Variables II
STAB529H Introduction to Probability

C-level courses
CSCC241H Principles of Programming Languages
CSCC401H Analysis and Design of Information Systems
CSCC439H Introduction to Databases
CSCC531H Computability and Computational Complexity
CSCC601H Operating Systems
CSCC739H Algorithm Design and Analysis

D-level courses
CSCD031H Social Impact of Information Technology
CSCD081H Software Engineering
Elective courses, all levels
One of (additional courses in scientific computing):
CSCC36H Numerical Methods
CSCC38H Numerical Algebra and Optimization
Four of (additional courses in the practice of computing):
CSCC09H Programming on the Web
CSCC38H Microprocessor Systems
CSCD11H Machine Learning and Data Mining
CSCD18H Computer Graphics
CSCD27H Computer and Network Security
CSCD43H Database System Technology
CSCD58H Computer Networks
CSG46H Operating Systems Design and Implementation
CSG48H Compilers and Interpreters

4. Joint Mathematics Stream
This stream has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in it are able to complete it. Students who had intended to enrol in it in 2010/11 might want to consider enrolling in the Major Program in Computer Science and the Major Program in Mathematics.

5. Joint Physics Stream
This stream has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in it are able to complete it. Students who had intended to enrol in it in 2010/11 might want to consider enrolling in the Major Program in Computer Science and the Major Program in Astrophysics & Physics.

6. Joint Statistics Stream
This stream has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in it are able to complete it. Students who had intended to enrol in it in 2010/11 might want to consider enrolling in the Major Program in Computer Science and the Major Program in Statistics.

SPECIALIST (CO-OPTERATIVE) PROGRAM IN COMPUTER SCIENCE
Supervisor of Studies: R. Penner (416-287-7679) Email: penner@uottawa.ca
Co-op Contact: askcoo@uottawa.ca

The Co-operative Program in Computer Science is a work-study Program which combines academic studies in Computer Science with work terms in public and private enterprises. The Program prepares students for direct employment as a computer professional as well as for graduate study in Computer Science. 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.uottawa.ca/ Scarborough. The minimum qualifications for entry are 4.0 full credits including CSCI35H, CSCA48H, CSGA65H, MATA23H, MATA30H & MATA37H plus a cumulative GPA of at least 2.75.
* The Information Systems stream also requires MGMT46H & MGMT62H.
* The Joint Physics stream also requires PHYA15H & PHYA21H.

Program Requirements

Work Terms
Students who entered the Program in 2001/2002 or later, must complete three work terms along with the academic Program. Students who entered before 2001/2002 must complete two work terms, with an optional third work term with permission of the Co-ordinator. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple mandatory sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term. Students are not permitted to complete more than one summer work term.

Course Requirements
The Co-operative Program can be taken in conjunction with any of the streams in the Specialist Program in Computer Science. Please refer to the description of the Specialist Program in Computer Science. The courses may be taken in any order as long as the prerequisites and co-requisites are satisfied.

Note: Each student's program requires the annual approval of the Supervisor of Studies. Students are individually responsible to ensure that they have correctly completed program and degree requirements for graduation.
MAJOR (CO-OPERATIVE) PROGRAM IN COMPUTER SCIENCE

Supervisor of Studies: R. Pancer (416-287-7679) E-mail: pancer@utsc.utoronto.ca
Co-op Contact: askcoop@utsc.utoronto.ca

See the Specialist Co-operative Program in Computer Science for admission information and work term requirements. Course requirements for the Co-operative Computer Science Major are the same as for the regular Computer Science Major (see below). The Co-operative Computer Science Major must be combined with a secondary Major in order to fulfill the degree requirements for an Honours B.Sc. The secondary Major must be pre-approved by the Supervisor of Studies.

MAJOR PROGRAM IN COMPUTER SCIENCE

Supervisor of Studies: R. Pancer (416-287-7679) Email: pancer@utsc.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 8.0 full credits. 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. When a course is offered at both campuses in a given session, U of T Scarborough students are expected to take that course at U of T Scarborough. 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 both campuses.

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

- CSCA08H1 Introduction to Computer Programming
- CSCA48H1 Introduction to Computer Science
- CSCA65H1 Mathematical Expression and Reasoning for Computer Science
- MATBA23H1 Linear Algebra I
- MATBA23H1 Calculus I
- MATBA37H1 Calculus II for Mathematical Sciences

B-level courses

- CSCB07H1 Software Design
- CSCB36H1 Introduction to the Theory of Computation
- CSCB58H1 Computer Organization
- CSCB63H1 Design and Analysis of Data Structures
- MATBA24H1 Linear Algebra II
- STA242H1 Introduction to Probability

Elective courses, all levels

The courses chosen must include four courses at the C- or D-level (300 or 400) level satisfying:

One of (additional courses in the practice of computing):

- CSCC09H1 Programming on the Web
- CSCC24H1 Principles of Programming Languages
- CSCC40H1 Analysis and Design of Information Systems
- CSCC43H1 Introduction to Databases
- CSCC60H1 Operating Systems
- CSCC85H1 Microprocessor Systems
- CSCD111H Machine Learning and Data Mining
- CSCD181H Computer Graphics
- CSCD27H1 Computer and Network Security
- (CSCD354H1) The Business of Software
One of (additional courses in scientific computing):
CSCE360H Numerical Methods
CSCE500H Numerical Algebra and Optimization

One of (additional courses in the theory of computing):
CSCE53H Computer Science and Computational Complexity
CSCE473H Algorithm Design and Analysis
CSCE465H Formal Methods in Software Engineering
CSCE448H Formal Languages and Automata

One of (additional courses in mathematics):
MATH41H Techniques of the Calculus of Several Variables
MATH411H Linear Programming and Optimization
MATH97H Introduction to Mathematical Logic
MATH168H Coding Theory and Cryptography
MATH32H Graph Theory and Applications of Graph Theory
MATH34H Introduction to Combinatorics

MINOR PROGRAM IN COMPUTER SCIENCE
Supervisor of Studies: R. Panzer (416-287-7679) Email: panzer@u of toronto.ca

Program Requirements
This program may not be combined with any Major or Specialist Program in Computer Science, Mathematics or Statistics. It requires
4.0 full credits as follows:

1. All of (introductory programming courses)
   - CSCE20H Computer Science for the Sciences
   - CSCE48H Introduction to Computer Science

2. One of (basic mathematics courses)
   - CSCE45H Mathematical Expression and Reasoning for Computer Science
   - MATH41H Linear Algebra I
   - MATH97H Calculus I
   - MATH32H Calculus for Management I
   - PHLB90H Symbolic Logic I

3. One of (intermediate programming courses)
   - CSCE80H Software Design
   - CSCE90H Software Tools and Systems Programming

4. One of (prerequisites for other courses in the program)
   - CSCE11H Introduction to the Theory of Computation
   - CSCE59H Computer Organization

5. One of (courses in theoretical computer science or scientific computing)
   - CSCE23H Design and Analysis of Data Structures
   - CSCE59H Numerical Methods
   - CSCE63H Computer Systems and Computational Complexity
   - CSCE73H Algorithm Design and Analysis

6. One of (courses in the practice of computing)
   - CSCE92H Programming on the Web
   - CSCE40H Analysis and Design of Information Systems
   - CSCE43H Introduction to Databases
   - CSCE85H Microprocessor Systems
   - CSCE93H Social Impact of Information Technology

7. One additional course from those listed in Requirements 5 and 6

Requirement 1 note: CSCE48H may be substituted, with permission of the program supervisor, for CSCE20H.
Requirements 5 & 6 note: CSCE33H, CSCE39H, CSCE35H, CSCE40H, CSCE35H, CSCE39H & CSCE35H may require that you take more than 4.0 full credits to complete the program. If you are interested in taking one of these courses, check the prerequisites carefully before deciding which courses to select from Requirements 2-4. See the program supervisor if you need a program exception for the statistics prerequisite for CSCE33H or for the calculus prerequisite for CSCE35H.

SPECIALIST PROGRAM IN MANAGEMENT AND INFORMATION TECHNOLOGY
See the Management section of this Calendar for program requirements.
SPECIALIST PROGRAM IN QUANTITATIVE ANALYSIS
See the Statistics section of this Calendar for program requirements.

CSCA40H1 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 and sorting complexity. Breadth requirement: Quantitative Reasoning. Exclusion: CSCA20H1, CSC108H1, CSC120H1. Corequisite: CSCA48H1. Prerequisite: Any Grade 12 mathematics course. Note: This course is intended for students with no prior exposure to computer programming. Students who have sufficient programming experience may enrol directly in CSCA48H1, consult the instructor or the Supervisor of Studies for guidance.

CSCA20H1 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. Breadth requirement: Quantitative Reasoning. Exclusion: CSCA10H1, CSC108H1, CSC120H1.

CSCA48H1 Introduction to Computer Science
Abstract data types and data structures for implementing them. Linked data structures; algorithm and information-hiding: Object-oriented programming. Specifications. Analyzing the efficiency of programs. Recursion. Breadth requirement: Quantitative Reasoning. Exclusion: CSC144H1. Prerequisite: CSCA08H1 & Grade 12 Calculus & Vectors & 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 CSCA88H1. Students who already have this background may consult the instructor or Supervisor of Studies for advice about skipping CSCA88H1. Students who enrol in CSCA48H1 and find the course too difficult may "drop down" to CSCA10H1 in sessions when CSCA10H1 is offered. The deadline for "dropping down" is the end of the fifth week of classes.

CSCA65H3 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 mathematical notation and reasoning. Representation of floating point numbers and introduction to numerical computation. Breadth requirement: Quantitative Reasoning. Exclusion: CSC145H1, CSC240H1. Prerequisite: CSCA88H1 & Grade 12 Calculus & Vectors & one other Grade 12 mathematics course. Corequisite: CSCA48H1.

CSCB50H3 Software Design

CSCB09H3 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. Breadth requirement: Quantitative Reasoning. Exclusion: CSCB09H1. Prerequisite: CSCB07H & [CGPA 2.5 or enrolment in a CSC subject POS].

CSCB22H1 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). Breadth requirement: Quantitative Reasoning. Exclusion: This course may not be taken after or concurrently with any C- or D-level Computer Science course. Prerequisite: [CSCA08H1 or CSCA20H1 or PSCB57H1] & 3 other full credits & a cumulative CGPA of at least 2.5. Priority will be given to EPCTEPT2 students. Note: This course assumes programming experience in a language such as Python, C++ or Java as provided by CSCA88H1. Students who already have this background may consult the instructor or Supervisor of Studies for advice about skipping CSCA88H1/CSCA20H1/PSCB57H1.

CSCB39H3 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, solutions of linear and divide-and-conquer recurrences, introduction to automata and formal languages. Breadth requirement: Quantitative Reasoning. Exclusion: CSC236H1, CSC240H1. Prerequisite: CSCA40H1 & CSCA68H1 & [CGPA 2.5 or enrolment in a CSC subject POS].
CSCB58H3 Computer Organization
Computer structures, machine languages, instruction execution, addressing techniques, and digital representation of data. Computer system organization, memory storage devices, and microprogramming. Block diagram circuit realizations of memory, control and arithmetic functions. There are a number of laboratory periods in which students conduct experiments with digital logic circuits.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC258H
Prerequisite: [CSCA48H or PSCB57H] & [CGPA 2.5 or enrolment in a CSC subject POSI]

CSCB63H3 Design and Analysis of Data Structures
Breadth requirement: Quantitative Reasoning
Exclusion: CSC263H, CSC265H
Prerequisite: CSCB37H & CSCB36H & STAB52H & [CGPA 2.5 or enrolment in a CSC subject POSI]

CSCC08H3 Programming on the Web
Breadth requirement: Quantitative Reasoning
Exclusion: CSC308H
Prerequisite: CSCB39H & CSAC40H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC41H3 Principles of Programming Languages
Major topics in the development of modern programming languages. Syntax specification, type systems, type interface, exception handling, information hiding, structural recursion, run-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). 
Breadth requirement: Quantitative Reasoning
Exclusion: CSC324H
Prerequisite: CSCB37H & CSCB36H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC38H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSCC50H, CSCC51H, CSC339H, CSC358H, CSC359H
Prerequisite: [CSBC57H or CSBCB7H] & [MATAM6H or MATA37H] & [MATA42H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC40H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC340H
Prerequisite: CSCB31H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC42H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC342H
Prerequisite: CSCB31H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC43H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSCC36H, CSC339H, CSC359H
Prerequisite: [CSBCB7H or CSBC57H] & MATB24H & MATB42H & [CGPA 3.0 or enrolment in a CSC subject POSI]

CSCC51H3 Numerical Approximation, Integration and Ordinary Differential Equations
Breadth requirement: Quantitative Reasoning
Exclusion: CSCC36H, CSC339H, CSC359H
Prerequisite: CSCC50H & [CGPA 3.0 or enrolment in a CSC subject POSI]
CSCD03H3 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 invasion of privacy, computer-based crime; and professional ethics in the software industry. There will be an emphasis on current events relating to these topics.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Exclusion: CSC309H
Prerequisite: 14.0 full credits including CSCA08H1 or PSCI357H1 or CSCA44H1 [or, in special cases, (CSCA02H1) & permission of the instructor]

CSCD08H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC406H1
Prerequisite: CSC404H1 & (CSCB09H1 or proficiency in C) & [CGPA 3.0 or enrolment in a CSC subject POS6]

CSCD11H3 Machine Learning and Data Mining
Breadth requirement: Quantitative Reasoning
Exclusion: CSC411H1
Prerequisite: MAT224H1 & MATB43H1 & STAB32H1 & CSCB63H1 & (CSC36H1 or CSC308H1) or permission of the instructor & [CGPA 3.0 or enrolment in a CSC subject POS6]

CSCD18H3 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 one 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.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC414H1
Prerequisite: MATB24H1 & MATB42H1 & (CSCB09H1 or proficiency in C) & CSCB63H1 & (CSC36H1 or CSC50H1) & [CGPA 3.0 or enrolment in a CSC subject POS6]
CSC237H3 Computer and Network Security
Public key and symmetric key algorithms and their applications; key management and certificate management; authentication protocols; digital signatures and data integrity; secure network and application protocols; application system and network attacks and defenses; intrusion detection and prevention; social engineering attacks; risk assessment and management.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC247H
Prerequisite: CSC206H & CSC216H & [CGPA 3.0 or enrolment in a CSC subject POS]
Recommended Preparation: CSC259H

CSC234H3 Database System Technology
Breadth requirement: Quantitative Reasoning
Exclusion: CSC243H
Prerequisite: CSC233H & CSC259H & CSC275H & [CGPA 3.0 or enrolment in a CSC subject POS]

CSC258H3 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 multicaressing. Principles in the context of the working code model implemented in the Internet.
Breadth requirement: Quantitative Reasoning
Exclusion: CSC258H
Prerequisite: CSC258H & CSC259H & [STAB52H or STAB57H] & [CGPA 3.0 or enrolment in a CSC Subject POS]

CSC371H3 Topics in Computer Science
A topic from computer science, selected by the instructor, will be covered.
The exact topic will typically change from year to year.
Prerequisite: Permission of the instructor & [CGPA 3.0 or enrolment in a CSC subject POS]
Normally intended for students who have completed at least 8.0 full credits.

CSC372H3 Topics in the Theory of Computing
A topic from theoretical computer science, selected by the instructor, will be covered.
The exact topic will typically change from year to year.
Prerequisite: Permission of the instructor & [CGPA 3.0 or enrolment in a CSC subject POS]
Normally intended for students who have completed at least 8.0 full credits.

CSC394H3 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: CSC394H
Prerequisite: [Three 1-level computer science half-courses] & [Permission of the Supervisor of Studies] & [CGPA 3.0 or enrolment in a CSC subject POS]
Enrollment procedures: Project supervisor's note of agreement must be presented to the Supervisor of Studies, who must issue permission for registration.

CSC395H3 Computer Science Project
Same description as CSC394H. Normally a student may not take two project half-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: CSC395H
Prerequisite: CSC394H
Note: Students must obtain consent from the Supervisor of Studies before registering for this course.

Concurrent Teacher Education (B.A./B.B.Sc. & B.Ed.)
CTEP Co-ordinator: S. Syed Email: syyed@utsc.utoronto.ca
Academic Advisor (French): C. Bouqueau Email: csp-french-program-supervisor@utsc.utoronto.ca
Academic Advisor (Mathematical Sciences): X. Jiang Email: xjiang@utsc.utoronto.ca
Academic Advisor (Physical Sciences): L. Dyer Email: ldyer@utsc.utoronto.ca

The Concurrent Teacher Education Program (CTEP) is a partnership between the Ontario Institute for Studies in Education (OISE) 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 level (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 level (Kindergarten to Grade 6) or the intermediate-secondary level (Grades 7 to 12).

Teaching Subjects

Intermediate/Secondary (IS): Students must have two teaching subjects, the main teaching (anchor) subject and a second teaching subject.

Primary/Junior (PJ): Students must have an anchor subject but they do not need a second teaching subject (although it is recommended). As teachers, they will cover many topics in the curriculum and should have knowledge of a range of areas.

Students declare their anchor and second subjects and teaching level (primary/junior or intermediate/secondary) in the session following attainment of their 4th credit.

- Anchor subjects: For students admitted to CTEP/Arts, the anchor is French as A Second Language. For students admitted to CTEP/Science, the anchor is one of Mathematics, Science-Chemistry or Science-Physics.
- Second subjects: Eligible second subjects at UTSC are: Computer Studies; Dramatic Arts; Economics; English; French as a Second Language; Geography; History; Mathematics; Politics; Science-Biology; Science-Chemistry; Science-General; Science-Physics; Sociology Sciences-General; and, Visual Arts.

At this stage of their studies, students also select the specialist or major programs that are associated with their anchor subject.

Specialist and Major Programs Associated with Anchor Subjects

(See the Chemistry, French, Mathematics, Physical Sciences, Physics or Statistics section of this Calendar for specific program requirements.)

CTEPIArts

- Specialist Program in French

CTEPIScience

- Specialist Program in Biological Chemistry
- Specialist Program in Chemistry
- Specialist Program in Mathematics
- Specialist Program in Mathematics and Its Applications
- Specialist Program in Natural Sciences
- Specialist Program in Physical and Mathematical Sciences
- Specialist Program in Physics and Its Applications
- Specialist Program in Quantitative Analysis
- Two approved major programs, one of which must be from the following list:
  a) Major Program in Astrophysics and Physics
  b) Major Program in Biochemistry
  c) Major Program in Chemistry
  d) Major Program in Mathematics
  e) Major Program in Physical Sciences
  f) Major Program in Statistics

Note: If available, students are encouraged to enrol in a minor program associated with their second teaching subject.

Admissions

In most cases, students apply to enter CTEP 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, applicants must indicate the specific code for the program on the Application for Admission to an Ontario University. See the Admissions section of this Calendar for more information and deadlines. On receiving the application, the University of Toronto's Admissions office will send the applicant a confirmation letter and Application Instructions Guide. At this stage CTEP applicants will be required to complete an on-line Application Profile.

Current U of T Scarborough Students: Application procedures can be found at the Registrar's Office website at: www.utsc.utoronto.ca/subjectspot. Admission is competitive. Applications will be considered from students who:
• Are enrolled in an eligible specialist or major program
• Have at least 4.0 credits including the recommended first year courses for the appropriate specialist or major program
• Have a cumulative GPA of at least 2.50

Academic status in CTEP
Note: These rules are over and above the rules governing overall standing at UTSC as described in the Overall Standing section of this Calendar and apply to the Honours Bachelor of Arts or Honours Bachelor of Science part of CTEP.

Academic status within CTEP will be determined as follows at the end of each Winter Session for all students who have attempted at least eight full credits since beginning their studies in their degree:

1. In good standing in CTEP
   Students who maintain a cumulative grade point average of 2.50 or better are said to be “in good standing” in CTEP.

2. On probation in CTEP
   Students who have attempted at least eight full credits and have a cumulative GPA below 2.50 will be placed on probation in CTEP.

3. Probation in CTEP cleared
   Students may clear probation by achieving a cumulative GPA of at least 2.50. Students who have cleared probation shall be said to be again in good standing in CTEP.

4. Probation in CTEP continued
   Students may continue on probation in CTEP by achieving an annual (Fall/Winter) GPA of at least 2.70 until such time as they return to good standing. Students who fail to meet this requirement will be allowed to continue on probation if they have a GPA of at least 2.50 in the best 75% of their courses.

5. Required to withdraw from CTEP
   The following students will be required to withdraw from CTEP:
   a) Any student on probation in CTEP who fails to achieve an annual GPA of at least 2.70 or who fails to achieve a GPA of at least 2.50 in the best 75% of their courses.
   b) Any student who, under the general rules governing overall standing, incurs a suspension.
   c) Any student who fails to meet OISE’s standards for continued enrolment in the B.Ed. program.

Program Requirements
The program requires completion of:

• An Honours Bachelor of Arts or an Honours Bachelor of Science degree (see the Degrees section of this Calendar for specific degree requirements) including:
  1. Completion of an approved specialist program or of two approved major programs.
  2. The following education focused courses (some currently under development):
     a) PSYB1H1 (Introduction to Developmental Psychology: Focus on Education) to be taken within Years 1 or 2.
     b) CTEB1H1 (Equity and Diversity in Education) to be taken within Years 2 or 3.
     c) CTEC1H1 (Communication and Conflict Resolution) to be taken within Years 2 or 3.
     d) Two 0.5 credit Subject Studies for Teachers courses to be taken within Years 1, 2 or 3 or the Fall of Year 4. Students who have chosen the French option must take FREB1H1 and FREC1H1.
     e) CTEP internship in a school or community organization to be taken within Years 3, 4 or 5.

   Students who choose, or are required, to withdraw from CTEP will 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 e) above and the Bachelor of Education courses listed below.

• A Bachelor of Education degree which requires completion of 3.0 full credits as follows:
  a) Year 3 or 4: Principle of Teaching: Legal, Ethical and Professional (0.5 credit).
  b) Year 3 or 4: Inclusive Education: ESL and Exceptional Learners (0.5 credit) which includes 20-hour field experience focused on observation/tutoring.
  c) Year 4: Psychological Foundations of Learning (0.5 credit).
  d) Year 4: Social Foundations of Teaching and Schooling (0.5 credit).
  e) Year 4: Mentored Inquiry and Teaching (0.25 credit) with 10-15 days spent in schools.
  f) Year 4: Curriculum, Instruction and Assessment1 (1.0 credit).
  g) Year 4: Practicum placement in schools (0.25 credit), 35-40 days, 3.5 days per week, Winter session.
  h) Year 5: Mentored Inquiry and Teaching (0.25 credit) with 10-15 days spent in schools.
  i) Year 5: Curriculum, Instruction and Assessment2 (1.0 credit).
  j) Year 5: 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 related CTEP requirements, see the OISE Calendar.)

Graduation from CTEP
In order to graduate in the CTEP program, students will be required:

1. To complete requirements of an Honours B.A. or an Honours B.Sc.;
2. To complete the requirements of a B.Ed. having achieved a cumulative GPA of at least 2.50 in their best 15.0 credits at UTSC.

CTEB01H3 Equity and Diversity in Education
Focuses on raising awareness and sensitivity to issues related to equity, diversity and inclusion facing teachers and students in diverse schools and cultural communities. It includes field experience that entails observation of, and participation in, equity and diversity efforts in a culturally-rooted school and/or community organization.

Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: Restricted to CTEP students.
Exclusion: CTEC00H1
Prerequisite: PSYB21H3

CTEC01H3 Communication and Conflict Resolution
This course will provide theoretical knowledge about small-group interactions and their application for interpersonal communication and conflict resolution. First, we will study the role of status characteristics, cross-cultural variation in communication, and the emergence of power as they relate to the etiology of conflict. How the same facts can be re-organised in conflict management and resolution will be the focus in the second half of the course. Students will work on case studies and write reports about them.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35. Restricted to CTEP students.
Exclusion: CTEB25H1
Prerequisite: CTEB01H1 & PSYB21H3

PSYB21H3 Introduction to Developmental Psychology: Focus on Education
See the Psychology section of this Calendar for a full course description.

Diaspora and Transnational Studies
(B.A.)

Faculty List
M. Lambe, B.A. (McGill), M.A., Ph.D. (Michigan), F.R.S.C., Professor
M.B. Goldman, M.A., (Victoria), Ph.D. (Toronto), Associate Professor
E.A. Barney, M.Phil., Ph.D. (London), Associate Professor
N. Kortenaaar, M.A., Ph.D. (Toronto), Associate Professor
P. Landoh, B.A., M.A. (York), M.A., Ph.D. (Johns Hopkins), Associate Professor
C. Daawar, B.Sc. (National University of Singapore), M.Sc., Ph.D. (London School of Economics), Assistant Professor
K. MacDonald, B.A., M.A., Ph.D. (Waterloo), Assistant Professor
A. Pac, B.A. (Queen's), M.A. (Tel Aviv), M.A. (Chicago), Assistant Professor

Undergraduate Counsellor: R. R pedestrian Email: social-sciences.counsellor@uoftutorontonnen.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 at least two full-course modules 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 as follows:

1. DTSB01H1 Introduction to Diaspora and Transnational Studies
2. 5.0 full credits from Group A and Group B courses (below) with at least 2.0 full credits 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 full credit must be at the C-level or above.
3. DTSB02H1 Advanced Topics in Diaspora and Transnationalism I: Postcolonialism and Diaspora
   DTSB02H1 Advanced Topics in Diaspora and Transnationalism II: Critical Approaches to Diaspora Studies

DTSB01H1 Introduction to Diaspora and Transnational Studies

DTSB02H1 Advanced Topics in Diaspora and Transnationalism I: Postcolonialism and Diaspora

DTSB02H1 Advanced Topics in Diaspora and Transnationalism II: Critical Approaches to Diaspora Studies
Note: In addition, while not required at this point in time, the Faculty of Arts & Science course JQR369H (The Canadian Census: Populations, Migrations and Demographics) is highly recommended.

Group A (Humanities) courses
CLAC248H Multiculturalism and Cultural Identities in the Greek and Roman Worlds
ENGH179H Contemporary Literature from the Caribbean
ENGH199H Contemporary Literature from South Asia
ENGH130H Ethnic Traditions in American Literature
ENGH701H The Immigrant Experience in Literature to 1980
ENGH711H The Immigrant Experience in Literature since 1980
ENGH629H Topics in Postcolonial Literature and Film
ENGH681H Topics in Literature and Religion
ENGH711H Studies in Arab North American Literature
ENGH971H Between Traditions and Freedoms: Writing by Canadians of Asian Descent
FRED201H The Francophone World
FRED334H Francophone Literature
FRED371H Cinema of the Francophone World
FRED341H Folklore, Myth and the Fantastic in the French-Speaking World
FREC471H Special Topics in Linguistics: Pidgin and Creole Languages
FREC331H Cultural Identities and Stereotypes in the French-Speaking World
FRED121H Advanced Topics in Literature: Haitian Migrant Literature in Quebec
GASB101H Methodologies and Issues in Global Asia Studies
GASB103H Introduction to South Asian Literatures
GASB111H Introduction to Chinese Literature
GASB201H Gender and Social Institutions in Asia
GASB301H Asian Religions and Cultures
GASC311H Chinese Thought and Culture in Historical Perspective
GASC201H Gendering Global Asia
GASC311H Self and Imagination in Pre-modern China
GASC221H Art of Memory: China and the West
GASC401H Chinese Media and Politics
GASC411H Media and Popular Culture in East and Southeast Asia
GASC421H Film and Popular Culture in South Asia
GASC501H Comparative Studies of East Asian Legal Cultures
GASC511H Politics and Culture in Modern South Asia
HISS021H The British Empire: A Short History
HSSH101H History on Film
HSSH501H Africa in the Nineteenth Century
HSSH511H Twentieth Century Africa
HSSH571H Sub-Continental History: South Asia in the World
HSSH621H The Early Modern Mediterranean, 1500-1800
HISC031H History of Animals and People
HISC141H Edible History: History of Global Foodways
HISC631H People in Motion: Immigrants and Migrants in U.S. History
HISC451H Immigrants and Race Relations in Canadian History
HISC571H China and the World
HISC581H Delhi and London: Imperial Cities, Mobile People
HISC501H Old Worlds? Strangers and Foreigners in the Mediterranean, 1200-1700
HISC041H Missionaries and Converts in the Early Modern World
HISC501H Between Two Worlds? Translators and Interpreters in History
HISC601H Global History of Crime and Punishment since 1750
HISC311H Thinking of Diversity: Perspectives on American Pluralisms
HISC351H The Politics of American Immigration, 1865-present
HISC221H East African Societies in Transition
HISC651H 'Cools' and Others: Asian Labouring Diasporas in the British Empire
HISC601H Travelling and Travel Writing from the Middle Ages to the Early Modern Period
EECC211H Theories and Methods in the Study of Society and Culture
EECC211H Perspectives on the Globalized and the Transnational I
EECC211H Perspectives on the Globalized and the Transnational II
LGCN474H Intermediate Tamil
MDIS051H Media and Globalization (formerly HUMB748H)
MDIS261H Covering Immigration
Diaspora and Transnational Studies

RLOC10H Hinduism in South Asia and the Diaspora
RLOC21H Contemporary Engaged Buddhist Movements in Asia
VPAB09H Dialogues in the Diaspora
VPBH08H Africa through the Photographic Lens
VPHB65H Exhibiting Africa: Spectacle and the Politics of Representation
VPHB67H Religion in the Arts: Buddhist Arts and Cultures
VPHB70H Topics in Global Visual Culture
VPHB75H Religion in the Arts: Hinduism and Jainism
VPHC32H Issues in Contemporary Global Arts
VPHC51H The Silk Routes
VPHC58H Religion in the Arts: Seminar in Buddhism and Art
VPHC58H Art in Global Crisis
VPHC70H Modern and Contemporary Arts and Visual Culture of the Middle East
VPHC71H Brazilian Modernisms: Art and Architecture
VPHC73H Home, Away and in Between: Artists, Art, and Identity
VPMH09H Music of the World's Peoples
VPMH07H Music in Islamic Cultures
VPMH09H Performing Arts of Asia
VPMH99H Popular Music in a Cross-Cultural Context
VPMG09H Musical Diasporas in Canada and the USA

WSTD04H Senior Seminar in Gender, Equity and Human Rights/Gender, Local and Global Communities

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

ANTB09H Culture and Society in Africa
ANTB09H The Chinese Diaspora
ANTB18H Canadian Cultural Identities
ANTB29H Culture, Politics and Globalization
ANTB34H Peoples of the Middle East: An Introduction
ANTB44H The Anthropology of Food: Consuming Passions
ANTB54H An Introduction to Pacific Island Societies
ANTC34H African Cultures and Societies II: Case Studies
ANTC34H Families: Kinship and Marriage from a Cross-Cultural Perspective
ANTC34H Producing People and Things: Economics and Social Life
ANTC34H The Anthropology of Transnationalism
ANTC54H Muslim Societies
GGRB49H Local Geographies of Globalization
GGRD10H Health and Sexuality
GGRD10H Spaces of Multiculturalism: Critical Mixed Race Theory
IDCG08H Media and Development
POLA11H Leaving Home: Politics and Emigration
POLA31H Exploring Globalization
POLA41H Globalization and Governance
POLB01H Comparative Development in International Perspective
POLC44H Globalization, Gender and Development
POLC90H Politics and Society in the Middle East I
POLC97H Politics and Society in the Middle East II
SOCB25H International Migration and Immigrant Incorporation
SOCB35H Race and Ethnicity
SOCB23H Ethnicity, Race and Migration
SOCB41H Migrations & Transnationalism

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

For Faculty of Arts & Science courses that may be applied to the program, see http://www.artsandscience.utoronto.ca/ofc/arcved/9901calendar/pug_dsh.htm

For UTM courses, see http://www.erin.utoronto.ca/regcal/WEBGROUP/125.html.
MINOR PROGRAM IN DIASPORA AND TRANSNATIONAL STUDIES

Program Requirements
Students must complete 6.0 full credits as follows:
The specific requirements of the minor program at U of T Scarborough are as follows:

1. DTSB01H Introduction to Diaspora and Transnational Studies I
2. 2.5 full credits from Group A and Group B courses (see the Major Program above) with at least 1.0 full credit from each group.
3. DTSB02H (Advanced Topics in Diaspora and Transnationalism I: Postcolonialism and Diaspora)
or
DTSB02H (Advanced Topics in Diaspora and Transnationalism II: Critical Approaches to Diaspora Studies)

Note: In addition, while not required at this point in time, the Faculty of Arts & Science course JQR360H (The Canadian Census: Populations, Migrations and Demographics) is highly recommended.

DTSB01H: Introduction to Diaspora and Transnational Studies I
An interdisciplinary introduction to the study of diaspora, with particular attention to questions of history, globalization, cultural production and the creative imagination. Material will be drawn from Toronto as well as from diasporic communities in other times and places.
Breadth requirement: Social & Behavioural Sciences
Exclusion: DTSB09F, DTSB01F
It is recommended that students take DTSB01H in their second year of study.

DTSB02H: Introduction to Diaspora and Transnational Studies II
A continuation of DTSB01H. An interdisciplinary introduction to the study of diaspora, with particular attention to questions of history, globalization, cultural production and the creative imagination. Material will be drawn from Toronto as well as from diasporic communities in other times and places.
Breadth requirement: Social & Behavioural Sciences
Exclusion: DTSB09F, DTSB02H
Prerequisite: DTSB01H
It is recommended that DTSB01H & DTSB02H be taken in the same academic year.

Drama
See Theatre and Performance Studies in the Visual and Performing Arts section of this Calendar.
Economics for Management Studies (B.B.A./B.A.)

Faculty List
M. Krahinsky, S.B. (M.I.T.), M.Phil., Ph.D. (Yale), Professor
M. Campolieti, B.Sc., M.A., Ph.D. (Toronto), Associate Professor
G. Frazee, B.Math (Waterloo), B.Ed. (Western), M.A. (Toronto), M.Phil., Ph.D. (Yale), Associate Professor
H. Krahinsky, B.A. (Queen's), M.A., Ph.D. (Princeton), Associate Professor
L.C. Parker, B.A. (Manitoba), M.A. (Toronto), Ph.D. (Yale), Associate Professor
E. Dickey, B.A. (Colorado), M.A. Ph.D. (California), Assistant Professor
A. M. Franco, B.A. (California), M.A., Ph.D. (Rochester), Assistant Professor
J.M.S. Au, B.A., M.A., Ph.D. (Simon Fraser), Senior Lecturer
G. E. Cleveland, B.A. (Dalhousie), M.A., Ph.D. (Toronto), Senior Lecturer
J. Parkinson, Hon B.A. (Western), M.A., Ph.D. (Toronto), Senior Lecturer
A. Marafioti, BA, MA, PhD, Lecturer

Chair: M. Krahinsky

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 Program in Economics for Management Studies (with a co-op option) as part of the B.B.A., or may offer the major or minor in economics as part of the B.A. degree. Finally, economics plays a significant role within the various programs leading to the 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. Major in Economics for Management Studies - program of six full credits of Economics for Management Studies, one full credit 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.
4. Minor in Economics for Management Studies - program of four full credits 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:

5. Specialist in Management (B.B.A.) - a program emphasizing Management but including four full credits in Economics for Management Studies, leading to a B.B.A. degree. Described in detail in the Management section of this Calendar.
6. Specialist in Co-op in Management (B.B.A.) - same as #5 above, but also includes Co-op work terms.
7. 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). Students should have ten full credits or less when they seek admission to programs in the Department of Management. Note that enrollment in ECON212H, ECON214H, ECM110H, ECM112H, ECON102H, and ECON104H 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 CGPA of 2.0 or greater after completing eight credits in order to remain 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 may not be guaranteed admission to B-level and C-level courses and, at times, 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 Special 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 period. 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-OPT) PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES (B.B.A.)

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, work terms and curriculum requirements, please see the Co-operative Programs section and the Management section of this Calendar.

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

This program will provide a specialization for those wishing for a substantial component of Economics in a Management degree leading to a Bachelor of Business Administration (B.B.A.). The students in this program may be seeking to prepare themselves for studies in Economics at the Masters level. For more details and curriculum requirements, please refer to the Management section of this Calendar.

The Co-operative Program option of this program is a work-study program which combines academic studies in economics and management with work experience in public and private enterprises. It 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, work terms, and curriculum requirements, please see the Co-operative Programs section and the Management section of this Calendar.

Program Admission

Note: Registration in this program is limited. If not directly admitted to the program from high school, students may apply to the program after first year. They must have completed a minimum of four credits at the University of Toronto with the required courses to be considered for this program. Required courses must include ECON204H, ECON206H, MGTA03H, MGTA06H & MATA21H & MATA32H (or equivalents). Students will be considered on the basis of cumulative GPA. For more details please refer to the Management section of this Calendar.

Program Requirements

For specific program requirements, see the Management section of this Calendar.

Students should be aware that the mathematics requirement implies that Grade 12 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 B.B.A. are assessed based on these rules.
Overall course load limit for B.B.A. students

Please refer to the Management section of this Calendar for rules on course load limits for B.B.A. students.

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

Supervisor of Studies: TBA. Email: economics-supervisor-studies@utsc.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 full credits to be considered for this program. Required courses include ECMA401H, ECMA406H, MATA23H, MAT22H. Decisions will be made on the basis of cumulative GPA.

Students may apply until they have completed up to 10 full credits, and admission will be on the basis of all grades received.

Students who have completed more than 10 full credits will not be considered for admission to the Program.

Students should be aware that the Mathematics requirement implies that Grade 12 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 credits in Economics for Management Studies, one full credit in Mathematics and one full credit in Humanities. The Economics courses must include:

ECMA401H & ECMA406H
ECMB102H & ECMB104H
[ECMB113H & ECMB115H] or ECMB109Y
ECMC201H & ECMC206H
ECMC211H

Plus 1.5 full credits chosen from the courses in Economics for Management Studies including at least one at the C-level (not including ECMC91H, ECMC92H, ECMC93H).

Students must also complete MATA32H & MATA33H (or equivalent) and one full credit in Humanities.

Note: Students who take ECMA401H and ECMA406H and then decide to apply for this program will be permitted to substitute [ECMA401H & ECMA406H] for [ECMA403H & ECMA405H]. However, these students will be required to complete [MATA32H & MATA33H] or equivalent before registering for ECMB202H and ECMB206H.

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

Supervisor of Studies: TBA. Email: economics-supervisor-studies@utsc.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 programs in order to graduate. (See the Degrees section of this Calendar for information.) Students need not have completed Grade 12 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 full credits in Economics for Management Studies as follows:

ECMA401H or ECMA404H
ECMA405H or ECMA406H
ECMB102H or ECMB104H
ECMB109Y or ECMB106H

Plus two more full credits 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 (ECMC91H, ECMC92H & ECMC93H) and will be available to students in the minor program. Future additions available to students in the minor program are anticipated.

Note: Students may if they wish, count STA223H, ANTC35H, PSYB207H or SOCB201 or a more advanced statistics course as one full credit B-level Economics course in the Minor Program in Economics for Management Studies. While not required, students are strongly encouraged to include a statistics course in the program.
ECON03H3 Introduction to Microeconomics
Economic theory of the firm and the consumer. Although calculus is not used in this course, algebra and graphs are used extensively to illuminate economic analysis.

Note: This course is not for students interested in applying to the Specialization in Management and Economics leading to the B.B.A. or for the Major program in Economics.

Breadth requirement: Social & Behavioural Sciences
Exclusion: ECMA04H1, ECO100Y, ECO101Y

ECON04H3 Introduction to Microeconomics: A Mathematical Approach
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.

Breadth requirement: Social & Behavioural Sciences
Exclusion: ECMA04H1, ECO100Y, ECO101Y
Prerequisite: Grade 12 Calculus
Corequisite: It is strongly recommended that MATA32H1 & MATA33H1 be taken simultaneously with ECMA04H1 & ECON04H1

ECON05H3 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 illuminate economic analysis.

Note: This course is not for students interested in applying to the Specialization in Management and Economics leading to the B.B.A. or for the Major program in Economics.

Breadth requirement: Social & Behavioural Sciences
Exclusion: ECMA04H1, ECO100Y, ECO105Y

ECON06H3 Introduction to Macroeconomics: A Mathematical Approach
Study of the determinants of output, employment, 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.

Breadth requirement: Social & Behavioural Sciences
Exclusion: ECMA04H1, ECO100Y, ECO105Y
Prerequisite: Grade 12 Calculus
Corequisite: It is strongly recommended that MATA32H1 & MATA33H1 be taken simultaneously with ECMA04H1 & ECON04H1

ECON07H3 Price Theory
Intermediate level development of the principles of microeconomic theory. The emphasis is on static partial equilibrium analysis. Topics covered include: consumer theory, 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 120 per section
Exclusion: ECON02H1, ECO200Y, ECO204Y, ECO206Y
Prerequisites: [ECMA04H1 & ECMA06H1] or [ECMA04H1 & ECON04H1]

ECON08H3 Price Theory: A Mathematical Approach
Intermediate level development of the principles of microeconomic theory. The course will cover the same topics as ECON07H3, 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80 per section
Exclusion: ECON02H1, ECO200Y, ECO204Y, ECO206Y
Prerequisites: ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or [MATA27H1]
Students who have completed ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or [MATA27H1] may be admitted with the permission of the Supervisor of Studies.

ECON09H3 Macroeconomic Theory and Policy
Intermediate level development of the principles of macroeconomic theory. Topics covered include: theory of output, employment and the price level. This course does not qualify as a credit for either the Major in Economics for Management Studies or for the B.B.A.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 120 per section
Exclusion: ECON06H1, ECO200Y, ECO204Y, ECO209Y
Prerequisites: [ECMA04H1 & ECON06H1] or [ECMA06H1 & ECON04H1]

ECON10H3 Macroeconomic Theory and Policy: A Mathematical Approach
Intermediate level development of the principles of macroeconomic theory. The course will cover the same topics as ECON09H3, 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80 per section
Exclusion: ECON06H1, ECO200Y, ECO204Y, ECO209Y
Prerequisites: ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or [MATA27H1]
Students who have completed ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or [MATA27H1] may be admitted with the permission of the Supervisor of Studies.
ECMB3973 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, hypothesis testing, simple and multiple regression. Enrollment is limited to students registered in programs requiring this course.
Breadth requirement: Quantitative Reasoning
Limited enrolment: 60 per section
Prerequisite: ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or (MAT271H1)
Students who have completed ECMA01H1 & ECMA05H1 & [MATA32H1 & MATA33H1] or (MAT271H1) may be admitted with the permission of the Supervisor of Studies.

ECMB3193 Quantitative Methods in Economics I
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. Enrollment is limited to students registered in programs requiring this course.
Breadth requirement: Quantitative Reasoning
Limited enrolment: 120 per section
Prerequisite: ECMA04H1 & ECMA06H1 & [MATA32H1 & MATA33H1] or (MAT271H1)
Students who have completed ECMA01H1 & ECMA05H1 & [MATA32H1 & MATA33H1] or (MAT271H1) may be admitted with the permission of the Supervisor of Studies.

ECMB1283 Quantitative Methods in Economics II
A second course in probability and statistics as used in economic analysis. Topics to be covered include: confidence intervals, hypothesis testing, simple and multiple regression. Enrollment is limited to students registered in programs requiring this course.
Breadth requirement: Quantitative Reasoning
Limited enrolment: 30 per section
Exclusion: ECMB09Y, ECO220Y, ECO227Y, STA218H, STA218H, STA218H, STA218H, STA218H
Prerequisite: (ECMA01H1 or [STA252H1 & STA257H1]) & [MATA32H1 & MATA33H1] or (MAT271H1)

ECMB3950 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 examines 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 policy-making.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: [ECMA04H1 & ECMA06H1] or (ECMA01H1 & ECMA05H1)

ECMB3983 Economic Aspects of Public Policy
Cost-Benefit Analysis (CBA) as a key policy-evaluation tool developed by economists to assess government policy alternatives and provide advice to governments. In this course, we learn the key assumption behind and techniques used by CBA and how to apply these methods in practice.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: [ECMA04H1 & ECMA06H1] or (ECMA01H1 & ECMA05H1)
Corequisite: ECMB10H1 or ECMB12H1

ECMB3883 Comparative Economic Systems
A research-oriented course focused on the application of general systems theory to comparative analysis of alternative economic systems, capitalist, socialist and other. Half of the course will focus on general theoretical systems models, the other half will empirically study Russia, China and other systems.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: [ECMA04H1 & ECMA06H1] or (ECMA01H1 & ECMA05H1)
Corequisite: ECMB10H1 or ECMB12H1

ECMC202H1 Topics in Price Theory
Continuing development of the principles of microeconomic theory. This course will build on the theory developed in ECMB20H1. Topics will be chosen from a list which includes: monopoly, price discrimination, product differentiation, oligopoly, game theory, general equilibrium analysis, externalities and public goods. Enrollment is limited to students registered in programs requiring this course.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80 per section
Exclusion: ECO322H, ECO327Y, ECO328Y1, ECO328Y2
Prerequisite: ECMB10H1 & [MATA32H1 & MATA33H1] or (MAT271H1)

ECMC206H3 Topics in Macroeconomic Theory
Continuing development of the principles of macroeconomic theory. The course will build on the theory developed in ECMB20H1. 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80 per section
Exclusion: ECO322Y, ECO328Y, ECO328Y2
Prerequisite: ECMB20H1 & [MATA32H1 & MATA33H1] or (MAT271H1)
ECMC311H3 Introduction to Regression Analysis
This course will develop the knowledge and skills necessary to obtain and analyse economic data, providing an introduction to the use and interpretation of regression analysis. Students will learn how to estimate regressions, undertake hypothesis tests, and critically assess statistical results. Students will be required to write a major analytical report. Enrollment is limited to students registered in programs requiring this course.
Breadth requirement: Quantitative Reasoning
Limited enrollment: 60
Exclusion: (ECMB120H) ECOMC111H may not be taken after or concurrently with STA107H or ECO327Y.
Prerequisites: [ECMB11H1 & ECOMB12H] or ECOMB09Y

ECMC209H3 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 conventional 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Prerequisites: ECOMB10H1 or ECOMB02H

ECMC271H3 Classics in the History of Economic Thought
A study of the literature of economics, both past and current. Students will read economists important in the development of current economic thought, including Smith, Marx, and Keynes, and will also read the ideas of some important current economic thinkers. Emphasis is on primary sources rather than secondary commentaries.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60 per section
Exclusion: ECO322Y, ECO342Y
Prerequisites: [ECMB10H1 or ECOMB02H] & [ECMB05H or ECOMB06H]

ECMC311H3 Economics of the Public Sector: Taxation
A course concerned with the revenue side of government finance. In particular, the course deals with existing tax structures, in Canada and elsewhere, and with criteria for tax design.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECOMC91H1, ECO336Y
Prerequisite: ECOMB01H1 or ECOMB02H

ECMC321H3 Economics of the Public Sector: Expenditures
A study of resource allocation in relation to the public sector, with emphasis on decision criteria for public expenditures. The distinction between public and private goods is central to the course.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECOMC91H1, ECO336Y
Prerequisite: ECOMB01H1 or ECOMB02H

ECMC351H3 Economics of Health Care
A study of the economic principles underlying health care and health insurance.
This course is a survey of some of the major topics in health economics. Some of the topics that will be covered will include the economic determinants of health, the market for medical care, the market for health insurance, and health and safety regulation.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECO369H, ECO369Y
Prerequisites: ECOMB02H & [MAT132H & MAT133H] or [MAT2781]

ECMC357H3 Law and Economics
A study of laws and legal institutions from an economic perspective. Includes the development of a positive theory of the law suggesting that laws frequently evolve so as to maximize economic efficiency. The efficiency of various legal principles is examined. Topics covered are drawn from: externalities, property rights, contracts, torts, product liability and consumer protection, and procedure.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECO322H, ECO329Y
Prerequisites: ECOMB01H1 or ECOMB02H

ECMC381H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECO336Y
Prerequisites: [ECMB10H1 or ECOMB02H] & [ECMB05H or ECOMB06H]

ECMC404H3 Economics of Organization and Management
Covers economics of the internal organization of the firm. Emphasis will be on economic relationships between various parties 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECO310Y, ECO370Y, ECO381H, ECO426H
Prerequisites: ECOMB01H1 or ECOMB02H

ECMC414H3 Industrial Organization
The economy of the firm in a market environment. The aim is to study business behavior 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrollment: 60
Exclusion: ECOMC92H1, ECO310Y
Prerequisite: ECOMB02H
ECMC3H0 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: ECMB01H1 or ECMB02H1

ECMC4H0 Organization Strategies
Explores the issue of outsourcing, broadly defined: which activities should a firm do "in-house" and which should it take outside? Using a combination of cases and economic analysis, it develops a framework for determining the "best" firm organization.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: RSM481H, (MGT491H)
Prerequisite: ECMB02H1 & [ECMC40H1 or ECMC41H1]

ECMC4H0 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60 per section
Prerequisite: ECMB05H1 or ECMB06H1

ECMC4H0 Financial Economics
This course introduces students to the theoretical underpinnings of financial economics. Topics covered include: intertemporal choice, expected utility; the CAPM, Arbitrage Pricing, State Prices (Arrow-Debreu security), market efficiency, the term structure of interest rates, and option pricing models. Key empirical tests are also reviewed.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECO358H
Prerequisite: [ECMB002H1 & [ECMB068H] & [ECMB12H1 or ECMB09Y1]

ECMC5H0 Labour Economics
Applications of the tools of microeconomics to various labour market issues. The topics covered will include: labour supply, labour demand, equilibrium in competitive and non-competitive markets; non-market approaches to the labour market; unemployment. Policy applications will include: income maintenance programs; minimum wages; unemployment.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECO23Y, ECO339Y, ECO361Y
Prerequisite: ECMB02H1

ECMC5H0 Labour Economics II
A continuation of ECMC3H0. 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECMC53H1, ECO23Y, ECO339Y, ECO361Y
Prerequisite: ECMC51H1 & ECMB02H1 & [ECMB12H1 or ECMB09Y1]

ECMC5H0 Economics of the Family
This course studies the economic aspects of how families make decisions - about employment, child care, having 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECO332H
Prerequisite: ECMB02H1

ECMC5H0 Economics of Human Resource Management
This course focuses on the various methods that firms and managers use to pay, recruit and dismiss employees. Topics covered may include: training decisions, deferred compensation, variable pay, promotion theory, incentives for teams and outsourcing.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECMC52H1, ECO339Y
Prerequisite: ECMB02H1

ECMC6H0 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 versus flexible exchange rates; international capital movements, and their implications for monetary policy.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECO23Y, ECO328Y, ECO356H
Prerequisite: ECMB05H1 or ECMB06H1

ECMC6H0 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECMC90H3, ECO23Y, ECO328Y, ECO364H
Prerequisite: ECMB01H1 or ECMB02H1
ECONOMICS 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 boards, common currency, banking and currency crises. The course will describe and analyze several major episodes of financial crises, such as Latin America in the 1990s, East Asia, Europe, Mexico and Russia in the 1990s, and Turkey and Argentina in recent years.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: ECON616H

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, education, population growth, rural and urban issues, and risk in a low-income environment.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECON324Y
Prerequisite: ECON301H1 or ECON302H1

ECONOMIC 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECON324Y
Prerequisite: ECON616H

ECONOMIC HISTORY
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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 60 per section
Exclusion: ECON321Y
Prerequisite: ECON301H1 or ECON302H1 or ECON305H1 or ECON306H1

ECONOMIC 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.A. or of the Major Program in Economics for Management Studies.
Breadth requirement: Social & Behavioural Sciences
Exclusion: ECON314H, ECON324H, ECO328Y
Prerequisite: ECON301H1 or ECON302H1

ECONOMIC OF MARKETS AND PRICING
The course builds on ECON301H1 (or ECON302H1) 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. Roles 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.A. or of the Major Program in Economics for Management Studies.
Breadth requirement: Social & Behavioural Sciences
Exclusion: ECON301H1, ECON302H1, ECON305Y, ECON306Y, ECON326Y, ECON330Y
Prerequisite: ECON301H1 or ECON302H1

ECONOMIC HISTORY
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.A. or of the Major Program in Economics for Management Studies.
Exclusion: ECON326H, ECON328Y
Prerequisite: [ECON301H1 or ECON302H1] & [ECON305H1 or ECON306H1]
ECMD1H3 Theory and Practice of Regression Analysis
This is an advanced course building on ECMC1H. Students will master regression theory, hypothesis and diagnostic tests, and assessment of econometric results. Treatment of special statistical problems will be discussed. Intensive computer-based assignments will provide experience in estimating and interpreting regressions, preparing students for ECMD5H1. Enrolment is limited to students registered in programs requiring this course. Breadth requirement: Quantitative Reasoning
Limited enrolment: 30
Exclusion: ECOS27Y, STA302H, (ECMC1H)
Prerequisite: ECMB2H1 & ECMB2H4 & (ECMB1H1 & ECMB1H2) or ECMB2H1 & ECMB2H4 & (ECMB1H1 & ECMB1H2)

ECMD1H3 Supervised Reading
These courses will normally be made available only to upper-level students whose interests are not covered by other courses and whose performance in Economics courses has been well above average. Not all faculty will be available for these courses in any single session.
Note: Students must obtain consent from the Supervisor of Studies, supervising instructor and the Department of Management before registering for this course.

ECMD1H3 Advanced Microeconomic Theory
An upper level extension of the ideas studied in ECMD0H. The course offers a more sophisticated treatment of such topics as equilibrium, welfare economics, risk and uncertainty, strategic and repeated interactions, agency problems, and screening and signalling problems. Enrolment is limited to students registered in programs requiring this course. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35
Exclusion: ECO1H4H, (ECMC1H)
Prerequisite: [ECMB2H1 & ECMB1H2] or ECO1C0H

ECMD1H3 Advanced Macroeconomic Theory
This course will review recent developments in macroeconomics, including new classical and new Keynesian theories of inflation, unemployment and business cycles. Enrolment is limited to students registered in programs requiring this course.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35
Exclusion: ECOS27H1, (ECMC1H)
Prerequisite: [ECMB2H1 & ECMB1H2] or ECO1C0H

ECMD5H3 Workshop in Economic 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, write a paper on their topic and present their ongoing work to the class.
Prerequisite: [ECMB2H1 & ECMD0H, ECMB2H4 & ECMD0H, ECMB1H1 & ECMB1H2] or ECMB2H1 & ECMB2H4 & (ECMB1H1 & ECMB1H2). This course should be taken among the last 15 credits of a twenty-credit degree. Corequisite: ECMD1H1

GGRG0H3 Urban Residential Geography
GGRG1H3 Urban Transportation Policy Analysis
GGRG2H3 Location and Spatial Development
These courses may be counted as B-level credits in ECOM programs. (See the Geography section of this Calendar for full descriptions.)

IDS01H3 Political Economy of International Development
IDSC1H3 Economics of Small Enterprise and Microcredit
These courses may count for B-level credit in ECOM programs. (See the International Development Studies section of this Calendar for full descriptions.)

English (B.A.)

Faculty List
R.M. Brown, M.A., Ph.D. (Binghamton), Professor Emeritus
M.C. Cuddy-Kane, M.A., Ph.D. (Toronto), Professor
G. Leonard, M.A., Ph.D. (Florida), Professor
C. Bolus-Reichert, M.A., Ph.D. (Indiana), Associate Professor
N. Dallas, M.A., Ph.D. (Harvard), Associate Professor
A. Dubois, B.A. (Ottawa), Ph.D. (Harvard), Associate Professor
M.B. Goldman, M.A. (Victoria), Ph.D. (Toronto), Associate Professor
N. Kettner, M.A., Ph.D. (Toronto), Associate Professor
S. Lamb, M.A., Ph.D. (Toronto), Associate Professor
R.R. Lawson, M.Pol., M.Sc. (Oxford), Ph.D. (Toronto), Assistant Professor
A. Maurice, M.A., Ph.D. (Cornell), Assistant Professor
A. Punt, M.A. (Abbeens), Ph.D. (Toronto), Assistant Professor
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 inevitable in an 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. ENGA10H and ENGA11H 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 of the twentieth century. ENGB03H, ENGB04H, and ENGB05H 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 sophisticated 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 Program Supervisor or the Program Director before taking courses on other campuses.

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

The English Study Guide is available at: http://www.utspace.utoronto.ca/ehomdv/English/studyguide/index.htm

Guidelines for First-Year Course Selection

First-year students often take ENGA10H or ENGA11H (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 ENGB03H, ENGB04H, and ENGB05H early in their university career. They may, if they so choose, begin satisfying these B-level English requirements in their first year. Students are strongly encouraged to take HUMA00H (Exploring Key Questions in Humanities) as early as possible in their studies.

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

Program Supervisor: C. Bolsa-Reichert (416-287-7162) Email: english-program-supervisor@utspace.utoronto.ca

Program Requirements

12.0 credits in English are required of which at least 3.0 must be at the C-level and 1.5 at the D-level. 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. 3.0 credits from courses whose content is pre-1900
5. 0.5 credits in Canadian literature
6. 7.0 additional credits in English

Among the 16.5 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:

ENG03SH Children’s Literature
ENG33H9S Detective Fiction
ENG34H9S Science Fiction

Students may count no more than one full credit of D-level independent study (ENG59Y, ENG27H, ENG28H, ENG29H, ENG39Y, ENG39H) towards an English program.

The following courses do not count towards any English programs: ENG100H, ENG185Y.

MAJOR PROGRAM IN ENGLISH

Program Supervisor: C. Bolsa-Reichert (416-287-7162) Email: english-program-supervisor@utspace.utoronto.ca

Program Requirements

7.5 credits in English are required of which at least 2.0 must be at the C- or D-level. 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.

Note: Students may count no more than one of the following courses towards the Major requirements:
ENGB03H Critical Thinking About Narrative
ENGB04H Critical Thinking About Poetry
ENGB05H Critical Writing about Literature
ENGB06H Children’s Literature
ENGB08H Detective Fiction
ENGB09H Science Fiction
Students may count no more than one full credit of D level independent study (ENGD26Y, ENGD27H, ENGD28H, ENGD97H, ENGD99H) towards an English program.

The following courses do not count towards any English programs: ENG100H, ENG185Y.

MINOR PROGRAM IN ENGLISH LITERATURE
Program Supervisor: C. Behlau-Reichert (416-287-7162) /email: english-program-supervisor@uwaterloo.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 D level independent study (ENGD26Y, ENGD27H, ENGD28H, ENGD97H, ENGD99H) towards an English program.

The following courses do not count towards any English programs: ENG100H, ENG185Y.

ENGA10H Introduction to Twentieth-Century Literature and Film: 1980 to World War II
An exploration of how literature reflects the artistic and cultural concerns that shaped the first half of the twentieth century. An introduction to university-level critical reading and interpretation, this course will analyze the writing of early twentieth-century men and women.

Breadth requirement: Arts, Literature & Language
Exclusion: ENGB40Y

ENGA11H Introduction to Twentieth-Century Literature and Film: 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 analyze the writing of late twentieth-century men and women from a range of backgrounds and nationalities.

Breadth requirement: Arts, Literature & Language
Exclusion: ENGB40Y

ENGB03H 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 analyze narratives.

Breadth requirement: Arts, Literature & Language
Exclusion: ENGB11Y

ENGB04H Critical Thinking About Poetry
An introduction to the literary analysis of poetry. This course will study closely poems and poetic forms from different periods in order to develop the critical skills to analyze poetry.

Breadth requirement: Arts, Literature & Language
Exclusion: ENGB201Y

ENGB05H Critical Writing about Literature
An intensive training in critical writing about literature. Students learn essay-writing skills (explication, organization and argumentation; research techniques; bibliographies and MLA-style citation) necessary for the study of English at the university level through group workshops, multiple short papers, and a major research-based paper. This is not a grammar course; students are expected to enter with solid English literacy skills.

Breadth requirement: Arts, Literature & Language
Exclusion: (ENGB01H, ENGB02H)
Corequisites: ENGB03H or ENGB04H

ENGB06H Canadian Literature I: Imagining the Nation
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.

Breadth requirement: Arts, Literature & Language
Exclusion: ENGB252Y
ENG807H3 Canadian Literature II: Re-imagining the Nation
An examination of the formation of identity, of a sense of belonging, and of the problematics of nationhood in Canadian writing.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG223Y

ENG808H3 American Literature to 1850
An examination of Early American literature in historical context from colonization to the Civil War. This introductory survey covers a wide variety of genres including conquest 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
Breadth requirement: Arts, Literature & Language
Exclusion: 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 to Rita Dove’s Thomas and Beulah, with an emphasis on themes of immigration, ethnicity, modernization, individualism, class, and community.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG250Y
Prerequisite: ENG808H

ENG812H1 Life Writing
Life-writing, whether formal biography, chatty memoir, postmodern history, 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.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG232H

ENG814H1 Twentieth-Century Drama
A study of major plays and playwrights of the twentieth century. This international survey might include turn-of-the-century works by Wilde or Shaw; mid-century drama by Beckett, O’Neill, Albee, or Miller; and late twentieth-century plays by Harold Pinter, Tom Stoppard, Caryl Churchill, Peter Shaffer, August Wilson, Tom Stoppard, Highway, David Hwang, or Abol Fagard.
Breadth requirement: Arts, Literature & Language
Exclusions: ENG340H, ENG341H, ENG342H, (ENG811H), (ENG813H), (ENG338Y), (ENG339Y)

ENG817H2 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.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG270Y, NEW222Y, (ENG253Y)

ENG819H1 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 colonization and Partition, and the task of making the novel South Asian.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG270Y, (ENG253Y)

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, Lawrence, and Gallant.
Breadth requirement: Arts, Literature & Language
Exclusion: ENG215H

ENG830H3 Classical Myth and Literature
An analysis of the relationship between classical myth and literature. This course examines classical Greek and Roman myth in relation to English literary works.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: (ENG458H), (ENG608H), (ENG609H)

ENG831H1 The Romance: In Quest of the Marvelous
A study of the romance as genre. The romance as episodic tale of marvellous adventures and questing heroines has been both criticized and celebrated. This course looks at the range of a form stretching from Malory and Spenser through Scott and Tennyson to contemporary forms such as fantasy, science fiction, postmodern romance, and the romance novel.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: (ENG611H)

ENG832H1 Shakespeare in Context I
An introduction to the poetry and plays of William Shakespeare, this course situates his works in the literary, social and political contexts of early modern England. The main emphasis will be on close readings of Shakespeare’s sonnets and plays, to be supplemented by classical, medieval, and renaissance proce and poetry upon which Shakespeare drew.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: ENG220Y, (ENG101H)

ENG833H2 Shakespeare in Context II
A continuation of ENG832H, this course introduces students to selected dramatic comedies, tragedies and romances and situates Shakespeare’s works in the literary, social and political contexts of early modern England. Our readings will be supplemented by studies of Shakespeare’s sources and influences, short theoretical writings, and film excerpts.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: (ENG810H), (ENG220Y)
Recommended preparation: ENG832H
ENGB34H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGD13H

ENGB38H3 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 authorial creativity, race, class, gender, and nationhood.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGD23H

ENGB37H3 Selling Pleasure: Popular Literature and Mass Culture
This course considers the creation, marketing, and consumption of popular film and fiction. Genres studied might include bestsellers; detective fiction; mysteries; romance, and horror; fantasy and science fiction; "chick lit"; popular song; pulp fiction and fanzines.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGD23H, (ENGC57H)

ENGB38H3 The Graphic Novel
A study of extended narratives in the comic book form. Emphasis on formal analysis of narrative artwork combined with an investigation of social, political, and cultural issues in this popular literary form. Works to be studied may include graphic novels, comic book series, and comic book short stories or poetry collections.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGD23H, (ENGC57H)

ENGB40H3 Victorian Poetry and Prose
An introduction to the poetry and non-fiction prose of the Victorian period, 1837-1901. Representative authors will be studied in the context of a culture in transition, in which questions about democracy, the rights of women, national identity, imperialism, science and religion, and the place of the arts in everyday life were prominent.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: ENGC34Y, (ENG101H), (ENG312Y)

ENGB50H3 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.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Exclusion: ENGD233Y

ENGB51H3 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.
Breadth requirement: Arts, Literature & Language

ENGB60H3 Creative Writing: Poetry I
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 U275A no later than the first Tuesday of August. They should contain a selected sample (5-15 pp.) of your strongest writing, which could include fiction, poems or essays. Do not include originals.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: ENGD39Y

ENGB61H3 Creative Writing: Fiction I
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 U275A 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: ENGD39Y

ENGB70H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: NIN115Y

ENGB75H3 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.
Breadth requirement: Arts, Literature & Language

ENGB76H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: (ENG238H)

ENGC20H3 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisites: [ENG803H & ENG804H] & one of ENG805H or (ENG800H) or (ENG802H) or (ENG801H) or (ENG807H)
ENGCS3H3 Topics 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 to and documented the local, social, national, and historical themes; and the proliferation of representation for marginalized communities, groups, and identities.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG335Y, ENG216Y
Prerequisite: [ENG0B3H & ENG0B4H] & one of ENG0B5H or [ENG0B1H] or [ENG0B2H] or [ENG0B6H] or [ENG0B7H]

ENGCR7H3 Canadian Drama
A study of major Canadian playwrights with an emphasis on the creation of a national theatre, distinctive themes that emerge, and their relation to regional and national concerns. This course explores the perspectives of Québecois, feminist, Native, queer, ethnic and Black playwrights who have shaped Canadian theatre.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG152H, ENG223H
Prerequisite: [ENG0B3H & ENG0B4H] & one of ENG0B5H or [ENG0B1H] or [ENG0B2H] or [ENG0B6H] or [ENG0B7H]
Alternative prerequisite: VPD010H & VPD011H

ENGCS8H3 Canadian Poetry
A study of contemporary Canadian poetry in English, with a changing emphasis on the poetry of particular time-periods, regions, and communities. Discussion focuses on the ways poetic form achieves meaning and opens up new strategies for thinking critically about the important social and political issues of our world.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG334Y
Prerequisite: [ENG0B3H & ENG0B4H] & one of ENG0B5H or [ENG0B1H] or [ENG0B2H] or [ENG0B6H] or [ENG0B7H]

ENGCH1H3 Studies in Shakespeare
A study of the plays of Shakespeare. An in-depth study of select plays from Shakespeare's dramatic corpus, combined with an introduction to the critical debates within Shakespeare studies. Students will gain a richer understanding of Shakespeare's texts and their critical reception.
Pre-1600 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: [ENG0B3H & ENG0B4H] & one of ENG0B5H or [ENG0B1H] or [ENG0B2H] or [ENG0B6H]

ENGCH2H3 Individualism and Community in 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-individualist conception of the self and a more traditional, communitarian sense of the self as determined by region, community, family, and social bonds.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: [ENG0B0H & ENG0B1H] & one of [ENG0B5H] or [ENG0B8H] or [ENG0B1H] or [ENG0B2H] or [ENG0B3H] or [ENG0B9H]

ENGCH3H3 Ethnic Traditions in American Literature
A survey of the literature of Native Peoples, Africans, Irish, Jews, Italians, Latinos, and East Asians in the U.S. focusing on one or two groups each term. We will look at how writers of each group register the affective costs of the transition from "old-world" communalism to "new-world" individualism.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: [ENG0B0H & ENG0B1H] & one of [ENG0B5H] or [ENG0B8H] or [ENG0B1H] or [ENG0B2H] or [ENG0B3H] or [ENG0B9H]

ENGCH4H3 Concepts in Literary Criticism
A study of selected topics in literary criticism.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG208H, ENG267H
Prerequisite: [ENG0B0H & ENG0B1H] & one of [ENG0B5H] or [ENG0B8H] or [ENG0B1H] or [ENG0B2H] or [ENG0B3H] or [ENG0B9H]

ENGCH5H3 The Bible and Literature I
Literary analysis of the Hebrew Bible (Christian Old Testament) and its 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 Mozes, The Song of Solomon, Job, Jonah, Jeremiah.
Pre-1600 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG421H, ENG200Y
Prerequisite: [ENG0B0H & ENG0B1H] & one of [ENG0B5H] or [ENG0B8H] or [ENG0B1H] or [ENG0B2H] or [ENG0B3H]

ENGCH6H3 The Bible and Literature II
Literary analysis of the narratives and other literary forms in the New Testament, and extended consideration of selected literary texts that the New Testament has influenced.
Pre-1600 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG435H, ENG200Y
Prerequisite: ENG16H or ENG42H
ENGCG29H3 The Victorian Novel to 1860
A study of major works of Victorian fiction, 1830-1860. This course focuses on the development of the realist novel in its social context. Authors studied might include Charles Dickens, William Makepeace Thackeray, the Bronte sisters, Anthony Trollope and Elizabeth Gaskell.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusions: ENG33Xy, ENG333H
Prerequisite: ENGB03H & ENGB04H & one of ENGB05H or (ENGBO1H) or (ENGBO2H)

ENGCG29H3 The Victorian Novel after 1860
A study of major works of Victorian fiction, 1860-1901. This course examines the emergence of the sensation novel, fantasy and science fiction, and High Victorian realism. Authors studied might include George Eliot, Wilkie Collins, George MacDonald, Thomas Hardy, Robert Louis Stevenson, H.G. Wells, Joseph Conrad, and Rudyard Kipling.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG32Xy
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]

ENGCG23H3 Fantasy and the Fantastic in Literature and the Other Arts
A study of fantasy and the fantastic from 1800 to the present. Students will consider various theories of the fantastic in order to chart the complex genealogy of modern fantasy across a wide array of literary genres (fairy tales, poems, short stories, romances, and novels) and visual arts (painting, architecture, comics, and film).
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG333H
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]

ENGCG29H3 Drama: Tragedy
An exploration of major dramatic tragedies in the classic and English tradition. Tragedy has been thought of as one of the earliest and most profound literary forms, having both visual and philosophical implications and inspiring theoretical treatises beginning with Aristotle's Poetics.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]
Alternative prerequisite: VPD81H & VPD81H

ENGCG29H3 Drama: Comedy
An historical exploration of comedy as a major form of dramatic expression. Theatrical comedy has been thought of as having social as well as literary dimensions (selling riffs; providing carnivalesque escape; mocking folly).
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]
Alternative prerequisite: VPD81H & VPD81H

ENGCG28H3 Chaucer
Selections from The Canterbury Tales and other works by the greatest English writer before Shakespeare. In studying Chaucer's medieval masterpiece, students will encounter a variety of tales and tellers, with subject matter that ranges from broad and bawdy humour through subtle social satire to mortal tale.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG330Y
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]

ENGCG30H3 Studies in Medieval Literature
A study of selected medieval texts by one or more authors.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]

ENGCG33H3 Decadent, Dissent, and the English Civil Wars, 1663-1660
A study of the poetry, prose, and drama written in England between the death of Queen Elizabeth in 1603 and the Restoration of the monarchy in 1660. This course will examine the innovative literature of these politically tumultuous years alongside debates concerning personal and political sovereignty, religion, censorship, ethnicity, courtship and marriage, and women's authorship.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG330Y
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGBO1H) or (ENGBO2H)]

ENGCG34H3 Early Modern Women and Literature, 1550-1700
A focused exploration of women's writing in the early modern period. This course considers the variety of texts produced by women (including closet drama, religious and secular poetry, diaries, letters, prose romance, translations, political texts, and confessions), the contexts that shaped these writings, and the theoretical questions with which they engage.
Pre-1990 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB05H or [ENGB03H & ENGB04H & one of ENGB05H or (ENGBO1H) or (ENGBO2H)]
ENGC39H3 Imagined Communities in Early Modern England, 1500-1700
A study of the real and imagined multiculturalism of early modern English life. How did English encounters and exchanges with people, products, languages, and material culture from the globe redefine ideas of national, ethnic, and social community? In exploring this question, we will consider drama, poetry, travel journals, autobiography, letters, cookbooks, costume books, and maps.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: [ENG00D1 or ENG0B4H1 or [one of ENG0B5H or (ENG0B1H) or (ENG0B2H)]]
Recommended preparation: [ENG0B2H or ENG0B3H] & [ENG0A1H or ENG0C2H] or ENG0C3H]

ENGC39H3 Literature and Culture, 1660-1750
Studies in literature and literary culture during a turbulent era that was marked by extraordinary cultural ferment and literary experimentation. During this period satires and polemics flourished, Milton wrote his great epic, Behn her brilliant comedies, Swift his bitter attacks, and Pope his technically balanced but often viciously twisted poetry.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG05H5
Prerequisite: ENG0B0H1 & ENG0B4H1 & [either ENG0B0H3 or (ENG0B1H) & (ENG0B2H)]

ENGC39H3 Literature and Culture, 1750-1830
An exploration of literature and literary culture during the end of the eighteenth and beginning of the nineteenth centuries. We will trace the development of a consciously national culture, and birth of the concepts of high, middle, and low culture. Authors may include Johnson, Boswell, Burney, Sheridan, Yeats, Blake, and Wordsworth.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or (ENG0B1H) or (ENG0B2H)],

ENGC39H3 Novel Genres: Fiction, Journalism, Novels, and Autobiography, 1540-1750
An examination of generic experimentation that began during the English Civil Wars and led to the novel. We will address such authors as Aphra Behn and Daniel Defoe, alongside news, ballads, and scandal sheets, and look at the book trade, censorship, and the growth of the popular press.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG02Y2
Prerequisite: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or ENG0B1H) or (ENG0B2H)]

ENGC39H3 The Early Novel in Context, 1740-1830
A contextual study of the first novels that contemporaries recognized as being the novel. We will examine the novel in the context of its makers: of neighbouring genres such as letters, non-fiction travel writing, conduct manuals; and of culture more generally. Authors might include Richardson, Fielding, Sterne, Burney, Austen and others.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG32Y2
Prerequisite: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or (ENG0B1H) or (ENG0B2H)],

ENGC42H3 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 response it provoked in the wider culture. Examination of representative authors such as Goethe, Rousseau, Wollstonecraft, 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
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG10Y2
Prerequisite: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or (ENG0B1H) or (ENG0B2H)],

ENGC44H3 Self and Other: Dialectics in Fiction
A study of the relation between self and other in narrative fiction. This course will examine three approaches to the self-other relation: the moral relation, the epistemological relation, and the functional relation. Examples will be chosen to reflect engagements with gendered others, with historical others, with generational others, with cultural and national others.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or (ENG0B1H) or (ENG0B2H)],

ENGC47H3 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 drew will be discussed, as will the influence of Modernism on postmodern writing.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENG0B0H1 & ENG0B4H1 & [one of ENG0B0H3 or (ENG0B1H) or (ENG0B2H)],
ENGC4H3 Satire
An investigation of the literatures and theories of the unthinkable, the reformist, the iconoclastic, 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 Juvenal, Horace, Lucian, Erasmus, Donne, Jonson, Rochester, Dryden, Swift, Pope, Gay, Haywood, and Behn to Pynchon, Nabokov, and Atwood.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: (ENG807H)
Prerequisite: (ENG803H & ENG804H) or [one of (ENG805H) or (ENG806H) or (ENG802H)]

ENGC5H3 Studies in Contemporary American 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, Ann Beattie, Raymond Carver, Don DeLillo, Toni Morrison, Maxine Hong Kingston, and Leslie Marmon Silko. The course may be organized around themes or movements.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: (ENG563H, ENG561H)
Prerequisite: (ENG803H & ENG804H) or (ENG805H) or (ENG806H) or (ENG802H) or (ENG809H)

ENGC5H3 Contemporary Arab Women Writers
A study of Arab women writers from the late nineteenth century to the present. Their novels, short stories, essays, poems, and memoirs invite us to rethink western perceptions of Arab women; therefore, issues of gender, religion, class, nationalism, and colonialism will be examined from Arab women's perspectives, from both the Arab world and North America.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: (ENG803H & ENG804H) or (one of ENG805H or ENG806H or ENG802H)

ENGC59H3 Geography and Regionalism in Literature
Analysis of space and place in literature. This course studies representations of space in literature—whether geographical, regional, or topographical—that offer conceptual alternatives to the notion, state, or tribe. Geographical or regional focus may change depending on instructor.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: (ENG801H & ENG804H) or [one of (ENG805H) or (ENG803H) or (ENG802H)]

ENGC69H3 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 ruined castles, graveyard, 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
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: (ENG803H & ENG804H) or [one of (ENG805H) or (ENG803H) or (ENG802H)]

ENGC709H3 The Immigrant Experience in Literature to 1980
An examination of twentieth-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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: (ENG803H & ENG804H) or [one of (ENG805H) or (ENG806H) or (ENG802H)]

ENGC719H3 The Immigrant Experience in Literature since 1980
A continuation of ENGC709H, focusing on texts written since 1980.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: (ENG803H & ENG804H) or [one of (ENG805H) or (ENG806H) or (ENG802H) or (ENG708H)]

ENGC729H3 Contemporary Literature from Africa
A study of fiction, drama, and poetry from English-speaking Africa. This course will examine the relation of English-language writing to indigenous languages, to orality, and to audience, as well as the issues of creating an art in a world of suffering and of de-colonizing the narrative of history.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: ENG278Y
Prerequisite: (ENG803H & ENG804H) or [one of (ENG805H or (ENG801H) or (ENG802H)] or (AFS010H)
ENGC63H3 The Body in Modesty: 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 brutishness, legitimacy or illegitimacy, nature or culture. Same as VPA4C47H.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 45
Exclusion: VPA4C47H, VPHC47H
Corequisite: Two full credits at the B-level or above from ENG, WST, VPA, VPH, and/or VPS, or permission of the instructor.

ENGC77H3 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, culture, and ethnicity. Same as VPA4C46H.
Breadth requirement: Arts, Literature & Language
Exclusion: VPA4C48H, VPHC48H
Corequisite: Two full credits at the B-level or above from ENG, WST, VPA, VPH, and/or VPS, or permission of the instructor.

ENGC87H3 Dystopian Visions in Fiction and Film
Negative utopias and post-apocalyptic worlds. The course will draw from novels such as 1984, Brave New World, Clockwork Orange, and On Her Majesty's Secret Service, and films such as Metropolis, Mad Max, Brazil, and The Matrix. Why do we find stories about the world gone wrong so compelling?

Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGB01H or ENGB02H)]

ENGC88H3 Modernist Narrative, 1900-1950
Advanced study of a crucial period for the development of new forms of narrative and the beginnings of formal narrative theory, in the context of accelerating modernity.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGB01H or ENGB02H)]

ENGC89H3 Cinema Studies: Themes and Theories
A variable theme course that will feature different theoretical approaches to Cinema: feminist, Marxist, psychoanalytic, postcolonial, and semiotic. Thematic clusters include "Madness in Cinema", and "Films on Film".

Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H & ENGB04H & [one of ENGB05H or (ENGB01H or ENGB02H)]

ENGC89H3 Studies in World Cinema
Organizes a series of films that are non-Western: African, Asian, Middle Eastern and analyzes them both on their own terms and against the backdrop of issues of colonialism and globalization.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB02H & ENGB04H & [one of ENGB05H or (ENGB01H or ENGB02H)]

ENGC89H3 Creative Writing: Poetry II
An intensive study of the writing of poetry through a selected theme, topic, or author. The course will undertake its study through discussion and workshop sessions. Admission by portfolio. Portfolios should be left with the Humanities departmental assistant in H925A no later than the first Tuesday of August. They should contain a selected sample (5-15 pp.) of your strongest writing, which must include poetry and may include fiction. Do not include originals.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: ENGB04H

ENGC89H3 Creative Writing: Fiction II
An intensive study of the writing of fiction through a selected theme, topic, or author. The course will undertake its study through discussion and workshop sessions. Admission by portfolio. Portfolios should be left with the Humanities departmental assistant in H925A no later than the first Monday of October. They should contain a selected sample (5-15 pp.) of your strongest writing, which must include fiction and may include poetry. Do not include originals.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: ENGB02H

ENGD08H3 Topics in Contemporary Literary Theory
A study of selected topics in recent literary theory.

Limited enrolment: 22
Prerequisite: 2 C-level courses in English.
Recommended preparation: ENGC15H

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 oeuvre, and the relationship of poetry to the individual person and to the culture at large.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD09H3 Topics in African Literature
This advanced seminar will provide intensive study of a selected topic in African literature written in English; for example, a single national literature, one or more authors, or a literary movement.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English or [AFSA01H & ENGC72H]
ENG121H3 Topics 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

ENG144H3 Topics in Early Modern English Literature and Culture
An advanced inquiry into critical questions relating to the development of sixteenth- and seventeenth-century English literature and culture. Focus may include the intensive study of an author, genre, or body of work.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG108H3 Topics in the Long Eighteenth Century, 1660-1830
Topics in the literature and culture of the long eighteenth century. Topics vary from year to year and might include a study of one or more authors, or the study of a specific literary or theatrical phenomenon.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG109H3 Theoretical Approaches to Early Modern English Literature and Culture
An in-depth study of sixteenth- and seventeenth-century literature together with intensive study of the theoretical and critical perspectives that have transformed our understanding of this literature.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG201Y3
ENG207H3
ENG208H3 Independent Studies: Creative Writing
Advanced study of creative writing for students who have excelled at the introductory and intermediate levels. Admission by portfolio. Portfolio should be left with the Humanities departmental assistant in H525A no later than the first Tuesday of April for Summer courses or no later than the first Tuesday of August for Fall and Winter courses and no later than the first Monday of October for Winter courses. They should contain a selected sample (19-20 pp.) of your strongest writing and a five-hundred-word proposal stating your goals for the independent study. Do not include a thesis.
Note: Students may count no more than 1.0 full credit of D-level independent study towards an English program.
Prerequisite: [ENG606H & ENG608H] or [ENG601H & ENG611H] & permission of the instructor.

ENG209H3 Topics 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

ENG210H3 Studies in Major Modernist Writers
Advanced study of a selected Modernist writer or small group of writers. The course will pursue the development of a single author’s work over the course of his or her entire career or it may focus on a small group of thematically or historically related writers.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG211H3 Topics 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 19th, or American or Canadian Romanticism.
Pre-1900 course
Limited enrolment: 22
Prerequisite: 2 C-level courses in English
Recommended preparation: ENG632H

ENG216H3 Studies in Major Victorian Writers
Advanced study of a selected Victorian writer or small group of writers. The course will pursue the development of a single author’s work over the course of his or her entire career or it may focus on a small group of thematically or historically related writers.
Pre-1900 course
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English.

ENG221H3 Cinema: The Auteur Theory
An exploration of the genesis of auteur theory. By focusing on a particular director such as Jean-Luc Godard, Michael Cimino, and Sidney Lumet, this course will explore the ways in which the director’s vision can be traced through his or her body of work.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Exclusion: IN373H4, IN375H
Prerequisite: 2 C-level courses in English.

ENG215H3 Studies in Major Canadian Writers
Advanced study of a selected Canadian writer or small group of writers. The course will pursue the development of a single author’s work over the course of his or her entire career or it may focus on a small group of thematically or historically related writers.
Limited enrolment: 22
Exclusion: ENGD511H, ENGD881H
Prerequisite: 2 C-level courses in English.

ENG212H3 Topics in Canadian Literature
Topics in the literature and culture of Canada. Topics vary from year to year and may include advanced study of ethics, haunting, madness, or myth, a particular city or region.
Limited enrolment: 22
Exclusion: ENGD511H, ENGD881H
Prerequisite: 2 C-level courses in English.
ENGB08H3 Topics in American Poetry
This seminar will usually provide advanced intensive study of a selected American poet each term, following the development of the author's work over the course of his or her entire career. It may also focus on a small group of thematically or historically related poets.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English
Recommended preparation: ENGB08H1 or ENGB09H1

ENGB08H3 Topics in American Prose
This seminar will usually provide advanced intensive study of a selected American prose-writer each term, following the development of the author's work over the course of his or her entire career. It may also focus on a small group of thematically or historically related prose-writers.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English
Recommended preparation: ENGC12H1

ENGB08H3 Topics in Postcolonial Literature and Film
An exploration of multicultural perspectives on issues of power, perception, and identity as revealed in representations of imperialism and colonialism from the early twentieth century to the present.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGB09H3 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGB09H3 Topics in Literature and Religion
Topics might explore the representation of religion in literature, the way religious beliefs might inform the production of literature and literary values, or literature written by members of a particular religious group.
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD71H3 Studies in Arab North-American Literature
A study of Arab North-American writers from the twentieth century to the present. Surveying one hundred years of Arab North-American literature, this course will examine issues of gender, identity, assimilation, and diaspora in poetry, novels, short stories, autobiographies and nonfiction.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD98H3 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 writing), this course will look at topics in women and Canadian literature in the context of theoretical questions about women's writing.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD98H3 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Prerequisite: 2 C-level courses in English

ENGD99H3 Topics 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 steampunk.
Limited enrolment: 22
Exclusion: ENG443Y
Prerequisite: 2 C-level courses in English

ENGD99H3 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".
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Exclusion: INDI22Y
Prerequisite: 2 C-level courses in English

ENGD99H3 Theoretical Approaches to Cinema
Advanced study of theories and critical questions that inform current directions in cinema studies.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Exclusion: INDI14Y
Prerequisite: 2 C-level courses in English

ENGD99H3 Stranger Than Fiction: The Documentary Film
The study of films from major movements in the documentary tradition, including ethnography, cinema vérité, sociological 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 22
Exclusion: INDI325Y
Prerequisite: 2 courses at the C-level in English
Environmental Science
(B.Sc.)

Faculty List
B. Greenwood, B.Sc., Ph.D. (Brisbane), Ph.D. (Hons. Canus, Lippesia), Professor Emeritus
J.A. Westgate, B.Sc. (Reading), Ph.D. (Alberta), Professor Emeritus
A.G. Prior, B.Sc. (Wales), M.Sc., Ph.D. (McGill), Associate Professor Emeritus
N. Fyles, B.Sc. (Leicester), M.Sc. (Memorial University NFLD), Ph.D. (East Anglia), D.Sc. (Leicester), P.Geo., Professor
K.W.F. Howard, B.Sc., (Dublin), M.Sc., Ph.D. (Birmingham), P.Geo., C.Geo., F.G.S., P.H.G., Professor
J. Wanni, Dep. Greek, (Bayeruth), Ph.D. (Tokyo), Professor
D.D. Williams, B.Sc. (North Wales), Dip. Ed. (Liverpool), M.Sc., Ph.D. (Waterloo), D.Sc., (Wales), Professor
R.R. Fuller, B.Sc., M.Sc., (Toronto), Ph.D. (Carleton), Associate Professor
W.A. Gough, B.Sc. (Waterloo), M.Sc. (Toronto), Ph.D. (McGill), Associate Professor
A. Simpson, B.Sc., Ph.D. (Birmingham), Associate Professor
M.J. Stroopson, B.Sc., Ph.D. (Alberta), Associate Professor
G.B. Athanassios, B.Sc., M.Sc. (Agricultural Uni of Athens, Greece), Ph.D. (Univ. of the Aegean, Greece), Assistant Professor
M.E. Dinecek, M.S. (Moscow), Ph.D. (Humboldt), Assistant Professor
C. Mitchell, B.Sc. (McMaster), M.Sc., Ph.D. (Toronto), Assistant Professor
M. Wells, B.Sc., Ph.D. (Australian National), 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.

The following programs in Environmental Science are available at UTSC:
• Four Specialist Programs (Environmental Biology, Environmental Chemistry, Environmental Geoscience and Environmental Physics)
• A Major Program in Environmental Science
• A Minor Program in Environmental Science
• In addition, a Joint Specialist Program at 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 Program in Environmental Biology, Environmental Chemistry, Environmental Geoscience and Environmental Physics and the Major Program in Environmental Science 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 science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN ENVIRONMENTAL BIOLOGY
Supervisor of Studies: R. R. Fulthorpe (416-287-7221) Email: fulthorpe@atse.utoronto.ca

Program Requirements

Total requirements: 14.5 full credits

First Year:
- EESA01H Introduction to Environmental Science
- EESA02H Introduction to Planet Earth
- BIOA01H Introductory Biology: Part I
- BIOA02H Introductory Biology: Part II
- CHMA10H Introductory Chemistry I: Structure and Bonding
- CHMA11H Introductory Chemistry II: Reactions and Mechanisms
- MATA30H Calculus I
- [MATA33H Calculus II for Biological Sciences or MATA36H Calculus II for Physical Sciences or MATA37H Calculus II for Mathematical Sciences]
- [PHYA10H Introduction to Physics IA or PHYA11H Introduction to Physics IB]

Second Year:
- BIOB01H Ecology
- BIOB02H Evolutionary Biology
- BIOB05H Ecology and Evolutionary Biology Laboratory
- EESB15H Earth History
- EESB16H Feeding Humans - The Cost to the Planet
- STA222H Statistics I
- [PSICB57H Introduction to Scientific Computing or CSCA08H Introduction to Computer Programming] and

and 1.0 full credit from the following:
- EESB01H Principles of Climatology
- EESB04H Principles of Hydrology
- EESB05H Principles of Soil Science
- CHMA15H Environmental Chemistry

Third and Fourth Years:
- 2.5 credits from:
  - EESC03H Geographic Information Systems and Remote Sensing
  - EESC04H Biodiversity and Biogeography
  - EESC08H Microbial Biogeochemistry
  - EESC13H Environmental Impact Assessment and Auditing
  - EESC15H Research Seminar in Environmental Science

- 2.0 credits from:
  - BIOC31H Tropical Marine Ecology and Evolution
  - BIOC32H Ecology Field Course
  - BIOC58H Biological Consequences of Global Change
  - BIOC59H Advanced Population Ecology
  - BIOC61H Community Ecology and Environment Biology
  - BIOC62H Environmental Toxicology
  - BIOC63H The Role of Zoos in Conservation
  - BIOC65H Conservation Biology
  - BIOC67H Advanced Field Course in Ecology

- 1.0 credit from:
  - EESD50H Contaminant Hydrogeology
  - EESD60H Climate Change Impact Assessment
  - EESD15H Cleaning Up our Mess: Remediation of Terrestrial and Aquatic Environments
118 Environmental Science

EESD32H Contaminant Fate in Terrestrial Environments
EESD95Y Research Project in Environmental Science
EESD101H Research Project in Environmental Sciences
BIOID52H Senior Seminar in Biodiversity and Conservation Biology
BIOID406H Spatial Ecology
BIOID406H Causes and Consequences of Biodiversity
BIOID959H Supervised Study in Biology
BIOID98Y Research Project in Biology

SPECIALIST PROGRAM IN ENVIRONMENTAL CHEMISTRY
Supervisor of Studies: R. R. Fulthorpe (416-287-7221) Email: fulthorpe@uncutoronto.ca
Advisor: J. Donaldson (416-287-7213)

Program Requirements
Total requirements: 15.0 full credits

First Year:
EESA001H Introduction to Environmental Science
EESA061H Introduction to Planet Earth
BIOA011H Introductory Biology: Part I
BIOA021H Introductory Biology: Part II
CHIMA101H Introductory Chemistry I: Structure and Bonding
CHIMA111H Introductory Chemistry II: Reactions and Mechanisms
MATA30H Calculus I
[MATA33H Calculus II for Biological Sciences or MATA35H Calculus II for Physical Sciences or MATA37H Calculus II for Mathematical Sciences]
[PHYA101H Introduction to Physics I or PHYA111H Introduction to Physics II]

Second Year:
BIOB504H Ecology
CHMB201H Chemical Thermodynamics and Elementary Kinetics
CHMB211H Chemical Structure and Spectroscopy
CHMB411H Organic Chemistry I
CHMB421H Organic Chemistry II
CHMB551H Environmental Chemistry
STAB221H Statistics I

and
1.0 full credit from the following:
EESB031H Principles of Climatology
EESB041H Principles of Hydrology
EESB051H Principles of Soil Science
EESB151H Earth History

Third Year:
EESC301H Geographic Information Systems and Remote Sensing
EESC371H Groundwater
EESC131H Environmental Impact Assessment and Auditing
EESC151H Research Seminar in Environmental Science
CHMB111H Techniques in Analytical Chemistry
CHMB311H Introduction to Inorganic Chemistry
PCSB571H Introduction to Scientific Computing

Fourth Year:
EESD321H Contaminant Hydrogeology
EESD951H Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
EESD321H Contaminant Fate in Terrestrial Environments
CHMC311H Principles of Analytic Instrumentation

and
0.5 credit from the following:
CHMC211H Topics in Biophysical Chemistry
CHMC311Y Intermediate Inorganic Chemistry
CHMC411H Intermediate Organic Chemistry
CHMC471H Bio-Organic Chemistry
SPECIALIST PROGRAM IN ENVIRONMENTAL GEOSCIENCE
Supervisor of Studies: R. R. Fulthorpe (416-287-7221)  Email: fulthorpe@utsc.utoronto.ca

Program Requirements
Total requirements: 15.0 full credits of which 1.0 must be at the D-level as follows:

First Year:
- EESA01H1 Introduction to Environmental Science
- EESA06H1 Introduction to Planet Earth
- BIAA01H1 Introductory Biology: Part I
- BIAA02H1 Introductory Biology: Part II
- CHMA15H1 Introductory Chemistry I: Structure and Bonding
- CHMA16H1 Introductory Chemistry II: Reactions and Mechanisms
- MATA26H1 Calculus I
- [MATA25H1 Calculus II for Biological Sciences or MATA36H1 Calculus II for Physical Sciences or MATA27H1 Calculus II for Mathematical Sciences]
- [PHYA10H1 Introduction to Physics IA or PHYA11H1 Introduction to Physics IB]

Second Year:
- BIOL55H1 Ecology
- CHEM55H1 Environmental Chemistry
- EESB20H1 Principles of Geomorphology
- EESB23H1 Principles of Climatology
- EESB40H1 Principles of Hydrology
- EESB55H1 Principles of Soil Science
- EESB51H1 Earth History
- PSCB57H1 Introduction to Scientific Computing
- STAB22H1 Statistics I

Third Year:
- EESC03H1 Geographic Information Systems and Remote Sensing
- EESC04H1 Biodiversity and Biogeography
- EESC07H1 Groundwater
- EESC13H1 Environmental Impact Assessment and Auditing
- EESC15H1 Research Seminar in Environmental Science
- EESC16H1 Principles of Glacial Sedimentology and Stratigraphy
- EESC22H1 Mineralogy and Petrology
- and
- 0.5 credit from the following:
  - EESC18H1 The Great Lakes: An Introduction to Physical Limnology
  - EESC19H1 Marine Systems

Fourth Year:
- 1.0 full credit from the following:
  - EESC21H1 Urban Environmental Problems of the Greater Toronto Area
  - EESD03H1 Contaminant Hydrogeology
  - EESD04H1 Climate Change Impact Assessment
  - EESD08H1 Research Project in Environmental Science
  - EESD14H1 Research Project in Environmental Science
  - EESD15H1 Process Hydrology
  - EESD17H1 Cleaning Up Our Mess: Remediation of Terrestrial and Aquatic Environments
  - EESD32H1 Contaminant Fate in Terrestrial Environments
- and
- 1.0 full credit from any other EES courses
- Strongly recommended: EESC16H1 or EESD07H1.
SPECIALIST PROGRAM IN ENVIRONMENTAL PHYSICS

Supervisor of Studies: R. R. Fulthorpe (416-287-7221) Email: fulthorpe@utsc.utoronto.ca
Advisor: M. Wells (416-288-4879) Email: wells@utsc.utoronto.ca

Program Requirements

Total Requirements: 125.5 full credits

First Year:
PHYA10H Introduction to Physics IA
PHYA21H Introduction to Physics IB
MAT102H1 Calculus I
MAT103H1 Calculus II for Physical Sciences
CHMI10H1 Introductory Chemistry I: Structure and Bonding
CHMI11H1 Introductory Chemistry II: Reactions and Mechanisms
EESA00H1 Introduction to Environmental Science
EESA01H1 Planet Earth
MAT223H1 Linear Algebra I

Second Year:
PHYB21H Waves and Vibrations
EESB02H1 Principles of Geomorphology
EESB03H1 Principles of Climatology
EESB04H1 Principles of Hydrology
EESB05H1 Principles of Soil Science
MATB31H1 Techniques of Calculus of Several Variables I
MATB32H1 Techniques of Calculus of Several Variables II

Third Year:
PHYB40H1 Intermediate Physics Laboratory I
PHYB41H1 Intermediate Physics Laboratory II
PHYB42H1 Electricity and Magnetism
PSCB17H1 Introduction to Scientific Computing
STAB22H1 Statistics I
EESB15H1 Earth History
EESC30H1 Remote Sensing and Geographical Information Systems
EESC35H1 Research Seminar in Environmental Science
EESC37H1 Groundwater
EESC39H1 The Great Lakes: An Introduction to Physical Limnology or EESC39H1 Marine Systems

Fourth Year:
EESC31H1 Environmental Impact Assessment and Auditing
PSCD01H1 The Physical Sciences in Contemporary Society

And
1.5 full credits from:
CHM303H1 Environmental Chemistry
EESC20H1 Urban Environmental Problems of the Greater Toronto Area
EESC302H1 Contaminant Hydrogeology
EESC306H1 Climate Change Impact Assessment
EESC308H1 Research Project in Environmental Science
EESC40Y1 Research Project in Environmental Science
EESC41H1 Process Hydrology
EESC42H1 Contaminant Fate in Terrestrial Environments
PSCD10H1 Physical Sciences Project
MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE

Supervisor of Studies: C. Mitchell (416 288 2744)  Email: carl.mitchell@utoronto.ca

Program Requirements
This program requires 8.5 full credits as follows:

First Year
BIOA01H Introductory Biology Part I
BIOA02H Introductory Biology Part II
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms
[(MATA20H Calculus A or MATA30H Calculus I) or
[(MATA21H Calculus II or MATA33H or MATA36H Calculus II for Biological/Physical Sciences)
[PHYA10H or PHYA11H Introduction to Physics IA or IB]
EESA06H Planet Earth

Second Year
STAB22H Statistics I

and

1.5 credits from:
EESB30H Principles of Climatology
EESB34H Principles of Hydrology
EESB35H Principles of Soil Science
EESH15H Earth History
EESH16H Feeding Humans - The Cost to the Planet

and

0.5 credits from:
BIOB300H Ecology
EESB30H Principles of Geomorphology
EESH17H Hydro Politics and Transboundary Water Resource Management
PSCB57H Introduction to Scientific Computing
CHM0055H Environmental Chemistry

Third & Fourth Years
2.0 credits from C- & D-level EES courses with at least 0.5 credit at the D-level

MINOR PROGRAM IN ENVIRONMENTAL SCIENCE

Supervisor of Studies/Advisor: G. Achondritis (416-288-4858). Email: georgea@uot.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. In addition to science students, it is appropriate for students pursuing a degree in the social sciences or in management and economics.

Program Requirements
Total requirements: 4.0 full credits

First Year:
EESA01H Introduction to Environmental Science
EESA06H Introduction to Planet Earth

Second Year:
Any 1.5 full credits from the following:
EESB20H Principles of Geomorphology
EESB30H Principles of Climatology
EESB34H Principles of Hydrology
EESB35H Principles of Soil Science
EESH15H Earth History

Third Year:
1.5 full credits of any other EES courses of which 1.0 full credit must be at the C- or D-level.
MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE - GENERAL ENVIRONMENTAL SCIENCE STREAM
This stream has been withdrawn from the curriculum. Every effort will be made to allow students enrolled in the stream to complete it.

MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE - ENVIRONMENTAL BIOLOGY STREAM
This stream has been withdrawn from the curriculum. Every effort will be made to allow students enrolled in the stream to complete it.

MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE - WATER SCIENCE STREAM
This stream has been withdrawn from the curriculum. Every effort will be made to allow students enrolled in the stream to complete it.

SPECIALIST (JOINT) PROGRAM IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY
See the Environmental Science and Technology section of this Calendar for program requirements.

SPECIALIST PROGRAM IN NATURAL SCIENCES
See the Physical Sciences section of this Calendar for program requirements.

EESA6H3 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.
Breadth requirement: Natural Sciences

EESA6H3 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, glacio-eration, 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.
Breadth requirement: Natural Sciences
Exclusion: GLG110H

EESA6H3 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.
Breadth requirement: Natural Sciences
Exclusion: GGR100Y, GLG110H

EESA6H3 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 wettest 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.
Breadth requirement: Natural Sciences

EESA6H3 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.
Breadth requirement: Natural Sciences

EESA6H3 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 widespread production and use of chemicals and the unintentional 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 toxicsology using case studies. No prior knowledge of environmental or medical science is required.
Breadth requirement: Natural Sciences
EESB02H Principles of Geomorphology
The physical and chemical processes responsible for the development of regolith at the surface of the earth and the mechanics of transportation, transport and deposition of mass by rivers, wind, glaciers, water waves, gravitational stress, 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 un-modified geomorphic system. Breadth requirement: Natural Sciences Exclusion: GGR20H1 Prerequisite: EESA06H

EESB03H 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. Breadth requirement: Natural Sciences Exclusion: GGR20H1, GGR312H Prerequisite: EESA06H or EESA09H

EESB04H 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. Breadth requirement: Natural Sciences Exclusion: GGR20H1 Prerequisite: EESA06H or EESA09H or any B-level EES course.

EESB05H 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. Breadth requirement: Natural Sciences Exclusion: GGR20H1 Prerequisite: EESA06H or EESA09H

EESB15H Earth History
Planet Earth is at least 4.4 billion years old and a geological record exists for at least the last 2.5 billion 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 tectonic impacts, are now recognized as the major controls on development of the planet's atmosphere, oceans, biology, climate and geo-chemical cycles. This course reviews this long history and the methods and techniques used by geologists to identify ancient environments. Breadth requirement: Natural Sciences Prerequisite: EESA09H or EESA01H or permission of the instructor

EESB16H 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 these species and systems and the local ecology will be examined, looking at issues of over harvesting, genetic erosion, soil erosion, pesticide use, and impacts of genetically modified strains. Breadth requirement: Natural Sciences Prerequisites: BIOA01H1 & BIOA02H

EESB17H Water Policy and Transboundary Water Resources Management
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. Breadth requirement: Social & Behavioural Sciences Prerequisite: EESA06H1 or EESA09H
EESC203H3 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, engineering, geology, ecology and biology). Topics include (but are not limited to): spatial data types, formats and organization; geo-referencing and coordinate systems; remotely sensed image manipulation and analysis; map production.
Breadth requirement: Quantitative Reasoning
Prerequisite: EESA16H3 & 1.5 full credits in B- or C-level EES courses.
Recommended: A prior introductory GIS course and some experience with the use of computers (Windows or Unix-based).

EESC246H3 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 change on humans.
Breadth requirement: Natural Sciences
Prerequisite: BIOB30H1 or permission of the instructor

EESC270H3 Groundwater
Groundwater represents the world's largest and most important fresh water resource.
This basic course in hydrogeology introduces the principles of groundwater flow and aquifer storage and shows how a knowledge of these fundamental tools is essential for effective groundwater resource management and protection. Special emphasis is placed on the practical methods of resource exploration and assessment; examples of the approach are given for aquifers under environmental stress in southern Ontario, the US and Africa.
Breadth requirement: Natural Sciences
Prerequisite: EESA16H3 & 1.0 full credit in B-level EES courses

EESC319H3 Environmental Impact Assessment and Auditing
To familiarize students with the relevant legislation, qualitative and quantitative approaches and applications for environmental impact assessment 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.
Breadth requirement: Natural Sciences
Exclusion: GGR30H1
Prerequisite: 2.5 full credits of EES courses or permission of the instructor

EESC354H3 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. This course is also designed to ensure interaction between students from disparate amounts of environmental science through participation in joint seminars with faculty and with environmental practitioners from the community at large.
Breadth requirement: Natural Sciences
Prerequisite: Permission of co-ordinator

EESC361H3 Field Camp I
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 investigations in a range of environments.
The camp is held mutually either in May or late August. Locations for the camp include Costa Rica, Rockies, Arizona, and Appalachians.
Breadth requirement: Natural Sciences
Prerequisite: Permission of the instructors.
Recommended preparation: EESB15H1

EESC362H3 The Great Lakes: An Introduction to Physical Limnology
North America is endowed with eight of the twelve largest freshwater lakes in the world. The hydrodynamics and hydraulics of the Canadian Great Lakes are used as examples of large lacustrine systems. Fundamental concepts in physical and biological limnology are related to features found in the Great Lakes. Topics include: classification and origin of lakes, temperature structure, seasonal circulation, heat budgets, Langmuir circulation, settle, waves and water levels, eutrophication and invasive species.
Breadth requirement: Natural Sciences
Prerequisite: EESB10H1
Recommended course: EESB10H2

EESC363H3 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 data-acquisition perspective 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.
Breadth requirement: Natural Sciences
Prerequisite: EESB10H1
Recommended preparation: EESB10H2
EESC21H3 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.

Breadth requirement: Natural Sciences
Prerequisite: 30 full credits in an EES Program, or permission of the instructor.

EESC24H3 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 full credits in EES courses. Permission of the Supervisor of Studies.

EESC30H3 Microbial Biogeochemistry

This course examines the role of microorganisms in the cycling of nutrients in the environment. Topics include microbial physiology, physiology of species interactions, and the effects of microorganisms on the environment.

Breadth requirement: Natural Sciences
Exclusion: (BGCY35H3)
Prerequisites: BAMA101H & BAMA111H & BIBS50H & BIBS51H

EESC31H3 Principles of Glacial Sedimentology and Stratigraphy

This course examines the interaction of glaciers, periglacial processes, and the evolution of landscapes. The course will cover the geology of glaciers, the evolution of landscape, and the role of periglacial processes in the formation of landscapes.

Breadth requirement: Natural Sciences
Prerequisite: EESA06H

EESC32H3 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 chemistry 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.

Breadth requirement: Natural Sciences
Limited enrolment: 20
Exclusion: (GLG206H, ERS201H, ERS203H)
Prerequisites: EESA101H & ESES30H

EESC33H3 Environmental Science Field Course

A field course on selected topics in aquatic environments. Aquatic environmental issues require careful field work to collect related hydrological, meteorological, biological and other environmental data. This hands-on course will teach students the necessary skills for fieldwork investigations on the interactions between air, water, and biota.

Breadth requirement: Natural Sciences
Limited enrolment: 20
Exclusion: (EEB310H)
Prerequisites: 1.5 full credits at the B-level or higher in EES & permission of instructor.

EESC32H3 Contaminant Hydrogeology

This course examines the occurrence, nature and distribution of contaminated groundwater. Topics include groundwater contamination, the mechanisms of contaminant transport, and remediation techniques.

Breadth requirement: Natural Sciences
Prerequisite: At least 1 full credit in Environmental Science at the C-level.

EESC30H3 Climate Change Impact Assessment

This course examines the impacts of climate change on human activities and ecosystems. Topics include climate change mitigation, adaptation strategies, and implications for policy and planning.

Breadth requirement: Natural Sciences
Prerequisite: EESC30H

EESC30H3 Field Camp II

This course is a field-based course that focuses on the geology and geophysics of the Canadian Shield. The course will cover the geology of the Canadian Shield, the evolution of landscapes, and the role of periglacial processes in the evolution of landscapes.

Breadth requirement: Natural Sciences
Prerequisite: EESC16H and permission of the instructor.
Environmental Science and Technology

B.Sc.

SPECIALIST (JUN1) PROGRAM IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY

Supervisor of Students: Contact Rose Jones (416-287-7196) Email: environmental-science-and-technology@ualberta.ca

This program is offered in collaboration with The School of Engineering Technology and Applied Science at Centennial College. The program leads to an Honours B.Sc. Degree from UTSC and the Environmental Protection Technician Diploma from Centennial College, all within the normal course-load requirements for Specialist programs. This program is a valuable option that prepares graduates with a combination of key theoretical and practical skills to work in the environmental field. UTSC and Centennial College bring together in this program considerable strengths, expertise and excellent facilities in support of environmental science education and training. Students graduate from the Joint program with the comprehensive and analytical skills necessary to undertake a range of careers in industry, government and non-government organizations. There is at present an untapped demand for expertise in this area in the Canadian labour market. Graduates are also excellent candidates to continue on to graduate studies in pursuit of advanced degrees in environmental science, such as the department's Master of Environmental Science program.

Guidelines for 1st year course selection

Students who intend to pursue this program should include BIBA01H, BIBA02H, CHMA10H, CHMA11H, MATA30H, MATA31H & [PHYA10H or PHYA11H] in their 1st year course selection.

Program Admission

Students should request the program through ROSI. Enrolment is limited. Students may apply for admission to the program after completing 4.0 full credits, including 1.0 credit in Environmental Science, and 0.5 credit in each of Chemistry, Biology, Mathematics and Physics.
Program Requirements

Students must complete 16.0 full credits, as follows:

1. **Introductory (3.5 credits):**
   a) EESM01H Introduction to Environmental Science
      and
      EESA06H Introduction to Planet Earth
   b) CHEMA101H Introductory Chemistry I: Structure and Bonding
      and
      CHEMA111H Introductory Chemistry II: Reactions and Mechanisms
   c) BIOA01H Introductory Biology: Part I
      and
      BIOA02H Introductory Biology: Part II
   d) STAB220H Statistics
      or
      PSB/B/S78H Introduction to Scientific Computing

2. **Fundamentals and Principles (3.5 credits):**
   a) BIOB50H Ecology
      and
      [PHYA10H Introduction to Physics IA
         or
         PHYA11H Introduction to Physics IB]
   b) MATA36H Calculus I
      and
      MATA36H Calculus II for Physical Sciences
   c) 1.5 credits of the following:
      EESB02H Principles of Geomorphology
      EESB03H Principles of Climatology
      EESB04H Principles of Hydrology
      EESB05H Principles of Soil Science
      EESH15H Earth History
      EESH161H Feeding Humans - The Cost to the Planet

3. **Applied and Technical (6.0 credits):**
   (These courses are taught at the Centennial HP Science and Technology Centre.)
   a) *MCB00H Microbiology Basics
      *STEB01H Organic Chemistry and Applications
      *STEB07H Analytical Chemistry and Applications
      *STEB40H Applied Environmental Microbiology
      STEC10H Applied Microbiological Analysis
      STEC15H Applied Analytical Instrumentation
   b) *STEB42H Water Quality Control
      *STEB43H Engineering Equipment and Processes
      STEC50H Applied Hydrology and Water Management
      STEC61H Hazardous Wastes and Modern Industrial Processes
   c) *STEB44H Environmental Legislation and Regulations
      and
      [STEC53H Environmental Audits, Sampling and Data Management
      or
      EESC13JH Environmental Impact Assessment and Auditing]

4. **Advanced**

   2.0 credits from:
   EESC03H Geographic Information Systems and Remote Sensing
   EESC04H Biodiversity and Biogeography
   EESC07H Groundwater
   EESC18H The Great Lakes: An Introduction to Physical Limnology
   EESC19H Marine Systems
   EESC21H Urban Environmental Problems of the Greater Toronto Area
   EESC240H Advanced Readings in Environmental Science
   EESC30H Microbial Biogeochemistry
   and
   1.0 credit from:
   Any D-level EES course

* A minimum grade of 60% is required in courses marked with an asterisk in order to maintain standing in the program.
STEBB07H3 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 Applied Microbiology.
Breadth requirement: Natural Sciences
Exclusion: CHMC11H, CHMB16H. Prerequisite: IMC80H or CHMA11H and permission of instructor.
Note: CHMC11H or CHMB16H may be taken after STEB07H, but STEB07H cannot be taken after CHMC11H or CHMB16H.

STEB21H3 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. Enrollment is limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Exclusion: CHMB14H & CHMB24H. Note: CHMB14H and CHMB24H may be taken after STEB21H, but STEB21H may not be taken after CHMB14H or CHMB24H.
Prerequisite: CHMA11H

STEB40H3 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.
Breadth requirement: Natural Sciences
Prerequisite: BIOA02H or IMC80H

STEB42H3 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.
Breadth requirement: Natural Sciences

STEB43H3 Engineering Equipment and Processes
Energy and mass in engineering systems, hydrostatics, 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.
Breadth requirement: Natural Sciences
Prerequisite: PHYA10H or PHYA11H

STEB44H3 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.
Breadth requirement: Natural Sciences

STEC11H3 Applied Microbiological Analysis
The basic principles of Environmental Microbiology, immunology, molecular biology and genetics and toxicity testing using microorganisms. Laboratories are performed using current Ministry of Environment methodologies. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Prerequisite: STEB40H

STEC5H3 Applied Analytical Instrumentation
The theory and practice of chemical sampling and analysis used by the Ministry of Environment and Energy. The emphasis will be on the analysis of environmental samples using M/JEF procedures and College equipment. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Exclusion: CHMC16H. Note: STEC15H may be taken after CHMC16H, but CHMC16H may not be taken after STEC15H.
Prerequisite: CHMA11H & STEB07H

STEC53H3 Environmental Audits, Sampling and Data Management
Ministry approved Industrial Auditing protocols. The presentation and manipulation of graphs, spreadsheets and lists, using popular software titles. The ISO series, with emphasis on EMS and ISO 14001. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Exclusion: STEC53H may not be taken after or concurrently with EESC13H.

STEC60H3 Applied Hydrology and Wastewater Management
The movement of water in its natural state, techniques to measure and control the flow of surface and subsurface water. Current techniques to prevent contamination of subsurface water and surface water by chemical spills. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Prerequisite: EESB04H & STEB42H

STEC61H3 Hazardous Waste 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, polymeric resins, PCBs, halogenated solvents, organic acids, Fries or pesticides. Limited to students enrolled in the Joint Specialist program in Environmental Science and Technology.
Breadth requirement: Natural Sciences
Prerequisite: CHMA11H & STEB21H & STEB07H
IMCO01H3 Microbiology Basics
See the Industrial Microbiology section of this Calendar for a full description.

French (B.A.)

Faculty List
C. Bertrand-Jennings, L. de L. (Paris), Ph.D. (Wayne State), Professor Emeritus
E. Drouet de la Rancière, B.A. (London), Ph.D. (Brown), Professor Emeritus
S. Meunier, M.A. (Torrone), Ph.D. (Strasbourg), Associate Professor
J. Ndayirage, M.A. (Montreal-UQAM), Ph.D. (Montreal-UQAM), Associate Professor
P. Rimond, M.A., Ph.D. (Montreal), Assistant Professor
C. Bensouls, M.A., Ph.D. (Western), Senior Lecturer
K. McCord, M.A., Ph.D. (Toronto), Senior Lecturer
F. Mugnier, M.A. (Lyon), Ph.D. (Grenoble), Senior Lecturer
J. English, M.A., Ph.D. (Toronto), Lecturer
M. Tumessen, B.A. (Athens), M.A., Ph.D. (Montreal), Lecturer

Program Director: P. Mugnier (416-287-7143). Email: pmugnier@utsc.utoronto.ca

Studies in French allow for a wide range of interests: the enhancement of practical language skills, including translation, pronunciation and business French (FREA17H, FREB00H, FREB17H, FREB11H, FREB44H, FREQ18H), the study of how the language is structured (FREB04H, FREB45H, FREQ50H, FREQ64H, FREC43H, FREC46H); the development of approaches to the teaching of French (FREQ11H, FREB02H, FREQ11H); and the exploration of the rich literatures and cultures of French Canada, France and other parts of the francophone world.

Students are also encouraged to take HUMA01H (Exploring Key Questions in Humanities) as early as possible in their French studies.

The following Programs are offered at University of Toronto Scarborough: a Minor Program in French; a Minor Program in French for Francophones; a Major in French; 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 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 FREQ11H about the appropriate entry course(s). Students without Grade 12 French may wish to take FREA01H Introductory French I, FREA01H Introductory French II, FREA01H Intermediate French I or FREA01H Intermediate French II. 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 for the first time in FREA01H, FREA07H, FREA97H or FREA99H. University of Toronto students who have already taken FSL111H or FSL11H do not need to write the placement test. Please check the Humanities French webpage for details: http://www.utsc.utoronto.ca/~humsf/Langadd.htm/fee_studyguide/overview.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-placements@utsc.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 FREA01H and higher-level courses (some exceptions may apply with the permission of the Program Supervisor). Note that the Language Practice courses FREA01H & FREA02H, FREQ11H & FREQ12H and FREQ11H & FREQ10H must be taken in sequence. Normally, an A-level FRE course should not be taken at the same time as, or after, a B-level FRE course. Please do not hesitate to consult Program Supervisors and other faculty members for further advice about course selection and Programs.

The Study Abroad 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 Program Supervisor.

Students with Grade 12 French who took Summer Bursary Program courses prior to attending U of T must see the Program Supervisor during the first week of classes. After assessing the course, the Program Supervisor 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 Program Supervisor 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 (FREB44H & FREQ30H) 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.
Language Citation
U of T Scarborough offers a growing range of language opportunities and, as students seek international study, work opportunities and post-graduate study, they may be assisted by a notation of language proficiency. The Language Citation provides that notation. See the Language Citation section of the Calendar for more information.


SPECIALIST PROGRAM IN FRENCH
Program Supervisor: F. Maguin (416-287-7143) Email: french-program-supervisor@utsc.utoronto.ca
This program 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.)

Program Requirements
This program requires 12.0 credits as follows:

1. 4.0 credits consisting of:
   - FREA01H Language Practice I
   - FREA02H Language Practice II
   - FREA03H Language Practice III
   - FREA04H Language Practice IV
   - FREA05H Language Practice V
   - FREA06H Language Practice VI
   - FREA07H Language Practice VII: Written French
   - FREA08H Language Practice VIII: Oral French
   (Except where substitution of other French credits is permitted for students with special proficiency in the French language)

2. 3.0 credits selected from:
   - FRED43H Understanding French Grammar
   - FRED44H Introduction to Linguistics: French Phonetics and Phonology
   - FRED45H Introduction to Linguistics: French Morphology and Syntax
   - FRED46H French Morphology
   - FRED47H French Syntax
   - FRED48H Special Topics in Linguistics: Pilgrim and Creole Languages
   - FRED49H Sociolinguistics of French
   - FRED50H Special Topics in Advanced French Syntax
   - FRED51H French Semantics

3. 1.0 credit selected from:
   - FRED21H The Society and Culture of Québec
   - FRED22H Modern France
   - FRED23H The Francophone World

4. 3.0 credits in literature which must include: one full credit in French Canadian literature; one full credit in French literature (FRED50H, FRED51H and FRED55H can fulfill this requirement); one-half credit in literature from other parts of the French-speaking world excluding France and Canada; one-half credit of your choice.

5. 1.0 additional credit in French.

Note: CTEP students should choose two subject-specific half credit courses focusing on teaching French.

MAJOR PROGRAM IN FRENCH
Program Supervisor: F. Maguin (416-287-7143) Email: french-program-supervisor@utsc.utoronto.ca

Program Requirements
Students must complete 7.0 credits in French, of which at least 2.0 credits must be at the C- or D-level, including:

1. FREA01H, FREA02H, FREA03H and FREA04H (except where the Program Supervisor permits substitution of other FRED courses for students with special proficiency in the French language).

2. One further full credit in language.

3. One full credit in literature and/or culture.

4. Three additional full credits in French
Minor Program in French

Program Requirements
Students should complete four full credits including: FREA01H, FREA02H, FREB01H and FREB02H, plus two further credits in French. At least one full credit must be at the C-level.

Note: Only courses for which students do the assignments in French can be counted towards the Minor Program in French.

Minor Program in French As a Second Language

This program has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in it are able to complete. Students who had planned to enrol in it in 2010/11 may want to consider enrolling instead in the Minor Program in French.

Minor Program in French for Francophones

Program Requirements
Students in this Program must complete at least four full credits at the B- and C-levels, excluding FREB01H, FREB02H and FREB17H. At least one full credit must be at the C-level.

Note: Only courses for which students do the assignments in French can be counted towards the Minor Program in French for Francophones.

FRE A 09H3 Introductory French I
An intensive basic course in written and spoken French; comprehension, speaking, reading and writing.

This intensive, practical course is designed for students who have no previous knowledge of French.
The placement test is mandatory for all students (even complete beginners) who register for the first time. The Department strongly recommends that the placement test be completed prior to registration.

Breadth requirement: Arts, Literature & Language
Limited enrollment: 30 per section
Exclusion: (LGGB24H), (LGGB26H), (LGGB29H), (LGGB23H), FSL1001 or equivalent

FRE A 09H3 Introductory French II
An intensive course in written and spoken French; a continuation of FREA09H3.

This course is designed for students who have some knowledge of French. It continues the basic, comprehensive training in both written and oral French begun in FREA09H3, using the second half of the same textbook.

A placement test is mandatory for all students who register for the first time in FREA09H3, FREA09H1, FREA9H1 and FREA9H1. The Department strongly recommends that the placement test be completed prior to registration.

Breadth requirement: Arts, Literature & Language
Limited enrollment: 30 per section
Exclusion: (LGGB24H), FSL1002H or equivalent. Prerequisite: FREA09H3 or (LGGB21H)

FRE A 09H3 Intermediate French I
Intended for students 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/aural competence.

A placement test is mandatory for all students who register in FREA09H3, FREA09H1, FREA9H3 or FREA9H1 for the first time. The Department strongly recommends that the placement test be completed prior to registration.

Breadth requirement: Arts, Literature & Language
Limited enrollment: 30 students per section
Exclusion: FSL 121Y, (LGGB23H) or equivalent
Prerequisite: FREA9H3 or (LGGB22H)

FRE A 09H3 Intermediate French II
Intended for students who have some knowledge of French and who wish to bring their proficiency up to the level of normal University entrance; a continuation of FREA09H3, prepares students for FREA09H4. Offers training in written and spoken French, reinforcing reading comprehension, written skills and oral/aural competence.

A placement test is mandatory for all students who register in FREA09H3, FREA09H1, FREA9H3 or FREA9H1 for the first time. The Department strongly recommends that the placement test be completed prior to registration.

Breadth requirement: Arts, Literature & Language
Limited enrollment: 30 per section
Exclusion: Grade 12 French, (LGGB24H), FSL121Y or equivalent. Cannot be taken concurrently or after FREA09H1.
Prerequisite: FREA09H1, (LGGB23H) or equivalent.
FREA01H3 Language Practice I
Reinforcement and development of the language skills -
understanding, reading, writing and speaking - necessary
for higher-level courses.
The course includes grammar review (written and oral),
various exercises both traditional and internet-based, and
reading and discussion of texts from different francophone
cultures. FREA01H is a prerequisite for all B-level courses.
Breadth requirement: Arts, Literature & Language
Exclusion: Native or non-native fluency in French
(FSL161Y), (FSL181Y), FSL221Y
Prerequisite: Grade 12 French or FREA09H or equivalent
or permission of instructor

FREA02H3 Language Practice II
A continuation of FREA01H.
Breadth requirement: Arts, Literature & Language
Exclusion: Native or non-native fluency in French:
(FREA10Y), (FSL161Y), (FSL181Y), FSL221Y
Prerequisite: FREA01H
FREA17H3 Conversation I
Development and reinforcement of spoken French.
Through oral practice based on common situations,
students will learn vocabulary, syntax and grammar
essential for communication. The course also involves
supportive in-class written work and listening
comprehension exercises. It may but does not have to
accompany FREA01H and FREA02H.
Breadth requirement: Arts, Literature & Language
Exclusion: Native or non-native proficiency: (FSL161Y).
In addition, FREA17H may not be taken after or
concurrently with FREA06H, FREA08H, FREA11H, FREA12H, FREA20H, FREA21H or
FREC18H.
Prerequisite: Grade 12 French or equivalent

FREA03H3 Language Practice III
This course is concerned with the development of
fluency, accuracy of expression and style through the study
of grammar, composition, oral/aural practice and a variety
of readings. Course work can be supplemented by audio
and videotapes.
Breadth requirement: Arts, Literature & Language
Exclusion: (FSL261Y), (FSL281Y), FSL311Y, FSL341Y
or equivalent or native proficiency
Prerequisite: FREA01H & FREA02H or equivalent
or permission of instructor

FREA04H3 Language Practice IV
A continuation of FREA03H.
Breadth requirement: Arts, Literature & Language
Exclusion: (FSL261Y), (FSL281Y), FSL311Y, FSL341Y
or equivalent or native proficiency
Prerequisite: FREA03H or equivalent or permission of instructor

FREB06H3 Practical Translation I
An introduction to translation.
The course will use a wide selection of short texts dealing
with a variety of topics. Grammatical and lexical problems will
be examined with special attention to interference from English.
Breadth requirement: Arts, Literature & Language
Exclusion: Native proficiency. FREB08H may not be taken
after or concurrently with FREC10H, FREC140Y or FREC141Y.
Prerequisite: [FREA01H & FREA02H] or equivalent or
permission of instructor

FREB11H3 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.
Breadth requirement: Arts, Literature & Language
Prerequisite: [FREA01H & FREA02H] or equivalent or
permission of instructor

FREB17H3 Conversation II
Intensive practice in spoken French.
Controlled situational work, discussion groups and a variety
of exercises designed to improve lexical and syntactical
resourcefulness will provide an opportunity for a reasonable
degree of confidence when speaking about everyday life and
contemporary topics. FREB17H can also be taken under Study
Elsewhere.
Breadth requirement: Arts, Literature & Language
Prerequisite: [FREA01H & FREA02H] or equivalent

FREB18H3 Commercial French
The French language in a commercial or economic context.
Of interest, among others, to students in French, Business,
Accounting, Management, Economics and Journalism, this
course emphasizes commercial writing techniques and exercises
that include the vocabulary and structures of business language
primarily as found in the Canadian francophone community.
Breadth requirement: Arts, Literature & Language
Exclusion: FSL161Y
Prerequisite: [FREA01H & FREA02H] or equivalent or
permission of instructor

FREB20H3 Teaching Children's Literature in French
An analysis of the varied forms and contents of children's
literature written in French.
The course examines different texts in terms of target age,
pictorial illustrations, didactic bent, socio-cultural determinants
etc., focusing on, among other things, fairy tales, urban and
otherwise, cartoons, detective stories, adventure tales, and art,
science and history books.
Breadth requirement: Arts, Literature & Language
Exclusion: FREB35H
Prerequisite: [FREA01H & FREA02H] or equivalent or
permission of instructor
FREB22H3 The Society and Culture of Quebec
A study of the historical, cultural and social development of Quebec society from its origins to today. Aspects such as history, literature, art, politics, education, popular culture and cinema will be examined. Emphasis will be placed on the elements of Quebec culture and society that make it a distinct place in North America.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor

FREB27H3 Modern France
An examination of political, social and cultural developments in France in the last hundred years. Topics will include: the impact of two World Wars; the decolonization process; the European Community; the media; the educational system; immigration, etc.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor

FREB28H3 The Francophone World
An examination of historical, political and cultural realities in different parts of the French-speaking world. Topics to be discussed will include slavery, colonization, de-colonization and multilingualism.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: FSI382Y
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor

FREB35H3 Francophone Literature
A study of a variety of literary texts from the French-speaking world, excluding France and Canada. Attention will be given to the cultural and historical background as well as to the close study of works from areas including the West Indies, North and West Africa.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE332H
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor

FREB39H4 The 20th Century Quebec Novel
A study of some of the major novels written in Quebec since 1945. The course will focus on the evolution of the novelistic form and its relevance within modern Western literature. We will also examine the link between the novels studied and the transformation of Quebec society.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE219Y
Prerequisite: [FREA0H1 & FREA0H2]

FREB37H3 Contemporary Quebec Drama
An examination of contemporary Quebec theatre.
We will study texts representative of a variety of dramatic styles. The focus will be primarily on dramatic texts; significant theatrical performances, however, will also be considered.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE312H
Prerequisite: [FREA0H1 & FREA0H2]

FREB43H3 Understanding French Grammar
Directed to students specializing in French and all those who wish to strengthen their knowledge/use of French. We explore ways in which quite simplified linguistic tools shed light on the apparent complexity of French grammar, and examine parts of speech, grammatical features and functions, subordination, clause types, and more.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE172H
Prerequisite: [FREA0H1 & FREA0H2] or equivalent

FREB44H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE272Y, FRE374H
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor

FREB45H3 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.
This course complements FREB43H and FREB44H.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE272Y
Prerequisite: [FREA0H1 & FREA0H2] or permission of instructor

FREB50H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: FRE240Y
Prerequisite: [FREA0H1 & FREA0H2] or equivalent or permission of instructor
FREC54H3 Language Practice VI
A continuation of FREC91H1.
Breadth requirement: Arts, Literature & Language
Exclusion: FSL361Y, FSL362H, FSL383H, FSL431Y, FSL442H, FSL443H or equivalent
Prerequisite: FREC91H1

FREC55H3 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
"reframing" and speed of delivery.
Breadth requirement: Arts, Literature & Language
Prerequisite: FREC37H1 or equivalent or permission of
instructor

FREC11H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: FREC36H1
Prerequisite: [FREC31H1 and FREC32H1] or equivalent or
permission of instructor

FREC18H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: FREC38H1 may not be taken after or concurrently
with FREC40H1 or FREC41Y1
Prerequisite: [FREC30H1 and FREC32H1] or [FREC38H1 or
(FREC30H1)] or equivalent or permission of instructor

FREC38H3 Special Topics in the Literature of Quebec:
Postmodern Literature
An exploration of the textual forms and ideas that challenge
traditions 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.
Breadth requirement: Arts, Literature & Language
Prerequisite: FREC30H1 or equivalent or permission of
instructor

FREC45H4 French Morphology
A study of the morphological rules governing word formation
and inflection in modern French. Special attention is devoted to
analytical tools and their relevance to issues surrounding second
language learning.
Breadth requirement: Arts, Literature & Language
Exclusion: FREC37H1
Prerequisite: FREC34H1 or equivalent
FREC463H 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 fea-
tures that pose problems for FSL learners.
Exclusion: FRE378H
Prerequisite: FREB45H

FREC473H 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 socio-historical discussion.
Breadth requirement: Arts, Literature & Language
Prerequisites: FREB43H or FREB44H or FREB45H or LIN403H or permission of the instructor

FREC483H 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: LINB50H (LINB51H)
Prerequisites: [FREB01H & FREB02H] or equivalent or permission of instructor

FREC563H 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 thematic and literary techniques in at least six short stories; attention will also be paid to their socio-cultural context.
Breadth requirements: Arts, Literature & Language
Prerequisites: [FREB01H & FREB02H] & [FREB50H or equivalent] or permission of instructor

FREC563H Topics in French Literature: Humour in French Literature
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 in we consider culture's influence and how and why satire, parody and pastiche make us laugh.
Breadth requirement: Arts, Literature & Language
Prerequisites: FREB50H or equivalent or permission of instructor

FREC533H Topics in French Literature: Encountering Foreign Cultures: Travel Writing in French
An examination of the trends and attitudes embodied in French travel writing over time.
The course considers aspects of utopianism, cosmopolitanism, exoticism, imperialism, postcolonialism and ethnography in fictional and non-fictional narratives set "elsewhere". Selections are drawn from writers such as Lahontan, Gauthier, Neraval, Gide, Loti, Segalen, Camus, Bovier and Baudrillard.
Breadth requirement: Arts, Literature & Language
Exclusion: none
Prerequisites: [FREB01H & FREB02H] & [FREB50H or equivalent] or permission of instructor

FREC583H 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 "tobler savage", the "Oriental", the "country bumpkin" and the "foreigner".
Taught in English.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisites: Two Humanities courses or permission of instructor

FRED913H Language practice VII: Written French
Through a review of major grammar points and the development of the necessary techniques for the production of various types of discourse (argumentative essays, summarizing, critiquing, etc.), students will be guided to work on accuracy and logical structure in written French.
Breadth requirement: Arts, Literature & Language
Limited enrollment: 30
Exclusions: FSLA31Y, FSLA41Y, FSLA42H or equivalent
Prerequisite: FRED92H or equivalent or permission of instructor

FRED953H Language Practice VIII: Oral French
Through a variety of listening related activities, students will refine strategies for increasing aural comprehension. In-class discussions, debates and oral presentations will enhance their fluency, reinforce the accuracy of their oral communication, expand their vocabulary and improve pronunciation.
Breadth requirement: Arts, Literature & Language
Limited enrollment: 30
Exclusion: FSLA43H or equivalent
Prerequisite: FRED92H or equivalent or permission of instructor

FRED123H Advanced Topics in Literature: Haitian Migrant Literature in Quebec
Novels by Haitian writers living in Quebec speak of migration, tension, marginalization, in-betweenness, 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.
Prerequisites: [FREB50H & at least one C-level literature course] or permission of instructor.
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FRED34H3 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: FRED48H1
Prerequisite: FRED46H8

FRED49H3 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, their properties and of their combination will be discussed.
Breadth requirements: Arts, Literature & Language
Exclusion: FRED36H1, LINC12H
Prerequisite: FRED43H1 or FRED44H1 or FRED45H1 or LINA41H1 or permission of the instructor

Geography
(B.A.)

Faculty List
J. Miron, B.A. (Queen's), M.A. (Penn.), M.Sc. (Mun.), Ph.D. (Toronto), Professor
E. C. Ralph, B.A., M.Phil. (London), Ph.D. (Toronto), Professor
M. F. Bunce, B.A. (Sheffield), Ph.D. (Sheffield), Associate Professor
M. Mahnken, B.A. (Dundee), Ph.D. (London), Associate Professor
A. Scamps, B.F.A. (Nova Scotia College of Art and Design), M.Sc., Ph.D. (London), Associate Professor
S.C. Bunce, B.A. (York), M.E.S. Ph.D. (York), Assistant Professor
M. Hunter, B.A., (Sask demands, M.A. (New York), Ph.D. (Univ. of Calgary), Assistant Professor
T. Kepe, B.Agric. (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

Discipline Representative: J. Miron
Undergraduate Counsellor: J. Roopnaran Singh
Email: social-sciences-counsellor@sic.uwestern.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, 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 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 shapes (and is 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 & GGRA13H1 in first year. They might also want to take GGRA30H1.

Guidelines for Major Program completion
Courses in the Major Program in Human Geography are divided into these main subdisciplinary streams: Urban Geography, Social/Cultural Geography and Environmental Geography. Major students are welcome to take courses in more than one stream and are advised to take all three of the related Theory and Concept courses, GGRB05H Urban Geography, GGRB13H Social Geography, and GGRB28H Environmental Conservation and Sustainable Development.
Program Requirements
The Major Program in Human Geography requires a total of 7.0 full credits as follows:

1. **Introduction** (1.0 credit)
   - GGRA03H The Geography of Global Processes
   - GGRA03H Cities and Environments

2. **Theory and Concepts in Human Geography**
   - GGRB02H The Logic of Geographical Thought

   1.5 credits from:
   - [CITB01H Canadian Cities and Planning or (GGRB06H) Planning in Canada]
   - GGRB05H Urban Geography
   - GGRB13H Social Geography
   - GGRB22H Environmental Conservation and Sustainable Development
   - GGRB23H Geographies of Disease

3. **Methods** (1.0 credit)
   - GGRA30H GIS and Empirical Reasoning
   - One of:
     - ANTC35H Quantitative Methods in Anthropology
     - ECMB09Y Quantitative Methods in Economics
     - ECMB11H Quantitative Methods in Economics I
     - GGRB20H Introductory Analytical Methods
     - GGRB27H Social Research Methods
     - PSYB07H Data Analysis in Psychology
     - SOCI16H Social Statistics
     - STAB22H Statistics I

4. **Applications** (at least 2.0 credits from among the following):
   - GGRC01H Supervised Readings in Human Geography
   - GGRC02H Population Geography
   - GGRC04H Urban Residential Geography
   - GGRC07H Current Topics in Social Geography
   - GGRC10H Urbanization and Development
   - GGRC11H Current Topics in Urban Geography
   - GGRC13H Urban Political Geography
   - GGRC18H Urban Transportation Policy Analysis
   - GGRC19H Issues in Rural Development
   - GGRC21H Current Topics in Environmental Geography
   - GGRC22H Political Ecology Theory and Applications
   - GGRC27H Location and Spatial Development
   - GGRC28H Agriculture, Environment, and Development
   - GGRC33H The Toronto Region
   - GGRC40H Current Topics in Human Geography
   - GGRC45H Local Geographies of Globalization
   - (GGRC46H) Tourism, Environment and Development
   - GGRD01H Supervised Research Project
   - GGRD02H Advanced Geographical Theory and Methods
   - (GGRD07H) Countryside Conservation
   - GGRD09H Feminist Geographies
   - GGRD10H Health and Sexuality
   - GGRD19H Spaces of Multiculturality: Critical Mixed Race Theory

5. 1.0 additional credit to be selected from the courses listed in Requirements 2 or 4 above.

**MINOR PROGRAM IN HUMAN GEOGRAPHY**

Program Requirements:
The requirements for this Program are four full credits in Geography which must include one full credit at the C-level or D-level.
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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 provide a background in physical sciences and mathematics. It is recommended that first year students take EESA01H, EESA06H, GGRA02H and GGRA03H and at least 1.0 full credit from among [BOMA01H & BOMA02H], [CSIMA10H & CHMA11H], [PHYA10H or PHYA11H], [MATA30H & MATA35H/A36H/A37H].

Program Requirements
The Major Program in Physical and Human Geography requires the completion of a total of 8.0 full credits of which 4.0 credits are to be EES courses, and 4.0 credits are to be GGR courses. Among these 8.0 credits, the student must include:

1. EESA01H, EESA06H, GGRA02H & GGRA03H
2. At least 1.5 credits from among EESB03H, EESB04H, EESB05H, EESB06H, & EESS04H
3. At least 1.5 credits from among [CTIB01H or (GGRB06H)], GGRB05H, CITC03H, GGRB01H, GGRB20H & GGRB22H
4. At least 1.0 credit at the C- or D-level from among EES courses
5. At least 1.0 credit at the C- or D-level from among GGR courses
6. At least one additional 0.5 credit with a GGR prefix.
7. At least one additional 0.5 credit with an EES prefix.

GGRA02H3 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: GGRB105H, GGRB107H, GGRB117H

GGRA03H3 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: GGRB103H, (GGRB107H), GGRB117H

GGRA03H3 Geographic Information Systems (GIS) and Empirical Reasoning
Conformatory causal modeling and GIS, map as model; GIS data input; cartographic and GIS data structure; data errors and editing; elementary spatial analysis; measurement; map comparison; classification; statistical surfaces; spatial arrangement; privacy issues.
Breadth requirement: Quantitative Reasoning
Exclusion: (EESA09H), GGBT22H, (GGRA20H) may not be taken after or concurrently with EESO30H.

GGRB09H3 The Logic of Geographical Thought
Many of today’s key debates - for instance, on globalization, the environment, and cities - draw heavily from geographical thinking and what some have called the "spatial turn" in the social sciences. This course introduces the most important methodological and theoretical aspects of contemporary geographical and spatial thought, and serves as a foundation for other upper level courses in Geography.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Prerequisite: GGRA02H & GGRA03H

GGRB09H3 Urban Geography
This course will develop an 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 and the ways they are analysed.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Exclusion: GGRB124H, (GGRB125H) Prerequisite: [GGRA02H & GGRA03H] or IDS010H or alternative prerequisite with permission of the instructor

GGRB13H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Prerequisite: [GGRA02H & GGRA03H] or [SOCI01H & SOCI02H]

GGRB13H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Prerequisite: [GGRA02H & GGRA03H] or [SOCI01H & SOCI02H]
GBR202H3 Environmental Conservation and Sustainable Development

Deals with two main topics: the origins of environmental problems in the global spread of industrial capitalism, and environmental decision-making and policies. Themes include: changes in human-environment relations, trends in environmental problems, the rise of environmental awareness and activism, environmental policy, problems of sustainable development.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Exclusion: GGR202H
Prerequisite: GGRA02H or [EESA01H & ESEA05H] or IDS05H

GBR203H3 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 150
Prerequisite: One of GGRA02H, GGRA03H or HLT101H

GBR203H3 Supervised Readings in Human Geography

An independent supervised reading course open only to students in the Major Program in Human Geography. An independent literature review research project will be carried out under the supervision of an individual faculty member.

Prerequisite: 10 full credits including completion of the following requirements for the Major Program in Human Geography: 1) Introduction, 2) Theory and Concepts, 3) Method; & a cumulative GPA of at least 2.5.

GBR204H3 Population Geography

An examination of the geographical dimension to human population through the social dynamics of fertility, mortality and migration. Themes include disease epidemics, international migration, reproductive technologies, and changing family structure.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: GGR202H
Prerequisite: HLTB81H or [Any one of GGB02H, GGB03H, GGB13H, GGB20H or GGR202H]

GBR204H3 Urban Residential Geography

Household production; household governance and contracting; household economic behaviour, housing demand; life course and housing career; housing policy and markets; dwelling maintenance and neighbourhoods: social mix and segregation.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: GGR379H
Prerequisite: University-level half-credit in data analysis & GGB02H & [one of CITB01H, EMB01H, GGB05H, GGR106H, GGR25H, GGR379H]

GBR204H3 Current Topics in Social Geography

Examination and discussion of current trends and issues in social geography, with particular emphasis on recent developments in concepts and methods. Specific content will vary from year to year.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRA02H & GGRA03H & GGRB02H & GGRB13H

GBR204H3 Urbanization and Development

Examines global urbanization processes and the associated transformation of governance, social, economic and environmental structures particularly in the global south. Themes include theories of development, migration, transnational flows, socio-spatial polarization, postcolonial geographies of urbanization.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRA02H & GGRA03H & GGRB02H & GGRB13H

GBR204H3 Current Topics in Urban Geography

Examination and discussion of current trends and issues in urban geography, with particular emphasis on recent developments in concepts and methods. Specific content will vary from year to year.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRA02H & GGRA03H & GGRB02H & GGRB13H

GBR204H3 Urban Political Geography

Geographical approach to the politics of contemporary cities with an 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRB02H & GGRB05H & [CITB01H or (GGRB06H)]

GBR205H3 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: GGR224H
Prerequisite: University-level half-credit in data analysis & GGB02H & one of CITB01H, EMB01H, EMB03H, GGRB05H, GGRB06H, GGRB27H, GGRB37H.
GGRC20H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRB02H1 & [GGRB13H1 & GGRB20H1] or [IDS601H1 & IDS602H1]

GGRC21H3 Current Topics in Environmental Geography
Examination and discussion of current trends and issues in environmental geography, with particular emphasis on recent developments in concepts and methods. Specific content will vary from year to year.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRM21H & [GGRM31H & GGRB02H1 & GGRB08H]

GGRC22H3 Political Ecology Theory and Applications
Explores how politics, the economy, history and culture shape and are shaped by interactions of people with the physical environment. Analysis moves beyond the roles government and interest groups in shaping environmental policies, to expanding our understanding of 'politics' in (i) environmental discourses and knowledge, (ii) economic systems; (iii) regimes of natural resource ownership and use; and (iv) everyday struggles within and between communities and interest groups as they shape human-nature relationships.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 80
Prerequisite: GGRB02H1 & [GGRB02H1 or IDS602H1]

GGRC27H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: GGRB27H1, GGRB20H1
Prerequisite: GGRB02H1 & [ECMB01H1 or ECMB02H1]

GGRC29H3 Agriculture, Environment and Development
Changing social, economic and environmental relations 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRB02H1 & [One of ANTB64H1, (ANTC63H), (ANTC64H), IDS601H, IDS602H, GGRB08H]

GGRC33H3 The Toronto Region
This course examines issues of urban form and structure, urban growth and planning in the Toronto region. Current trends in population, housing, economy, environment, governance, transport, urban design and planning practices at the local level and the regional scale will be examined critically.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRB02H1 & GGRB03H1 & [CITIB10H1 or (GGRB09H1)]

GGRC41H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRM22H & GGRM32H & GGRB02H1 & one B-level full credit in Human Geography

GGRC45H3 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 globalization differently based on their unique conditions of life and how they respond to the challenges and opportunities of a globalized world.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: GGRB02H1 & [GGRB05H1 or GGRB02H1 or ANTB16H1 or IDS601H1]

GGRD01H3 Supervised Research Project
An independent studies course open only to students in the Major Program in Human Geography. An independent studies project will be carried out under the supervision of an individual faculty member.
Prerequisite: 15 full credits including completion of the following requirements for the Major Program in Human Geography: 1) Introduction, 2) Theory and Concepts, 3) Methods, & a cumulative GPA of at least 2.5.

GGRD09H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: GGRB02H1 & [GGRB13H1 & GGRC13H1] or WSTC20H1
GGRD10H3 Health and Sexuality
Examines links between health and human sexuality. Particularly explores sexuality transmitted infections. Attention will be given to the socially and therefore spatially constructed nature of sexuality. Other themes include sexual violence, masculinities and health, reproductive health, and transnational relationships and health. Examples will be taken from a variety of countries.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: GGRB02H1 & [GGRB13H1 or GGRB20H1] & [(GRCG20H1 or GGRD10H1) or (HLET30H1 & ANTC15H1)]

GGRD11H3 Advanced Geographical Theory and Methods
Designed for final-year Human Geography Majors, this reading-intensive seminar course develops analytical and methodological skills in socio-spatial analysis. We explore major theoretical/methodological traditions in geography including positivism, humanism, Marxism, and feminism, and major analytical categories such as place, scale, and networks. Particularly recommended for students intending to apply to graduate school.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: 15 full credits including completion of the following requirements for the Major Program in Human Geography: 1) Introduction, 2) Theory and Concepts, 3) Methods. Priority will be given to Geography Majors with the highest GPA.

Global Asia Studies (B.A.)

Faculty List
P. C. Hulme, B.A. (National Chung-sing), M.A. (Chinese Cultural), M.A., Ph.D. (UCLA), Associate Professor
R. Bai, B.A., M.A. (Beijing Foreign Studies), Ph.D. (Illinois), Assistant Professor
L. Chen, M.A. (Sage St), M.A. (SUNY Buffalo), J.D. (Illinois), M.A., M.P.H., Ph.D. (Columbia), Assistant Professor
J. Park, B.A., M.A. (Sookmyung Women's), M.S., Ph.D. (Illinois), Assistant Professor
J. Sharma, B.A. (Lady Shri Ram), M.A. (Hindu), M.Phil. (Delhi), Ph.D. (Canish), Assistant Professor
H.C. Shih, B.A., M.A., Ph.D (Toronto), Assistant Professor
C. Ving, B.A. (UC Berkeley), M.A., Ph.D (Harvard), Assistant Professor
H.X. Wu, M.A., Ph.D. (Toronto), Senior Lecturer
S. Naid, B.A., M.A., M. Phil. (JNU), Lecturer
S.L.V. Wang, B.A., M.A., Ph.D (Hawaii), Lecturer

Program Director: J. Sharma Email: gas-program-supervisor@utsc.utoronto.ca
Global Asia Studies (GAS) is an area-focused, interdisciplinary undergraduate program that places Asia within a dynamic global and diaspora context. It enhances our understanding of historical and contemporary global culture and politics by enabling students to engage with an extensive and intensive study of Asia and Asian diasporas in the past and present. Global Asia Studies uses cutting-edge humanities methods and goals and includes a range of different disciplines and methodologies, with a broad concentration on the societies of East and South Asia and their global ramifications. It aims to locate the academic study of Asia within the fabric of the community through exciting co- and extra-curricular programming and a commitment to socially responsible and educationally rigorous experiential learning.

The curriculum combines a variety of approaches. The first year A-level courses GAS101H and GAS102H provide both a general introduction to the study of Asia in global perspective, as well as an introduction to historical and cultural approaches to such a study. GAS101H then moves onto introductory courses at the B-level which provide a comprehensive foundation of knowledge in particular areas and fields relevant to studying Asia. For example, see below for courses such as GAS101H.

In upper-level C courses, students investigate specific areas and problems pertaining to East and South Asia in greater depth. They are conducted in lecture and tutorial discussion format. For example, see courses such as GAS201H.

Upper level D-level courses are conducted as small-group seminars where students make close and thorough studies of particular questions and present their findings in class discussions and research essays. For example, see courses such as GAS601H.
The Global Asia Studies minor is designed for those students who wish to acquire a broad general knowledge of Asian societies and cultures. See requirements below.

The Global Asia Studies major and specialist programs are designed for those students who wish to acquire an intensive knowledge of Asia that spans a number of disciplines and fields and which will be helpful in their future career.

Language study for the Global Asia Studies program is particularly important for those students who wish to move onto advanced studies of East or South Asia at university level and to acquire a specialized knowledge base for a range of professional and academic opportunities. Languages offered at the university that count towards the Global Asia Studies degree include Hindi and Mandarin. On a case by case basis, the program accepts other Asian languages taught elsewhere at the university. See requirements below.

**Guidelines for 1st year course selection**

Students who intend to complete a Global Asia Studies program should include GASAOH1 & GASAOH2 in their 1st year course selection. Students are also strongly encouraged to take HUMA1H1 (Exploring Key Questions in Humanities) as early as possible in their studies.

**SPECIALIST PROGRAM IN GLOBAL ASIA STUDIES**

Program Supervisor: J. Sharma  Email: gas-program-supervisor@uottawa.ca

**Program Requirements**

Students must complete 12.0 full credits including at least 4.0 C- or D-level credits of which at least 1.0 must be at the C- or D-level as follows:

1. 1.0 credit must come from:
   - GASAOH1 Introduction to Global Asia I
   - GASAOH2 Introduction to Global Asia II

2. 4.0 credits should be from any of the GAS core courses below:
   - GASBIH1 Methodologies and Issues in Global Asia Studies
   - GASBIH2 Introduction to South Asian Literatures
   - GASBIH3 Introduction to Chinese Literature
   - GASBIH4 Gender and Social Institutions in Asia
   - GASBIH5 Asian Religions and Cultures
   - GASBIH6 Chinese Thought and Culture in Historical Perspective
   - HSBIOH1 Sub-continental Histories: South Asia in the World
   - HISBIH1 Modern Chinese History
   - GASBIH8 Gendering Global Asia
   - GASBIH10 Self and Imagination in Pre-modern China
   - GASC32I Art of Memory: China and the West
   - GASC40I Chinese Media and Politics
   - GASC41I Media and Popular Culture in East and Southeast Asia
   - GASC42I Film and Popular Culture in South Asia
   - GASC50I Comparative Studies of East Asian Legal Cultures
   - GASC51I Politics and Culture in Modern South Asia
   - HISCIH1 China and the World

3. An additional 2.5 credits can be from the above GAS core courses or from the electives below:
   - MDSIOH5 Media and Globalization (formerly HUMB74H1)
   - RLGCIH2 Contemporary Engaged Buddhist Movements in Asia
   - VPHB37I Religion in the Arts: Buddhist Arts and Cultures
   - VPHB37J Visualizing Asia
   - VPHB37K Religion in the Arts: Hinduism and Jainism
   - VPHB37L The Silk Routes
   - VPHC38I Religion in the Arts: Seminar in Buddhism and Art
   - VPHC46J A Tale of Three Cities: Introduction to Contemporary Art in China
   - WSTC19I Gender in East Asian Science and Technology

4. 2.0 credits from any of the D-level courses listed below:
   - GASDOH1 Senior Seminar: Topics in Global Asian Societies
   - GASDOH2 Senior Seminar: Topics in Global Asian Societies
   - GASDOH3 Senior Seminar: Social Change and Gender Relations in Chinese Societies
   - GASDOH4 Senior Seminar: Issues in Chinese Media Studies
   - GASDOH5 Senior Seminar: Social and Cultural Aspects of South Asian Societies
   - HSDSIOH1 Colonialism and Others: Asian Laboring Diasporas in the British Empire
   - HISD5IH1 Culture, Politics, and Society in Late Imperial China
   - HISD5IH2 Law and Society in Chinese History
   - VPHD46I Visual Encounter: The Meeting of Eastern and Western Art
5. An additional 2.5 full credits should be from Asian language courses taught at the university, of which at least 1.5 credits should be from such courses taken at the B, C, or D levels. Preferably, these language courses will be taken in sequence as far as is practicable. The aim is for students to acquire linguistic competence in one or more Asian languages to aid in his or her future professional development. The GAS program director will guide GAS students in choosing from the Asian language courses offered at the university, especially if they face challenges in finding suitable upper-level courses in these languages.

MAJOR PROGRAM IN GLOBAL ASIA STUDIES

Program Supervisor: J. Sharma
Email: gas-program-supervisor@utsc.utoronto.ca

Program Requirements

Students must complete 7.5 full credits of which at least 2.0 must be at the C- or D-level as follows:

1. 1.0 credit must come from:
   GAS301H Introduction to Global Asia I
   GAS402H Introduction to Global Asia II

2. 2.5 credits should be from any of the GAS core courses below:
   GAS310H Methodologies and Issues in Global Asia Studies
   GAS310H Introduction to South Asian Literatures
   GAS311H Introduction to Chinese Literature
   GAS320H Gender and Social Institutions in Asia
   GAS330H Asian Religions and Cultures
   GAS331H Chinese Thought and Culture in Historical Perspective
   HIS370H Sub-continental Historians: South Asia and the World
   HIS375H Modern Chinese History
   GASC200H Gendering Global Asia
   GASC211H Self and Imagination in Pre-modern China
   GASC320H Art of Memory: China and the West
   GASC401H Chinese Media and Politics
   GASC411H Media and Popular Culture in East and Southeast Asia
   GASC421H Film and Popular Culture in South Asia
   GASC500H Comparative Studies of East Asian Legal Cultures
   GASC511H Politics and Culture in Modern South Asia
   HISC570H China and the World

3. An additional 1.0 credits can be from the above GAS core courses or from the electives below:
   MDS8001H Media and Globalization (formerly HUMB741H)
   RELG129H Contemporary Engaged Buddhist Movements in Asia
   VPHC230H Visualizing Asia
   VPHC235H Religion in the Arts: Hinduism and Jainism
   VPHC253H The Silk Routes
   VPHC258H Religion in the Arts: Buddhism and Art
   VPHC274H A Tale of Three Cities: Introduction to Contemporary Art in China
   WSTC191H Gender in East Asian Science and Technology

4. At least 1.0 credits from any of the D-level courses listed below:
   GAS301H Senior Seminar: Topics in Global Asian Cultures
   GAS310H Senior Seminar: Topics in Global Asian Societies
   GAS320H Senior Seminar: Social Change and Gender Relations in Chinese Societies
   GAS341H Senior Seminar: Issues in Chinese Media Studies
   GAS350H Senior Seminar: Social and Cultural Aspects of South Asian Societies
   HIS2540H Confucius and Others: Asian Labouring Diasporas in the British Empire
   HIS2551H Culture, Politics, and Society in Late Imperial China
   HISD5591 Law and Society in Chinese History
   VPHC2401H Visual Encounters: The Meeting of Eastern and Western Art

5. An additional 2.0 full credits should be from Asian language courses taught at the university, of which at least 1.0 credits should be from such courses taken at the B, C, or D levels. Preferably, these language courses will be taken in sequence as far as is practicable. The aim is for students to acquire linguistic competence in one or more Asian languages to aid in his or her future professional development. The GAS program director will guide GAS students in choosing from the Asian language courses offered at the university, especially if they face challenges in finding suitable upper-level courses in these languages.
Program Requirements
Students must complete 4.0 full credits as follows:

1. 1.0 credit must come from:
   GASA01H Introduction to Global Asia I
   &
   GASA02H Introduction to Global Asia II

2. 2.0 credits should be from any of the courses below, of which at least 1.0 credit should be from C- or D-levels:
   GASA01H Methodologies and Issues in Global Asia Studies
   GASA11H Introduction to South Asian Literatures
   GASA21H Introduction to Chinese Literature
   GASA22H Gender and Social Institutions in Asia
   GASA28H Asian Religions and Cultures
   GASA29H Chinese Thought and Culture in Historical Perspective
   HISB57H Sub-continental Histories: South Asia and the World
   HISB58H Modern Chinese History
   GASC22H Gendering Global Asia
   GASC31H Self and Imagination in Pre-modern China
   GASC32H Art of Memory: China and the West
   GASC44H Chinese Media and Politics
   GASC41H Music and Popular Culture in East and Southeast Asia
   GASC42H Film and Popular Culture in South Asia
   GASC38H Comparative Studies of East Asian Legal Cultures
   GASC39H Politics and Culture in Modern South Asia
   HISG21H China and the World
   RLGG12H Contemporary Engaged Buddhist Movements in Asia
   VPHB67H Religion in the Arts: Buddhist Arts and Cultures
   VPHB71H Visualizing Asia
   VPHB75H Religion in the Arts: Hinduism and Jainism
   VPHC33H The Silk Routes
   VPHC43H Religion in the Arts: Seminar in Buddhism and Art
   VPHC44H A Tale of Three Cities: Introduction to Contemporary Art in China
   WSTC19H Gender in East Asian Science and Technology
   GASP21H Senior Seminar: Topics in Global Asian Cultures
   GASP22H Senior Seminar: Topics in Global Asian Societies
   GASP23H Senior Seminar: Social Change and Gender Relations in Chinese Societies
   GASP24H Senior Seminar: Issues in Chinese Media Studies
   GASP30H Senior Seminar: Social and Cultural Aspects of South Asian Societies
   HISD56H Coolies and Others: Asian Labouring Diasporas in the British Empire
   HISD58H Culture, Politics, and Society in Late Imperial China
   HISD59H Law and Society in Chinese History
   VPID46H Visual Encounter: The Meeting of Eastern and Western Art

3. An additional 1.0 credit should be from Asian language courses taught at the university. Preferably, these language courses will be taken in sequence as far as is practicable. The aim is for students to acquire linguistic competence in one or more Asian languages to aid in his or her future professional development. The GAS program director and the LGG coordinator will guide GAS students in choosing, from the Asian language courses offered at the university, especially if they face challenges in finding suitable upper level courses in the language(s) in which they are interested.

GASA01H Introduction to Global Asia I
This course introduces Global Asia Studies through studying historical and political perspectives on Asia. Students will learn how to critically analyze major historical texts and events to better understand important cultural, political, and social phenomena involving Asia and the world. They will engage in intensive reading and writing for humanities. Breadth requirement: History, Philosophy & Cultural Studies

GASA02H Introduction to Global Asia II
This course introduces Global Asia Studies through the study of cultural and social institutions in Asia. Students will critically study important elements of culture and society over different periods of history and in different parts of Asia. They will engage in intensive reading and writing for humanities. Breadth requirement: Arts, Literature & Language
GASC113H3 Methodologies and Issues in Global Asia Studies
This course introduces Global Asia Studies through studying methodologies and issues pertaining to the histories, societies, and cultures of Asia, with specific reference to East and South Asia, and their diasporas. This course is recommended for Global Asia Studies specialists and majors. They will engage in intensive reading and writing for humanities.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: GAS401H or GAS402H

GASC116H3 Introduction to South Asian Literatures
This course introduces students to a range of languages and literatures from South Asia and its regions and provides important cultural insights into these societies. Students also hone their skills in critical reading and writing. The primary texts for the course are translated into English from different South Asian languages.
Breadth requirement: Arts, Literature & Language

GASC117H3 Introduction to Chinese Literature
This course offers a historical overview of Chinese literature and concepts of literary theory. It surveys selected Chinese literature texts with a critical analysis of different genres in socio-political and intellectual contexts. It is conducted in English, with primary texts translated from Chinese into English.
Breadth requirement: Arts, Literature & Language

GASC207H3 Gender and Social Institutions in Asia
This course examines the role of gender in shaping social institutions in Asia.
Breadth requirement: History, Philosophy & Cultural Studies

GASC208H3 Asian Religions and Culture
This course examines the close relationship between religions and cultures, and the role they play in shaping the worldviews, aesthetics, ethical norms, and other social ideals in Asian countries and societies.
Breadth requirement: History, Philosophy & Cultural Studies

GASC215H3 Chinese Thought and Culture in Historical Perspective
This course surveys the history of thought and intellectual culture in China from the 7th through the 17th centuries. Topics studied include the establishment of empires as a norm, literal culture; Neo-Confucianism; aesthetics and landscape painting; the literature of desire; and the contact with the West through Christianity.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: EAS215H

GASC201H3 Gendering Global Asia
This course offers students a critical and analytical perspective on issues of gender history, equity, discrimination, resistance, and struggle facing societies in East and South Asia and their diasporas.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 50
Prerequisite: GAS401H or GAS402H or permission of instructor

GASC213H3 Self and Imagination in Pre-modern China
This course explores the evolving history of how the self was conceived in pre-modern China (from antiquity to the 12th century). Works studied include: Warring States philosophical treatises; Buddhist and Daoist texts on meditation and self-cultivation; literary theory and poetry; philosophical prose essays by literati; and painting.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 50
Exclusion: EAS340H
Prerequisite: GAS401H or GAS402H or permission of instructor

GASC223H3 Art of Memory: China and the West
This course explores how thinkers in pre-modern China and Europe (from antiquity to the thirteenth century) conceived of memory. Reading through parallels as well as divergences, this course invites reflection on how thinking about memory is bound up with thinking about the self and about the sources of subjective identity.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 50
Prerequisite: GAS401H or GAS402H or permission of instructor

GASC408H3 Chinese Media and Politics
This course examines the complex and dynamic interplay of media and politics in contemporary China, and the role of the government in this process.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 50
Prerequisite: GAS401H or GAS402H or permission of instructor

GASC413H3 Media and Popular Culture in East and Southeast Asia
This course introduces students to media industries and commercial popular cultural forms in East and Southeast Asia. Topics include reality TV, TV dramas, anime, and manga as well as issues such as regional cultural flows, global impact of Asian popular culture, and the localization of global media in Asia.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrollment: 50
Exclusion: (HUMC54H1)
Prerequisite: GAS401H or GAS402H or MD5401H or MD5005H or (HUMB74H1 or (NMEA208H1) or permission of instructor
GASC 401H1 Film and Popular Culture in South Asia
This course offers students a critical perspective on film and popular cultures in South Asia. Topics include Bombay, Tamil, and other regional films, industries, their history, production, and distribution strategies, their themes and musical genres, and a critical look at the larger social and political meanings of these filmic cultures.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: GASC 301H1 or GASC 402H1 or permission of instructor

GASC 502H1 Comparative Studies of East Asian Legal Cultures
An introduction to the distinctive East Asian legal tradition shared by China, Japan, and Korea through readings about selected thematic issues. Students will learn to appreciate critically the cultural, political, social, and economic causes and effects of East Asian legal cultures and practices.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: HSB 358H or an equivalent B-level history course in East Asia or permission of instructor

GASC 503H1 Politics and Culture in Modern South Asia
This course studies the history of modern South Asia with an emphasis on the interplay of politics and culture as the region moved towards distinctive forms of Asian modernity and post-coloniality over the nineteenth and twentieth centuries.
Limited enrolment: 50
Prerequisite: HSB 377H or an equivalent B-level history course in East or South Asia or permission of instructor

GASC 504H1 Senior Seminar: Topics in Global Asian Cultures
This course offers an in-depth study of important cultural issues in historical and contemporary Asian and diasporic societies. Themes for study include music, art, cinema, media, literature, drama, and representations. It is conducted in seminar format with emphasis on discussion, critical reading, and writing of research papers.
Limited enrolment: 15
Prerequisite: [GASC 401H1 & GASC 402H1 & one C-level course from the options in the specialist or major program requirement 2] or permission of instructor.

GASC 505H1 Senior Seminar: Topics in Global Asian Societies
This course offers a capstone experience of issues which confront Asian and diasporic societies. Themes include gender, environment, human rights, equity, religion, politics, law, migration, labour, nationalism, post-colonialism, and new social movements. It is conducted in seminar format with emphasis on discussion, critical reading, and writing of research papers.
Limited enrolment: 15
Prerequisite: [GASC 401H1 & GASC 402H1 & one C-level course from the options in the specialist or major program requirement 2] or permission of instructor.

GASC 506H1 Senior Seminar: Social Change and Gender Relations in Chinese Societies
This seminar examines the transformation and perpetuation of gender relations in contemporary Chinese societies. It pays specific attention to gender politics at the micro level and structural changes at the macro level through in-depth readings and research.
Limited enrolment: 15
Prerequisite: [GASC 401H1 & GASC 402H1 & one C-level course from the options in the specialist or major program requirement 2] or permission of instructor.

GASC 507H1 Senior Seminar: Issue in Chinese Media Studies
The Chinese government has played a central role in the development of print, electronic and digital media. Recent changes in the political economy of Chinese media have had strong political and cultural implications. This seminar course examines the complex and dynamic interplay of media and politics in contemporary China.
Limited enrolment: 15
Prerequisite: [GASC 401H1 & GASC 402H1 & one C-level course from the options in the specialist or major program requirement 2] or permission of instructor.

GASC 508H1 Senior Seminar: Social and Cultural Aspects of South Asian Societies
This course offers an in-depth study of important social and cultural aspects of South Asian societies. It is conducted in seminar format with emphasis on discussion, critical reading, and writing of research papers.
Limited enrolment: 15
Prerequisite: [GASC 401H1 & GASC 402H1 & one C-level course from the options in the specialist or major program requirement 2] or permission of instructor.

Health Studies
(B.A./B.Sc.)

Faculty List
F. D. Burton, B.Sc., M.A., (NYU), Ph.D. (CUNY), Professor Emeritus
A. E. Binn, B.A. (Oxford), M.A. (University of Canterbury), Sc.D. (Johns Hopkins), Associate Professor
C. Barakat, B.Sc. (Toronto), M.E.S. (York), Ph.D. (McMaster), Assistant Professor
T. Beydoun, B.A., M.S.W., Ph.D. (Toronto), Assistant Professor
M. Hunter, B.A. (Surrey), M.A. (Univ. of Natal), Ph.D. (Univ California, Berkeley), Assistant Professor
M. Silver, B.A., B.S., & M.P.P. (Univ California, Berkeley), Ph.D. (Univ of Chicago), Assistant Professor

Undergraduate Counsellor: J. Roopnarine Singh Email: social-sciences-counsellor@utsc.utoronto.ca

Health is an extremely important area of study, from a biological, social, and policy perspective. Social scientists consider a wide range of questions, such as: How does individual behaviour affect health? How can we design health care systems and public policy so as to promote health? How does health vary over the life course and between men and women? What can be learned from large
scale survey data about health patterns and the health of populations? The Health Studies Program combines 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. Students in Health Studies are encouraged to combine their program with another major in a relevant discipline.

Guidelines for first-year course selection

Students intending to complete a program in Health Studies should take one of the following sets of courses in first year: [ANTA0LH & ANTA02H] or [BOYA01H & BOYA02H] or [ECMA0LH & ECMA03H] or [ECMA02H & ECMA05H] or [GGRA02H & GGRA03H] or [GGRA01H & GGRA02H] or [PSYD01H & PSYD02H] or [SOGC01H & SOGC02H] or [SOGC01H & SOGC02H] or [SOGC01H & SOGC02H].

Note: It is Department policy that students must meet all relevant prerequisites, exceptions will be made only in the case of special circumstances. Students should check carefully the prerequisites required for particular B- and C-level courses. Note that some courses (e.g., BIO, ECM & SOC) are part of limited enrolment programs, with first preference in these courses going to students enrolled in these programs.

MAJOR (CO-OPERATIVE) PROGRAM IN HEALTH STUDIES

Co-op Contact: askcoo@con.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 Program section of this Calendar.

Minimum qualifications for entry following first year: 4.0 credits, including 1.0 from [ANTA01H & ANTA02H] or [BOYA01H & BOYA02H] or [ECMA01H & ECMA03H] or [ECMA02H & ECMA05H] or [GGRA02H & GGRA03H] or [GGRA01H & GGRA02H] or [PSYD01H & PSYD02H] or [SOGC01H & SOGC02H], 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 requirement in sections 1 and 2 plus any 1.0 credit from among requirements 3 and 4 below. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

Course Requirements

See requirements for Major Program in Health Studies. In addition, students are required to include HLTD02H, Health Research Seminar.

MAJOR PROGRAM IN HEALTH STUDIES (B.A./B.SC.)

Program Requirements

This program requires a minimum of 7.5 full credits as follows:

Note: A single course may be applied to one requirement only even if it is listed more than once.

1. Background Courses and Methodology

1.5 credits from one of the following groups:

[ANTA01H & ANTA02H & ANTC01H]

or

[BIOA01H & BIOA02H & BIOB01H]

or

[ECMA01H & ECMA03H & ECMB01H]

or

[GGRA02H & GGRA03H & GGRB01H]

or

[PSYD01H & PSYD02H & PSYB01H]

or

[SOGC01H & SOGC02H & SOGC03H]

2. Specialized Methods in Health Studies (1.0 credit as follows)

HLTA10H Introduction to Research in Health Studies

HLTH10H Introduction to Quantitative and Qualitative Research Methods in Health Studies

Note: HLTH10H will be offered for the first time in 2011/12 and will require HLTA10H as a prerequisite.
3. **Introduction to Health (3.0 credits)**
1.5 credits as follows
- HLTAD101 Plagues & People
- HLTDB03H Foundations in Health Studies
  - [HLTB01H Health, Aging & the Life Cycle or HLTB02H Issues in Child Health & Development or HLTB04H Health & the Urban Environment]

and
1.5 credits from:
- ANTB14H Biological Anthropology: Beginnings
- ANTB15H Contemporary Human Evolution and Variation
- ANTB19H Ethnography and the Comparative Study of Human Societies
- ANTB20H Culture, Politics and Globalization
- ANTB64H The Anthropology of Food: Consuming Passions
- EESA10H Human Health and the Environment
- GGRB28H Geographies of Disease
- HLTB01H Health, Aging and the Life Cycle
- HLTB02H Issues in Child Health and Development
- HLTB04H Health and the Urban Environment
- IDSB04H International Health Policy Analysis
- PHILB09H Biomedical Ethics
- PSYB22H Abnormal Psychology
- PSYB55H Human Brain and Behaviour

4. **Advanced Health Courses**
   At least 1.5 credits from:
- ANTC51H Medical Anthropology: Illness and Healing in Cultural Perspective
- ANTC52H Medical Anthropology: Biological and Demographic Perspectives
- (ANTC53H) The Anthropology of Food: Human Needs
- ANTC67H Foundations of Epidemiology
- ANTC68H Deconstructing Epidemics
- ANTD01H The Body in Culture and Society
- ANTD17H Medical Anthropology: Public Health Perspectives on Human Skeletal Health
- (ANTO22H) Ethnomedicine
- ANTD25H Prehistory: Public Health Perspectives on Zoonotic Diseases
- BIOC17H Microbiology I: The Bacterial Cell
- BIOC21H Vertebrate Histology: Cells and Tissues
- (BGYC22H) Vertebrate Histology: Organs
- ECMC348 Economics of Health Care
- GGRD10H Health and Sexuality.
- HLTCD01H Directed Research on Health Services and Institutions
- HLTCD02H Women and Health: Past and Present
- HLTCD03H The Politics of Canadian Health Policy
- HLTDO1H Directed Readings in Health Studies
- HLTDO2H Health Research Seminar
- IDSC11H Issues in International Health
- NROD67H Psychobiology of Aging

5. 0.5 credit from:
- HLTDO1H Directed Research on Health Services and Institutions
- HLTDO2H Women and Health: Past and Present
- HLTDO3H The Politics of Canadian Health Policy
- HLTDO1H Directed Readings in Health Studies
- HLTDO2H Health Research Seminar
- ANTC67H Foundations of Epidemiology
- ANTC68H Deconstructing Epidemics

6. For this program, no more that 4.0 credits can be counted from any single course prefix (e.g., ANT) other than HLT.

7. For the Major in Health Studies alone to qualify for B.Sc. Major, at least 5.0 credits 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 courses (e.g., BIO, ECM & SOC) are part of limited enrolment programs, with first preference in these courses going to students enrolled in those programs.
MINOR PROGRAM IN HEALTH STUDIES (B.A.)

Program Requirements
This program requires 4 full credits as follows:

1. Introduction to Health (2.5 credits)
   1.0 full credit as follows:
   HLT A01H Plagues and Peoples
   HLT B03H Foundations in Health Studies
   and
   1.5 full credits from:
   ANTH 441H Biological Anthropology: Beginnings
   ANTH 515H Contemporary Human Evolution and Variation
   ANTH 643H The Anthropology of Food: Consuming Passions
   GGRD 298H Geography of Disease
   HLT B01H Health, Aging and the Life Cycle
   HLT B02H Issues in Child Health and Development
   HLT B04H Health and the Urban Environment
   IDIS 404H International Health Policy Analysis

2. Advanced Health
   1.5 full credits from:
   ANTC 609H Medical Anthropology: Illness and Healing in Cultural Perspective
   ANTC 628H Medical Anthropology: Biological and Demographic Perspectives
   (ANTC 630H) The Anthropology of Food: Human Needs
   ANTC 676H Foundations of Epidemiology
   ANTC 688H Dissecting Epidemics
   ANTD 101H The Body in Culture and Society
   ANTD 170H Medical Osteology: Public Health Perspectives on Human Skeletal Health
   (ANTD 230H) Ethnomedicine
   ANTD 225H Primateology: Public Health Perspectives on Zoonotic Diseases
   ECMC 341H Economics of Health Care
   GGRD 101H Health and Sexuality
   HLT C01H Directed Research in Health Services and Institutions
   HLT C02H Women and Health: Past and Present
   HLT C03H The Politics of Canadian Health Policy
   HLT D01H Directed Readings in Health Studies
   IDSC 111H Issues in International Health

3. For this program, no more than 2.0 full credits can be counted from any single course prefix (e.g., ANT) other than HLT

HLTA 01H 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 "plagues" emerge and how their occurrence is intimately linked to human behaviour.
Breadth requirement: Social & Behavioural Sciences

HLTA 015H Introduction to Research in Health Studies
The objective of this course is to introduce students to the main principles that are needed to undertake health-related research. Students will be introduced to the concepts and approaches to health research, the nature of scientific inquiry, the role of empirical research, and epidemiological research designs.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: HLTA 01H

HLTB 01H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisites: HLTA 01H or [ANT A01H & ANTA 02H] or [BIOA 01H & BIOA 02H] or [PSYA 01H & PSYA 02H]

HLTB 02H3 Issues in Child Health and Development
This course will explore socio-spatial 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: HLTA 01H or [ANT A01H & ANTA 02H] or [BIOA 01H & BIOA 02H] or [PSYA 01H & PSYA 02H]

HLTB 03H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisites: HLTA 01H or [ANT A01H & ANTA 02H] or [BIOA 01H & BIOA 02H] or [PSYA 01H & PSYA 02H]
HLTB03H3 Foundations in Health Studies
This course is designed to introduce theory, contemporary topics, and analytical techniques related to the study of health issues. Examples of topics include social determinants of health, basic anatomy, introduction to child development, introduction to the life course and aging, disease, health economics and policy, and applicable research methods.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: HLTSA1H
Recommended preparation: High School Biology is advisable
Corequisite: HLTBC0H or HLTBC2H

HLTB04H3 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.
Breadth requirement: Natural Sciences
Exclusion: (ANTIB5H)
Prerequisite: Any A-level course

HLTB10H3 Introduction to Quantitative and Qualitative Research Methods in Health Studies
The objective of the course is to introduce students to the research methods and approaches used by health and social scientists to investigate health issues. Students will learn about the experimental method, survey method in health research, qualitative interviews, ethnography, among other methods. The course will expand their research skills set in health sciences and the social sciences. They will also learn quantitative and qualitative data analysis approaches.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: HLTSA1H & HLTSA1O1

HLTC52H3 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 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 IDSBS0H and complement work in HLTBC0H. Students must obtain consent from the Supervisor of Studies and supervising instructor before registering for this course.
Prerequisite: HLTSA1H & IDSBS0H & permission of the instructor & a cumulative GPA of at least 3.0.

HLTC62H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: ANTC51H or IDSBS0H or B-level course on women's studies/gender

HLTC63H3 Politics of Canadian Health Studies
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 Canadians' attachment to Medicare are discussed.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (POLC55H)
Prerequisite: Any 5.0 credits, POLBS6H & POLBS2H are highly recommended.

HLTD01H3 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

HLTD02H3 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 enrolment: 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 10.0 credits from the requirements of the Major Program in Health Studies, including completing the methodology requirements from Requirements 1 and 2.
History
(B.A.)

Faculty List
J.S. Mintz, M.A., Ph.D. (Toronto), D.D. (Presb. College, Montreal), Professor Emeritus
M.R. Robertson, M.A. (McGill), Ph.D. (Toronto), Professor Emeritus
A. Sheps, M.A., Ph.D. (Toronto), Associate Professor Emeritus
E.W. Dowler, A.M. (Harvard), Ph.D. (London School of Economics), Professor
M. Elekansky, B.A. (Toronto), B.Phil., D.Phil. (Oxon.), Professor
M. Gersway, A.B. (Princeton), M.A. (Penn), Ph.D. (Toronto), Professor
F. Jacobvits, M.A., Ph.D. (York, Canada), Professor
R.A. Kaita, M.A., Ph.D. (Perugia/Vanuatu), Associate Professor
S.J. Rokoff, M.A., Ph.D. (Toronto), Associate Professor
D.E. Bender, M.A., Ph.D. (New York), Assistant Professor
K. Blouin, B.A., M.A., Ph.D. (Leiden and Nice), Assistant Professor
L. Chen, B.A. (Beijing Foreign Studies), M.A. (UNY Buffalo), J.D. (Illinois), M.A., M.Ph., Ph.D. (Columbia), Assistant Professor
C.J. Pennington, B.A. (York, Canada), Ph.D. (Toronto), Assistant Professor
E.N. Rothman, M.A. (Tel Aviv), Ph.D. (Michigan), Assistant Professor
J. Sharma, B.A. (Lady Shri Ram), M.A. (Hindu), M.Phil. (Delhi), Ph.D. (Cambridge), Assistant Professor
C. Berekwitz, B.A. (Colorado), Ph.D. (Toronto), Lecturer

Program Director: W. Dowler (416-287-7165) Email: dowler@utsc.utoronto.ca

The study of History is vital for our understanding of the present. It offers multiple ways of explaining both how the contemporary world emerged, and how past societies differed from our own. The History Program at UTSC provides a dynamic introduction to the global transformations that have taken place over the past two millennia, while also focusing on the experiences and contributions of ordinary men and women to these transformations. Our curriculum spans the history of all parts of the world in their complex, transitional connections, and covers a broad range of topics, including religion and everyday life, colonialism, the relations between women and men, the history of work, the environment, urbanization, immigration, race and ethnicity, and material culture. Findings in history depend upon the precise evaluation of specific evidence, be it texts, images, or objects, and the History Program emphasizes the critical reading, research, and writing skills which are necessary for the study of the past and for a wide range of professional activities beyond the university, innovative and interdisciplinary. History courses play a part in a number of other programs, including Classics, Global Asia Studies, and Intersections in the Humanities, and can also complement and enhance courses in Politics, Philosophy, Literature, Arts, Economics, Sociology, and Anthropology.

The History curriculum encompasses a variety of approaches in order to build a range of knowledge and skills. A-level courses provide both a general introduction to the study of history at the university level and the preparation for further studies in transnational and global history. B-level surveys offer a comprehensive foundation of knowledge in their particular areas, including the histories of particular nation-states and regions of the world. In C-level courses, students investigate more specific places, periods, or problems through lectures and tutorials. D-level courses are conducted as seminars, where students make close and thorough studies of particular questions and present their findings in discussions, essays, and research papers. History courses at all levels cover a range of periods, from antiquity to the present, and explore a variety of world regions, from North America and Africa, through Europe and the Mediterranean, to South and East Asia. The History curriculum as a whole stresses training in writing, research, and historical methods; these skills are also the focal point of two specialized courses: HSB01H—Critical Writing and Research for Historians and HISC01H—History and Evidence.

Knowledge of other languages is essential to advanced study in history. If you plan to take history to an advanced level, we strongly encourage early study of an appropriate language for your program or areas of interest. Specialists may enrol in the Language Stream, which is designed to foster such language training.

The History Study Guide is available at: http://www.uts.utoronto.ca/~humdev/History/studyguide/

Guidelines for 1st year course selection
Students intending to complete a program in History should take two of the following courses in the first year: GASA01H, HIS004H & HIS005H.

Note: The History discipline urges students who plan to specialize or major in History to take HUMA01H (Exploring Key Questions in Humanities) at the beginning of their studies.

Note: Students are advised to consult the prerequisites for C-level and D-level courses when planning their individual programs.

Note: 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
Program Supervisor: R. Kazal (416-287-7133) Email: history-program-supervisor@utsc.utoronto.ca

Program Requirements

1. Number of Credits
   Students must complete at least twelve full credits in History. These twelve must include two of GA3A01H, HIS3A04H, HIS3A05H, as well as HIS3B03H, HIS3C01H and five (in addition to HIS3C01H) full credits at the C- or D-level. At least one of the five C- or D-level credits must be at the D-level.

2. Pre-1800 Credits
   Of the twelve credits, at least two full credits must deal with the period prior to 1800.

3. Areas of Study
   Students are required to include in their program five full credits distributed over four of the following areas:
   a) Canadian
   b) United States and Latin America
   c) Medieval
   d) European
   e) Africa and Asia
   f) Transnational
   g) Ancient World
   Of the five full credits at least one full credit must be in Canadian history.

Specialist Program in History—Language Stream

Students registered in the Specialist Program in History have the option of registering in the Language Stream. Students in the Language Stream must complete the Specialist Program in History and 2.0 credits in a single language. This option is designed to encourage Specialists to undertake language study with an eye to engaging historical writing and sources in the original language. Specialists who wish to demonstrate proficiency in a given language on their transcript should undertake the additional study that would qualify them for the UTSC Language Citation.

MAJOR PROGRAM IN HISTORY
Program Supervisor: R. Kazal (416-287-7133) Email: history-program-supervisor@utsc.utoronto.ca

Program Requirements

1. Number of Credits
   Students must complete seven full credits in History. These seven must include two of GA3A01H, HIS3A04H, HIS3A05H, as well as HIS3B03H and three C- or D-level courses.

2. Pre-1800 Credits
   Of the seven credits at least 1.5 credits must deal with the period prior to 1800.

3. Areas of Study
   Students must take one full credit in Canadian history and at least one half credit in two of the following areas of history:
   a) United States and Latin America
   b) Medieval
   c) European
   d) African and Asia
   e) Transnational
   f) Ancient World

MINOR PROGRAM IN HISTORY
Program Supervisor: R. Kazal (416-287-7133) Email: history-program-supervisor@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.

HIS3A04H 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.
Breadth requirement: History, Philosophy & Cultural Studies

HIS3A05H 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.
Breadth requirement: History, Philosophy & Cultural Studies
HISB20H3 The British Empire: A Short History
The British Empire at one time controlled a quarter of the world’s population. This course surveys the nature and scope of British imperialism from the sixteenth to the twentieth century, through its interactions with people and histories of Asia, Africa, the Americas, the Caribbean, the Pacific, and the British Isles.
Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies

HISB03H3 Critical Writing and Research for Historians
Practical training in critical writing and research in History. Through lectures, discussion and workshops, students will learn writing skills (including essay organization, argumentation, documentation and bibliographic style), an introduction to methodologies in history and basic source finding techniques.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 25
Exclusion: HISB01H3

HISB18H3 History on Film
An examination of selected historical events or phenomena and their depiction in film. 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.
Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies

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.
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS239H3, HIS349H1

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.
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS239H3, HIS349H1
Prerequisite: HISB20H1

HISB39H3 American History to the Civil War
A survey of American history from contact between Indians and Europeans up through the Civil War. Topics include the emergence of colonial societies; the rise and destruction of racial slavery; revolution and republic-making; economic and social change in the new nation; western conquest; and the republic’s collapse into internal war.
United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS271Y

HISB31H3 History of the United States since the Civil War
This course offers a survey of U.S. history from the post-Civil War period through the late 20th century, examining key episodes and issues such as settlement of the American West, industrialization, urbanization, immigration, popular culture, social movements, race relations, and foreign policy.
United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS271Y
Prerequisite: HISB30H

HISB40H3 Canadian 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.
Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS262Y, HIS263Y

HISB41H3 Canadian History Since 1885
Topics include cultural conflict: the optimism of the Laurier period, the impact of the two world wars, political independence, Amerindianization and relations with the United States, regionalism, and relations between English-speaking and French-speaking Canada.
Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS262Y, HIS263Y
Prerequisite: None, but HISB40H highly recommended.

HISB50H3 Africa 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.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC50H1, HIS295H1, HIS396H1, HIS396Y1
Prerequisite: Any modern history course or AFSA40H1 or permission of the instructor.
HIS8513 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.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS2510, HIS2841H, HIS285Y
Prerequisite: None, but AFSAA01H or HIS250H is strongly recommended.

HIS5753 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.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS282Y, HIS282H

HIS558H3 Modern Chinese History
This course provides an overview of the historical changes and continuities of the major cultural, economic, political, and social institutions and practices in modern Chinese history.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS280V

HIS60H3 Europe in the Early Middle Ages (805-1053)
The development of Europe from the Late Roman period to the eleventh-century separation of the Roman and Byzantine Churches. The course 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.
0.50 pre-1800 credit
Medieval Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS220Y

HIS61H3 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.
0.50 pre-1800 credit
Medieval Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS220Y
Prerequisite: none, but HIS660H is highly recommended.

HIS626H3 The Early Modern Mediterranean, 1500-1800
An exploration of the interplay of culture, religion, politics and commerce in the Mediterranean region from 1500 to 1800. Through travel narratives, autobiographical texts, and visual materials we will trace how men and women on the Mediterranean’s European, Asian, and African shores experienced their changing world.
0.50 pre-1800 credit
Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies

HIS70H3 Kievian Rus and Mosc computing, 500-1689
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.
0.50 pre-1800 credit
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS250Y

HIS71H3 Imperial Russia, 1682-1900
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.
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS250Y

HIS72H3 Revolutionary Russia, 1900 - Present
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 experimentations of the 1920s, collectivization and industrialization, the Stalin cult, the disintegration of Stalinism and the end of the USSR.
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS250Y
HISC963H Modern Europe 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
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC438H

HISC964H Modern Europe 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
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC438H

HISC973H 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 making 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. European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (HISC901H) Prerequisite: HISC901H

HISC973H History of Animals and People
An examination of the places of animals in global history. The course examines on-going interactions between humans and animals through hunting, zoom, breeding, and pets and the historical way the divide between humans and animals has been measured. Through animals, people have often thought about what it means to be human. Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC903H Prerequisite: Any 2.5 credits in History or permission of instructor

HISC144H Edible History: History of Global Foodways
An exploration of how eating traditions around the world have been affected by economic and social changes, including imperialism, migration, the rise of a global economy, and urbanization. Topics include: immigrant cuisines, commodity exchanges, and the rise of the restaurant. Lectures will be supplemented by cooking demonstrations. Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Two of (HISA01H), (HISA02H), HISA04H, HISA05H

HISC159H 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. 0.50 per 1.00 credit European Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC244H, HISC341V
Prerequisite: 1.0 credit at B-level in European history

HISC320H The Emergence of Modern America, 1877-1933
Overview of the political and social developments that produced the modern United States in the half-century after 1877. Topics include urbanization, immigration, industrialization, the rise of big business and of mass culture, imperialism, the evolution of the American colour line, and how Americans used politics to grapple with these changes. United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: (HISC301H & HISC31H)

HISC330H Modern American Political Culture
An examination of the relationship between culture and politics in modern American history. The course considers culture as a means through which Americans expressed political desires. Politics, similarly, can be understood as a forum for cultural expression. Topics include imperialism, immigration and migration, the Cold War, and the "culture wars" United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: (HISC301H & HISC31H) or permission of instructor

HISC350H 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 era, nativism, stresses towards pluralism and assimilation, and how migration experiences have varied by race, class, and gender. United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: (HISC301H & HISC31H) or permission of instructor

HISC360H Immigrants and Race Relations in Canadian History
An examination of aspects of the history of immigrants and race relations in Canada, particularly for the period 1541-1960s. The course covers various immigrant and racialized groups and explores how class, gender and race/ethnicity shaped experiences and racial/ethnic relations. Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Any 4.0 credits
HISC409H3 Introduction to Canadian International Relations
A survey of Canada's place in the world from its origins to the present day, with an emphasis on the post-Confederation period. Topics covered will include Canada's evolving role in the British Empire, Canadian-American relations, the World Wars, the Cold War, peacekeeping, and the question of national identity.
Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC311H, HISC315Y
Prerequisite: Any four credits
Recommended preparation: HISC400H, HISC414H

HISC479H3 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
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISC311H, HISC315Y
Prerequisite: HISC404H & HISC414H

HISC529H3 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.
0.50 pre-1800 credit
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: A History credit considering Europe, Africa or Asia before 1800.
Highly recommended: One of (HISC501H, HISC503H, HISC508H or HISC511H)

HISC529H3 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, women and war, repressive and weak states, the Cold War, guerrilla movements, resource predation. Case studies of anticolonial rebellions, liberation wars, and civil conflicts will be chosen from various regions.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: HISC508H or HISC511H or (HISC510H or HISC515H) or permission of the instructor

HISC579H3 China and the World
A study of the history of China's relationship with the rest of the world in the modern era. The readings focus on China's role in the global economy, politics, religious movements, transnational diasporas, scientific/technological exchanges, and cultural encounters and conflicts in the ages of empire and globalization.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: Any 4.0 credits
Recommended: HISC599H

HISC589H3 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.
Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Two of (HISC501H, HISC525H, HISC544H, HISC555H) or 1.0 credit in Modern History

HISC609H3 Old Worlds? Strangers and Foreigners in the Mediterranean, 1200-1700
An exploration of how medieval and early modern societies encountered foreigners and accounted for foreigners, as well as for religious, linguistic, and cultural difference more broadly. Topics include: monsters, reliefs, pilgrimage, the rise of the university, merchant companies, mercenaries, piracy, captivity and slavery, tourism, and the birth of resident embassies.
0.50 pre-1800 credit
Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Corequisite: At least one of HISC601H, HISC604H or HISC621H

HISC699H3 Venice and Its Empires, 800-1800
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 colonization in the Mediterranean, state building and piracy, aristocracy and slavery, civic ritual and spirituality, guilds and confraternities, households and families.
0.50 pre-1800 credit
European Area
Prerequisite: 1.0 credit in History

HISC709H3 Social History of Imperial Russia, 1700-1800
The development of Russian society from the revolutionary reforms of Peter the Great to the counter-revolutionary reforms of Alexander II. Topics include peasant society, the nobility, women, urbanization, and proletarianization.
European Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: HISC721H or any 2.5 credits in HIS
HISD793H3 Social History of Revolutionary Russia, 1906-Present
Social 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.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS351H1, HIS351Y
Prerequisite: HIS872H or any 2.5 credits in HIS

HISC093H3 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.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (HIS317H1, HIS317Y), HIS330H
Prerequisite: HIS890H

HISC093H3 Modern Germany II: The Twentieth Century
German history from the First World War to the present day. The two world wars, the Weimar Republic, the rise of Hitler, the Third Reich, the Holocaust, the division of Germany, the Cold War, European Union, and German reunification are among the topics covered.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HIS317H1, (HIS317Y)
Prerequisite: HIS891H

HISD01H3 HISD02H3 Independent Studies: Senior Research Project
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 historical field which is of common interest to both student and supervisor.
Exclusion: HIS497Y1, HIS499H1, HIS499H1, HIS499Y1
Prerequisite: At least 15.0 credits and completion of the requirements for the Major Program in History; written permission must be obtained from the instructor in the previous session.

HISD04H3 Missionaries and Converts in the Early Modern World
A seminar exploring how early modern people thought about and practiced community, belief, and ritual. We will relate religious and social change in the missions and other cultural contexts.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS862H or (HIS880H1) or (HIS881H1) or permission of instructor

HISD05H3 Between Two Worlds: Translators and Interpreters in History
A seminar exploring the social history of translators, interpreters, and the texts they produce. Through several case studies from Ireland and Iran to Quebec, Mexico City, and Goa, we will ask how translators shaped public understandings of "self" and "other," "civilisation" and "barbarity" in the wake of European colonization.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: [HIS862H & HIS868H1] or permission of instructor

HISD06H3 Global History of Crime and Punishment since 1750
An exploration of the global problem of crime and punishment. The course investigates how the global processes of colonialism, industrialisation, capitalism and liberalisation affected modern criminal justice and how the state-society relationship and modern citizenship in different cultures across time and space.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: Two half credits in History and/or Global History Studies at or above B-level or permission of the instructor.

HISD08H3 Borderlands and Beyond: Thinking about a North American History
An examination of approaches to historical analysis that take us beyond the national narrative beginning with the study of borderlands between the United States and Mexico, comparing that approach with the study of Canada/United States borderlands and finishing with themes of a North American continental or transnational nature.
Economic Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: Any 11 credits, including [HIS830H1 & HIS831H1] or HIS840H & HIS841H1 & one C-level course in Canadian or United States History.
HIS330H3 Gendering America
The history of gender in the United States from the era of exploration 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. United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS330H1 & HIS331H1 or permission of instructor

HIS351H3 Thinking of Diversity: Perspectives on American Pluralism
A seminar exploring the evolution of American thinking about diversity—ethnic, religious, and regional—from colonial-era defenses of religious toleration to today’s multiculturalism. Participants will consider pluralist thought in relation to competing ideologies, such as nativism, and compare American pluralism to formulations arrived at elsewhere, including Canada. Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS330H1 & HIS331H1 or permission of instructor

HIS346H3 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/or the history of slavery and emancipation. United States and Latin America Area
Limited enrolment: 15
Prerequisite: HIS330H1 & HIS331H1

HIS353H3 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. United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS330H1 & HIS331H1

HIS356H3 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. United States and Latin America Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS330H1 & HIS331H1

HIS40H3 Canadian Political Leadership, 1608 to Present
A seminar course that investigates the tradition of political leadership in Canada, from New France to the present day, with an emphasis on the post-Confederation period and the governing styles of major figures such as Sir John A. Macdonald, William Lyon Mackenzie King, and Pierre Trudeau. Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS40H1 & HIS41H1
Recommended preparation: A C-level Canadian History course

HIS42H3 Selected Topics in Canadian Diplomatic and Military History
A seminar course that takes a case-study approach and examines important controversies in the history of Canadian warfare and diplomacy. Specific topics will vary from year to year. Canadian Area
Limited enrolment: 15
Exclusion: HIS40H3
Prerequisite: HIS40H1 & HIS41H1 or HIS360H

HIS46H3 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 economics, sexuality, and women and the courts. We will also explore topics in gender history, including masculinity studies and gay history. Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: Any credit in Canadian History

HIS47H3 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, and experiences within a comparative North American context. Weekly readings are organized around a particular theme or set of themes, including the national insecurity state; reds, spies, and civil liberties; suburbs and sexuality. Canadian Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HIS41H & at least one other B- or C-level credit in History
HIS5D5H3 Southem Africa, 1652-1910
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 miscalculation, and the South African War. Extensive reading and student presentations are required.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HISB55H3 or (HISC50H3) or any 2.5 credits in History or permission of instructor

HIS5D5H3 Southem Africa: Colonial Rule, Apartheid and Liberation
A seminar study of southern African history from 1910 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.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HISB51H3 or HISD50H3

HIS5D5H3 East African Societies in Transition
A seminar study of East African peoples from late pre-colonial times to the 1960s, emphasizing their rapid although uneven adaptation to integration 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.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: [One of HISB55H3, HISB51H3, (HISC50H3), (HISC51H3)] or any 2.5 credits in History or permission of instructor

HIS5D6H3 'Cookes' and Others: Asian Labouring Diasporas in the British Empire
'Cookes' laboured formed an imperial diaspora linking South Asia and China to the Caribbean, Africa, the Indian Ocean, South-East Asia, and North America. The long-lasting results of this history are evident in the cultural and ethnic diversity of today's Caribbean nations and Commonwealth countries such as Great Britain and Canada.
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: [One of HISB20H3, HISB21H3, HISB40H3, HISB50H3, HISB55H3, HISB57H3, HISB60H3, HISB61H3, (HISC51H3), HISC52H3, HISC56H3, HISC57H3, (HISC54H3), (HISC55H3) or 2.0 credits in the
B- or C-level in Modern History.

HIS5D6H3 Culture, Politics, and Society in Late Imperial China
A study of major cultural trends, political practices, social customs, and economic developments in late imperial China (1400-1911) as well as their relevance to modern and contemporary China. Students will read the most recent literature and write a substantive research paper.
0.5 pre-1800 credit
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: 8.0 credits including GASAN1H4 or HISB55H3

HIS5D6H3 Law and Society in Chinese History
A seminar course on Chinese legal tradition and its role in shaping social, political, economic, and cultural developments, especially in late imperial and modern China. Topics include the foundations of legal culture, regulations on sexuality, women's property rights, crime fictions, private-state violence, laws of ethnicities, prison reforms and modernization.
0.5 pre-1800 credit
Africa and Asia Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HISB65H3

HIS5D6H3 Travelling and Travel-Writing from the Middle Ages to the Early Modern Period
The development of travel and travel narratives before 1800, and their relationship to trade and colonization in the Mediterranean and beyond. Topics include: Marco Polo, pilgrimage and crusading, the history of geography and ethnography. Extensive reading, oral presentations, and a final paper based on research in primary documents are required.
0.50 pre-1800 credit
Transnational Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HISB62H3.
Recommended preparation: HISC60H4

HIS5D6H3 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.
0.50 pre-1800 credit
Medieval Area
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Prerequisite: HISB60H4 & HISB61H3
HISD04H3 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.
- 0.50 pre-1800 credit
- Medieval Area
- Breadth requirement: History, Philosophy & Cultural Studies
- Limited enrolment: 15
- Prerequisite: HISB06H1 & HISB06H1

HISD09H3 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
- Breadth requirement: History, Philosophy & Cultural Studies
- Limited enrolment: 15
- Prerequisite: One C-level credit in European History.

CLABS05H3 History and Culture of the Greek World
CLABS06H3 History and Culture of the Roman World
CLACS05H2 Environment, Society and Economy in Peloponnesian and Roman Egypt
CLAC24H3 Multiculturalism and Cultural Identities in the Greek and Roman Worlds
CLAD05H3 Water Management in the Ancient Mediterranean World

These courses may be used to fulfill History Program requirements. (See the Classical Studies section of this Calendar for full descriptions.)
- Pre-1800 courses
- Ancient World Area

GASG01H3 Introduction to Global Asia I
GASG02H3 Comparative Studies of East Asian Legal Cultures

These courses may be used to fulfill History Program requirements. (See the Global Asia Studies section of this Calendar for full description.)
- Africa and Asia Area

IEEC44H3 Themes in Translation and Cultural Mediation I

This course may be used to fulfill History Program requirements. (See the Intersections, Exchanges, Encounters in the Humanities section of this Calendar for full description.)
- Transnational Area

Humanities (B.A.)

Faculty List
E. Khoob, B.Sc. Ed. (USM), M.A., TESOL (Reading), Ph.D. (USQ), Senior Lecturer
M. Petit, M.A., Ph.D. (Colombia), Lecturer
C. Smith, M.A., Ph.D. (Toronto), Lecturer

As a broad and diverse collection of disciplines, the Humanities examine how we construct our aesthetic, intellectual, emotional, ethical, social, and political worlds, and they look comparatively at the differences in such constructions in different times and places, and for different people. The Humanities thus study human culture in all of its rich diversity while also seeking to understand the ways in which humans are interconnected.

As an approach to knowledge, the Humanities rely on analytic, critical, interpretive and evaluative methods of inquiry that are markedly distinct from the empirical methods of the natural and social sciences. The Humanities focus on the subjective constructions of the world around us as forms of identity and human expressions in order to better understand what it means to be human.

As one of the U of T Scarborough's academic departments, Humanities houses several distinct disciplines and programs including African Studies, Classical Studies, French, Global Asia Studies, History, Humanities Co-op, Intersections, Exchanges, Encounters in the Humanities, Journalism, Linguistics, New Media Studies, Religion, Visual and Performing Arts, and Women's and Gender Studies. Each of these is listed under its own heading in the Calendar and offers a range of courses in its own program(s) of study.

The Humanities Department also offers, under the rubric HUM, courses that fall outside the purview of the individual Humanities disciplines. These courses help establish an intellectual context in which students can explore different approaches to learning and benefit from a comparative and interdisciplinary approach to knowledge.
HUMA1H3 Exploring Key Questions in the Humanities
Academic study in the Humanities is distinguished by its critical and historical approaches to text, image, and sound. This course introduces students to key questions through thought-provoking lectures and readings, performances, and intense small group discussions. Students experience the dynamism and diversity of the Humanities and humanistic inquiry while refining their critical thinking and communication skills. HUMA1H3 is a writing intensive course that offers students regular constructive feedback. Breadth requirement: Arts, Literature & Language

HUMA1H3 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. Breadth requirement: Arts, Literature & Language
Exclusion: (LGG1A1H). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

HUMA1H7H 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 specially 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 HUMA1H7H must also be enrolled in HUMA1H8H. Breadth requirement: Arts, Literature & Language
Exclusion: (LGGA1A1H), (LGGA9A9H). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Corequisite: HUMA1H9H

HUMA1H8H Current Approaches to the Academic Writing Process II: A Course for Non Native Speakers of English
A continuation of HUMA1H7H. This course stresses the development of research based writing skills, communication skills, and critical thinking through written assignments, oral presentations, and discussion. Breadth requirement: Arts, Literature & Language
Exclusion: (LGGA1A1H), (LGGA9A9H). The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course, including those who meet the prerequisite.
Prerequisite: HUMA1H7H or permission of the instructor

HUMA1H9H Writing Practice: 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. Breadth requirement: Arts, Literature & Language
Exclusion: (LGG1A1H), (LGG9A9H)

HUMB11H3 Critical Thinking, Reasoning and Decision-Making
An introduction to locating, evaluating and analyzing information, and using this knowledge to construct and organize effective arguments and make practical decisions. As the emphasis is the application of critical thinking principles, this course and its materials will be relevant to a wide range of academic, professional, and other contexts. Breadth requirement: Arts, Literature & Language
Limited enrolment: 30 per section
Exclusion: (HISP101H) if taken prior to 2007 Summer, PHIL35H

HUMD2H3
HUMD2H3 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; this should be done by 15 April for 'F' and 'Y' courses and by 1 December for 'S' courses. If the proposal is approved, two faculty members from relevant disciplines will supervise and evaluate the work. Prerequisite: Three full credits at the B-level in the Department of Humanities.

Humanities Co-operative
B.A.

Program Supervisor: S.L. Helwig (416-287-7140) Email: humanities-coop-program-supervisor@utsc.utoronto.ca
Co-op Contact: askcoop@utsc.utoronto.ca

The Co-operative Program in Humanities allows students to identify and consider relationships between academic and work environments, and combine their chosen Humanities program with work experience that draws upon the knowledge and skills acquired during their 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 in the Humanities) and to complete the requirements of an Honours (30-credit) 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.

Note: For information on the Specialist (Co-operative) Program in Arts Management which operates separately from the Co-op Program in Humanities, please see the Visual and Performing Arts section of this Calendar.
Admissions
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 at: www.utm.utoronto.ca/subjectpost. 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) - HUMA01H & 1 other full credit in Visual & Performing Arts
2. Art History (Major): HUMA01H & 1 full credit in Art History
3. English (Specialist & Major): ENGB03H, ENGB04H & ENGB05H
4. French (Major): FREA01H & FREA02H
5. History (Specialist & Major): [2.0 full credits from GASB01H, HIS0A04H, HIS0A05H] or 1 full credit at the B-level in HIS
6. Linguistics (Major): LINA01H & LINA02H
7. Music & Culture (Major): HUMA01H & 1 full credit in Music
8. Philosophy (Major): 1 full credit in PHL
9. Psycholinguistics (Specialist): LINA01H, LINA02H, PSYA01H & PSYA02H
10. Studio (Major): HUMA01H and 1 full credit in Studio
11. Theatre & Performance Studies (Major): HUMA01H
12. Women’s & Gender Studies (Major): WSTA01H & WSTA03H

Program Requirements
The program requires eight four-month sessions of study and two 12-week work placements and normally requires four to five years to complete.

Course Requirements
Students in the Co-operative Program in Humanities must complete the following:

1. All of the following 2.5 full credits:
   a) 1.5 credits in English or Languages as follows:
   [ENGB03H Critical Thinking About Narrative and
   ENGB04H Critical Thinking About Poetry and
   ENGB05H Critical Writing About Literature] or
   [HUMA17H Current Approaches to the Academic Writing Process I: A Course for Non-Native Speakers of English and
   HUMA18H Current Approaches to the Academic Writing Process II: A Course for Non-Native Speakers of English and
   HUMA19H Writing Practicum: A Course for Non-Native Speakers of English]
   b) HUMA01H Exploring Key Questions in Humanities
   c) HUMB11H Critical Thinking, Reasoning and Decision-Making
   Where appropriate, credits in this list may also count towards the completion of a Specialist, Major or Minor Program.

2. In addition to the core credits, students must complete a Specialist Program offered by the Department of Humanities OR two Major Programs (at least one of which is in the Humanities) OR one Major Program (in the Humanities) and two Minor Programs (in any area).

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
   English
   French
   History
Linguistics
Music and Culture
Philosophy
Studio
Theatre & Performance Studies
Women's Studies

For the requirements of these programs, please see the program descriptions elsewhere in this Calendar. Students should consult with the Program Supervisor of the Co-operative Program in Humanities as well as with their discipline Program Supervisor(s) about their course selection.

3. Elective Courses

Students are normally required to take a certain number of elective courses as a part of their Specialist or Major program. The purpose of the elective field is to allow students some flexibility in shaping a degree to their interests and future needs. Students are encouraged to use their elective credits to take courses outside their area(s) of concentration in order to broaden their understanding of contemporary issues and their historical context and to enhance their communication skills. It is strongly recommended that Humanities Co-op students take either [VPAA100H *Introduction to Arts Management* and VPAA120H *Audience and Resource Development*] or [MGTA40H and MGTA44H *Introduction to Management 1 and 2*] as elective choices to allow the student to gain an important contextual understanding of workplace issues and develop expected skills for the co-op placement environment. Students are encouraged to meet with the Humanities Co-op Program Supervisor to discuss the appropriateness of each of the choices for their particular interests and needs.

For course descriptions please see the relevant program area(s) of the Calendar.

**Courses in the first year of the program**

The first year of study would normally consist of the full core requirements, the required introductory courses from the Specialist, Major and/or Minor Program(s) (chosen in consultation with the Program Supervisor for that/those program(s)), and electives. Students will also normally take the Arts & Science Co-op Work Term Preparation Course in the first fall session (note that this is a non-credit course taken over and above the five credits in the first year).

**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 (with a minimum 2.5 Cumulative Grade Point Average) and have completed at least 9.0 full credits, including at least 1.5 credits of the Humanities Co-op core courses and at least 4.5 full credits toward the requirement of the Specialist Program or the Humanities Major Program(s) in which they are enrolled. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

To be eligible for their second work term, students must be in good standing in the program (with a minimum 2.5 Cumulative Grade Point Average) and have completed at least 12.5 full credits, including all 2.0 core credits and at least 7.0 credits toward the requirements of their Specialist program or their Major Program(s). As well, they must have received a satisfactory evaluation of their performance and work term report for their first placement.

**International Development Studies**

(B.A./B.Sc.)

**Faculty List**

A., Berry, B.A. (Western), M.A. (Yale), Ph.D. (Princeton); Professor Emeritus
A.G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill), Associate Professor Emeritus
E. C. Relph, B.A., M. Phil. (London), Ph.D. (Toronto); Professor
J. Teichman, B.A., M.A., Ph.D. (Toronto); Professor
S. Banford, B.A. (Toronto), M.A. (McMaster), M.A., Ph.D. (Virginia), Associate Professor
A. E. Birt, B.A. (Harvard), M.A. (University of Canterbury), Sc.D. (Johns Hopkins), Associate Professor
M. F. Burns, B.A. (Sheffield), Ph.D. (Sheffield), Associate Professor
M. Hoffman, B.S. (Michigan Technological University), Ph.D. (George Washington University), Associate Professor
P.C. Huang, B.A. (National Chiao-Tung), M.A. (Chinese Culture), M.A., Ph.D. (UCLA), Associate Professor
P. Kingston, B.A. (Toronto), M.A. (London), D.Phil. (Oxford), Associate Professor
N. Kortenmaa, M.A., Ph.D. (Toronto), Associate Professor
C. Noord, B.A., M.A. (London), Ph.D. (Geneva), Associate Professor
S.J. Rackel, M.A., Ph.D. (Toronto), Associate Professor
G. Fraser, M.A. (Toronto), Ph.D. (Yale), Assistant Professor
M. Hunter, B.A., B.S. (Sussex), M.A. (Univ. of Natal), Ph.D. (Univ. California, Berkeley), Associate Professor
Discipline Representative: L. Chan
Undergraduate Counsellor: J. Roopkrernsingh. Email: social-sciences-counsellor@utsc.utoronto.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 Southern non-governmental organization (NGO), research institute, multilateral organization, or private partner; and (5) develop partnerships with individuals and organizations in the Global South working in international development.

There are three IDS programs offered: a specialist (non-co-op), a specialist co-op and a major.

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 alongside their specialist IDS program. For details about how these joint programs can be worked out, please consult 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: ECMA01H, ECMA02H, EESA01H and IDS002H. Other useful related (but not required) first year courses include: ANTA02H, GGRA01H, HLA01H, and POLA09H. Students should also be careful to make sure that they take the appropriate prerequisites for all courses and programs they decide to pursue.

SPECIALIST PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

Program Requirements

This program requires 13.0 full credits of which at least 6.0 must be at the C- or D-level including at least 1.0 at the D-level.

1. Introduction to International Development Studies (2.0 full credits as follows)
   IDS001H: Introduction to International Development: History, Approaches and Debates
   [ECMA01H Introduction to Microeconomics or ECMA02H Introduction to Macroeconomics: A Mathematical Approach]
   [EESA01H Introduction to Macroeconomics or ECMA02H Introduction to Macroeconomics: A Mathematical Approach]
   EESA01H Introduction to Environmental Science

2. Core courses in International Development (3.5 full credits as follows)
   IDS002H Development and Environment
   IDS004H International Health Policy Analysis
   IDS006H Equity, Ethics and Justice in International Development
   POLA09H Comparative Development in International Perspective
   POLA09H Comparative Development in Political Perspective
   IDS002H Supervised Research in International Development

3. Methods for International Development Studies (1.5 full credits as follows)
   DSC003H Project Management I
   0.5 FCE in statistics/quantitative methods (one of ANTC25H, ECMB11H, GGRA30H, SOCBR08H, PSYB07H & STA222H)
   0.5 FCE in qualitative methods (one of ANTB19H, GGRB02H, SOCBR05H, HLA01H, POLC78H)
4. Specialized Courses: Approaches to International Development (6.0 full credits)
   At least 2.0 full credits must be from two of the following clusters. IDS/CD/1H, IDS/CD/1H and IDS/CD/1H may also
   be counted towards the completion of this requirement. However, the chosen readings topics in IDS/CD/1H and IDS/CD/1H should
   be consistent with other specialized courses selected by the student.

   Culture and Society
   ANTS/1H Ethnography and the Comparative Study of Human Societies
   ANTS/2H Culture, Politics and Globalization
   ANTS/6H The Anthropology of Food: Consuming Passions
   ANTC/1H Anthropological Perspectives on Development
   ANTC/3H The Anthropology of Transnationalism
   (ANTS/5H) Muslim Societies
   ANTC/6H Anthropology of Tourism
   DTS/1H Diaspora and Transnationalism Studies I
   DTS/2H Diaspora and Transnationalism Studies II
   HIS/1H Twentieth Century Africa
   HIS/5H Sub-continental Historians: South Asia in the World
   (HIS/3H) Topics in Asian History
   HIS/4H War and Society in Modern Africa
   IDS/CD/1H Media and Development
   SOCC/2H Ethnicity, Race and Migration
   SOCC/4H Migrations & Transnationalism

   Economics of Development
   ANTC/1H Producing People and Things: Economics and Social Life
   ECM/1H Economic Aspects of Public Policy
   ECM/2H Comparative Economic Systems
   ECM/3H Economic Development
   ECM/6H Development Policy
   DTS/1H Economics of Small Enterprise and Micro-Credit

   Environment and Land Use
   ANTS/1H Political Ecology
   ETS/1H Feeding Humans - the Cost to the Planet
   ETS/7H Hydro Polities and Transboundary Water Resources Management
   FOR/1H Conservation of Tropical and Subtropical Forests
   GURS/2H Environmental Conservation and Sustainable Development
   GURS/2H Issues in Rural Development
   GURS/2H Political Ecology, Theory and Application

   Gender and Health
   ANTC/1H Feminism and Anthropology
   ANTC/1H Genders and Sexualities
   ANTC/1H Medical Anthropology: Illness and Healing in Cultural Perspective
   GURS/2H Geographies of Disease
   GURS/1H Health and Sexuality
   HLT/1H Plagues and Peoples
   HLTCS/2H Women and Health: Past and Present
   HLT/1H Global Health and Human Rights
   IDS/CD/1H Issues in International Health
   PLO/CD/1H Globalization, Gender and Development
   WSTC/1H Women and Development
   WSTC/1H Applied Study in Women and Development

   Politics and Policy
   POL/CD/1H Introduction to International Relations
   POL/CD/1H International Conflict and Conflict Management
   POL/CD/1H International Cooperation and Institutions
   POL/CD/1H The New International Agenda
   POL/CD/1H Development Studies: Political and Historical Perspectives
   POL/CD/1H Latin America: Dictatorship and Democracy
   POL/CD/1H Politics and Society in the Middle East I
   POL/CD/1H Politics and Society in the Middle East II
SPECIALIST PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

The science version of the Specialist Program in International Development Studies is currently under review and new enrollment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar.

SPECIALIST (CO-OPERATIVE) PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

The Co-operative Program in International Development Studies at University of Toronto Scarborough, is a five year undergraduate Program which aims to provide students with a critical understanding of international development issues through exposure to a variety of academic disciplines and to another culture. The Program combines interdisciplinary academic study in the social and environmental sciences and humanities with a practical work experience in a developing country. IDS students graduate with an Honours B.A. with a Specialist certification in International Development Studies.

Note: The science version of the Specialist (Co-operative) Program in International Development Studies is currently under review and enrollment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar.

Enrollment in the Program is limited. Interviews are normally held from March until May for students who pass the initial screening. Admissions are granted on the basis of the applicant’s academic performance, background in relevant subjects, language skills, experience or interest in international development studies and work, and a letter of reference from a high school teacher or university instructor. For information on admissions, fees, work placements and standing in the Program, please see the Co-operative Programs section of this Calendar.

Work Placement

This Program requires twenty courses (four years) of study and one work term of eight to twelve months in duration. The work term will normally begin between April and September of the third year. The IDS work term is an integral part of the Co-op/Co-op program and is designed to provide students with practical hands-on experience in a developing country. The majority of work terms are with Canadian NGOs, research institutes or private sector consulting firms. The location of placements will vary according to each student’s disciplinary and regional preferences and abilities, the availability of placements, and the practicality and safety of the area. Placement employers are asked to cover the living allowance of the student. Those students who choose to carry out their placement with no funding will be asked to finance the living allowance themselves.

Students are required to submit progress reports every 2 months and begin work on a major research project. To be eligible for placement, students must have completed 4.5 full credits including 12.0 IDS credits. These 12 must include IDS 200H, IDS 204H, plus 9.5 other credits from Requirements 1 through 4. For information about status in the co-op program, fees, and regulations, please see the Co-op/Co-opive Programs section of this Calendar.

Students who successfully complete all requirements associated with a work term are awarded credit, these credits being additional to the 20.0 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.

IDS Co-op Tutorial and Pre-Departure Orientation

Students participate in a non-credit co-op tutorial, commencing at the end of the year in which they complete 10 credits, and continuing through the following year (the pre-placement year). Presentations, group exercises and individual assignments are presented for the placement experience. There are mandatory sessions on cross-cultural understanding, health and safety issues on placement, researching for the IDS 301Y thesis, and other key topics. A weekend retreat with the fifth years (who have returned from placement) provides the opportunity for sharing of first-hand experience.

Program Admission

Enrollment in the Program is limited. Interviews are normally held from March until May for students who pass the initial screening. Admissions are granted on the basis of the applicant’s academic performance, background in relevant subjects, language skills, experience or interest in international development studies and work. For information on fees and status in the Program, please see the Co-operative Programs section of this Calendar.

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

This program requires 15.5 full credits, of which at least 6.0 must be at the C or D-level including at least 1.0 at the D-level.

Students must complete requirements 1-4 of the requirements for the Specialist (Non-co-op B.A.) Program in International Development Studies above, except for IDS801H, plus the following:

- 1.0 full credit in a second language
- IDS601H3 Research Design for Development Fieldwork (must be taken prior to co-op placement)
- IDS801Y3 Pre-placement Seminar and Thesis.

MAJOR PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

Program Requirements

This program requires 9.0 full credits of which at least 2.0 must be at the C- or D-level.

1. Introduction to International Development Studies (0.5 full credits)
   IDS401H1 Introduction to International Development: History, Approaches and Debates

2. Core courses in International Development (1.5 full credits)
   IDS801H3 Political Economy of International Development
   IDS802H1 Development and Environment
   IDS803H1 International Health Policy Analysis
   IDS804H1 Equity, Ethics and Justice in International Development
   POL290H1 Comparative Development in International Perspective

   (Students wishing to take IDS801H3 and IDS802H1 should be aware that there are A-level prerequisites for these courses.)

3. Methods for International Development Studies (1.5 full credits)
   IDS801H1 Project Management I
   0.5 credits in quantitative/statistical methods (one of ANTC53H1, ECMB1H1, GGRA30H1, PSYB01H3, SOCB06H1 & STAB2H1)
   0.5 credits in qualitative methods (one of ANTB59H1, GGRB20H1, SOCB03H1, HLTA10H1, POLC78H1)

4. Specialized Courses (4.5 full credits)
   4.5 credits from the courses listed in Requirement 4 of the B.A. version of the Specialist Program in IDS with at least 1.0 credit from each of TWO of the clusters.

MAJOR PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.Sc.)

The science version of the Major Program in International Development Studies is currently under review and enrollment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar.

MINOR PROGRAM IN INTERNATIONAL DEVELOPMENT STUDIES (B.A.)

The Minor Program in International Development Studies has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in the program are able to complete it.

INTERFACULTY COMBINATION PROGRAM IN INTERNATIONAL DEVELOPMENT AND ENVIRONMENTAL STUDIES

The Interfaculty Combination Program in International Development & Environmental Studies is under review and enrollment in it has been suspended indefinitely. Students who are currently enrolled in it will be able to complete it.

IDS801H3 Introduction to International Development Studies

History, theory and practice of international development, and current approaches and debates in international development studies. The course explores the evolution of policy and practice in international development and the academic discourses that surround it. Lectures by various faculty and guest will explore the multidisciplinary nature of international development studies. This course is a prerequisite for all IDS D-level courses.

Breadth requirement: Social & Behavioural Sciences

IDS801H3 Political Economy of International Development

Introduces students to major development problems, focusing on international economic and political economy factors. Examines trade, aid, international institutions such as the World Bank, the IMF and the WTO. Examines both conventional economic perspectives as well as critiques of these perspectives. This course can be counted for credit in EFM Programs.

Breadth requirement: Social & Behavioural Sciences

Limited enrolment: 170

Exclusion: ECO230H

Prerequisite: [ECMA01H & ECMA05H] or [ECMA04H & ECMA06H]
IDSO20H3 Development and Environment
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 land, reduced access to resources, declining water quality and quantity, and climate change. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Prerequisite: EESA401H

IDSO40H3 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; financing and organization of health systems; international health agencies; role of civil society; and globalization and health. Breadth requirement: Social & Behavioural Sciences
Prerequisite: 5.0 full credits

IDSO60H3 Equity, Ethics and Justice in International Development
What constitutes equitable, ethical as well as socially and environmentally just processes and outcomes of development? This course explores these questions with particular emphasis on their philosophical and ideological foundations and on the challenges of negotiating global differences in cultural, political and environmental values in international development. Breadth requirement: Social & Behavioural Sciences
Prerequisite: IDSO40H3. Students registered in an IDS program before 2018-1 will be admitted with permission of instructor

IDSC01H3 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. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 20. Limited to students enrolled in the Specialist Co-op Program in IDS. Students in other IDS programs may be admitted with permission of instructor subject to the availability of spaces.
Prerequisite: 9.0 full credits in total including at least 6.0 credits satisfying Requirements 1 through 4 of the Specialist Co-op program

IDSC04H3 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. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: Restricted to students in the IDS Specialist and major programs.
Prerequisite: IDSO101H & IDSB02H

IDSC06H3 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 undertaking 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 IDSO40H3. Students must obtain consent from the Supervisor of Studies before registering for this course.
Prerequisite: IDSO101H & IDSB02H & permission of the instructor
Corequisite: IDSO40H3 recommended

IDSC07H3 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. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: Limited to students in IDS Specialist and Major programs. Other students may be admitted with permission of instructor. Students in the Co-op program must take this course prior to their placement year.
Prerequisite: IDSO40H3

IDSC08H3 Media and Development
Critical perspectives on the effects of traditional and 'new' media on development policy and practice. The course examines the increasingly significant role the media plays in the development process, the ways in which media-generated images of development and developing countries affect development policy and the potential of 'new' media for those who are marginalized from the development process. Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35
Prerequisite: IDSO101H & IDSB02H

IDSC10H3 Topics In International Development Studies
Contents to be determined by instructor.
Prerequisite: IDSO101H & IDSB02H
**International Studies (B.A.)**

**Faculty List**

E.W. Dowler, A.M., (Harvard), Ph.D. (London School of Economics), Professor

A. Rabinoff, A.B. (Albany), M.A., Ph.D. (Chicago), Professor

S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), Professor

J. Teichman, B.A., M.A., Ph.D. (Toronto), Professor

P. Kingston, B.A. (Toronto), M.A. (London), D.Phil. (Oxford), Associate Professor

M. Maltoni, B.A. (Dulwich), Ph.D. (London), Associate Professor

S.J. Rockall, M.A., Ph.D. (Toronto), Associate Professor

K. Liddle, B.A. (Oberlin), M.A. (Auburn), Ph.D. (Temple), Assistant Professor

L. Chan, B.A., M.A. (Toronto), Senior Lecturer

**MAJOR (CO-OPERATIVE) PROGRAM IN INTERNATIONAL STUDIES**

The Major (Co-operative) Program in International Studies is under review and enrolment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session will be able to complete the program provided they have completed ISTB011H by the end of the 2010 Fall Session. For program requirements, please refer to the 2009/10 UTSC Calendar.

**MAJOR PROGRAM IN INTERNATIONAL STUDIES**

The Major Program in International Studies is under review and enrolment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session will be able to complete the program provided they have completed ISTB011H by the end of the 2010 Fall Session. For program requirements, please refer to the 2009/10 UTSC Calendar.

**ISTB013H1 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.

Breadth requirement: Social & Behavioural Sciences

Limited enrolment: 50 per section (preference will be given in the first round of registration to students enrolled in IST programs).

Prerequisite: 5.0 full credits
Intersections, Exchanges, Encounters in the Humanities

(B.A.)

Faculty List
S. Lamb, M.A., Ph.D. (Toronto), Associate Professor
D.E. Bender, M.A., Ph.D. (New York), Assistant Professor
K.R. Larson, M.Phil., M.Sc. (Oxford), Ph.D. (Toronto), Assistant Professor
K.A. McLennan, M.A. (McMaster), Ph.D. (McGill), Assistant Professor
A. Paz, B.A. (Queens), M.A. (Tel Aviv), M.A. (Chicago), Assistant Professor
E.N. Rothman, M.A. (Tel Aviv), Ph.D. (Michigan), Assistant Professor
M. Rubright, A.B. (Vassar), M.A. (Missouri-Columbia), Ph.D. (Michigan), Assistant Professor

Program Director: D. Bender Email: ice-program-supervisor@utsc.utoronto.ca

"Intersections, Exchanges, Encounters in the Humanities" (IEE) is a selective, competitive admissions program that familiarizes students with current, cutting-edge research from across the humanities. IEE courses focus on where different traditions of inquiry intersect, and are taught by professors working in areas such as music, literature, history, and beyond whose research spans across traditional boundaries. By taking courses with faculty with diverse approaches and interests, students will be able to explore connections between subject areas they otherwise could not. Because IEE is designed as an advanced companion major, students pursuing IEE will gain broader contextual insights into their companion program. The experiential component of IEE will help students understand how the complexity of humanities thought can be applied outside of the university.

IEE graduates will be superbly equipped for a wide range of future scholarly and professional endeavours. Since students will have mastered a variety of methodological and research approaches and encountered a rich breadth of subject areas, they will be uniquely qualified for graduate school, teacher's college, law school, or indeed any undertaking requiring flexibility of mind, creativity, and the ability to think through and analyze diverse information. IEE's approach to humanities thought, together with its emphasis on language competency and experiential learning, will also provide an excellent foundation for careers in areas such as government, social activism, and community work.

IEE students will be expected to complete both the requirements of the IEE major as well those of a major in an established program, usually in the humanities. As a companion major and through sharing conversations with faculty and fellow students from different disciplines, IEE offers students a unique opportunity to expand their practical and intellectual training across multiple humanistic fields.

Guidelines for 1st year course selection
Students interested in applying to IEE at the end of their first year are strongly encouraged to take HUMA40H1 (Exploring Key Questions in Humanities) in their first year.

MAJOR PROGRAM IN INTERSECTIONS, EXCHANGES, ENCOUNTERS IN THE HUMANITIES

Program Director: D. Bender Email: ice-program-supervisor@utsc.utoronto.ca

Program Admission
This is a highly selective program. Typically, students will be required to apply for IEE at the end of the second term of their first year. Applicants must include:

• A letter of recommendation from a faculty member at UTSC who is familiar with the applicant's university-level academic work
• A short written statement of interest of no more than 500 words
• A writing sample (such as an essay written for a university-level class)

Companion program
Because of the selective and multi-disciplinary nature of this program, students will be expected to complete a major or specialist in a complementary program.
Program Requirements
Students must complete 8.0 full credits. The specific program requirements are as follows:

1. **Core Curriculum**
   - Students are required to complete a total of 1.5 credits.
   - IEEB01H Human, Inhuman, and Non-Human
   - IEEB02H Senses, Sensibility, Sensuality
   - IEEB03H Time, Story, Perspective

2. **Themes, Perspectives and Exchanges**
   - Students may choose from the following courses and must complete at least 3.5 credits.
   - **Note:** Many C-level IEE courses are offered as I & II. This is not meant to suggest a chronology, and students are welcome to take both to gain a breadth of perspective on key topics, which will vary with instructor.
   - IEEC01H Theories and Methods in the Study of Society and Culture
   - IEEC03H Defining the Human I
   - IEEC04H Defining the Human II
   - IEEC11H Perspectives on Language and Culture I
   - IEEC12H Perspectives on Language and Culture II
   - IEEC21H Perspectives on the Globalized and the Transnational I
   - IEEC22H Perspectives on the Globalized and the Transnational II
   - IEEC31H Perspectives on Science and Humanities I
   - IEEC32H Perspectives on Science and Humanities II
   - IEEC41H Themes in Translation and Cultural Mediation I
   - IEEC42H Themes in Translation and Cultural Mediation II
   - IEEC51H Themes in Travel and Encounter I
   - IEEC52H Themes in Travel and Encounter II
   - IEEC61H Themes in Consumption and Material Culture I
   - IEEC62H Themes in Consumption and Material Culture II
   - IEEC71H Exchanges in Performance and the Arts I
   - IEEC72H Exchanges in Performance and the Arts II
   - IEEC81H Exchanges in Music and Media I
   - IEEC82H Exchanges in Music and Media II

3. **Advanced Seminars in IEE**
   - All IEE students must fulfill at least 1.0 credits at the D-level. They must complete the capstone seminar, normally in the final year.
   - IEED01H Capstone Seminar in Intersections, Exchanges, Encounters in the Humanities
   - Students must also pursue a 5.0 experiential learning credit. The experiential learning credit will be fulfilled in an IEE seminar and may include: an internship, community fieldwork, or applied arts. Some students may fulfill this requirement with a term abroad. Most students, however, will enrol in:
     - IEED02H Experiential Learning Seminar in Intersections, Exchanges, Encounters in the Humanities

4. **Language Requirements**
   - Students must complete 2.0 credits in a non-English language. Please see Language (LGG) or French (FRE) listings in this calendar for UTSC offerings.

**IEEB01H: Human, Inhuman, and Non-Human**
This course investigates how definitions of human and non-human have been expressed and have changed over time. What are the expectations of defining someone or something as human or inhuman? Case studies may include slavery, genocides, animals, monsters, artistic expression, cybernetics, or disability. Required course for all IEE majors.

Breadth requirement: History, Philosophy & Cultural Studies

Prerequisite: At least 4.0 credits & restricted to IEE major students

**IEEB02H: Senses, Sensibility, Sensuality**
This course examines connections between the physical and the subjective by focusing on how sensual responses acquire and shape meaning. The course investigates the body, sexuality, visuality, taste, partiy/pollution, and aura. Case studies may include food, music, consumption and material culture, theatricality, and cinema. Required course for all IEE majors.

Breadth requirement: History, Philosophy & Cultural Studies

Prerequisite: At least 4.0 credits & restricted to IEE major students
IEEC01H3 Perspectives on Languages and Culture I
How does language shape the way groups and individuals understand art, literature, music, conversation, and everyday action? Combining readings from a variety of fields this course explores the sociocultural practices which language helps to structure. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB0HL, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC02H3 Perspectives on Languages and Culture II
How does language shape the way groups and individuals understand art, literature, music, conversation, and everyday action? Combining readings from a variety of fields this course explores the sociocultural practices which language helps to structure. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC03H3 Perspectives on the Globalized and the Transnational I
What does globalization mean? How new is it? And how can we study it by looking at phenomena such as consumption, mass media, transnational migration, and representations of home and abroad? This course will explore these issues through selected case studies. Topics will vary with instructor.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC04H3 Perspectives on the Globalized and the Transnational II
What does globalization mean? How new is it? And how can we study it by looking at phenomena such as consumption, mass media, transnational migration, and representations of home and abroad? This course will explore these issues through selected case studies. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC1H3 Perspectives on Science and Humanities I
This course examines the meanings of science and the activities of scientists through selected case studies. We will consider changing understandings of the environment, how different societies have classified natural phenomena, and how changing definitions of "nature" itself shape - and are shaped by - human relations. Topics will vary with instructor.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.
IEEC32H3 Perspectives on Science and Humanities II
This course examines the meanings of science and the activities of scientists through selected case studies. We will consider changing understandings of the environment, how different societies have classified natural phenomenons, and how changing definitions of "nature" itself shape - and are shaped by - human relations. Topics vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC41H3 Themes in Translation and Cultural Mediation I
This course examines how individuals and groups engage in translation, conversion, and the representation of cultural difference. Through case studies from across time and space it explores how and why boundaries between religions, cultures, languages, and societies have been drawn and re-drawn. Topics will vary with instructor.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISD50H
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC42H3 Themes in Translation and Cultural Mediation II
This course examines how individuals and groups engage in translation, conversion, and the representation of cultural difference. Through case studies from across time and space it explores how and why boundaries between religions, cultures, languages, and societies have been drawn and re-drawn. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGCI5H
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC51H3 Themes in Travel and Encounter I
This course investigates the interrelationship between travel, encounter, and the arts. Topics may include women travellers, traveling by marginalized groups such as servants and slaves; exploration; imperial or colonial travel; travel literature; migration, pilgrimage and crusading; fictional travel; the history of geography and ethnography. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Exclusion: ENGC63H
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC52H3 Themes in Travel and Encounter II
This course investigates the interrelationship between travel, encounter, and the arts. Topics may include women travellers, traveling by marginalized groups such as servants and slaves; exploration; imperial or colonial travel; travel literature; migration, pilgrimage and crusading; fictional travel; the history of geography and ethnography. Topics will vary with instructor.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HISD60H
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC81H3 Themes in Consumpotion and Material Culture I
This course investigates how humans relate to objects, how humans relate to other humans through objects, and how these relationships change historically and cross-culturally. Themes may include fashion, food, youth cultures, and commodification. Topics will vary with instructor.
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC82H3 Themes in Consumpotion and Material Culture II
This course investigates how humans relate to objects, how humans relate to other humans through objects, and how these relationships change historically and cross-culturally. Themes may include fashion, food, youth cultures, and commodification. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC71H3 Exchanges in Performance and the Arts I
This course investigates the interrelationship between various artistic forms from the perspective of performance. Topics may include the social role of performance, the body in performance, performing identities, virtual performance, and the impact of technology on the performing body. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEEC72H3 Exchanges in Performance and the Arts II
This course investigates the interrelationship between various artistic forms from the perspective of performance. Topics may include the social role of performance, crossing the senses, the body in performance, performing identities, and the impact of technology on performance and performance outside the arts. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.
IEED2H3 Exchanges in Music and Media I
This course investigates the interrelationship between music and various historical and contemporary media. Topics may include the exploration of questions surrounding ideology, identity, reception, technology and the relationship of music to other media including print culture, radio, television, film, video games and cyberspace. Topics will vary with instructor.
Exclusion: VPM3H4
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEED2H3 Exchanges in Music and Media II
This course investigates the interrelationship between music and various historical and contemporary media. Topics may include the exploration of questions surrounding ideology, identity, reception, technology and the relationship of music to other media including print culture, radio, television, film, video games and cyberspace. Topics will vary with instructor.
Breadth requirement: Arts, Literature & Language
Prerequisite: At least 4.0 credits
Corequisite: For IEE students, at least 2 of IEEB01H, IEEB02H or IEEB03H. For non-IEE students, at least 1.0 credits in the Humanities at the B, C, or D-level.

IEED2H3 Capstone Seminar in Intersections, Exchanges, Encounters in the Humanities
This course is the capstone course for IEE majors. Though topics will vary from year-to-year, the course will connect the themes, perspectives, and exchanges introduced throughout the program. Students will be expected to complete a lengthy research paper. This course is intended for IEE students in their final year.
Limited enrolment: 25
Prerequisite: IEEB01H & IEEB02H & IEEB03H & at least 2 C-level IEE courses & restricted to IEE major students

IEED2H3 Experiential Learning Seminar in Intersections, Exchanges, Encounters in the Humanities
This course is the experiential learning course for IEE majors. Students will meet with the instructor to define a program of experiential learning appropriate to their interests and future goals. Projects might include research collaboration with faculty or community work. All students will complete a paper related to their program. This course is intended for IEE students in their final year.
Limited enrolment: 25
Prerequisite: IEEB01H & IEEB02H & IEEB03H & at least 2 C-level IEE courses & restricted to IEE major students

Journalism
(B.A.)
Faculty List
M. Malani, B.A. (Dalhousie), Ph.D. (London), Associate Professor
E. McCreath, M.A., Ph.D. (Toronto), Senior Lecturer

SPECIALIST (JOINT) PROGRAM IN JOURNALISM
Program Supervisor: R. McCreath (416-287-7138) Email: journalism@usc.utoronto.ca
This program may be taken in fulfillment of the requirements of a four-year (20-credit) Honours B.A. Degree and requires four to five years to complete. In addition to completing the requirements for the degree, students who intend to qualify for a diploma from Centennial College must undertake one additional semester in a field placement and complete a short non-credit course on journalism career management at Centennial.
Courses are taught at both U of T Scarbrough and at Centennial College. Centennial courses are taken in the third and fourth years of the program. Students must be registered on a full-time basis while at Centennial College. This may include evenings and weekends.
Students must maintain a Cumulative Grade Point Average (CGPA) of 2.0 or higher to remain in the program.

Guidelines for 1st year course selection
Students intending to complete the program should include the following in their first year course selection: MDSA02H and MDSA22H & MDSA23H and HUMA01H & other courses of interest.

Program Admission
Limited enrolment: Applicants must fill out a joint program application form, which is available online at http://www.usc.utoronto.ca/jointprograms.

Program Requirements
a) MDSA02H From Print to Digital: History of Media and Technology
MDSA21H & MDSA22H Introduction to Journalism I & II
HUMA01H Exploring Key Questions in Humanities
b) MDSB24H Journalism in the Age of New Media
MDSB26H Covering Immigration
MDSB27H Critical Journalism
MDS350H Fundamentals of Journalistic Writing
HUMB1H Critical Thinking, Reasoning and Decision-Making
c) Two full credits at the C or D level, of which at least 1.0 credit is at the D level.
d) Courses that satisfy the requirements of one Minor Program. Note: Courses used to meet this requirement may also be applied to Requirements a) through c).
e) Journalism Group I - students will be eligible to enroll in these courses after successfully completing at least 10 full credits at the University of Toronto Scarborough (or permission of the Program Supervisor), including MDS4A0H, MDS4A1H, MDS4A2H, MDS4B1H, MDS4B2H, MDS4B3H, HUMA4A0H, HUMA4B0H.
*JOUA40H Journalism Law and Ethics
*JOUB1H News Reporting
*JOUB14H Journalism Design
*JOUB18H Imaging, Photography for Journalism
f) Journalism Group II - students will be eligible to enroll in these courses after successfully completing Group I above.
*JOUB40H Magazine/Freelance Journalism
*JOUB45H Advanced Interviewing Techniques
*JOUB40H News Laboratory I
*JOUB41H Radio News
*JOUB26H Multiplatform Journalism
g) Journalism Group III - students will be eligible to enroll in these courses after successfully completing Group II above.
*JOUC13H Best Reporting
*JOUC140H News Laboratory II
*JOUC17H Television News
* A minimum grade of C is required in these particular courses to pass and maintain standing in the program.

Completion of 15-week field placement and Career Management course are also required to qualify for the diploma from Centennial College. The field placement enables prospective graduates to practice and develop the skills required to work professionally and effectively in journalistic environments. Through individual work and as members of teams, students contribute to the publication of journalistic content within various formats and media platforms.

JOUA60H Journalism Law and Ethics
An examination of the key legal and ethical issues facing Canadian journalists, with an emphasis on the practical: what a journalist needs to know to avoid legal problems and develop strategies for handling ethical challenges. This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: History, Philosophy & Cultural Studies Exclusion: MDS860H Prerequisite: 10 credits including [MDSA3H or (JOUA1H), [MDSA2H or (JOUA2H), [MDSB2H or (JOUB1H), [MDSB1H or (JOUB2H), [MDSB3H or (JOUB20H)]]. HUMA1H Corequisite: JOUB11H & JOUB14H & JOUB18H

JOUB26H Magazine/Freelance Journalism
An introduction to developing and selling quality magazine stories for multiplatform publication. Students learn techniques for successful freelancing and magazine staff work. Students learn the importance of finding market niches, winning assignments, and carrying them out professionally. Assignments include producing source materials, a query letter and a feature-length story. This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language Prerequisite: 12 credits, including JOUA40H & JOUB11H & JOUB14H & JOUB18H Corequisite: JOUB25H & JOUB10H & JOUB17H & JOUB20H

JOUB25H Advanced Interviewing Techniques
An advanced course that helps students polish their interviewing techniques and correct weaknesses in their interviewing style. Students analyze recorded interviews, role-play, critique student interviews and conduct research. This is as much a "people" skills course as it is a course in learning how to ask the right questions. This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language Prerequisite: 12 credits, including JOUA40H & JOUB11H & JOUB14H & JOUB18H Corequisite: JOUB20H & JOUB30H & JOUB17H & JOUB20H

JOUB10H News Laboratory I
Practical experience on "The Observer," an online and printed community newspaper serving Malvern, Highland Creek and West Hill and produced by journalism students. The work includes research, field reporting, writing, photography, page design and audio/video website production. This intensive course requires a large time commitment that may include evenings and weekends. This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language Prerequisite: 12 credits, including JOUA40H & JOUB11H & JOUB14H & JOUB18H Corequisite: JOUB10H & JOUB30H & JOUB17H & JOUB20H
JOUB19H3 News Reporting

Practice in journalistic reporting and writing, starting with a simple news story and proceeding to feature and profile writing and coverage of municipal affairs. Class discussions focus on critical analysis of professional publications. Guest professional journalists discuss their experience and current issues in journalism. This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 10 credits including MDS2A1H or JOUA001H, MDS2A2H or JOUA002H, MDS2B1H or JOUA003H, JOUR2B7H or JOUB002H, HUMB1H or JOUB008H. Corequisite: JOUB018H & JOUB14H & JOUB18H

JOUB14H3 Journalism Design

This course introduces the principles of design and electronic publishing. Students develop skills to produce multiplatform layouts, including brochures, infographics and website formats, in preparation for experience on the print and online “Observer.” Students will use InDesign to produce attractively designed journalistic layouts that reflect sound news judgement.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 10 credits including MDS2A1H or JOUA001H, MDS2A2H or JOUA002H, MDS2B1H or JOUA003H, JOUR2B7H or JOUB002H, HUMB1H or JOUB008H. Corequisite: JOUB018H & JOUB14H & JOUB18H

JOUB17H3 Radio News

The basics of radio journalism, including news, sports and entertainment reporting, interviewing, broadcast writing, performance and studio techniques. Students use digital audio recorders and handheld microphones to produce live-to-air (via Internet) newscasts and podcasts that are posted on the college’s podcast web page. Stories are edited on digital audio software.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 12 credits including JOUA006H & JOUB11H & JOUB14H & JOUB18H. Corequisite: JOUB03H & JOUB15H & JOUB18H & JOUB20H

JOUB18H3 Imaging: Photography for Journalists

An introduction to the basic concepts of photography and a deeper examination of the principles of photojournalism. Students create photo stories using a range of equipment (portable, battery-operated flash equipment, digital cameras, etc.) and learn how to edit images for publication, either in print or in Web form.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 10 credits including MDS2A1H or JOUA001H, MDS2A2H or JOUA002H, MDS2B1H or JOUA003H, JOUR2B7H or JOUB002H, HUMB1H. Corequisite: JOUA006H & JOUB11H & JOUB18H

JOUB20H3 Multiplatform Journalism

This course focuses on design and writing for multiplatform presentations of editorial content. Instruction includes gathering, editing and uploading text, audio and video for display on websites and mobile handheld devices. Students learn the mechanics of news website construction and maintenance and protocols for storytelling in a digital milieu.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 12 credits including JOUA063H, JOUB11H, JOUB14H & JOUB18H. Corequisite: JOUB03H, JOUB05H, JOUB10H & JOUB17H

JOUC13H3 Best Reporting

Student teams select a “beat,” conduct research, and prepare a proposal. Each student researches and writes five stories. Each team publishes a niche magazine and designs an accompanying website; using multimedia skills of writing, photography, audio and video. The time commitment for this advanced course may include evenings and weekends.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 14.5 credits, including JOUB03H, JOUB05H, JOUB10H, JOUB17H & [JOUB093H or JOUB20H]. Corequisite: JOUC16Y & JOUC17H

JOUC16Y3 News Laboratory II

Students play more senior roles to produce content for the online and print editions of “The Observer.” Participants attend staff meetings during class time, and research and write stories outside class. This intensive course requires a large time commitment that may include evenings and weekends.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 14.5 credits, including JOUB03H, JOUB05H & JOUB10H & JOUB17H & [JOUB093H or JOUB20H]. Corequisite: JOUC13H & JOUC17H

JOUC17H3 Television News

This course focuses on video journalism skills for a multi-platform environment. Whether covering stories for traditional television news or a website, students learn how to shoot, edit and produce original content. Students also staff a live-to-air news program where they anchor as well as work behind the scenes.

This course is taught at Centennial College and is open only to students in the Joint Program in Journalism. Breadth requirement: Arts, Literature & Language
Prerequisite: 14.5 credits, including JOUB03H, JOUB05H & JOUB10H & JOUB17H & [JOUB093H or JOUB20H]. Corequisite: JOUC13H & JOUC16Y

MDS2A2H3 From Print to Digital: History of Media and Technology (1450 - Present)

MDS2A1H3 Introduction to Journalism I

MDS2A2H3 Introduction to Journalism II

MDS2A3H3 Journalism in the Age of New Media

MDS2A2H3 Covering Immigration

MDS2A3H3 Critical Journalism

MDS2A3H3 Fundamentals of Journalistic Writing

See the Media Studies section of this Calendar for full course descriptions.
Languages

Faculty List
P.R. León, M.A., Ph.D. (Cornell), Professor Emeritus
C.V. Fonotreff, M.A., Ph.D. (Toronto), Professor Emeritus
R. Skyrm, B.A., M.Lit. (Brown), M.A., Ph.D. (Michigan), Professor Emeritus
H. Wittmann, M.A., Ph.D. (Mass.), Professor Emeritus
R. Hulm-Park, M.A., Ph.D. (Toronto), Associate Professor
H. X. Wu, M.A., Ph.D. (Toronto), Senior Lecturer
T. Al-Kasey, B.A. (Slippery Rock), M.A., Ph.D. (Massachusetts), Lecturer
I. Dyson, B.A., M.A., Ph.D. (Toronto), Lecturer
N. F. Hermes, B.A. (Tamil), M.A. (Northern Iowa), Ph.D(Toronto), Lecturer
E. Mills, B.Sc. (London), B.A. (Oxford), Ph.D Candidate (Oxford), Lecturer
N. Sujal, B.A., M.A., M. Phil. (IN), Lecturer
S.L.V. Wang, B.A., M.A., Ph.D. (Hawaii), Lecturer

The courses listed under LGG include language courses in Arabic, Hindi-Urdu, Latin, Mandarin Chinese, Sanskrit Spanish and Tamil.
Registration in all courses with the prefix LGG is subject to the approval of the instructor. 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 inappropriate for the level of the course will not be approved for enrollment. 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, please consult the Co-ordinator of Language Studies, Tamara Al-Kasey at language-coordinator@utsic.utoronto.ca or, where appropriate, the instructors of these courses.

Language Citation
The Languages Study Guide is available at: http://www.utsic.utoronto.ca/~v7e2uediv/Langstdll/Lng/lang_studyguide/index.htm

LGGASA03I Introductory Spanish I
An elementary course for students with no knowledge of Spanish. The course develops listening, speaking, reading, and writing skills through culturally-based materials. Oral and written materials are enhanced by audio-visual and computer-based activities.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: Grade 12 Spanish, SPA100Y, native or near-native proficiency in Spanish. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGGASA03II Introductory Spanish II
A continuation of LGGASA03I.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: Grade 12 Spanish, SPA100Y, 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: LGGASA03I or permission of instructor

LGGASA04H3 Introductory Modern 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: ARA212Y, NMC210Y, NML210Y, Arabic instruction in high school, prior knowledge of spoken Arabic. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course. Note: students whose home language is a variety of spoken Arabic should enrol in LGGASA04H.

LGGASA04H3 Introductory Modern Standard Arabic II
A continuation of LGGASA04H. This course will build on the skills learned in LGGASA04H and will provide further practice in reading and writing in the Arabic script.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: ARA212Y, NMC210Y, NML210Y, Arabic instruction in high school, prior knowledge of spoken Arabic. 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: LGGASA04H or permission of instructor
LGGA501H1 Introductory Latin I
An elementary course for students with no knowledge of classical Latin. An introduction to the structure of Latin, with some attention to the place of Latin in the Indo-European language family and its cognate and derivative relationships.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: LAT100Y or higher, LAT102H, LAT150H. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGGA514H3 Introductory Latin II
A continuation of LGGA501H1, with some reading of elementary texts.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: LAT100Y or higher, LAT102H, LAT150H. 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: LGGA501H1 or permission of instructor

LGGA549H3 Introductory 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 Bengali.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: EAS282Y, NEW210Y, RLG260Y, SAN291Y. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGGA551H3 Introductory 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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: EAS282Y, NEW210Y, RLG260Y, SAN291Y. 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: LGGA549H3 or permission of instructor.

LGGA615H3 Introductory Mandarin II
A continuation of LGGA611H1. This course will build on the skills learned in LGGA611H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: All EAS, CHI & LGG Chinese courses except LGGA601H or LGGA603H. 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: LGGA611H1 or (LGGA601H or permission of instructor)

LGGA707H3 Introductory Hindi I
An elementary course for students with no knowledge of Hindi. Students learn the Devanagari script and the Hindi sound system in order to start reading and writing in Hindi. The course also develops listening and speaking skills through culturally-based materials. Course materials are enhanced by audio-visual and computer-based activities.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: HIN212Y, NEW212Y, any knowledge of Hindi. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Note: Students who speak Hindi or Urdu as a home language should enrol in LGGB705H or LGGB711H.

LGGA747H3 Introductory Hindi II
A continuation of LGGA707H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: HIN212Y, NEW212Y, knowledge of Hindi beyond materials covered in LGGA707H. 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: LGGA707H1 or permission of instructor

LGGA748H3 Introductory Tamil I
A continuation of LGGA707H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: HIN212Y, NEW212Y, knowledge of Tamil beyond materials covered in LGGA748H1. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGGA749H3 Introductory Tamil II
A continuation of LGGA748H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: NEW2121, knowledge of Tamil beyond materials covered in LGGA749H3. 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: LGGA748H1 or permission of instructor
LGCA4H3 Introductory Japanese I
A beginning course for those with minimal or no knowledge of Japanese. The course builds proficiency in both language and culture. Language practice includes oral skills for simple daily conversations; students will be introduced to the Japanese writing systems and learn to read and write simple passages.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: ESL120Y. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.

LGCA6H3 Introductory Japanese II
Continuation of Introductory Japanese I.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: ESL120Y. 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: LGCA4H3 or permission of instructor

LGBB2H3 Intermediate Spanish I
This course reviews Spanish usage and grammar and builds proficiency in listening, speaking, reading, and writing skills. There is a strong focus on the study of culture and the development of cross-cultural analysis.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: SPA220Y, 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: LGBB1H or permission of instructor

LGBB3H3 Intermediate Spanish II
A continuation of LGBB2H3.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: SPA220Y, native or near-native proficiency in Spanish
Prerequisite: LGBB2H3 or permission of instructor

LGBB4H3 Intermediate Modern Standard Arabic I
Building on LGBA4H3, 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: ARA312Y, NML310Y, Arabic courses in high school, advanced knowledge of Arabic. 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: LGBA4H3 or permission of instructor
Note: Students whose home language is a variety of spoken Arabic should enroll in LGBA4H3.

LGBB4H3 Intermediate Modern Standard Arabic II
A continuation of LGBB4H3. Through the use of authentic texts this course builds on language skills and cultural knowledge acquired in previous courses. The course also includes translation from Arabic to English and vice versa.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: ARA312Y, NML310Y, Arabic courses in high school, advanced knowledge of Arabic. 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: LGBB4H3

LGBB5H3 Modern Standard Arabic I for Students with Prior Background
A course for students exposed to informal spoken Arabic who wish to reinforce their ability to understand, speak, read and write Modern Standard Arabic. This course includes instruction in grammar, reading comprehension, and composition, through contemporary literary and non-literary texts, and builds oral proficiency with class discussions and audio-visual materials.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: Not for students educated in Arabic-language schools

LGBB5H4 Intermediate Sanskrit I
Students will gain further experience in structure and vocabulary, through exposure to a variety of texts such as fable, instructional and drama. Classes will meet in a workshop setting.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: EAS381H, SAN392Y or higher.
Prerequisite: LGBB5H3

LGBB5H5 Intermediate Sanskrit II
A continuation of Intermediate Sanskrit I. The class also works on paleography, looking at a single text copied in different character sets by different hands.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: EAS383H, SAN392Y or higher.
Prerequisite: LGBB5H4 or permission of instructor

LGBB6H3 Intermediate Mandarin I
This course will develop listening, speaking, reading, and writing skills in Mandarin. Writing tasks will help students to progress from characters to compositions and will include translation from Mandarin to English and vice versa. The course is not open to students who have more than the rudiments of Mandarin.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: All EAS & CHI 200- and higher level Chinese language courses; all B- and higher level LGG Chinese language courses; native speakers of any variety of Chinese. 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: LGBA4H1 or (LGBA4H2) or permission of instructor

LGBB6H5 Intermediate Mandarin II
Continuation of Intermediate Mandarin I. Further instructional work in character composition and oral proficiency.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: CHI courses above level 200.
Prerequisite: LGBB6H3

LGGB61H3 Intermediate Mandarin II
A continuation of LGGB60H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: All EAS & CHI 200- and higher level language Chinese courses; all 8- and higher level LGG Chinese language courses except LGGB60H1 or (LGGB10H1); native speakers of any variety of Chinese. 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: LGGB60H1 or (LGGB10H1) or permission of instructor.

LGGB82H3 Intermediate Mandarin for Heritage Students I
This course will further improve the literacy skills of heritage students by studying more linguistically sophisticated and totally extensive texts. Those who have not studied pinyin, the Mandarin pronunciation tool, but know about 600-800 complex or simplified Chinese characters should take this course instead of courses LGGB64H1 and LGGB65H1.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: All EAS & CHI 200- and higher level language Chinese courses; all 8- and higher level LGG Chinese language courses. 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: LGGB63H1 or permission of instructor.

LGGB63H3 Intermediate Mandarin for Heritage Students II
A continuation of LGGB62H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: All EAS & CHI 200- and higher level language Chinese courses; all 8- and higher level LGG Chinese language courses except LGGB62H1.
Prerequisite: LGGB62H1 or permission of instructor.

LGGB66H3 Mandarin I for Students with Prior Background
An introduction to Mandarin for students who speak some Chinese (any dialect) because of their family backgrounds but have minimal or no literacy skills in the language. Emphasis is placed on Mandarin phonetics and literacy through reading, writing and translation (English to Chinese & Chinese to English).
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: (LGGB62H1), All EAS, CHI & LGG Chinese language courses. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Prerequisite: LGGB65H3 or permission of instructor.

LGGB65H3 Mandarin II for Students with Prior Background
A continuation of LGGB64H1.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: (LGGB63H1). All EAS, CHI & LGG Chinese language courses except LGGB64H1 or (LGGB65H1). 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: LGGB64H1 or (LGGB65H1).

LGGB70H3 Hindi I for Students with Prior Background
Develops language and literacy through the study of Hindi cinema, music and dance along with an introduction to theatrical and storytelling traditions. The course enhances acquisition of cultural competence in Hindi with composition and conversation, complemented by culture-based material, film and other media.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 25
Exclusion: Not for students educated in India. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Prerequisite: Permission of instructor.

LGGB71H3 Hindi II for Students with Prior Background
Continuation of LGGB70H3.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 25
Exclusion: Not for students educated in India. 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: LGGB70H3.

LGGB74H3 Intermediate Tamil
Tamil language taught through culture for students with heritage language skills or prior formal study. The cultures of South India, Sri Lanka and diaspora populations will be studied to build literacy skills in the Tamil script as well as further development of speaking and listening skills.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 25
Exclusion: Not for students educated in Tamil Nadu or Sri Lanka.
Prerequisite: LGGA75H or permission of instructor.

LGGC30H3 Advanced Spanish: Language, Culture and Literature
Focus is on advanced language skills through study of literature and arts in Spain and the Americas within their cultural context. The course includes literary and non-literary texts and other media, with advanced grammar review, composition and conversation. Exclusion is based on compositions, participation and presentations, and examinations.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: SPA320Y, native or near-native proficiency in Spanish
Prerequisite: LGGB33H or permission of instructor.
LGCC32H Business Spanish
The Spanish language in a business context. Designed with the Management Program in mind, the aim is to develop facility in specialized uses of the Spanish language. The course uses texts and audiovisual materials to present the business world from within and through popular culture and literature. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 30 Exclusion: SPAN32H Prerequisite: LGGB33H or permission of instructor

LGCC33H Introduction to Spanish Translation and Interpretation
A workshop in translation to and from Spanish, focusing on basic theories and problems of translation. Translation of texts from a variety of sources, including law, mass media, business, and science will broaden students' vocabulary and develop proficiency in handling non-literate modes of expression. Breadth requirement: Arts, Literature & Language Limited enrolment: 30 Prerequisite: LGCC30H or LGCC34H or LGCC35H

LGCC34H Advanced Spanish: Spain
Focus is on advanced language skills through the study of history, popular culture, and the arts. Using literary and historical readings, film and other media from Spain, the course includes advanced grammar review, composition and conversation. Evaluation is based on written compositions, class participation and presentations, and examinations. Breadth requirement: Arts, Literature & Language Limited enrolment: 30 Exclusion: SPAN320V, native or near native proficiency in Spanish Prerequisite: LGGB33H or permission of instructor

LGCC35H Advanced Spanish: The Americas
Focus is on advanced language skills through the study of history, popular culture, and the arts. Using literary and historical readings, film and other media from Latin America, the course includes advanced grammar review, composition and conversation. Evaluation is based on written compositions, class participation and presentations, and examinations. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 30 Exclusion: SPAN320V, native or near native proficiency in Spanish Prerequisite: LGGB33H or permission of instructor

LGCC39H3 NON-CREDIT: Spanish Across the Disciplines
Non-credit course applying Spanish language skills to a course with related content. Students co-enroll in a relevant course in Humanities, Social Sciences, Arts, etc. A portion of the course work such as readings or written assignments will be completed in Spanish. Course may be used to complete Language Citation. Prerequisite: LGCC30H or LGCC32H or LGCC34H or LGCC35H. Prior arrangement with course instructors required.

LGCC60H3 Advanced Mandarin I
This course develops all four language skills (speaking, listening, reading, and writing), with special attention to idiomatic expressions. Through a variety of texts and interactive materials, students will be introduced to aspects of Chinese life and culture. Note: This course is not for native or near-native speakers. Breadth requirement: Arts, Literature & Language Limited enrolment: 30 Exclusion: LGCC62H or higher, all Chinese language courses with the exception of CHIN100Y, CHIN200Y, EAS100Y & EAS200Y Prerequisite: LGGB61H or [LGGB64H] or permission of instructor.

LGCC61H3 Advanced Mandarin II
A continuation of LGCC60H1. Note: This course is not designed for native or near native speakers. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 30 Exclusion: LGCC62H or higher, all Chinese language courses with the exception of EAS100Y and EAS200Y Prerequisite: LGCC60H or permission of instructor.

LGCC62H3 Advanced Mandarin: Culture in the East and West
Develops skills in spoken Mandarin and written varieties of Chinese. The course focuses on contrasts between Chinese and Western cultures. This course presents a variety of cultural and literary materials, through which students will further their language skills and learn approximately 400 new characters. Breadth requirement: Arts, Literature & Language Limited enrolment: 25 Exclusion: LGGB63H, LGGB67H, LGGB66H, LGGB65H, LGGC66H, LGGC67H Prerequisite: LGGB63H or permission of instructor. Note: Students who complete LGGB61H may request permission of instructor to take this course.

LGCC63H3 Advanced Mandarin: Pop Culture and the State
Develops skills in spoken Mandarin and written varieties of Chinese. The course focuses on the vision of the Chinese state presented in popular culture. This course presents a variety of text and non-text materials, through which students will further their language skills and learn approximately 400 new characters. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 25 Exclusion: LGGB63H, LGGB67H, LGGB66H, LGGB65H, LGGC66H, LGGC67H Prerequisite: LGGB63H or permission of the instructor. Note: Students who complete LGGB61H may request permission of instructor to take this course.
LGCC460H1 Reading Chinese: China from the Inside Out
Intended for students from Hong Kong, Macao, Taiwan and elsewhere, but usually excluding mainland China. Students must already know 2,500 complex Chinese characters and be able to read everyday publications, e.g., newspapers. Pinyin, complex-simplified character conversion, and fluency are emphasized through reading and discussing advanced materials, presentations, and essay writing.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: EAS295Y, LGGB011H, LGGB660H. The instructor has the authority to exclude students whose level of proficiency is unsuitable for the course.
Note: The sequence of courses offered in the Heritage and Non Heritage streams of Mandarin Chinese are not adequate preparation for this course.

LGCC681H1 Reading Chinese: Global Chinese Perspectives
A continuation of LGCC461H. Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: EAS295Y, LGGB021H, LGGB670H. 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: LGCC461H or (LGGB660H or LGGB011H) or permission of instructor.
Note: The sequence of courses offered in the Heritage and Non Heritage streams of Mandarin Chinese are not adequate preparation for this course.

LGCC686H1 Classical Chinese I
This course will examine classical Chinese texts such as Zhe parables, philosophical maxims, proverbial sayings, rhyming couplets, short poems, and Buddhist stories. A working knowledge of modern Chinese will be assumed.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Exclusion: EAS296Y, EAS306Y
Prerequisite: LGCC461H or (LGGB067H or LGGB062H)

LGCC671H1 Classical Chinese II
A continuation of LGCC661H (Classical Chinese I).
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Exclusion: EAS296Y, EAS390Y
Prerequisite: LGCC661H or permission of instructor.

LGCC701H1 Advanced Hindi: From Hindustan to Modern India
Advanced language learning through an introduction to the historical development of the Hindi language. Students develop language skills through the study of educational structure, and literary and cultural institutions in colonial and postcolonial India. The course studies a variety of texts and media and integrates composition and conversation.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 25
Exclusion: Not for students educated in India.
Prerequisite: LGGB071H & LGGB071H or permission of instructor.

LGGB971H3 Experiential Learning in a Language Community
A course for language learning in a community setting. This course, students further their language proficiency outside the classroom with a project requiring the use of Arabic, Mandarin, Hindi, Spanish, or Tamil for 4-10 hours per week in a community environment. Requires final paper written in the community language.
Prerequisite: 8.5 credits, including a C-level language course, or permission of instructor.

Linguistics
(B.A.)

Faculty List
R. J. Binnick, B.A. (CUNY), M.A., Ph.D. (Chicago), Professor
R. Helma-Park, M.A., Ph.D. (Toronto), Associate Professor
R. Strybny, B.A. (Carleton), M.Sc. (Alberta), Ph.D. (Alberta), Associate Professor
S. Belz, B.A., M.A., Ph.D. (Toronto), Assistant Professor
A. Hachimi, B.A. (Moulay Ismail), M.A. (Hawaii), Ph.D. (Hawaii), Assistant Professor
Y. Kang, B.A. (Sonsin National), Ph.D. (MIT), Assistant Professor
C. Narayam, A.B. (Berkeley), M.A. (Berkeley), Ph.D. (Michigan), Assistant Professor
A. Patel, B.A. (Queen’s), M.A. (Tel Aviv), M.A. (Chicago), Assistant Professor

Program Director: R. I. Binnick Email: binnick@atc.ucn.utoronto.ca

Linguistics is the scientific study of human language. It encompasses theories of linguistic structure in all domains: speech sounds (phonetics and phonology), words (morphology), sentences (syntax), meaning (semantics), and texts or conversations (discourse).
Sub-fields of linguistics include socio-linguistics (language variation according to region, gender, class, etc., as well as the social functions of language); psycholinguistics (language acquisition and processing, and their disorders); historical linguistics (how languages change across time, and why); and applied linguistics (e.g., second language learning, translation, clinical linguistics).
The Major Program in Linguistics is designed to help students prepare for entry into professional programs in areas with a significant language component, such as speech/language pathology, education, and language teaching. Students with a particular
interest in psycholinguistics can enrol in the Specialist Program in Psycholinguistics which provides excellent preparation for entry into postgraduate programs in speech/language pathology, psycholinguistics and education. The Specialist Program in Linguistics is designed for students who are interested in a more intensive study of linguistics and for students who are interested in general and theoretical linguistics.

The Linguistics Study Guide is available at:
http://www.utsu.utoronto.ca/%7Ehumdiv/LangandLing/ling_studyguide/index.htm

Guidelines for 1st year course selection

Students intending to complete the Specialist Program in Psycholinguistics should include the following in their first year course selection: LINA01H, LINA02H, PSYA01H, PSYA02H Students intending to complete the Specialist or Major Program in Linguistics should include LINA01H and LINA02H and should consider including a language course. Students intending to complete the Minor Program in Linguistics should include LINA01H and LINA02H. Students are also strongly encouraged to take HUMA01H (Exploring Key Questions in the Humanities) as early as possible in their studies.

Note: For Co-op opportunities related to the Specialist Program in Psycholinguistics, the Specialist Program in Linguistics and the Major Program in Linguistics, please see Humanities Co-operative Program section in this Calendar.

SPECIALIST PROGRAM IN PSYCHOLOGICAL REV
Program Supervisor: R. L. Binet Email: binoret@utsu.utoronto.ca

Program Requirements

Students must complete 12.5 full credits, including 4.0 full credits at the C- and D-levels of which 1.0 full credit must be at the D-level as follows:

1. LINA01H General Linguistics I
2. LINA02H General Linguistics II
3. PSYA01H Introduction to Psychology: Part I
4. PSYA02H Introduction to Psychology: Part II
5. LINB09H Phonetics: The Study of Speech Sounds
6. LINB09H Phonology I
7. LINB09H Syntax I
8. PLIC34H First Language Acquisition
9. PLIC35H Psycholinguistics
10. One of the following:
    - LINC05H Morphology
    - LINC12H Semantics
11. 1.5 full credits from:
    - PLIB25H Second Language Acquisition
    - PLIC15H Social Perception
    - PLIC34H Psycholinguistics of Reading
    - PLIC44H Acquisition of the Mental Lexicon
    - PLID51I Disorders of Speech and Language
    - (PLIC64H) Seminar in Second Language Acquisition
    - (PLIC65H) Seminar in Psycholinguistics
12. 1.3 full credits from:
    - PLIC65H Quantitative Methods in Linguistics (highly recommended)
    - PSYB07H Data Analysis in Psychology
    - PSYB20H Introduction to Developmental Psychology
    - PSYB31H Perception and Cognition
    - PSYB37H Memory and Cognition
    - PSYB55H Human Brain and Behaviour
    - PSYB21H Advanced Developmental Psychology
13. Four further full credits in LIN and/or PLI and/or FRE linguistics [FREC46H, FREC47H, FREC48H, FREC49H]
14. One further half credit in PSY.
SPECIALIST PROGRAM IN LINGUISTICS
Program Supervisor: R. J. Binick Email: binick@utsc.utoronto.ca

Program Requirements
Students must complete 12.0 full credits, including 4.0 full credits at the C- and D-level of which 1.0 full credit must be at the D-level as follows:

1. All of the following:
   LINA40H1 General Linguistics I
   LINA40H2 General Linguistics II
   LINA40H5 Phonetics: The Study of Speech Sounds
   LINA40H5 Phonology I
   LINC40H5 Syntax I
   LINC40H5 Phonology II
   LINC50H5 Morphology
   LINC11H1 Syntax II
   LINC12H1 Semantics

2. 2.5 full credits from the following, including at least 5 full credit from Group A and at least 0.5 full credit from Group B:
   **Group A**
   LINC20H1 Sociolinguistics
   (LINC23H1) Language, Power and Persuasion
   LINC27H1 Language and Ethnicity
   LINC28H1 Language and Gender
   **Group B**
   PLIC25H1 Second Language Acquisition
   PLIC25H1 Speech Perception
   PLIC24H1 First Language Acquisition
   PLIC35H1 Psycholinguistics
   PLID34H1 The Psycholinguistics of Reading
   PLID44H1 Acquisition of the Mental Lexicon
   PLID55H1 Disorders of Speech and Language
   (PLID65H1) Seminar in Psycholinguistics

3. Three full credits of language study. This may be filled with FRE or LGG (or at another campus) and should consist of three full credits in one language or two full credits in one language and one full credit in another language. Note that students who follow the first option may qualify for the Language Citation (see the University of Toronto Language Citation section of this Calendar).

4. A further two full credits in any LIN, PLI, JAL, or JLP courses, and/or courses selected from the following courses:
   FREC47H1 Special Topics in Linguistics:Pidgin and Creole Languages
   FREC47H1 Sociolinguistics of French
   FREC49H1 French Semantics
   HUMC11H1 Religion and Language
   PHIL580H Symbolic Logic I
   PHIL890H Philosophy of Language
   PHIL868H Foundations of Cognitive Science
   PHIL510H Symbolic Logic II

MAJOR PROGRAM IN LINGUISTICS
Program Supervisor: R. J. Binick Email: binick@utsc.utoronto.ca

Program Requirements
Students must complete eight full credits, as follows:

1. LINA40H1 General Linguistics I
   LINA40H2 General Linguistics II
   LINA40H5 Phonetics: The Study of Speech Sounds
   LINA40H5 Phonology I
   LINC40H5 Syntax I

2. One of the following:
   LINC40H5 Morphology
   LINC12H1 Semantics

3. Four further full credits in LINC and/or PLI and/or FRE linguistics (FREC46H1, FREC47H1, FREC48H1, FREC49H1), of which at least two credits must be at the C- or D-level.

4. One full credit in a language.
MINOR PROGRAM IN LINGUISTICS
Program Supervisor: R. I. Birmick Email: himrick@uottawa.ca

Program Requirements
Students must complete four full credits, as follows:

1. LINA01H General Linguistics I
   LINA02H General Linguistics II
2. Any two of the following:
   LINB09H Phonetics: The Study of Speech Sounds
   LINB10H Phonology I
   LINB11H Syntax I
3. Two further full credits in LIN and/or PLI and/or FRE linguistics (FREC46H1, FREC47H1, FREC48H1, FREC49H1), of which at least one credit must be at the C- or D-level.

LINB13H3 Language Diversity and Language Universals
An introduction to linguistic typology with special emphasis on cross-linguistic variation and uniformity in morphology, and syntax.
Breadth requirement: Arts, Literature & Language
Exclusion: LIN206H
Prerequisite: LINB06H

LINB17H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: LIN204H

LINB15H3 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.
Breadth requirement: Arts, Literature & Language
Exclusion: LIN204H, LINB18H may not be taken after or concurrently with LINC05H.

LINE25H3 Sociolinguistics
The study of the relationship between language and society. Topics include: how language reflects and constructs aspects of social identity such as age, gender, socioeconomic class and ethnicity; ways in which social context affects speakers' use of language; and social factors which cause the spread or death of languages.
Breadth requirement: Social & Behavioural Sciences
Exclusion: LINB21H1, (LINB22H1), LIN256H, FREC48H1
Prerequisite: LIN042H

LINE25H3 Phonology II
Basic Issues in phonological theory. This course assumes familiarity with phonetic principles, as discussed in LINB09H, and with phonological problem-solving methods, as discussed in LINB04H.
Breadth requirement: Arts, Literature & Language
Exclusion: LIN225H
Prerequisite: LINB04H & LINB09H
LINC201H1 Morphology
Core issues in morphological theory, including properties of the lexicon, combinatorial principles governing complex word-formation, and interactions between word-formation and phonology, syntax and semantics.
Breath requirement: Arts, Literature & Language
Exclusion: LIN231H, LIN333H, (LINC050H)
Corequisite: LINB044H & LINB064H

LINC206H3 Language Change
An introduction to language change and language relationships.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: LIN362H
Prerequisite: LINB044H

LINC209H3 Phonetic Analysis
Practical application of phonetic theory with special emphasis on instrumental and experimental techniques.
Breath requirement: Natural Sciences
Limited enrolment: 15
Exclusion: LIN423H
Prerequisite: LINB094H

LINC311H3 Syntax II
Basic issues in syntactic theory, including principles and constraints governing sentence formation and interfaces with other areas of language structure such as morphology and semantics, with emphasis on universal principles.
Breath requirement: Arts, Literature & Language
Exclusion: LIN223H, LIN331H
Prerequisite: LINB046H

LINC122H3 Semantics: The Study of Meaning
An introduction to the role of meaning in the structure, function, and use of language.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: LIN341H, (FREC49H), FRED49H
Prerequisite: LINB044H

LINC185H3 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.
Breath requirement: Arts, Literature & Language
Exclusion: JAL328H
Prerequisite: LINB094H

LINC227H3 Language and Ethnicity
How different ethnic groups become identified by their speech, and concentrating especially on bilingualism in immigrant communities. Conversational pragmatics (e.g., code-switching, language contact issues (e.g., borrowing), and how speakers' consciousness of such phenomena affects their use.
Breath requirement: Social & Behavioural Sciences
Prerequisite: One full credit at the B-level in LIN or PL

LINC281H3 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.
Breath requirement: Social & Behavioural Sciences
Exclusion: JAL355H
Prerequisite: One full credit at the B-level in ANT, LIN, SOC or WST

LINC202H3 Language Variation
Theory and methodology of variationist sociolinguistics. Topics include: Collection and analysis of natural-speech data, linguistic and social factors that constrain language variation (e.g., phonological environment, word classes, style, age, social class, gender, ethnicity, social networks), stable variation vs. changes in progress, and acquisition of linguistic variation.
Breath requirement: Arts, Literature & Language
Exclusion: LIN256H, LIN351H
Prerequisite: LINA01H & LINB02H

LINC211H3
LINC222H3
LINC230H3 Independent Study in Linguistics
Independent study and research in an area of interest to the student. Students must obtain consent from a supervising instructor before registering. Interested students should contact the Program Supervisor for Linguistics.
Prerequisite: At least one full credit at the C-level in LIN, or permission of the instructor.

LINC232H3 Seminar in Sociolinguistic Methodologies
Teaches research methodologies for sociolinguistics (interviews, corpus collection, surveys, ethnography, etc.) and helps students conduct individual research studies in real-life contexts.
Prerequisite: [LINB21H & one sociolinguistics course at the C-level] or permission of instructor.

PLIB253H3 Second Language Acquisition
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 Concurrent Teacher Education Program (French).
Breath requirement: Natural Sciences
Exclusion: (LINC025H)
Prerequisite: LINA01H or FREB441H or FREB459H or alternative prerequisite with permission of the instructor.

PLIC151H3 Speech Perception
An examination of the acoustics and perceptions of human speech. By looking at the acoustic properties of a variety of languages (including Tamil, Tagalog and First Nations languages), we will explore how people learn the peculiarities of their sound system and what this reveals about the nature of human speech perception.
Breath requirement: Social & Behavioural Sciences
Prerequisite: LINB044H & LINB094H
PLUC246H3 First Language Acquisition
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.
Breadth requirement: Natural Sciences
Exclusion: JLP311H & FREN341H1
Prerequisite: One full credit in LIN or [FREN341H1 & FREN345H1] & one full credit in PSY

PLUC359H3 Psycholinguistics
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind. Topics include speech perception, word retrieval, use of grammar in comprehension and production, discourse comprehension, and the role of memory systems in language processing.
Breadth requirement: Natural Sciences
Exclusion: JLP774H1
Prerequisite: One credit in LIN and one credit in PSY

PLUC365H3 Quantitative Methods in Linguistics
An introduction to experimental design and statistical analysis for linguists. Topics include both univariate and multivariate approaches to data analysis for acoustic phonetics, speech perception, psycholinguistics, language acquisition, language disorders, and sociolinguistics.
Breadth requirement: Quantitative Reasoning
Exclusion: LIN305H
Prerequisite: At least one full credit in PLI

PLUD31H3 PLUD32H3 Independent Study in Psycholinguistics
Independent study and research in an area of interest to the student. Students must obtain consent from a supervising instructor before registering. Interested students should contact the Program Supervisor for Psycholinguistics
Prerequisite: At least one full credit at the C-level in PLI & permission of the instructor

PLUD34H3 The Psycholinguistics of Reading
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. Recommended for students in the Concurrent Teacher Education Program (French).
Breadth requirement: Natural Sciences
Exclusion: LINC34H1, PLUC34H1
Prerequisite: LINA41H1 or [FREN384H1 & FREN385H1] & PLIC24H1 or alternative prerequisite with permission of the instructor.

PLUD44H3 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.
Breadth requirement: Natural Sciences
Prerequisite: PLIC24H or permission of the instructor

PLUD55H3 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: JLS474H1
Prerequisite: One full credit in LIN; one full credit in PSY & PLIB25H1 or PLIC24H or PLIC355H1 or permission of the instructor
Management

S. D. Mores, B.A. (Laurier), M.A. (Wilfrid Laurier), Ph.D. (Waterloo), Assistant Professor
K. Song, B.A. (Calgary), M.A., Ph.D. (Waterloo), Assistant Professor
J. Troupakos, B.S., M.B.A (Oklahoma State), Ph.D. (Purdue), Assistant Professor
S.W. Aldred, B.Com., M.A. (Sind), M.B.A. (Concordia), Senior Lecturer
C. Bowditch, B.A. (Queen’s), M.Sc. (Stirling), M.B.A. (Western), Senior Lecturer
L. H. Chen, M.S.Ed. (Penn), M.B.A. (U Toronto), Ph.D. (U Toronto), CGA, Senior Lecturer
S. L. Daga, B.A. (Waterloo), M.Ed. (Toronto), C.A. (CICA) C.P.A., Senior Lecturer
G. Quan Fun, CA., CMA., CGA., M.B.A. (Laurentian), B.A. (Toronto), Senior Lecturer
A. Szebehely, B.A. (Toronto), M.B.A. (York, Canada), CMA., Senior Lecturer
D. Chow, B.Com. (Toronto), M.B.A. (McMaster), Ph.D. (IRKUST), CMA, Lecturer
J. Heathcote, B.A., M.A. Ph.D. (Western), Lecturer
H. Laurence, B.A. (Amherst), M.A., Ph.D. (McGill), LLB (Osgoode), Lecturer
V. Quan, B.A.Sc., M.A.Sc., Ph.D. (Toronto), Lecturer
P. Radhakrishnan, B.A. (Windsor), M.A., Ph.D. (Illinois), Lecturer

Chair: M. Kozlowski

The design of the curriculum in Management is guided by our mission statement, which follows:

"The mission of the Department of Management at the University of Toronto Scarborough is to provide our students with the best pre-professional undergraduate management education in Canada. With special emphasis on our co-op model of education, we aim to provide a coherent set of learning experiences that simultaneously teaches management skills and develops the capacity to think analytically about managerial, economic and societal problems and opportunities. Our faculty engages in nationally and internationally recognized research which advances the frontiers of knowledge, serves the interests of our community, and brings new insights to our students. We will improve our students' current and future experiences by building and maintaining close links with private and public sector organizations, by helping students to bridge the gap between education and employment, and by providing a continuing and lively connection among current and former students of the Department."

The University of Toronto Scarborough offers the Bachelor of Business Administration degree to students who complete one of the Specialist Programs in Management. We also offer a Co-operative version of the Management Program as well as a non-Co-op Certificate in Business.

Limited enrolment: Because of pressures of demand for places, it has been necessary to place enrolment limits on most Management courses including those given in the summer session, and on admission to Programs. Information on how to apply for admission to a Program and to limited enrolment courses will be available prior to the end of classes in April.

Prerequisites: Students are responsible for ensuring that they have the prerequisites for all Management courses. Students who knowingly or unknowingly register for courses for which they do not have the necessary prerequisites will be denied access to those courses. Students are reminded that an SFH (Standing deferred) in a course is considered as not meeting the prerequisite for the subsequent course.

Management Programs

The degree offered to management students (Co-op and Non-Co-op) is the B.B.A. Students qualify for the B.B.A. by completing one of the specialist programs in Management. All specialist programs have co-op options, and all are described below. B.B.A. students are not permitted to request either the Major Program in Economics for Management Studies or the Minor Program in Economics for Management Studies.

Admissions

Each year, 400 students will be admitted to the Specialist Programs in Management including Co-operative studies. There are three possible ways to be admitted to the Specialist Programs. (Students interested in Co-op should also refer to additional application information in the following Co-op Programs section).

1. Directly from Secondary School
   Some students will be admitted directly from high school, on the basis of academic performance. Applicants interested in the Specialist Programs in Management must have completed Grade 12 English and Grade 12 Calculus.

2. At the End of First Year
   Most pre-program students will be considered for admission to the various B.B.A. programs at the end of the winter session of their first year. A second round of admissions takes place at the end of the following summer session. The minimum CGPA to guarantee admission to Non-Co-op BBA is calculated annually. For this year, it will not be greater than 3.3. Applications to the Co-Op B.B.A. (both from pre-program students and from B.B.A. students in Co-op) will only be considered at the end of first year in the Winter session Subject POSts selection cycle only. Typically, the cut-off for admission to Co-op will be higher than the cut-off for admission to Non-Co-op. Applicants for the Specialist Programs in Management must have completed (or be in the process of completing) MATH 030H, MATH 040H, ECON 040H, ECON 041H & (MATH 328H & MATH 338H) OR (MATH 300H & MATH 358H & MATH 378H) may also be used to satisfy the calculus requirement) and at least 4.0 full credits. Decisions will be made only when all grades are received.

3. Late Admission
   A limited number of places in the Non-Co-op B.B.A. will be available to students beyond the two application periods described in the previous section. Students may apply until they have completed up to 10 full credits, and admission will be on the basis of
all grades received. Students who have completed more than 10 full credits will not be considered for admission to the Programs. Since the number of students accepted in this category is very limited, students who are denied admission after first year (in the periods at the end of the winter session and the end of the summer session in first year) are strongly advised to visit Academic advising and Career Centre to explore alternative program options.

Guidelines for Course Selection for First-Year Students in Management Programs leading to the B.B.A.

- Non Co-op Students directly admitted to the B.B.A.: MGT80M, MGT80H, ECM90H, ECM90H, MATA2H, MATA2H, MGTB0H, MGTB0H, MGTB0H 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 MGTB0H and MGTB0H in first year.
- Students admitted directly into Management and Information Technology leading to the B.B.A.: MGT90M, MGT90H, ECM90H, ECM90H, CSSCA98H, CSSCA98H, CSSCA98H, and [MATA2H & MATA3H] or [MATA2H & MATA3H] or [MATA2H & MATA3H].

Recommended Schedule of courses for Co-op Students in First Summer Session: ECMB2H, ECMB2H, ECMB2H, ECMB2H, MGTB0H, MGTB0H, [MGTB0H or MGTB0H].

Grades Required to Remain in Programs

In the first year, students will take the courses required for the Program of their choice (see the following paragraph). 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 (CGPA) of 2.0 or higher after having attempted at least 4 full credits and continue to maintain a CGPA of 2.0 or higher after having attempted at least 8 full credits. Credits received at UTSC from sources external to U of T (transfer credit, AP, IB etc.) will be included in the count of attempted credits.

Overall course load limit for B.B.A. students

Students may take a maximum of 3.0 full credits in any one session. On occasion, B.B.A. students who have completed at least 10 full credits and who have a cumulative GPA of at least 3.5 may be permitted into an additional half-credit course. Requests to add an additional course must be made in writing to management-supervised-studies@utsc.utoronto.ca. This must be done after the last day to add courses for the session (see the Sessional Dates section of this Calendar). Students must provide an academic rationale for the request and include their name, student number, the course code and section requested.

Please note that approval of a request to add a course outside Management and Economics does not guarantee a place in the course. Requests from students who do not meet the above criteria will not be considered.

Guidelines for Course Selection for Students Admitted to Pre-Program and for Non-Program students who are interested in applying to Management

Read the information sent with your offer of admission. Students must have at least 4 full credits from the University of Toronto to apply to Programs. For B.B.A. consideration, enrol in: MGT80H, MGT80H, ECM90H, ECM90H, MATA2H, MATA3H

Taking a course in the Humanities or Social Sciences in first year is recommended.

Notice to Non-Program Students

All B, C and D-level Management courses are restricted to students in Management Programs.

Management courses at the St. George campus are restricted and not available to U of T Scarborough students.

Breadth & Depth Within the Degree

Students who first completed courses as UTSC degree students in the 2010 Summer Session or in a subsequent session must fulfill breadth and depth requirements in order to graduate. (See the "Degrees" section of this Calendar for the full degree requirements.)

1. Depth: A minimum of 6.0 full credits must be taken at the C and/or D-Level. Of these, a minimum of 1.0 full credit must be at the D-level. Students may use any C and D-level courses to fulfill this requirement, regardless of whether or not they are also used as a Program Requirement.

2. Breadth: A half-credit from each of the following categories must be taken. Both Program Requirements and Electives may be used to fulfill this requirement.
   a) Arts, Literature, and Language
   b) History, Philosophy, and Cultural Studies
   c) Social and Behavioural Sciences
   d) Natural Sciences
   e) Quantitative Reasoning

Management students over the course of completing their program requirements will naturally fulfill categories 3 and 5. Students completing their required 1.0 credit from the Department of Humanities will often find that categories 1 and/or 2 will be naturally accounted for as well by their course selection.
Management

CO-OPERATIVE PROGRAMS IN MANAGEMENT
Program Director: C. Aminniah (416-287-7122) E-mail: aminniah@utsc.utoronto.ca
Supervisor of Studies: S. Ahmed E-mail: management-supervise-studies@utsc.utoronto.ca

The Management Co-operative Program is an enriched program which combines academic studies with work experience in both public and private enterprises. Depending on their needs and abilities, students work in areas such as accounting, public administration, auditing, communications, economic development, finance, human resources/personnel, information systems, marketing, policy and strategic planning. For information about admission, work placements and standing in the Program, please see the Co-operative Programs section of this Calendar.

Full Year/Trimester Programming
The Management Co-op Program operates on a trimester schedule, featuring three terms (fall, winter and summer) in each calendar year. Students work or study in all three terms for five years or until graduation requirements are met. The Program requires eight-four month terms of study and three work terms. Students normally begin with three to five study terms (fall, winter and summer), then alternate study and work terms. Students always conclude their degree with a study term.

Program Requirements
Curriculum
Co-op students follow the course requirements of one of the specialist programs described later in this section. In addition, all co-op students must take MGTC36H1 prior to 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 full credits, including ECMA04H1, ECMA06H1, MGTA03H1, MGTA04H1, MGTC05H1, MGTC06H1, the appropriate Mathematics courses and the Introduction to Management Co-op Work Term Preparation Course
- For the second work term: 9 full credits, including MGTC34H1
- For the third work term: 11 full credits

SPECIALIST PROGRAM IN ECONOMICS FOR MANAGEMENT STUDIES
Program Requirements
This program which has 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.

The Specialist 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 full credits in Economics for Management Studies, including
   ECMA04H1, ECMA06H1, ECOM02H1, ECOM02H1, ECMB12H1, ECMC11H1, ECMD10H1, ECMD13H1, ECMD14H1, ECOM59H1 and two additional full credits in Economics for Management Studies including at least one at the C-level (not including ECOM91H1, ECOM92H1, ECOM93H1).
2. [MATA02H1 & MATA03H1] or [MATA02H1 & MATA03H1 & MATA04H1 & MATA05H1]
3. MGTA03H1, MGTA04H1, MGTC05H1, MGTC06H1, [MGTC06H1 & MGTC09H1] or MGTC07H1, [MGTC09H1 or MGTC09H1], MGTC19H1, MGTC29H1, MGTC49H1, MGTC59H1, MGTC69H1, MGTC79H1, MGTC13H1, MGTC33H1, MGTC35H1, MGTC38H1, MGTC39H1, MGTC41H1, MGTC42H1, MGTC43H1, MGTC49H1, MGTC54H1, MGTC55H1 or MGTC70H1
4. At least 0.5 full credits from courses within the Department of Economics.
5. At least 1.0 full credits in courses within the Department of Humanities.

Note: Students admitted to UTSC prior to September 2008 may take MGTC24H1 to complete their requirements in place of MGTC90H1 and MGTC90H1. Students admitted to UTSC as of September 2008 must take MGTC90H1 and MGTC90H1 to complete their program requirements.

The remaining courses needed to complete the degree requirements of 20 credits can be chosen either within or outside the Department of Management in accordance with the student’s interest. In choosing courses, students should keep in mind the need to complete the general BBA degree requirements referred to above.

Students should be aware that the mathematics requirement implies that Grade 12 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.
SPECIALIST PROGRAM IN MANAGEMENT

Supervisor: S. Ahmed  Email: management-supervisor-studies@utc.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. Co-op students should 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 B.B.A.

Note: A single course may only be used to fulfill one of the following requirements:

1. MGT403H, MGT406H, MGTB03H, MGBT04H, MGTB05H, MGTB08H, MGTB09H or (MGT330H, MGT327Y or MGT328H & MGT329H), MGTB41H, MGTB49H, MGTB48H, MGTB44H & 1.0 full credit of D-level MGT or ECM courses.

2. (MATA32H & MATA33H) strongly recommended or (MATA38H & MATA35H/A36H/A37H)

3. At least 0.5 credit of courses emphasizing strategic management, chosen from ECON43H, MGT359H, MGT358H, MGT348H, MGT345H, MGT357H, MGT356H, MGT355H & 1 full credit of C-level Economics for Management Studies courses (not including ECON34H, ECON32H, ECON30H).

4. In addition to the program-required 1.0 credit in Mathematics, all students in this program must complete at least 2.5 credits from outside MGT/ECM. The math courses will meet the breadth requirement in Quantitative Reasoning while the program-required Economics courses (ECON44H and ECON46H) will meet the breadth requirement in Social and Behavioural Sciences. The remaining three breadth categories can be fulfilled by any of the 2.5 credits outside MGT/ECM.

Note: Students admitted to UTSC prior to September 2008 may take MGT241H to complete their requirements in place of MGTB90H and MGT90H. Student admitted to UTSC as of September 2008 must take MGTB90H and MGT90H to complete their program requirements.

The remaining courses needed to complete the degree requirement of 20 credits can be chosen either within or outside the Department of Management in accordance with the student’s interest. In choosing courses, students should keep in mind the need to complete the general BBA degree requirements referred to above.

SPECIALIST PROGRAM IN MANAGEMENT AND ACCOUNTING

Supervisor: S. Ahmed  Email: management-supervisor-studies@utc.utoronto.ca

The Accounting Specialist program which has a Co-op option is designed for the individual who is interested in acquiring a concentrated core of accounting and related knowledge required to become a professional accountant. It provides a solid foundation to prepare students to become Chartered Accountants, Certified Management Accountants and Certified General Accountants after graduation. In addition, the Specialist program provides students the personal and professional attributes necessary to build a successful career in senior management.

The Accounting Specialist program encompasses topics such as introductory to advanced financial and managerial accounting, assurance, taxation, economics, and finance, along with a range of more advanced electives which covers topics and competencies that incorporate critical thinking and ethical decision making.

Program Requirements

The Program requires the completion of the following minimum requirements 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. MGT403H, MGT406H, MGTB03H, MGBT04H, MGTB05H, MGTB08H, MGTB09H (MGT330H, MGT327Y or MGT328H & MGT329H), MGTB41H, MGTB49H, MGTB48H, MGTB44H & 1.0 full credit of D-level MGT or ECM courses.

2. (MATA32H & MATA33H) strongly recommended or (MATA38H & MATA35H/A36H/A37H)

3. At least 0.5 credit of courses emphasizing strategic management, chosen from ECON43H, MGT359H, MGT358H, MGT348H, MGT345H, MGT357H, MGT356H, MGT355H & 1 full credit of C-level Economics for Management Studies courses (not including ECON34H, ECON32H, ECON30H).

4. ECON43H, ECON46H, ECON32H, ECON30H & 1 full credit of C-level Economics for Management Studies courses (not including ECON34H, ECON32H, ECON30H).

5. At least one D-level course from MGT90H, MGT90H, MGT90H, MGT90H, MGT90H, MGT90H & MGT90H.

6. At least one D-level course from MGT90H, MGT90H, MGT90H, MGT90H, MGT90H, MGT90H & MGT90H.

7. In addition to the program-required 1.0 credit in Mathematics, all students in this program must complete at least 2.5 credits from outside MGT/ECM. The math courses will meet the breadth requirement in Quantitative Reasoning while the program-required Economics courses (ECON44H and ECON46H) will meet the breadth requirement in Social and Behavioural Sciences. The remaining three breadth categories can be fulfilled by any of the 2.5 credits outside MGT/ECM.

Note: Students admitted to UTSC prior to September 2008 may take MGT241H to complete their requirements in place of MGTB90H and MGT90H. Student admitted to UTSC as of September 2008 must take MGTB90H and MGT90H to complete their program requirements.
The remaining courses needed to complete the degree requirements of 20 credits can be chosen either within or outside the Department of Management in accordance with the student’s interest. In choosing courses, students should keep in mind the need to complete the general BBA degree requirements referred to above.

NOTES:

- **Chartered Accountancy (CA) requirements:** For students interested in the CA designation, in addition to the specified courses in item 1 above, the following additional courses must be completed: MGT217H, MGT255H, MGT264H & one of MGT268H (formerly MGT210H), MGT255H, MGT264H
- **Certified Management Accountancy (CMA) requirements:** For students interested in the CMA designation, in addition to the specified courses in item 1 above, the following additional courses must be completed: MGT241H, MGT275H, MGT254H or (MGT210H) & MGT255H or MGT264H
- **Certified General Accountants (CGA) requirements:** Students who wish to be eligible for a “block transfer” of credits into CGA PACE studies must also complete: MGT275H, MGT254H or (MGT210H), MGT255H & MGT264H.
- **The advanced auditing courses (MGT261H & MGT262H) are part of post-graduate CGA professional studies and students who take these courses as part of their degree studies should be aware that they will still be required to write CGA challenge exams.**
- **Other:** Regardless of which professional accounting path students are interested in pursuing, they are strongly advised to refer to the websites of the three professional accounting organisations to be aware of their specified minimum grade requirements and any changes that may occur between updates of the description of this program in the UTSC Calendar.

**SPECIALIST PROGRAM IN MANAGEMENT AND FINANCE**

**Supervisor:** S. Ahmed  Email: management-supervisor-studies@utsc.utoronto.ca

This Program which has a co-op option builds on the core of the Specialist in Management Program and offers a deeper and wider coverage of Finance topics. The Program courses will equip students with a comprehensive understanding of financial issues and concepts, and with a firm mastery of methodologies and problem solving skills required in modern-day finance.

**Program Requirements**

The Program requires the completion of the following minimum requirements as part of a twenty-credit degree B.B.A.:

**Note:** A single course may only be used once to fulfill one of the following requirements:

2. MAT132H & MAT136H strongly recommended or [MAT132H & MAT135H]
3. At least 0.5 credit of courses emphasizing strategic management, chosen from ECMC43H1, MGT211H, MGT213H, MGT214H, MGT215H, MGT217H, MGT235H, MGT239H, MGT242H, MGT244H, MGT247H, MGT248H, MGT251H, MGT254H or MGT255H
5. MGT211H & MGT275H
6. At least 2.0 full credits from MGT217H, MGT253H, MGT275H, MGT282H, MGT283H, MGT284H, MGT285H
7. In addition to the program-required 10.0 credit in Mathematics, all students in this program must complete at least 2.5 credits from outside MGT/ECM. In the math courses will meet the breadth requirement in Quantitative Reasoning while the program-required Economics courses (ECMA404H) and ECM260H) will meet the breadth requirement in Social and Behavioural Sciences. The remaining three breadth categories can be fulfilled by any of the 2.5 credits outside MGT/ECM.

**Note:** Students admitted to UTSC prior to September 2008 may take MGT244H to complete their requirements in place of MGT201H and MGT204H. Student admitted to UTSC as of September 2008 must take MGT201H and MGT204H to complete their program requirements.

The remaining courses needed to complete the degree requirements of 20 credits can be chosen either within or outside the Department of Management in accordance with the student’s interest. In choosing courses, students should keep in mind the need to complete the general BBA degree requirements referred to above.

**SPECIALIST PROGRAM IN MANAGEMENT AND HUMAN RESOURCES**

**Supervisor:** S. Ahmed Email: 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 specialization in the area of Human Resource Management (HRM). HRM is an area that encompasses topics such as recruitment and selection, performance management, compensation, and industrial relations. By taking a BBA with a specialist in HRM, you will be qualified to work in any area of Human Resource Management, to take a graduate degree in HRM (potentially with advanced standing), and you will be well prepared for the CHRP certification exam required by many organizations for upper-level HR positions. In order to qualify for CHRP certification, you must maintain an average of at least 70% across the 9 courses required by CHRP and at least 65% in each of those 9 courses.

By completing this Specialist Program in Management and Human Resources, you will cover the nine required CHRP courses.
**Program Requirements**

The Program requires the completion of the following minimum requirements as part of a twenty-credit degree B.B.A.:

**Note:** A single course may only be used once to fulfill one of the following requirements:

1. MGT403H, MGT404H, MGT405H, MGT406H, MGT408H, MGT609H, MGT610H, MGT611H, or MGT612H.
2. MGT623H & MGT624H or MGT625H & MGT626H.
3. MAT323H & MAT379H.
4. At least 0.5 credit of courses emphasizing strategic management, chosen from ECOM43H1, ECOM43H2, or ECOM43H3.
5. At least 0.5 credit of courses emphasizing strategic management, chosen from MGT632H, MGT633H, or MGT634H.
6. At least 0.5 credit of courses emphasizing strategic management, chosen from MAT630H, MAT631H, or MAT632H.
7. 1.0 credit at the D-level in ECOM or MAT courses.

**SPECIALIST PROGRAM IN MANAGEMENT AND INFORMATION TECHNOLOGY**

**Supervisor:** S. Ahmed. Email: 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 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 the completion of the following minimum requirements as part of a twenty credit degree B.B.A.:

1. MGT403H, MGT404H, ECOM406H, CSCA44H1, CSCA45H, CSCA46H, CSCA47H, CSCA48H.
2. [MAT323H & MAT379H] or [MAT323H & MAT379H].
4. MGT623H, MGT624H, MGT625H, MGT626H, MGT627H, MGT628H.
5. 1.0 credit at the D-level in ECOM or MAT courses.

**Note:** Students admitted to UTSC prior to September 2008 must take MGT625H or MGT626H, and MGT627H or MGT628H. Students admitted to UTSC as of September 2008 must take MGT625H or MGT626H, and MGT627H or MGT628H. Students admitted to UTSC as of September 2008 must take MGT623H or MGT624H to complete their program requirements. The remaining courses needed to complete the degree requirements of 20 credits can be chosen either within or outside the Department of Management in accordance with the student’s interest. In choosing courses, students should keep in mind the need to complete the general B.B.A. degree requirements referred to above.

**SPECIALIST PROGRAM IN MANAGEMENT AND MARKETING**

**Supervisor:** S. Ahmed. Email: management-supervisor-studies@utsc.utoronto.ca

**Note:** Admission to this program will not begin until the 2010 Summer Session.

The Specialist Program in Management and Marketing which has a Co-op option gives students the perspective of the overall organization and beyond. In addition to the Company focus, Marketing also ensures that students take an external orientation by having an in-depth understanding of the Competition and the Consumer. While developing a good understanding of all the issues involved in developing Marketing Strategy, the student will learn to implement the tools of Marketing Tactics.

**Program Requirements**

The Program requires the completion of the following minimum requirements 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. MGT403H, MGT404H, MGT405H, MGT406H, MGT609H, MGT610H, MGT611H, or MGT612H.
2. MGT623H & MGT624H, MGT625H, MGT626H, MGT627H, MGT628H, MAT323H, MAT379H, or MAT430H.
3. 1.0 credit at the D-level in MGT, ECOM, or MAT courses.
2. [MATA2H & MATA3H] strongly recommended or [MATA3H & MATA2H,[ATH],[A3H]]

3. At least 0.5 credit of courses emphasizing strategic management, chosen from ECON343H, MGMT319H, MGMT321H, MGMT328H, MGMT339H, MGMT438H, MGMT442H, MGMT459H, MGMT480H, [MGMT54H or MGMT510H]


5. MGMT324H, MGMT339H, MGMT414H, MGMT421H, MGMT430H, MGMT431H.

6. MGMT201H

7. In addition to the program-required 1.0 credit in Mathematics, all students in this program must complete at least 2.5 credits from outside MGMT/ECON. The math courses will meet the breadth requirement in Quantitative Reasoning while the program-required Economics courses (ECON404H and ECON504H) will meet the breadth requirement in Social and Behavioural Sciences. The remaining three breadth categories can be fulfilled by any of the 2.5 credits outside MGMT/ECON.

Note: Students admitted to UTSC prior to September 2008 may take MGMT249H to complete their requirements in place of MGMT801H and MGMT901H. Students admitted to UTSC as of September 2008 must take MGMT801H and MGMT901H to complete their program requirements.

In addition to the above program requirements, we also offer equally interesting Marketing elective courses, Judgment and Decision Making [MGMT208H] & Marketing in the Information Age [MGMT209H].

SPECIALIST PROGRAM IN STRATEGIC MANAGEMENT

Supervisor: S. Ahmed Email: 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 Strategic Management.

It covers the direction and coordination of private sector, public sector, or non-profit sector organizations. The specialist requires a grounding in strategic management while providing a variety of elective courses to appeal to students interested in any one of the three sectors as well as electives that appeal to all three.

Program Requirements

The Program requires the completion of the following minimum requirements as part of a twenty credit degree B.B.A.-

Note: A single course may only be used once to fulfill one of the following requirements:

1. MGMT30H, MGMT40H, MGMT303H, MGMT304H, MGMT305H, MGMT406H, MGMT307H or (MGMT308H or MGMT309H or [MGMT310H & MGMT302H]), MGMT311H, MGMT313H, MGMT314H & one additional half-credit at the D-level in either MGMT or ECON.

2. [MATA2H & MATA3H] strongly recommended or [MATA3H & MATA2H,[ATH],[A3H]]


5. 1 full credit (2 courses) from MGMT414H, MGMT421H, MGMT439H, MGMT445H, MGMT459H, MGMT480H.

6. 0.5 full credit (1 course) chosen from the following courses: MGMT10H, MGMT11H, MGMT12H, MGMT330H, MGMT339H, MGMT349H, MGMT414H, MGMT421H, MGMT439H, MGMT445H, MGMT459H, MGMT480H, MGMT484H, MGMT486H or (MGMT1H or [MGMT10H]), ECON30H, ECON31H, ECON32H, ECON33H, POLC60H.

7. MGMT47H

8. In addition to the program-required 1.0 credit in Mathematics, all students in this program must complete at least 2.5 credits from outside MGMT/ECON. The math courses will meet the breadth requirement in Quantitative Reasoning while the program-required Economics courses (ECON404H and ECON504H) will meet the breadth requirement in Social and Behavioural Sciences. The remaining three breadth categories can be fulfilled by any of the 2.5 credits outside MGMT/ECON.

Note: Students admitted to UTSC prior to September 2008 may take MGMT249H to complete their requirements in place of MGMT801H and MGMT901H. Students admitted to UTSC as of September 2008 must take MGMT801H and MGMT901H to complete their program requirements.

The remaining courses needed to complete the degree requirements of 20 credits can be chosen either within or outside the Department of Management in accordance with the student's interest. In choosing courses, students should keep in mind the need to complete the general BBA degree requirements referred to above.

CERTIFICATE IN BUSINESS

Website: www.utsc.utoronto.ca/mbmg/business_cer.html

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.
MGTB39H3 Introduction to Management I

This course serves as an introduction to the concepts 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.

Breadth requirement: Social & Behavioural Sciences
Exclusion: (COM1101H), MGM100H1, RSM100Y
Prerequisite: MGTA03H1

MGTB40H3 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 MGTB39H3.

Breadth requirement: Social & Behavioural Sciences
Exclusion: MGM20H1, MGM102H1, RSM100Y
Prerequisite: MGTA03H1

MGTB39H3 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT232H1, MGT232H3, RSM222H1, RSM322H1, VPA113H1
Prerequisite: [(ECMA04H1 & ECMA06H3) or (ECMA01H) & ECMA06H3] & MGTB05H1

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, enrolment is limited to students registered in Programs requiring this course.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT252H1, RSM252H1
Prerequisite: MGTA03H1 & MGTA04H1

MGTB50H3 Financial Accounting I

Together with MGTB50H3, 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT20H1, MGT20H3, MGT220H1, RSM100Y, RSM220H1, VPA113H1
Prerequisite: MGTA03H1 & MGTA04H1. Note: Students admitted into the Management Program directly from high school and students registered in programs requiring this course may take it in the same session as either MGTB03H1 or MGTA04H1.

MGTB06H3 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, owner's equity, cash flow statements and analysis. Through case, choices of treatment and disclosure are discussed, and the development of professional judgment is encouraged.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT120H1, MGT20H1, MGT220H1, RSM220H1, VPA113H1
Prerequisite: MGTB05H1

MGTB09H3 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 uncertainty. Also covered are risk-return trade-offs, financial planning and forecasting, and long-term financing decisions.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ACCT20H1, ACCT240H1, (MGTC03H1), (MGT331Y), (MGT337Y)
Prerequisite: [ECMB09Y1 or ECMB11Y1] & MGTB05H1

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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTB27Y1, MGT262H1, RSM260H1, PSY332H1
Prerequisite: MGTA03H1 & MGTA04H1

MGTB27Y2 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT252H1, MGTB23H1, MGTB29H1, PSY332H1, RSM250H1
Prerequisite: MGTA03H1 & MGTA04H1
MGTC39H4 Intermediate Finance
This course covers mainstream finance topics. Besides a deeper examination of certain topics already covered in MGTS39H4, 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTS371Y, MGTS377Y
Prerequisite: MGTP89H or (MGTC30H1)

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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTP131H, RSM123H
Prerequisite: MGTP00H & ([MGTB23H & MGTR29H] or MGTR27Y)

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 appeals, 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, audiovisual programs and guest speakers from the local advertising industry.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTD12H3
Prerequisites: MGTA03H & MGTA40H & MGTP04H

MGTC13H3 Pricing Strategy
Pricing right is fundamental to a firm's profitability. This course covers microeconomics to develop practical approaches for optimal pricing decision-making. Students develop a systematic framework to think about, analyze and develop strategies for pricing right. Key issues covered include pricing new product, value pricing, behavioural issues, and price segmentation.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Prerequisite: MGTP04H & EFCM02H

MGTC14H3 Sales and Distribution Management
Sales and distribution are critical components of a successful marketing strategy. The course discusses key issues regarding sales force management and distribution structure and intermediaries. The course focuses on how to manage sales force rather than how to sell, and with the design and management of an effective distribution network.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Prerequisite: MGTP04H

MGTC29H3 Managing Groups and Organizations
An introduction to the practical and theoretical aspects of macro-organizational behavior. Building on MGTC29H, students will be introduced to theoretical and practical aspects of macro-organizational levels of behavior 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTP272Y, MGTP262H, RSM250H
Prerequisite: MGTP23H

MGTR04H3 Business Communication Skills
This course focuses on honing core skills for effective business communication. Students will attend lectures each week given by experts in the field and then practice specific written and oral skills in smaller laboratory groups. This course will cover topics such as persuasive communication, juggling the media, and providing performance feedback.
Breadth requirement: Social & Behavioural Sciences
Exclusion: MGTC24H
Prerequisite: MGTA03H & MGTA40H

MGTC00H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTS22H, RSM222H
Prerequisite: MGTP07H

MGTC07H3 Intermediate Financial Accounting I
Together with MGTC08H, this course examines financial reporting in Canada. Through case analysis and the technical material covered, students will build on their knowledge covered in MGTB05H, MGTR06H and, to a lesser extent, MGTP07H.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTP224H, MGTS222H, RSM221H, RSM220H
Prerequisite: Completion of 8.0 full credits including MGTR01H & MGTR06H

MGTC08H3 Intermediate Financial Accounting II
This course is a continuation of MGTC07H. 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 MGTC07H before attempting this course.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTP224H, MGTS222H, RSM221H, RSM220H
Prerequisite: MGTC07H
MGT202H1 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. Covers employment income, business and property income, and computation of tax for individuals.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT423H, RSM324H
Prerequisite: Completion of at least ten full credits including MGB05H1 & MGTB06H1 & MGTB08H1.
MGT107H1 is highly recommended.

MGT17H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT429H, RSM424H
Prerequisite: MGT16H1

MGT19H3 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 portfolios of adaptable and transferable skills. The course examines what consultants do, and why organizations engage consultants.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGB03H1 & [MGTB23H1 & MGTB29H1] or MGTB27Y

MGT209H3 Judgement and Decision Making
This course combines the elements of behavioral research as applied to consumers' 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 30
Prerequisite: MGTB04H1

MGT219H3 Product Management and Branding
Managing products and brands is one of the most important functions of a successful marketer. Product lines and extensions and other issues of product portfolio will be covered in this course. This course also examines issues about brand equity, its measurement and contemporary challenges faced by marketers about branding product management.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Prerequisite: MGTB04H1

MGT229H3 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 workplace.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT460H, RSM460H
Prerequisite: [MGTB23H1 & MGTB29H1] or MGTB27Y

MGT239H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Prerequisite: [MGTB23H1 & MGTB29H1] or MGTB27Y

MGT249H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTB04H1, MGT290H
Prerequisite: [MGTB23H1 & MGTB29H1] or MGTB27Y

MGT319H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT390H, RSM225H
Prerequisite: Completion of at least ten full credits including MGB05H1 & MGTB06H1

MGT329H3 The Legal Environment of Business II
This course further examines the issues raised in Legal Environment of Business I. 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGT394H, RSM325H
Prerequisite: MGT31H1
MGTC33H3 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 decision-making, accounting, marketing and organizational behaviour, required to produce a successful event.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: Completion of at least 10 full credits in the B.B.A. program

MGTC34H3 Accounting Issues in International Business
An overview of international accounting and financial reporting practices with a focus on accounting issues related to international business activities and foreign operations. Understanding the framework used in establishing international accounting standards, preparation and translation of financial statements, transfer pricing and taxation, internal and external auditing issues and discussion of the role of accounting and performance measurement for multinational corporations.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGTO51H & MGTO80H

MGTC35H3 Narratives on Management and Organization
Through the analysis of fiction and non-fiction narratives, particularly film, 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35
Prerequisite: [MGTO23H & MGTO291H] or MGTR27Y

MGTC36H3 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. These completing this course will experience a high degree of personal satisfaction.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 60
Prerequisite: MGTR23H or MGTR27Y

MGTC37H3 Introduction to Case Analysis Techniques
This course focuses on the theory and techniques of analyzing and writing business cases. The main focus is to assist students in developing their conceptual and analytical skills by applying the theory learned from each major area of management studies to practical situations. Critical thinking and problem solving skills are developed through extensive use of case analysis.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 30
Prerequisite: MGTO38H & MGTO80H & MGTO23H
Corequisite: MGTR80H & MGTO80H

MGTC38H3 Entrepreneurship
This course focuses on the skills required and issues personal, financial, sales, operational, personnel - 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 "old" or "new" economies.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTO91H, RSMG40H
Prerequisite: MGTO38H & [(MGTO23H & MGTO291H) or MGTR27Y]

MGTC39H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: MGTO40H & MGTO80H & MGTO80H

MGTC41H3 Corporate Strategy
Begins 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTO42H, RSMG40H, VPAC11H
Prerequisite: [MGTO291H or MGTO27Y] & [ECMB50H or ECMB60H]

MGTC42H3 Public Management
An introduction to key public sector management processes: strategic management at the political level, planning, budgeting, human resource management, and the management of information and information technology. Makes use of cases, and simulations to develop management skills in a public sector setting.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35
Prerequisite: [MGTO23H or MGTO27Y] or [POLB50H or POLB51H]

MGTC44H3 International Business Management
This course deals with problems facing managers of international business, such as political risk, contingency planning, human threats and weather extremes, relationships with NGOs (WTO, IMF & World Bank), Foreign Direct Investment & foreign exchange markets.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTO41H, RSMG40H
Prerequisite: [(MGTO23H & MGTO291H) or MGTO27Y]
MGT545H1 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGT503H & MGT504H

MGT546H1 Managerial Perspectives in a Global Economy
The surge in globalization, especially for Canada, has increased the need to extend managerial principles into a global context. Topics explored include issues around doing business in the global economy, from international trade, multinational strategies, outsourcing, risk management, and global financial strategies. International trading systems institutions are also considered.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: ECOM90H, ECO230Y, ECO304H
Prerequisite: ECOM90H & ECOM104H

MGT552H3 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 an introduction to traditional and emerging procedures for resolving disputes. To gain practical experience, students will participate in exercises which simulate negotiations.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: [MGT502H & MGT502H] or MGT507Y

MGT535H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: Completion of at least two full credits including [ECMA10H & ECMA10H] or [ECMA10H & ECMA20H] & [MGT503H & MGT504H]

MGT555H3 Planning and Budgeting for Public Institutions
The theory and practice of planning and allocating resources in public institutions. After presenting theories of planning and resource allocation in public institutions, the course will illustrate these by means of case studies of challenges faced by universities and colleges. Instruction will be a combination of lecture, discussion, and case studies.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 20
Prerequisite: MGT503H

MGT556H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 20
Prerequisite: MGT503H

MGT559H3 Management Ethics
Increasingly, the marketplace has come to reward -- and government regulation have come to demand -- a more 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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 60
Exclusion: PHIL80H
Prerequisite: MGT503H & MGT504H

MGT570H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Exclusion: MGT570H
Prerequisite: MGT509H or (MGT503H)

MGT573H3 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 each type of derivative security is introduced, its applications in investments and general risk management will be discussed.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Exclusion: MGT438H, ECON435H
Prerequisite: (ECMB11H or ECOM109Y) & (MGT509H or (MGT503H))
Corequisite: MGT509H
MGCT74H3 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 determining an optimal decision subject to various constraints.
Breadth requirement: Quantitative Reasoning
Limited enrolment: 60
Prerequisite: [MATA23H1 & MATA23H3] or [MATA27H1]
& ECMB09H1 or [ECMB11H1 & ECMB12H1] or ECMB09Y1

MGCT75H3 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.
Breadth requirement: Quantitative Reasoning
Limited enrolment: 60
Exclusion: MGST74H1, RSM70H1
Prerequisite: MGCT74H1

MGCT76H3 International Financial Management
This course provides students with a framework for making financial decisions in an international context. It discusses foreign exchange markets, international portfolio investment, and international corporate finance. Next to covering the relevant theories, students also get the opportunity to apply their knowledge to real world issues by practicing case studies.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Exclusion: RSM437H1, MGTC49H1
Prerequisite: MGCT09H1

MGCT09H2 Business Leadership Skills
This course will help students develop the critical skills required by today's managers. Topics covered include self-awareness, managing stress and conflict, using power and influence, negotiation, goal setting, and problem-solving. These skills are important for leadership and will enable students to behave more effectively in their working and personal lives.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTC24H1
Prerequisite: MGTR23H1 & MGTH90H1

MGTD06H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Prerequisite: MGTH90H1

MGTD07H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTD45H1, RSM44H1
Prerequisite: [ECMB11H1 & ECMB12H1] or ECMB09Y1 & MGTD04H1

MGTD13H3 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 behavior (e.g. why people buy), and (2) an experience in the application of these concepts to marketing decisions.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 30
Prerequisite: MGTA04H1 & MGTA04H1 & MGTD04H1

MGTD14H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 30
Prerequisite: [MGTC23H1 & MGTR29H1] or MGTR27Y1 & [MGTC24H1 or MGTC91H1]

MGTD15H3 Commercial Dispute Resolution
This course examines the theory and practice of models of dispute resolution for the settlement of commercial conflicts. 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 30
Prerequisite: Completion of at least 8.0 full credits

MGTD20H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTC05H1, MGTD53H1, RSM50H1
Prerequisite: MGTD04H1 & 0.5 full credits of C- or D-level marketing electives from within [MGTD12H1 or MGTD13H1, MGTC28H1, MGTD09H1, MGTD07H1 & MGTD13H1]
MGT249H1 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 consider the physical, psychological, social, and legal environments relevant to health and safety in the workplace.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 30
Prerequisite: MGT22H1
MGT259H3 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 employee interview in making selection decisions.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 40
Prerequisite: MGT22H1
MGT269H3 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 training needs analysis, the design and delivery of training programs, on and off-the-job training methods, the transfer of training, and training evaluation.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 40
Prerequisite: MGT22H1
MGT279H3 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 qualitative and quantitative techniques.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 40
Prerequisite: MGT22H1
MGT289H3 Compensation
This course is designed to provide students with an understanding of compensation programs and systems. Students will learn how to design and manage compensation and benefits programs; individual and group reward and incentive plans; and how to evaluate jobs and assess employee performance.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 40
Prerequisite: MGT22H1
MGT289H3 Knowledge Management
The course considers skills for managing knowledge assets and intellectual capital: fostering knowledge creation, representing and transferring knowledge and experience, building knowledge networks and communities of practice, managing knowledge assets for a competitive advantage and using information technology to support knowledge management.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 30
Prerequisite: Completion of at least 10 full credits in the B.B.A. program
MGT289H3 Intellectual Property Law
This course considers patents, trade marks, copyright and confidential information. Canada’s international treaty obligations as well as domestic law will be covered. Policy considerations such as the patentability of life forms, copyright in an Internet age of easy copying and patents and international development will be included.
Breadth requirement: Social & Behavioural Sciences Prerequisite: MGT28H1
Recommended preparation: 9.5 full credits in addition to the prerequisite.
MGT289H3 Senior Seminar in Strategic Management
This course allows 4th year specialists in strategic management to apply their specific skills to several larger, in-depth studies of strategic management issues in open-ended real-world cases. How strategic decisions are made at the higher levels of management with an opportunity to integrate previous training through analyses and presentations.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 20
Prerequisite: Completion of at least eleven full credits with one full credit (2 courses) from MGT24H1, MGT24H2 or MGT24H3.
MGT299H3 Advanced Financial Accounting
An in-depth study of advanced financial accounting topics: long-term inter-corporate investments; consolidation (including advanced measurements and reporting issues); foreign currency translation and consolidation of foreign subsidiaries and non-profit and public sector accounting. This course is critical to the education of students preparing for a career in accounting.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: MGT29H1 & MGT29H3
MGT299H3 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 system designs in manufacturing, service, financial, marketing and professional organizations, including international contexts.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Exclusion: MGT28H1, MGT28H2
Prerequisite: MGT29H1 & [MGT23H1 & MGT29H1] or MGT27Y1
MGTD593H3 Controversial Issues in Accounting
Through case analysis and literature review, this seminar addresses a variety of controversial reporting issues, impairment management, the politics of standard setting and the institutional context. Topics may include: international harmonization, special purpose entities, whistle-blowing, the environment and social responsibility and professional education and career issues.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGTC07H & MGTC08H

MGTD65H3 Advanced Accounting Case Analysis
This capstone case analysis course stresses the critical thinking skills required of Management program graduates. Due to its integrative nature, with 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: MGTC07H & MGTC08H

MGTD66H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGTC07H

MGTD67H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: MGTD66H

MGTD69H3 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
Prerequisite: MGTD66H

MGTD19H3 Advanced Financial Management
This course reinforces and expands upon the topics covered in MGTB99H (MGTC03H) and MGTC09H. It examines more advanced and complex decision making situations a financial manager faces in such areas as capital budgeting, capital structure, financing, working capital management, dividend policy, leasing, mergers and acquisitions, and risk management.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Prerequisite: MGTC09H

MGTD29H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 40
Exclusion: MGTA43H, RSMA43H
Prerequisite: MGTC09H

MGTD35H3 Investments
This course deals with fundamental elements of investments. Basic concepts and techniques are introduced for various topics such as risk and return characteristics, optimal portfolio construction, security analysis, investments in stocks, bonds and derivative securities, and portfolio performance measurement.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: MGTA30H, RSMA30H
Prerequisite: MGTB99H or (MGTC03H)
Corequisite: MGTC09H

MGTD76H3 Risk Management
This course develops analytical skills in financial risk management. It introduces techniques used for evaluating, quantifying and managing financial risks. Among the topics covered are market risk, credit risk, operational risk, liquidity risk, base regulations and credit derivatives.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Exclusion: RSMA32H (MGTA42H)
Prerequisite: MGTC09H

MGTD80H3
MGTD81H3
MGTD82Y3 Supervised Reading Courses
These courses are intended for upper level students whose interests are not covered in one of the other Management courses normally offered. The courses will only be offered when a faculty member is available for supervision and to students whose management performance has been well above average. Students interested in these courses should consult with the Supervisor of Studies for Management well in advance.
Students must obtain consent from the supervising instructor and the Department of Management before registering in these courses.
Mathematics

(B.Sc.)

Faculty List

E. W. Elten, Ph.D. (Hamburg), Professor Emeritus
R. W. Sharpe, M.Sc., Ph.D. (Yale), Professor Emeritus
J. Friedlander, M.A. (Waterloo), Ph.D. (Penn. State), F.R.S.C., University Professor
R.-O. Buchweitz, Ph.D. (Hannover), Professor
M. Goldstein, Ph.D. (Tashkent), Professor
L. C. Jeffrey, A.B. (Princeton), M.A. (Cambridge), D. Phil. (Oxford), Professor
E. Mendelsohn, B.Sc., M.Sc. (Manitoba), Ph.D. (McGill), Professor
P. Selick, B.Sc., M.Sc., Ph.D. (Princeton), Professor
J. Schür, B.Sc., M.A. (Oxford), Associate Professor
B. Virag, Ph.D. (Berkeley), Associate Professor
G. Pete, Ph.D. (Berkeley), Assistant Professor
B. Szegedy, Ph.D. (Budapest), Assistant Professor
N. Cherednico, M.Sc. (Kharkov), Ph.D. (Moscow), Senior Lecturer
S. Chrysostomou, M.Sc. (Toronto), Senior Lecturer
R. Gömez, Ph.D. (Queen's), Senior Lecturer
X. Jiang, B.Sc., M.Sc., Ph.D. (Glasgow), Senior Lecturer
E. Moore, M.A. (Memorial), Ph.D. (Toronto), Senior Lecturer
Z. Slambaz, B.Sc. (Sharif), M.Sc. (Toronto), Ph.D. (Toronto), 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. The Supervisor of Studies for the Co-operative programs is S. Chrysostomou (chrysostomou@cc.utoronto.ca).

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 & Its Applications: [CS2A48H or PSCB51H], MATA23H, MATA30H, MATA37H
- Major Program in Mathematics: [CS2A48H or PSCB51H], MATA30H, [MATA30H or MATA37H]

Students might also want to include one of the recommended writing courses.

Science Engagement Courses

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.
SPECIALIST PROGRAM IN MATHEMATICS

Supervisor of Students: E. Moore (416-287-7267) Email: emoore@utsc.utoronto.ca
The Specialist Program in 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-mathematical fields.

Writing Requirement: Students are required to take a course from the following list of courses by the end of their second year.

ANTA01H, ANTA02H, CLAA02H, ENGA10H, ENGA11H, ENGIB06H, ENGIB07H, ENGIB08H, ENGIB09H, ENGIB17H, ENGIB19H, ENGB08H, ENGB15H, GGRA02H, GGRA05H, GGRI05H, (GGB05H), (GGB06H), (HGSA10H), HLTDA1H, LINA01H, HUMA11H, HUMA17H, HUMA19H, (LGGA09H), PHLA10H, PHLA11H, WSTA01H.

Program Requirements

1. (3.0 full credits):
   SCAA49H Introduction to Computer Science
   MATA23H Linear Algebra I
   MATA30H Calculus I
   MATA37H Calculus II for Mathematical Sciences
   PHYA10H Introduction to Physics IA
   PHYA21H Introduction to Physics IIA

2. (2.5 credits):
   [CSIC07H Software Design or CSIC06H Introduction to the Theory of Computation]
   MATB24H Linear Algebra II
   MATB41H Techniques of the Calculus of Several Variables I
   MATB42H Techniques of the Calculus of Several Variables II
   MATB43H Introduction to Analysis

3. (1.5 credits):
   MATH44H Differential Equations I
   STAB52H An Introduction to Probability
   STAB57H An Introduction to Statistics

4. (1.5 credits):
   MATC01H Groups and Symmetry
   MATD01H Fields and Groups
   [MATC15H Introduction to Number Theory or MATD02H Classical Plane Geometries and their Transformations]

5. (1.0 credit):
   MATC34H Complex Variables
   MATC46H Differential Equations II

6. (1.0 credit): Two of:
   MATH36H Linear Programming and Optimization
   MATC27H Introduction to Topology
   MATC35H Chaos, Fractals and Dynamics
   MATD10H Topics in Mathematics I
   MATD11H Topics in Mathematics II
   MATD12H Topics in Mathematics III
   MATD34H Complex Variables II

7. (0.5 credit): One of:
   SCSIC5H Numerical Algebras and Optimization
   SCSIC51H Numerical Approximation, Integration and Ordinary Differential Equations
   MATD99H Introduction to Mathematical Logic
   MATD160H Coding Theory and Cryptography
   MATC32H Graph Theory and Algorithms for its Applications
   MATC44H Introduction to Combinatorics

8. 1.0 credit from MAT at B-, C+, or C-level.

9. (0.5 credit):
   [CSIC03H Social Impact of Information Technology or PSIC02H Current Questions in Mathematics and Science]
MAJOR PROGRAM IN MATHEMATICS

Supervisor of Studies: M. Cherkdako (416-287-7226 Email: m.cherkdako@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.

ANTA01H, ANTA02H, (CLA2A02H), ENGA10H, ENGA11H, ENG80H8H, ENGR87H, ENGR80H8H, ENGR89H, ENG88H8H, ENG89H8H, ENG89H9H, ENG89H1H, (GERA2H0H), GERA2H1H, GERA2H2H, (GER80H0H), (GER80H1H), (HSA80H1H), HLTA80H1H, HUMA11H, HUMA11H, HUMA11H, (HUMA9H0H), LINA01H, PHIL101H, PHIL111H, WSTA01H

Program Requirements

This program requires eight full credits.

1. Core Courses:
   - [CSCA44H Introduction to Computer Science or PSCB57H Introduction to Scientific Computing]
   - MATA25H Linear Algebra I
   - MATA38H Calculus I
   - [MATA39H Calculus II for Physical Sciences or MATA37H Calculus II for Mathematical Sciences (recommended)]
   - MATR04H Linear Algebra II
   - MATR04H Calculus of Several Variables I
   - MATR04H Calculus of Several Variables II
   - STAB02H Introduction to Probability
   - [MATC01H Groups and Symmetry or MATC15H Introduction to Number Theory]
2. Analysis: 1.5 credits from:
   - MATB34H, MATB44H, MATC27H, MATC46H, MATC55H, MATC77H, MATC34H, MATD34H
3. Algebra and Geometry: 1.0 credit from
   - MATB66H, MATC09H, MATC15H, MATC32H, MATC44H, MATC55H, MATD01H, MATD02H
4. Applications: 1.0 credit from
   - CSC C-level, CSC D-level, MATC16H, MATC32H, MATC44H, MATC58H, MATC82H, MATC90H, MATD61H, STAB57H, any STA C-level or D-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: emooore@ustc.utoronto.ca

The Specialist program in Mathematics and its Application 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.

ANTA01H, ANTA02H, (CLA2A02H), ENGA10H, ENGA11H, ENG80H8H, ENGR87H, ENGR80H8H, ENGR89H, ENG88H8H, ENG89H9H, ENG89H1H, ENGR89H, ENGR89H, GERA2H0H, GERA2H1H, GERA2H2H, (GER80H0H), (GER80H1H), (HSA80H1H), HLTA80H1H, HUMA11H, HUMA11H, HUMA9H0H, LINA01H, PHIL101H, PHIL111H, WSTA01H

Program Requirements

In selecting courses, students must ensure that they include 4.0 credits at the C- or D-level of which 1.0 must be at the D-level.

Core for all program streams:

1. (2.0 full credits):
   - [CSCA44H Introduction to Computer Science or PSCB57H Introduction to Scientific Computing] (if PSCB57H is selected it should be taken in second year)*
   - MATA23H Linear Algebra I
   - MATA38H Calculus I
   - [MATA39H Calculus II for Physical Sciences or MATA37H Calculus II for Mathematical Sciences (recommended)]
2. (2.5 credits):
   - MATR24H Linear Algebra II
   - MATR44H Techniques of the Calculus of Several Variables I
   - MATR44H Techniques of the Calculus of Several Variables II
   - MATR44H Introduction to Analysis
   - MATR44H Differential Equations I
3. (1.0 credit):
   - STAB2H An Introduction to Probability**
   - STAB57H An Introduction to Statistics**
4. (0.5 credit): MATC301H Groups and Symmetry
5. (0.5 credit): MATC434H Complex Variables
   * PSCB297H is required for the Computational Physical Sciences stream
   ** STA357H and STA358H must be taken in second year for the Statistics stream

AREAS OF CONCENTRATION:
Teaching Stream:
Students following this stream require a total of 13.0 credits.

1. (2.0 full credits):
   MATC125H Introduction to Number Theory
   MATD018H Fields and Groups
   MATD021H Classical Plane Geometries and their Transformations
   [MATC232H Graph Theory and Algorithms for its Applications or MATC441H Introduction to Combinatorics]

2. (1.5 credit): Three of:
   MATC301H Linear Programming and Optimization
   MATC309H Introduction to Mathematical Logic
   MATC316H Coding Theory and Cryptography
   MATC355H Chaos, Fractals and Dynamics
   MATC371H (MATC381H) Introduction to Real Analysis
   MATC408H Differential Equations II
   MATC431H Differential Geometry I
   MATC490H Beginnings of Mathematics
   MATD434H Complex Variables II

3. (2.0 full credits):
   MATC291H Mathematics for Teachers
   Three C- or D-level CSC, MAT or STA half-credit courses

4. (0.5 credit):
   [PSCD001H Current Questions in Mathematics and Science or C3CD003H Social Impact of Information Technology]

Statistics Stream:
Students following this stream require a total of 13.0 credits.

1. (2.5 credits):
   MATB401H Linear Programming and Optimization
   MATC441H Differential Equations II
   MATD018H Fields and Groups
   MATD021H Classical Plane Geometries and their Transformations
   STAC671H Regression Analysis

2. (1.0 credit): Two of:
   MATC305H Chaos, Fractals and Dynamics
   MATC371H (MATC381H) Introduction to Real Analysis
   MATC541H An Introduction to Mathematical Biology
   MATD434H Complex Analysis II

3. 2.0 credits from ACTB447H, C-level & D-level STA courses and 300- & 400-level STA courses on the St. George campus.

4. 0.5 credit:
   [PSCD001H Current Questions in Mathematics and Science or C3CD003H Social Impact of Information Technology]

Computational Physical Sciences Stream:
Students following this stream require a total of 14.0 credits.

1. (5.0 full credits):
   ASTA011 Introduction to Astronomy and Astrophysics I: The Sun and Planets
   ASTA021 Introduction to Astronomy and Astrophysics II: Beyond the Sun and Planets
   CSCA510H Numerical Analysis and Optimization
   CSCA511H Numerical Approximation, Integration and Ordinary Differential Equations
   MATB415H Linear Programming and Optimization
   MATC395H Chaos, Fractals and Dynamics
   MATC441H Introduction to Combinatorics
   MATC468H Differential Equations II
   PHYS100H Introduction to Physics I
   PHYS121H Introduction to Physics II

2. (4.0 full credits):
   MATC301H Linear Programming and Optimization
   MATC434H Complex Variables
   MATC441H Introduction to Combinatorics
   MATC468H Differential Equations II
   PHYS100H Introduction to Physics I
   PHYS121H Introduction to Physics II
2. (1.5 credits): Three of:
ASTR211H Solar System and Stellar Astrophysics
ASTC221H Galactic and Extragalactic Astrophysics
PHYB280H Vibrations and Waves
PHYB218H Electricity and Magnetism
PHYB251H Foundation of Modern Physics
(PHYC240H) Quantum Physics I

3. (0.5 credit): One of:
CSCD310H Computer Graphics
MAT334H Complex Variables II
MATD94H1 Readings in Mathematics
MATD95H1 Readings in Mathematics
PSCD02H Current Questions in Mathematics and Science
CSCD03H Social Impact of Information Technology

Computer Science Stream:
See Joint Mathematics stream in the Computer Science Specialist Program

Design Your Own Stream:
Students following this stream require a total of 13.0 credits.

1. (6.0 full credit): 12 half-credit courses chosen with the approval of the program supervisor for Mathematics and Its Applications.

2. (0.5 credit):
[PSCD02H Current Questions in Mathematics and Science or CSCD03H Social Impact of Information Technology]

SPECIALIST PROGRAM IN QUANTITATIVE ANALYSIS
See the Statistics section of this Calendar for program requirements.

SPECIALIST PROGRAM IN NATURAL SCIENCES
See the Physical Sciences section of this Calendar for program requirements.

MAT23H3 Linear Algebra I
Systems of linear equations, matrices, Gaussian elimination; vector spaces, basis, dimension; inner product spaces, geometry in R^n; linear transformations; determinants, Cramer's rule; eigenvalues and eigenvectors; diagonalization; orthogonal transformations.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT223H
Prerequisite: Grade 12 Vectors and Calculus or [Grade 12 Advanced Functions and Introductory Calculus & Geometry and Discrete Mathematics]

MAT23H3 Calculus I
An introduction to the basic techniques of Calculus.
Elementary functions: rational, trigonometric, root, exponential and logarithmic functions and their graphs.
Basic calculus: limits, continuity, derivatives, derivatives of higher order, analysis of graphs, use of derivatives; integrals and their applications, techniques of integration.
Breadth requirement: Quantitative Reasoning
Exclusion: (MAT220H, MAT232H, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, MAT135Y, MAT137Y, JMB170Y, (MATA27H)
Prerequisite: Grade 12 Vectors and Calculus

MAT23H3 Calculus for Management I
This is a calculus course with most 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; applications to finance; differential calculus of one variable; marginal analysis; optimization of single-variable functions; techniques of integration.
Breadth requirement: Quantitative Reasoning
Exclusion: (MAT220H, MAT227H, MAT23H, MAT123H, MAT124H, MAT133Y, MAT135Y, MAT137Y, MAT157Y, JMB170Y)
Prerequisite: Grade 12 Vectors and Calculus

MAT23H3 Calculus for Management II
This course will introduce the students to multivariable calculus and linear algebra. Topics will include: matrix algebra; multi-variable functions; contour maps; partial and total differentiation; optimization of multi-variable functions; Lagrange multipliers.
Breadth requirement: Quantitative Reasoning
Prerequisite: MAT23H
MAT23H3 Calculus II for Biological Sciences
A calculus course emphasizing examples and applications in the biological and environmental sciences. Topics include 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.

Breadth requirement: Quantitative Reasoning
Exclusion: [MAT21H1, MAT23H1, MAT24H1, MAT25H1, MAT26H1, MAT13JY, MAT13JY, MAT13JY, MAT13JY, MAT15JY, JMB170Y] (MAT27H1)
Prerequisite: MAT13H1

MAT36H3 Calculus II for Physical Sciences
This course is intended to prepare students for the physical sciences. Topics to be covered include: Newton's method, approximation of functions by Taylor polynomials, numerical methods of integration, complex numbers, sequences, series, Taylor series, differential equations.

Breadth requirement: Quantitative Reasoning
Exclusion: [MAT21H1, MAT23H1, MAT24H1, MAT25H1, MAT26H1, MAT13JY, MAT13JY, MAT13JY, MAT15JY, JMB170Y]
Prerequisite: MAT13H1

MAT37H3 Calculus for Mathematical Sciences
A calculus course providing a conceptual approach for students needing more than techniques and applications. An introduction to proofs and the theoretical side of basic calculus emphasizing intuition. Fundamental Theorem of Calculus, Taylor's Theorem, sequences and series, power series and differential equations.

Breadth requirement: Quantitative Reasoning
Exclusion: [MAT21H1, MAT23H1, MAT24H1, MAT25H1, MAT26H1, MAT13JY, MAT13JY, MAT13JY, MAT15JY, JMB170Y]
Prerequisite: MAT13H1

MAT42H3 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.

Breadth requirement: Quantitative Reasoning
Exclusion: MAT24H1
Prerequisite: MAT23H1 or MAT23H1

MAT44H3 Techniques of the Calculus of Several Variables
Partial derivatives, gradient, tangent plane, Jacobian matrix and chain rule, Taylor series; extremal problems; extremal problems with constraints and Lagrange multipliers, multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.

Breadth requirement: Quantitative Reasoning
Exclusion: MAT23JY, MAT23JY, MAT23JY, MAT23JY, MAT23JY
Prerequisite: [MAT23H1 or MAT23H1] & [MAT23H1 or MAT23H1] or [MAT23JY or MAT23JY]

MAT49H3 Techniques of the Calculus of Several Variables II
Fourier series. Vector fields in R^2, divergence and curl, curves, parametric representation of curves, path and line integrals, surfaces, parametric representations of surfaces, surface integrals; Green's, Gauss', and Stokes' theorems will also be covered. An introduction to differential forms, total derivative.

Breadth requirement: Quantitative Reasoning
Exclusion: MAT23JY, MAT23JY, MAT23JY, MAT23JY
Prerequisite: MAT49H1

MAT54H3 Introduction to Analysis
Calculus revisited rigorously: properties of real numbers, limits, compactness, topology of Euclidean space, continuity, differentiability, fundamental theorem, Riemann integral.

Breadth requirement: Quantitative Reasoning
Exclusion: MAT24JY
Prerequisite: [MAT23H1 or MAT23JY] & MAT25H1
Corequisite: MAT25H1

MAT54H4 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.

Breadth requirement: Quantitative Reasoning
Exclusion: MAT24H1, MAT25H1
Prerequisite: [MAT23H1 or MAT23H1] & MAT23H1
Corequisite: MAT25H1 & MAT24H1

MAT61H3 Linear Programming and Optimization
Linear programming, simplex algorithm, duality theory, interior point method; quadratic and convex optimization, stochastic programming; applications to portfolio optimization and operations research.

Breadth requirement: Quantitative Reasoning
Exclusion: APMP21H1
Prerequisite: MAT23H1
Corequisite: MAT24H1

MAT50H3 Groups and Symmetry

Breadth requirement: Quantitative Reasoning
Exclusion: MAT30H1, MAT34JY
Prerequisite: MAT37H1 & [MAT224H or MAT224H]
MATC29H3 Introduction to Mathematical Logic
Predicates calculus, relationship between truth and provability; Godel's completeness theorem; First order arithmetic as an example of a first-order system; Godel's incompleteness theorem; outline of its proof; Introduction to recursive functions.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT399H, CSC433H
Prerequisite: MAT124H1 & [MAT184H1 or CSC161H1]

MATC35H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT315H1
Prerequisite: [MAT368H3 or MAT378H3] & MAT124H1

MATC16H3 Coding Theory and Cryptography
The main problems of coding theory and cryptography are defined. Classic 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 logarithm based systems. Needful mathematical results from number theory, finite fields, and complexity theory are stated.
Breadth requirement: Quantitative Reasoning
Prerequisite: MAT124H1 & STAB22H1
Corequisite: MATC15H1 recommended

MATC27H3 Introduction to Topology
Breadth requirement: Quantitative Reasoning
Exclusion: MAT272H1
Prerequisite: MAT124H1 & MAT143H1

MATC32H3 Graph Theory and Algorithms for Its Applications
Graphs, subgraphs, isomorphism, trees, connectivity, Euler and Hamiltonian properties, matchings, vertex and edge colourings, planarity, network flows and strongly regular graphs; applications to such problems as timetabling, personnel assignment, task form scheduling, travelling salesman, tournament scheduling, experimental design and finite geometries.
Breadth requirement: Quantitative Reasoning
Prerequisite: [MAT124H1 or CSC161H1] & at least one other II-level course in Mathematics or Computer Science

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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT334H1
Prerequisite: MAT124H1

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 plane, iterations of rational functions, Julia sets, Mandelbrot set.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT335H1
Prerequisite: MAT34H1

MATC27H3 Introduction to Real Analysis
Breadth requirement: Quantitative Reasoning
Exclusion: MAT372H1, (MATC38H1)
Prerequisite: MAT124H1

MATC46H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT344H1
Prerequisite: MAT124H1

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.
Breadth requirement: Quantitative Reasoning
Exclusion: APM36H1
Prerequisite: MAT124H1 & MAT124H1
Corequisite: MAT144H1

MATC55H3 An Introduction to Mathematical Biology
Mathematical analysis of problems associated with biology, including models of population growth, cell biology, molecular evolution, infectious diseases, and other biological and medical disciplines. A review of mathematical topics: linear algebra, matrices, eigenvalues and eigenvectors, properties of ordinary differential equations and difference equations.
Breadth requirement: Quantitative Reasoning
Prerequisite: MAT124H1

MATC56H3 Differential Geometry
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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT363H1
Prerequisite: MAT124H1
MATC2H Mathematics for Teachers
The course discusses the Mathematics curriculum (K-12) from the following aspects: the strands of the curriculum and their place in the world of Mathematics, the nature of proofs, the applications of Mathematics, and its connection to other subjects.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT3AOH
Prerequisite: [MATA23H & MATA37H] or [MATA23H & MATA36H] & [ESCA55H or MATD4AOH]

MATC99H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT395H
Prerequisite: One Grade 12 Mathematics course & 5.0 full university courses

MATD01H3 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, constructability, Galois groups of polynomials, in particular cubics; insolvability of quintics by radicals.
Breadth requirement: Quantitative Reasoning
Exclusion: (MATC392H, MAT347Y, MATD02H)
Prerequisite: MATC01H
Recommended preparation: MATC34H

MATD02H3 Classical 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.
Breadth requirement: Quantitative Reasoning
Exclusion: MATD02H, MATD36H (MATD36H, MATD37H)
Prerequisite: MATA23H
Corequisite: MATC01H

MATD10H3

MATD11H3

MATD12H3 Topics in Mathematics
A variety of topics from geometry, analysis, combinatorics, number theory and algebra, to be chosen by the instructor.
Prerequisite: MATC01H & [MATC35H or MATC37H] & [MATC15H or (MATD02H)]

MATD34H3 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.
Breadth requirement: Quantitative Reasoning
Exclusion: MAT354H, (MATC65H)
Prerequisite: MATC34H

MATD61H2 Introduction to Industrial Mathematics
Monte Carlo Method (mean time between failures, servicing requests), Data Manipulation (z-transform, filters, Bode Plots), Discrete Fourier Transform (real time processing, FFT, image processing), Regression (best fit to discrete data, Hilbert Space, Gram's theorem). Frequency-Domain Methods, Numerical Models for PDE, Galerkin's methods, Cubic Splines.
The course provides extensions of mathematics useful in industrial problems, interweaving analytic and computing methods during problem solving.
Breadth requirement: Quantitative Reasoning
Prerequisite: MATB42H & MATB44H & STA325H
Recommended preparation: MATD01H & MATC46H

MATD99H3 Readings in Mathematics
Independent study under direction of a faculty member.
Prerequisite: MATC01H & [MATC35H or MATC37H] & [MATC15H or (MATD02H)]

Media Studies
(B.A.)

Faculty List
G. Leonard, M.A., Ph.D. (Florida), Professor
M. Maltese, B.A. (Dalhousie), Ph.D. (London), Associate Professor
R. Bai, B.A., M.A. (Beijing Foreign Studies), Ph.D. (Illinois), Assistant Professor
A. Montes, M.A., Ph.D. (Cornell), Assistant Professor
K.A. McLeod, M.A. (McMaster), Ph.D. (McGill), Assistant Professor
L. Chan, B.A., M.A. (Toronto), Senior Lecturer
S.L. Helwig, B.A. (Georgian), M.A. (Toronto), Senior Lecturer
K. McCrindle, M.A., Ph.D. (Toronto), Senior Lecturer
D. Hlynsky, B.A. (Ohio State), Lecturer
M. Petit, M.A., Ph.D. (Colorado), Lecturer
E. Weisner, B.A., M.A. (Toronto), Ph.D. (Case Western Reserve), Lecturer
MAJOR PROGRAM IN MEDIA STUDIES

The Major Program in Media Studies is under review and new enrollment in it has been suspended indefinitely. Students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Students who had intended to enroll in the program in 2009/11 might want to consider applying to the Joint Programs in Journalism or New Media.

MDSA01H3 Introduction to Media Studies

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 communication and new forms of knowledge representation in a variety of contexts and disciplines.

Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (NMEA20H)

MDSA02H3 From Print to Digital: History of Media and Technology (1450 - Present)

This course surveys the history of media and communication technologies and how such technologies exert impact on human societies. It covers the development of the printing press, telephone, radio, film, television, and the digital revolution.

Breadth requirement: History, Philosophy & Cultural Studies

MDSA21H3 Introduction to Journalism I

An introduction to the social, historical, philosophical, and practical contexts of the media. The course will examine various types of media and the role of the journalist. Students will be introduced to story forms and journalistic skills. Media coverage of current issues will be discussed.

Preference will be given to Journalism and Media Studies students.

Breadth requirement: Arts, Literature & Language
Exclusion: (JOUA01)

MDSA22H3 Introduction to Journalism II

A continuation of MDSA21H.

Preference will be given to Journalism and Media Studies students.

Breadth requirement: Arts, Literature & Language
Exclusion: (JOUA01)
Prerequisite: MDSA21H or (JOUA01)

MDSB02H3 Language and Media

A study of the relationship between language and media. The course examines language as a social phenomenon, in particular the ways in which media represent language-related issues and how media's use of language affects people's notions of what acceptable language use is and ought to be.

Breadth requirement: Arts, Literature & Language
Prerequisite: [[MDSA01H or (NMEA20H)] & MDSA02H] or [[MDSA21H or (JOUA01H)] & MDSA22H or (JOUA02H)]

MDSB03H3 Advertising and Consumer Culture

This course is an introduction to the study of advertising as social communication. The key objective of the course is to provide a historical perspective on advertising's role in the emergence and perpetuation of 'consumer culture'. The course will examine strategies historically employed to promote the circulation of goods as well as the impact of advertising on the creation of new habits and expectations in everyday life.

Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: MDSA01H or (NMEA20H)

MDSB04H3 Media Ethics

This course introduces students to moral and ethical issues related to the mass media. Using a decision-making framework, students will analyze actual cases that present ethical dilemmas in traditional and non-traditional news, advertising, and entertainment media (such as print, broadcast, and the Internet).

Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (JOUA01)
Note: Joint Journalism students are required to take their ethics course at Centennial College.
Prerequisite: [MDSA01H or (NMEA20H)] or [MDSA21H or (JOUA01H)] & [MDSA22H or (JOUA02H)]

MDSB05H3 Media and Globalization

This course introduces students to the variety of ways cultural and social theorists have addressed notions of "globalization" and the media, and to focus our eyes and research concerns on media systems and practices in the non-western world: Asian, Latin American, and Arab countries.

Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (HUMB741)

MDSB24H3 Journalism in the Age of New Media

Journalism is undergoing a revolutionary change. Old trusted formats are falling away and young people are consuming, producing, exchanging, and absorbing news in a different way. The course will help students critically analyze new media models and give them the road map they will need to navigate and work in New Media.

Preference will be given to Journalism and Media Studies students.

Breadth requirement: Arts, Literature & Language
Prerequisite: [[MDSA21H or (JOUA01H)] & [MDSA22H or (JOUA02H)] or [MDSA01H or (NMEA20H)]

MDSB25H3 Media Ownership and Journalism

This course examines how the political economy of news organizations shapes the process of news gathering, editing and publishing. It critically examines the implications of hyper-commercialization of media for journalism, and assesses the future of the newspaper industry.

Breadth requirement: Arts, Literature & Language
Prerequisite: MDSA01H or (NMEA20H) or [MDSA21H or (JOUA01H)] & [MDSA22H or (JOUA02H)]
MDSB2H3 Covering Immigration
An examination of Canadian coverage of immigration and transnational issues. With the shift in Canada’s demographics, media outlets are struggling to adapt to new realities. We will explore how media frame the public policy debate on immigration, multiculturalism, diaspora communities, and transnational issues which link Canada to the developing world. Preference will be given to Journalism and Media Studies students.
Breadth requirement: Arts, Literature & Language
Exclusions: [IOC800H1] Prerequisite: 4.0 credits including HUMA01H1 & (MDSA21H1 or [OUA01H1]) & [MDSA22H1 or (OUA02H1)]

MDSB27H3 Critical Journalism
The course examines the representation of race, gender, class and power in the media, traditional journalistic practices and newsroom culture. It will prepare students who wish to work in a media-related industry with a critical perspective towards understanding the marginalization of particular groups in the media. Preference will be given to Journalism and Media Studies students.
Breadth requirement: Arts, Literature & Language
Exclusion: [IOC802H1] Prerequisite: 4.0 credits including [HUMA01H1] & [MDSA21H1 or (OUA01H1)] & [MDSA22H1 or (OUA02H1)]

MDSB39H3 Fundamentals of Journalistic Writing
An overview of the standard rules and techniques of journalistic writing. The course examines the basics of good writing style including words and structures most likely to cause problems for writers. Students will develop their writing skills through assignments designed to help them conceive, develop, and produce works of journalism. Preference will be given to Journalism and Media Studies students.
Breadth requirement: Arts, Literature & Language
Prerequisite: [MDSA21H1 or (OUA01H1)] & [MDSA22H1 or (OUA02H1)] & HUMA01H1. (Note: HUMA01H1 will be waived in 2009 Fall.)

MDSB61H3 Digital Media and Cyberspace
This course introduces students to the key concepts and terms in digital media studies as well as approaches to digital media criticism.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Any 4.0 credits

MDSB62H3 Design in Visual Culture
How do contemporary cultural workers engage the potential of emerging design technologies? CAD, digital networks, robotics, space age materials, extreme 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Exclusion: [NME209H1]
Prerequisite: [MDSA01H1] or [NME208H1]

MOSC81H3 Theories and Methods in Media Studies
This is an advanced seminar on theories and methodologies applied to the study of media. Topics vary.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 30
Prerequisite: Any 5.0 credits including [MDSA01H1 or (NME208H1)] & MDS42H1

MOSC22H3 Topics in Media, Identities and Politics
This course explores the centrality of mass media such as television, film, the Internet and mobile media in the formation of multiple identities in the context of globalization, and the role of media as focal points for various cultural and political contestations.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35
Prerequisite: Any 5.0 credits including [MDSA01H1 or (NME208H1)] or [MDSA22H1 or (OUA02H1)]

MOSC37H3 Gender, Race and Ethnicity in Advertising
This course will look into the role of advertising in reflecting or moulding society’s perception of women/minority groups. A historical approach will be used to explore how the women/minority groups have been portrayed in advertising. In the process, topics such as gender roles, sexuality, and racism will be discussed.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 50
Prerequisite: Any 5.0 credits including MDSA01H1 or (NME208H1)

MOSC63H3 Legal and Ethical Issues in New Media Studies
This course is designed to be an in-depth exploration of ethical issues in the areas of journalism, advertising, and entertainment in the digital media environment. The case study approach will be used so students can apply the ethical decision-making framework introduced in the course. Media Ethics to examine ethical issues such as truth, accuracy, privacy, copyright infringement, and persuasion.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 35
Prerequisite: Any 5.0 credits including [MDSA01H1 or (NME208H1)] or MDS404H1
MDSC4H3 Old Media, New: Film and New Technology

This course examines how the popularization of old and new media has contributed to cultural attitudes that attend the introduction and social diffusion of new technologies. Prerequisite: Arts, Literature & Language. Limited enrolment: 15. 10 credits including MDSA02H3.

MDSD01H3 Senior Seminar: Topics in Digital Media and Arts

This is a senior seminar that focuses on digital media and art. Through research or studio projects, students will explore how artists use the potentials offered by digital technologies to create new ways of expression. Limited enrolment: 15. Prerequisite: Any 11 credits including [MDSA01H3 or (NMEA208H1 & MDAS02H1) or (MDSA21H1 or (JOUA01H1) & (MDSA22H1 or (JOUA02H1))]

MDSD02H3 Senior Seminar: Topics in Digital Media and Society

This is a senior seminar that focuses on digital media and society. It explores social and political implications of digital media and how social forces shape the development of new media. Topics vary. Limited enrolment: 15. Prerequisite: Any 11 credits including [MDSA01H3 or (NMEA208H1 & MDAS02H1) or (MDSA21H1 or (JOUA01H1) & (MDSA22H1 or (JOUA02H1))]

MDSD03H3 Senior Seminar: Issues in Contemporary Media, Representation, and Culture

This is a senior seminar that explores issues and questions concerning media, representation and culture. Topics vary. Limited enrolment: 15. Prerequisite: Any 11 credits including [MDSA01H3 or (NMEA208H1 & MDAS02H1) or (MDSA21H1 or (JOUA01H1) & (MDSA22H1 or (JOUA02H1))]

MDSD04H3 Senior Seminar: Topics in Media, Politics, and Democracy/Desdemocracy

This is a senior seminar that explores issues concerning the relationship of media, politics and democracy. Topics vary. Limited enrolment: 15. Prerequisite: Any 11 credits including [MDSA01H3 or (NMEA208H1 & MDAS02H1) or (MDSA21H1 or (JOUA01H1) & (MDSA22H1 or (JOUA02H1))]

Music

See the Visual and Performing Arts section of this Calendar.

Neuroscience

Faculty List

J.W. Gard, B.A. (Mount Allison), Ph.D. (McGill), Professor Emeritus
N.W. Milligan, B.A. (UCLA), M.A., Ph.D. (McGill), Professor Emeritus
R. Bonnetta, B.Sc. (Calgary), Ph.D. (British Columbia), Professor
J.R. Brown, B.Sc. (Carleton), Ph.D. (Texas), Professor
G.O. Ivy, B.A. (Drew), Ph.D. (California), Professor
T.L. Petri, B.Sc., M.A. (Louvain), Ph.D. (Florida), Professor
G.S. Cree, B.A., M.A., Ph.D. (Western), Associate Professor
S. Erb, B.Sc., W.F. Loutet, M.A., Ph.D. (Concordia), Associate Professor
A.C. Mason, B.Sc. (Guelph), M.Sc., Ph.D. (Toronto), Associate Professor
M. Niemier, M.A. (Hamburg), Ph.D. (Tubingen), Associate Professor
S.G. Reid, B.Sc., Ph.D. (Ottawa), Associate Professor
K.K. Zarkzani, B.A., M.A., Ph.D., C.Psych (York), Associate Professor
M. M. Aas, B.Sc., M.Sc. (Western), Ph.D. (McGill), Assistant Professor
D.W. Haley, B.A. (Assumption), M.A., Ph.D. (Albuquerque), Assistant Professor
M. Inzich, B.Sc. (McGill), M.Sc., Ph.D. (Brown), Assistant Professor
J.E. Nash, B.Sc. (Abilene), M.Sc., Ph.D. (Manchester), Assistant Professor
D. Mushbaum, B.A., M.A., York, Ph.D. (Waterloo), Assistant Professor
J.C. LeBouthillier, B.Sc., M.A., Ph.D. (Toronto), Senior Lecturer

[Associate Chair & Program Supervisor: Until December 31, 2010 11. J. LeBouthillier; From January 1, 2011 11. S. Erb. Email: neuroscience-program-supervisor@utsc.utoronto.ca]

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 neuropsychology and dysfunction and behaviour.

Course Support & Program Advisor: Hamza Kassy. Email: kassyhani@utsc.utoronto.ca

Additional Course Support & Program Advisor: Hamza Kassy. Email: kassyhani@utsc.utoronto.ca
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 Neurosciences 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 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 obtained from the Registrar's Office.

**Admission to Neuroscience Programs**

The Specialist and Major programs in Neuroscience have enrolment limits. Every year students will be admitted to the Specialist Program in Neuroscience including Co-operative studies and the major program in NRO. Entry into these programs can be gained as follows:

1. **Direct Entry**: Students may be admitted directly from high school, on the basis of academic performance and must have completed Grade 12 math, chemistry and biology. Students will be required to have a cumulative GPA of 2.5 or higher at the end of 1st year (i.e., at the end of the session in which they complete their 4th credit) to remain in the specialist program. Students whose cumulative GPA at the end of 1st year is between 2.0 and 2.49 may transfer to the major program.

2. **Admission after first year**: Students may apply to the program after completing a minimum of 4.0 credits including 1 credit in biology, chemistry and psychology. Admission will be based on cumulative GPA with 2.0 or higher guaranteeing admission to the Specialist program and 2.0 to the Major program. Students with lower GPAs will be considered to the extent that laboratory spaces are available for both programs. The minimum GPA used to admit these students will be determined as May (after the Winter session) and August (after the Summer session). Application for admission will be made to the Registrar through ROSI, in April/May and July/August.

**Neuroscience courses**

Priority access to Neuroscience courses will be given to Major and Specialists in Neuroscience programs 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 opened to other students in the third week.

**First-Year Students in Neuroscience**

BIOA01H, BIOA02H, CHMA10H, CHMA11H, MATA30H, PHYA10H or PHYA11H, 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 science experiential learning through community outreach, classroom in-residence and team research, please see the Science Engagement section of this Calendar.

**SPECIALIST PROGRAM IN NEUROSCIENCE**

*Associate Chair & Program Supervisor: Until December 31, 2010, J.L. Lebouthillier; From January 1, 2011, S. Esh; Email: neuroscience-program-supervisor@utsc.utoronto.ca*

*Course Support & Program Advisor: Hanan Kayyali; Email: kayyali@utsc.utoronto.ca*

**Program Requirements**

The Program requires completion of 14.0 credits:

1. The following 4.0 credits:
   - BIOA01H Introductory Biology: Part I
   - BIOA02H Introductory Biology: Part II
   - CHMA10H Introductory Chemistry I: Structure and Bonding
   - CHMA11H Introductory Chemistry II: Reacting and Mechanisms
   - [MATA30H Calculus I or (MATA30H) Calculus A]
   - [PHYA10H Physics A or PHYA11H Physics B]
   - PSYA01H Introductory Psychology: Part I
   - PSYA02H Introductory Psychology: Part II

2. The following 4.0 credits:
   - BIOB101H Cell Biology
   - BIOB110H Molecular Aspects of Cellular and Genetic Processes
   - BIOB301H Mammalian Physiology I
   - CHMB41H Organic Chemistry I
   - CHMB42H Organic Chemistry II
   - NBROB40H Neuroanatomy Laboratory
   - PSYB51H Human Brain & Behaviour
   - [STAB22H Statistics I or PSYB07H Data Analysis in Psychology]
3. The following 3.0 credits:
  BIOC12H1 Biochemistry I: Proteins & Enzymes
  BIOC13H1 Biochemistry II: Bioenergetics & Metabolism
  BIOC33H1 Maximalian Physiology II: Lecture & Laboratory
  NROC34H1 Neuroethology (Invertebrate Neurobiology)
  NROC61H1 Learning & Motivation
  NROC63H1 Neuroscience Laboratory
  NROC64H1 Sensory & Motor Systems
  NROC66H1 Synaptic Organization & Physiology of the Brain
  PSYC39H1 Advanced Data Analysis in Psychology
  PSYC62H1 Drugs & the Brain

4. 1.0 credit from the following:
  BIOD27H1 Molecular Endocrinology
  BIOD45H1 Animal Communication
  BIOD65H1 Pathologies of the Nervous System
  NROD60H1 Current Topics in Neuroscience
  NROD63H1 Advanced Neuroscience Laboratory
  NROD66H1 Drug Addiction
  NROD67H1 Psychobiology of Aging
  PSYD17H1 Social Neuroscience
  PSYD33H1 Current Topics in Abnormal Psychology
  PSYD66H1 Current Topics in Human Brain & Behaviour

Note: 0.5 credit of NROD98Y, Thesis in Neuroscience, may also be counted towards Requirement 4.

SPECIALIST (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE

Associate Chair & Program Supervisor: Until December 31, 2010: J. Leboutilier Email: leboutilier@utsc.utoronto.ca; From January 1, 2011: S. Leb Email: leb@utsc.utoronto.ca

Co-op Contact: miskoop@utsc.utoronto.ca

The Neuroscience Co-operative program is designed to provide the student with a broad education in neuroscience, including neuroanatomy, neurophysiology, behaviour, psychology, biochemistry, cell and molecular biology and data analysis through lectures, lecture/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 at: www.utsc.utoronto.ca/subject/about. The minimum qualifications for entry are 6.0 credits including BIOA0H1, BIOA02H, CHMA10H1, CHMA11H1, PSYA01H1 & PSYA02H1 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 10.0 credits including: BIOB10H1, BIOB11H1, BIOB12H1, BIOB30H1, CHIMB41H1, CHIMB42H1, NROB60H1, NROC61H1 or NROC64H1. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

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.
216 Neuroscience

Course Requirements
The program requires the completion of 15.0 credits including the 14.0 credits as specified in the Specialist Program in Neuroscience, plus the following:

1. BIOB12H Cell and Molecular Biology Laboratory
2. BIOC23H Practical Approaches to Biochemistry
3. The Arts & Science Co-op Work Term Preparation course

MAJOR PROGRAM IN NEUROSCIENCE
Associate Chair & Program Supervisor: Until December 31, 2009 J. LeBoxillier; From January 1, 2010 S. Ehr
Email: neuroscience-program-supervisor@uofc.utoronto.ca
Course Support & Program Advisor: Hanan Kayalji
Email: kayalji@uofc.utoronto.ca

Program Requirements
The Program requires completion of 8.0 credits. Students who wish to combine the Major Program in Neuroscience with the Major in Biology or the Major in Mental Health Studies or the Major in Psychology are advised that they must present 12.0 distinct credits 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 Program in Neuroscience:

1. The following 3.0 credits:
   BIOA01H Introduction to Biology: Part I
   BIOA02H Introduction to Biology: Part II
   CHMA10H1 Introductory Chemistry I: Structure and Bonding
   CHMA11H1 Introductory Chemistry II: Reactions and Mechanisms
   PSYA01H Introduction to Psychology: Part I
   PSYA02H Introduction to Psychology: Part II

2. The following 3.0 credits:
   BIOB10H1 Cell Biology
   BIOB11H Molecular Aspects of Cellular and Genetic Processes
   BIOB38H1 Mammalian Physiology I
   NROC460H1 Neuroanatomy Laboratory
   PSYB45H Human Brain and Behaviour
   [STA222H Statistics I or PSYB47H Data Analysis in Psychology]

3. The following 1.0 credit:
   NROC61H1 Learning and Motivation
   NROC64H1 Sensory and Motor Systems

4. 1.0 credit from the following:
   BIOC33H1 Mammalian Physiology II: Lecture & Laboratory
   BHOD27H Molecular Endocrinology
   BHOD45H Animal Communication
   BHOD65H Pathologies of the Nervous System
   NROC34H1 Neuroanatomy
   NROC63H1 Neuroscience Laboratory
   NROC69H1 Sympathetic Organization & Physiology of the Brain
   NROC99H1 Supervised Study in Neuroscience
   NROC69H1 Current Topics in Neuroscience
   NROC63H1 Advanced Neuroscience Laboratory
   NROC66H1 Drug Addiction
   NROC67H1 Psychology of Aging
   PSYC62H1 Drugs and the Brain
   PSYC71H1 Social Neuroscience
   PSYD33H1 Current Topics in Abnormal Psychology
   PSYD66H1 Current Topics in Human Brain & Behaviour
   [STA222H Statistics I or PSYB47H Data Analysis in Psychology]

NROC66H1 Neuroanatomy Laboratory
This course will focus on lab neuroanatomy at both the human and animal level. This will also include examination of the structure and function of neurons and glia, neurochemistry, and neuromechanisms of communication at the cellular and molecular level.

NROC66H1 Neuroanatomy Laboratory
This course will focus on lab neuroanatomy at both the human and animal level. This will also include examination of the structure and function of neurons and glia, neurochemistry, and neuromechanisms of communication at the cellular and molecular level.

Breadth requirement: Natural Sciences
Exclusion: CSB324H, PSY200H, PSY311H, ZOO32H
Prerequisite: BIOA01H & BIOA02H & PSYA01H & PSYA02H
Note: CHMA10H1 & CHMA11H1 are strongly recommended for students with no Chemistry background.
NRO334H3 Neuroethology
Neural basis of natural behaviour; integrative function of the nervous system; motor and sensory systems; mechanisms of decision-making, initiating action, co-ordination, learning and memory. Topics may vary from year to year.
Breadth requirement: Natural Sciences
Prerequisite: BIO385H

NRO665H3 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.
Breadth requirement: Natural Sciences
Prerequisites: BIO385H & NRO866H

NRO667H3 Neuroscience Laboratory
Instruction in a variety of techniques used in investigations of nervous system function. Behavioural 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).
Breadth requirement: Natural Sciences
Limited enrolment: 20
Exclusion: PSY399H
Prerequisite: [PSY807H or STAR22H] & NRO866H

NRO668H3 Sensory and Motor Systems
A focus on the mechanisms by which the nervous system processes sensory information and controls movement. 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 cerebral mechanisms of motor control are also covered.
Breadth requirement: Natural Sciences
Exclusion: PSY229H
Prerequisite: BIO385H & NRO866H

NRO669H3 Synaptic Organization and Physiology of the Brain
Neuronal morphology, synaptic connectivity, and molecular mechanisms of synaptic function are covered in detail. Similarities in circuitry among such diverse structures as the reticular thalamic core, 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.
Breadth requirement: Natural Sciences
Prerequisite: BIO385H & NRO866H

NRO670H3 Supervised Study in Neuroscience
An intensive research project intended to provide laboratory/field experience in data collection and analysis. The project must be completed over 2 consecutive terms. NRO670H & NRO680H provide an opportunity to engage in research in an area after completing basic coverage in regularly scheduled courses. The student must demonstrate a background adequate for the project proposed and should present a clear rationale to prospective supervisors. Regular consultation with the supervisor is necessary, and extensive data collection and analysis will be required. Such a project will culminate in a written research report.

Students must first find a supervisor before the start of the academic term in which the project will be initiated. They must then obtain permission from the Department of Psychology's website (www.utoronto.ca/psych/undergraduate) that is to be completed and signed by the intended supervisor, and returned to the Psychology Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course, including the structure of the required log-book.

Students seeking supervision off-campus are further advised to check the appropriateness of the proposed advisor with the Program Supervisor. If the proposed supervisor is not appointed to the Neuroscience faculty at UTSC then a secondary supervisor who is a member of the Neuroscience group at UTSC will be required.
Exclusion: For NRO669H: PSYC90H
For NRO670H: PSYC90H
Prerequisite: 3.0 credits in Psychology, Biology or Neuroscience & permission of instructor.

NRO671H3 Current Topics in Neuroscience
An intensive examination of selected issues and research problems in the Neurosciences.
Exclusion: PSY399H
Prerequisite: NRO641H & NRO644H

NRO672H3 Advanced Neuroscience Laboratory
Instruction in a variety of advanced techniques used to investigate nervous system functioning. Advanced molecular and cellular histotechnical techniques used in the neurosciences will be covered as well as theory, methodology and image analysis.
Breadth requirement: Natural Sciences
Limited enrolment: 20
Exclusion: PSY399H
Prerequisites: NRO641H & NRO644H
Corequisite: PSYC90H
NRCD686H3 Drug Addiction

An examination of the major phases of the addiction cycle, including drug consumption, withdrawal, and relapse. Consideration will be given to what basic motivational and corresponding neurobiological processes influence behaviour during each phase of the cycle. Recent empirical findings will be examined within the context of major theoretical models guiding the field.

Breadth requirement: Natural Sciences

Limited enrolment: 20

Exclusion: NRCD686H3 (if taken in the 2009 Fall Session)

Prerequisite: [NRCD658H3 or NRCD646H3] & PSYC62H1

Corequisite: PSYC68H1

NRCD676H3 Psychology 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.

Breadth requirement: Natural Sciences

Limited enrolment: 20

Prerequisite: NRCD666H3 & [NRCD61H3 or NRCD646H3]

Corequisite: NRCD66H1

NRCD68Y3 Thesis in Neuroscience

This course offers the opportunity to engage in a year-long research project under the supervision of an interested member of the faculty in Neuroscience. The project will culminate in a written report in the form of a thesis and a poster presentation. Throughout 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 own investigations.

Students must first find a supervisor, which is usually confirmed before the start of the academic term in which the project will be initiated. Students will meet as a group with the coordinator as well as individually with their supervisor. Preference in this course is given to Specialists in Neuroscience with a cumulative GPA of 3.3 or higher. Students planning to pursue graduate studies are especially encouraged to enrol in the course. Students must obtain a permission form from the Department of Psychology’s website (www.utsc.utoronto.ca/psych/undergraduate) that is to be completed and signed by the intended supervisor, and submitted to the Psychology 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 Neuroscience at UTSC.

Exclusion: BIOL98Y1, BIOL99Y1, BGYD99Y1, (BGYD99Y1), BGYD60Y1, (BGYD62Y1)

Prerequisite: Satisfactory completion of 15.0 credits in any discipline, including PSYC60H1 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. Note: Preference will be given to students in a specialist program in Neuroscience whose 15.0 credits include PSYC68H1 and who have a cumulative GPA of at least 3.3.

New Media Studies

(B.A.)

Faculty List

M. Mahzari, B.A. (Dalhousie), Ph.D. (London), Associate Professor
K. Liddle, B.A. (Oberlin), M.A. (Auburn), Ph.D. (Emory), Assistant Professor
L. Chan, B.A., M.A. (Toronto), Senior Lecturer

MAJOR (JOINT) PROGRAM IN NEW MEDIA STUDIES

Program Supervisor: L. Chan Email: newmedia@utsc.utoronto.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 Communications (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 of qualifying for a certificate from Centennial College by undertaking one 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 U of T 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 must request the program in ROSI 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 website at http://www.uac.utoronto.ca/jprog/newmedia/apply.html.)

Guidelines for 1st year course selection
Students who intend to complete the New Media program must include MDS01H1 and MDS02H1 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 works. This portfolio will be maintained and built upon by the students from their first year until their graduation. Students are also strongly encouraged to take HUMA01H1 (Exploring Key Questions in Humanities) as early as possible in their studies.

Program Requirements
Students must complete 8.0 full credits of which at least 2.0 must be at the C- or D-level, including:

1. MDS01H1 Introduction to New Media in Humanities and Social Sciences
2. 0.5 credits from among:
   (CSCA03H1) The Why and How of Computing
   (CSCA06H1) Introduction to Computer Programming
   (CSCA45H1) Introduction to Computer Science
   (VPAA02H1) Visual and Performing Arts in the Digital Age
   (VPAB01H1) Computers and the Arts I
   (VPAS72H1) Introduction to Photography
   (VPAS74H1) Introduction to Digital Studio Practice
3. MDS02H1 Design in Visual Culture
4. 1.0 full credit from among the following courses (some courses have prerequisites and/or enrollment restrictions—students should consult the course descriptions and plan accordingly):
   (ECMC20H1) Economies of the Media
   (ECMC21H1) The Economics of the Internet and E-commerce
   (ENG101H1) Critical Writing About Poetry
   (ENG104H1) Critical Thinking About Poetry
   (ENGCS55H1) Literature and Media: The Spoken Word and the Visual Page
   (ENGCS56H1) Literature and Media: From Page to Screen
   (MDSB03H1) Advertising and Consumer Culture
   (MDSB05H1) Media and Globalization
   (MDSB06H1) Digital Media and Cyberspace
   (MDSB07H1) Topics in Media, Identities, and Politics
   (SOCCS01H1) Sociology of Culture
   (SOCSC47H1) Media and Society
   (VPAAS01H1) Collaborations in the Visual and Performing Arts
   (VPAS09H1) Introduction to Contemporary Cultural Theory
   (VPAS40H1) Foundation Studies in Studio
   (VPBA73H1) Computers and the Arts II
   (VPSB03H1) Photo-based Work
   (VPSB05H1) Intermediate Video
   (VPSB08H1) Digital Studio Practice
   (WSTB13H1) Women and the Media
   (WSTB15H1) Women in the Cyberspace: Transnational Feminist Networks and Activism
5. 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 1, 2, 3 and 4 above.
   (NMAA01H1) Digital Fundamentals
   (NMAA02H1) Introduction to New Media Communications
   (NMAA03H1) The Language of Design
   (NMAA04H1) Interface Design, Navigation and Interaction I
6. New Media Group 2 - students will be eligible to enrol in these courses after successfully completing all courses in Group 1 as listed in 5 above.
   (NMAA05H1) Interface Design, Navigation and Interaction II
   (NMAA06H1) Project Development and Presentation
   (NMAA08H1) Application Software for Interactive Media
   (NMAA09H1) Sound Design
   (NMAA10H1) Design for New Media
7. NMEA01H1 New Media Senior Project
8. NMEA20H1 Theory and Practice of New Media
NMEA01H3 Digital Fundamentals
This course introduces basic hardware and software for new media. Students will learn basics of HTML (tags, tables and frames) and Javascript for creation of new media. Discusses hardware requirements including storage components, color palettes and different types of graphics (bitmap vs. vector-based). Students will be introduced to a variety of software packages used in new media production.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: 10 full credits
Corequisite: NMEA02H3, NMEA03H3, NMEA04H3

NMEA02H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: 10 full credits
Corequisite: NMEA01H3, NMEA03H3, NMEA04H3

NMEA03H3 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, learners will be introduced to the exciting world of applied graphic design and multi-media.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: 10 full credits
Corequisite: NMEA01H3, NMEA02H3, NMEA04H3

NMEA04H3 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: 10 full credits
Corequisite: NMEA01H3, NMEA02H3, NMEA03H3

NMEA05H3 Interface 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 test a design with real world users.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: NMEA01H3, NMEA02H3, NMEA03H3, NMEA04H3

NMEB06H3 Project Development and Presentation
This course enables the participant to understand the new media production process. Learners will develop the skills to conduct benchmarking, scoring 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: NMEA01H3, NMEA02H3, NMEA03H3, NMEA04H3
Corequisite: NMEB05H3, NMEB08H3, NMEB09H3, NMEB10H3

NMEB08H3 Application Software for Interactive Media
This course builds on NMEA01H3. It enables learners to extend their understanding of software requirements and of advanced software techniques. Software used may include: Dreamweaver, Flash, Director, and animation (using Director).
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: NMEA01H3, NMEA02H3, NMEA03H3, NMEA04H3

NMEB09H3 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, create and compress files, and in the planning and post-production of new media. Students will also learn to use audio in interactive ways such as soundscapes.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: NMEA01H3, NMEA02H3, NMEA03H3, NMEA04H3
Corequisite: NMEB05H3, NMEB06H3, NMEB08H3, NMEB10H3
NMED10H3 New Media Design
This course discusses the integration of multiple media with the art of good design. The course examines the conventions of typography and the dynamics between words and images, with the introduction of time, motion and sound. The course involves guest speakers, class exercises, assignments, field trips, group critiques and major projects.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 35. This course is only open to students registered in the Joint Major Program in New Media.
Prerequisite: NMEA0H1, NMEA02H, NMEA03H, NMEA04H
Corequisite: NMEB05H, NMEB06H, NMEB08H, NMEB09H

NMED01H3 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, CD's or other suitable media. 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 full credits including [MDSA0H1 or (NMEA2010)], [MDSB02H or (NMED201H3)], NMEB06H, NMEB08H, NMEB09H, NMED10H1 & NMED20H1

NMED02H4 Theory and Practice of New Media
A seminar course providing critical reflection on digital media applications and their implementation in a variety of settings, including education, publishing, performing arts, video and film production. Students will also examine the ideological, political, structural, and representational assumptions underlying much of new media production and consumption in contemporary society.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 35
Prerequisite: NMEB05H, NMEB06H, NMEB08H, NMEB09H & NMED10H

MDSA01H3 Introduction to New Media in the Humanities and Social Sciences
MDSB03H3 Advertising and Consumer Culture
MDSB06H3 Media and Globalization
MDSB06H4 Digital Media and Cyberspace
MDSB06H5 Design in Visual Culture
MDSB06H6 Topics in Media, Identities and Politics
See the Media Studies section of this Calendar for full course descriptions.

Paramedicine
(B.Sc.)

Faculty List
S.G. Reid, B.Sc., Ph.D. (Ottawa), Associate Professor

SPECIALIST (J OINT) PROGRAM IN PARAMEDICINE
Supervisor of Studies: S. Reid (until July 1 2010) and after Dec 31 2010; J. Scherk (July 1, 2010 - Dec 31, 2010)
Email: paramedicine@utm.utoronto.ca
This program consists of 18.0 required credits and may be taken in fulfillment of the requirements of a four-year (20-credit) Honours Degree. Students who complete the requirements of the program will also qualify for the Paramedic Diploma from Centennial College. Students who have completed the requirements for Centennial’s diploma are eligible to take the Ministry of Health exams required to qualify as a Primary Care Paramedic.

Program Admission
Limited enrolment. Applicants must fill out a joint program supplementary application form. Prior to taking courses at Centennial College, students must also fill out a medical certificate and have current qualifications in CPR and standard first aid. Other non-academic requirements such as a vulnerable sector police check, fitness standards and face mask fit certification are also required. Additional details regarding these requirements may be found at Centennial’s website or by contacting Walter Tavares at Centennial College (ntavases@centennialcollege.ca). Applicants may arrange to complete some of these requirements during the first year of their studies at the University of Toronto Scarborough.

For more information on admission and deadlines, see the Joint Programs with Centennial College section of this Calendar.
Program Requirements
Note: In order to remain in the program, students must typically maintain a cumulative grade point average of at least 2.0. Students whose cumulative GPA falls below 2.0 should consult the program supervisor to discuss their options.

Please note that 20 credits are required to complete a degree. In the case of the Joint Paramedicine Specialty Program these 20 credits include the 18 required credits and 2 elective credits.

Students should ensure that they are familiar with the UTSC Degree Requirements.

Program Requirements (Note, suggested course sequences follow below)

1.0 Credit of Introductory Biology Courses
BIOA01H Introductory Biology, Part 1
BIOA02H Introductory Biology, Part 2

2.0 Credits of Core Biology Courses
BIOB18H Cell Biology
BIOB181H Molecular Aspects of Genetic Processes
BIOB188H Mammalian Physiology I
BIOB188H Human Development and Anatomy

2.0 Credits of Foundational Biology Courses
BIOC15H Genetics
BIOC171H Microbiology: The Bacterial Cell
BIOC21H Vertebrate Histology, Cells and Tissues
BIOC33H Mammalian Physiology II: Lecture and Laboratory

1.0 Credit of Advanced Biology Courses
Choose From:
BIOB33H Seminars in Cellular Microbiology
BIOB33H Comparative Environmental Physiology
BIOB56H Pathologies of the Nervous System
BIOB56H Fungal Biology and Pathogenic
BIOB43H Exercise Physiology
BIOB250H Pathobiology of Human Disease
BIOB960H Directed Research in Paramedicine

1.0 Credit of Introductory Chemistry Courses
CHMA10H Introductory Chemistry I: Structure and Bonding
CHMA11H Introductory Chemistry II: Reactions and Mechanisms

1.0 Credit of Introductory Psychology Courses
PSYA01H Introductory Psychology: Part I
PSYA02H Introductory Psychology: Part II

1.0 Credit of B-Level Psychology Courses
PSYB20H Introduction to Developmental Psychology
PSYB32H Abnormal Psychology

1.0 Credit of Statistics/Data Analysis Courses
STATB2H Statistics I or PSYB07H Data Analysis in Psychology
PSYC08H Advanced Data Analysis in Psychology

Note: Students who do not take PSYB07H must complete an upgrade module prior to taking PSYC08H.

7.0 Credits of Paramedicine Courses
*PMDB22H Pre-Hospital Care 1: Theory and Lab
*PMDB25H Therapeutic Approaches to Behaviour in Crisis
*PMDB41H Professional Issues, Research and Leadership
*PMDB30H Alterations in Human Body Function I
*PMDB32Y Pre-Hospital Care 2: Theory, Lab and Clinical
*PMDB34H Pharmacology for Allied Health Proerequisite
*PMDC40H Alterations in Human Body Function II
*PMDC42Y Pre-Hospital Care 3: Theory, Lab and Field
*PMDC43H Medical Directed Therapeutics and Paramedic Responsibilities
**PMDC 544 Pre-Hospital Care 4: Theory, Lab and Field**

**PMDC 564 Primary Care Practice Integration and Decision Making**

*A grade of 60% is required in these courses to maintain standing in the program. All PMD courses are taught at Centennial College.

### 1.0 Credit of C-Level Anthropology Courses

- ANTC 577H Foundations in Epidemiology
- ANTC 580H Deconstructing Epidemics

### Suggested Program Sequence

**Note:** Students may also take courses in the summer, when offered. BIOB 110Y may be taken in place of BIOB 110H.

#### Year 1: Fall Session

- a) BIOA 111H Introductory Biology, Part 1
- b) CHMA 101H Introductory Chemistry I: Structure and Bonding
- c) PSY A01H Introductory Psychology: Part I
- d) PSYB 011H Data Analysis in Psychology (fall) & 0.5 credits of elective courses
  - OR
  - 1.0 credit of elective courses

#### Year 1: Winter Session

- a) BIOA 112H Introductory Biology, Part 2
- b) CHMA 111H Introductory Chemistry II: Reactions and Mechanisms
- c) PSY A02H Introductory Psychology: Part II
- d) STAB 221H Statistics I & 0.5 credits of elective courses
  - OR
  - 1.0 credits of elective courses

#### Year 2: Fall Session

- a) BIOB 111H Cell Biology
- b) BIOB 111H Human Development and Anatomy
- c) PMDB 221H Pre-Hospital Care 1: Theory and Lab site
- d) PMDB 221H Therapeutic Approaches to Behaviour in Crisis
- e) PMDB 311H Professional Issues, Research and Leadership

#### Year 2: Winter Session

- a) BIOB 111H Molecular Aspects of Genetic Processes
- b) PMDB 120H Alterations in Human Body Function I
- c) PMDB 222Y Pre-Hospital Care 2: Theory, Lab and Clinical
- d) PMDB 360H Pharmacology for Allied Health Pre-requisite

#### Year 3: Fall Session

- a) BIOB 120H Mammalian Physiology I
- b) PMDC 120H Alterations in Human Body Function II
- c) PMDC 121Y Pre-Hospital Care 3: Theory, Lab and Field
- d) PMDC 433H Medical Directed Therapeutics and Paramedic Responsibilities

#### Year 3: Winter Session

- a) BOC 117H Microbiology: The Bacterial Cell
- b) BOC 233H Mammalian Physiology II: Lecture and Laboratory
- c) PMDC 544 Pre-Hospital Care 4: Theory, Lab and Field
- d) PMDC 560H Primary Care Practice Integration and Decision Making

#### Year 4: Fall Session

- a) BOC 151H Genetics
- b) BOC 231H Vertebrate Histology: Cells and Tissues
- c) PSYB 220H Introduction to Developmental Psychology
- d) PSYB 322H Abnormal Psychology
PMB229H 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. Emphasizes the components of primary and secondary assessment, and the implementation of patient care based on interpretation of assessment findings. Discusses principles of physical and psycho-social 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.

Breadth requirement: Social & Behavioural Sciences
Limited enrolment: Enrolment is restricted to students in the Specialist Program in Paramedicine.
Prerequisite: BIOA001H & BIOA002H
Corequisite: PMDB229H, PMDB411H, BIOB333H

PMB253H3 Therapeutic Communications and Crisis Intervention
Focuses on the utilization of effective communication tools when dealing with persons facing 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.

Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: Enrolment is restricted to students in the Specialist Program in Paramedicine.
Prerequisite: BIOA001H & BIOA002H
Corequisite: PMDB229H, PMDB411H, BIOB333H

PMB304H3 Alterations of Human Body Function
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.

Breadth requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB229H, PMDB253H, PMDB411H, BIOB333H
Corequisite: PMDB32Y, PMDB36H

PMB323Y3 Pre-hospital Care 2: Theory, Lab and Clinical
Provides the necessary knowledge, skill and value base that will enable the student to establish the priorities of assessment and management for persons who are in stress or crisis due to the effects of illness or trauma. The resulting patho-physiological or psychological manifestations are assessed to determine the degree of crisis and/or life threat. Students must pass each component (theory, lab and clinical) of the course to be successful. This course is taught at the Centennial HP Science and Technology Centre.

Breadth requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB229H, PMDB253H, PMDB411H, BIOB333H
Corequisite: PMDB301H, PMDB36H

PMB386H3 Pharmacology for Allied Health
Introduces principles of Pharmacology, essential knowledge for paramedics who are expected to administer medications in pre-hospital care. Classification of drugs will be discussed in an organized manner according to their characteristics, purpose, physiologic action, adverse effects, precautions, interactions and pre-hospital applications. Students will use a step-by-step process to calculate drug dosages. This course is taught at the Centennial HP Science and Technology Centre.

Breadth requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB229H, PMDB253H, PMDB411H, BIOB333H
Corequisite: PMDB301H, PMDB32Y
PMD813H Professional and Legal Issues, Research, Responsibilities and Leadership
Discusses the changing role of the paramedic and introduces the student to the non-technical professional expectations of the profession. Introduces fundamental principles of medical research and professional principles. Topics covered include the role of professional organizations, the role of relevant legislation, the labour management environment, the field of injury prevention, and basic concepts of medical research. This course is taught at the Centennial HP Science and Technology Centre.
Breath requirement: Social & Behavioural Sciences
Limited enrolment: Enrolment is restricted to students in the Specialist Program in Paramedicine.
Prerequisite: BIOM01H & BIOM02H
Corequisite: PMDC823H, PMDC828H, BIOM33H

PMDC403H Alternations 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. Physiologic alterations 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 treatment. This course is taught at the Centennial HP Science and Technology Centre.
Breath requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB36H, PMDB37Y, PMDB36H, BIOB11H
Corequisite: PMDC42Y, PMDC43H

PMDC423Y Pre-hospital Care 3: Theory, Lab and Field
Provides students with the necessary theoretical concepts and applied knowledge and skills for managing a variety of pre-hospital medical and traumatic emergencies. Particular emphasis is placed on advanced patient assessment, ECG rhythm interpretation and cardiac emergencies, incorporation of symptom relief pharmacology into patient care and monitoring of intravenous fluid administration. 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.
Breath requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB36H, PMDB37Y, PMDB36H, BIOB11H
Corequisite: PMDC40H, PMDC43H

PMDC433H 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 or 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 course. Patient care and monitoring of intravenous fluid administration. This course is taught at the Centennial HP Science and Technology Centre.
Breath requirement: History, Philosophy & Cultural Studies
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDB36H, PMDB37Y, PMDB36H, BIOB11H
Corequisite: PMDC40H, PMDC42Y

PMDC543Y 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.
Breath requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDC40H, PMDC42Y, PMDC43H
Corequisite: PMDC56H

PMDC563H Primary Care Paramedic 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.
Breath requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist Program in Paramedicine.
Prerequisite: PMDC40H, PMDC42Y, PMDC43H
Corequisite: PMDC54Y

BIOC063H Directed Research in Paramedicine
See the Biological Sciences section of this Calendar for a full course description.
Philosophy
(B.A.)

Faculty List
W.C. Graham, M.A., Ph.D. (Toronto), Professor Emeritus
J.H. Sobel, M.A. (Iowa State), Ph.D. (Michigan), Lecturer Emeritus
W.E. Siegel, M.A. (Alberta), Ph.D. (Toronto), Professor
B. Helie, B.A. (Stanford), Ph.D. (Princeton), Associate Professor
K. Huebert, B.A. (Williams), M.A. (Warwick), Associate Professor
P. Kemeny, B.Sc. (Toronto), Ph.D. (Pittsburgh), Associate Professor
L. M. Lange, B.A., M.A. (Manitoba), Ph.D. (Toronto), Associate Professor
S. Selby, B.A. (Toronto), Ph.D. (Pittsburgh), Associate Professor
J. Wilson, B.A. (U.C. San Diego), Ph.D. (Cornell), Associate Professor

Program Director: S. Selby Email: philosophy-program-supervisor@utoronto.ca

Philosophy is the study of the ideas that shape our thought and activity. While we do discuss controversial issues in politics, morality, science, religion, art, etc., philosophy is more concerned with the ideas that underlie all such debates. We consider what the role of government should be, what reasons there could be to describe anything as good or bad, what proves that something is true, whether there could be a reality beyond the physical world, and whether the only value of art is the pleasure it gives. Such questions have been answered in a variety of theories, and any study in philosophy begins with learning what others have thought, but our purpose is not primarily to be historians of ideas, and assignments focus on developing the intellectual abilities and techniques required to think effectively for oneself at this deeper level. So philosophy emphasizes interpretation and original thought, reasoning, discussion and assessment.

PHIL10H and PHIL11H are a survey of the main topic-areas of philosophy. They are recommended both as courses of general interest and as an introduction to the Major and Specialist Programs.

B-level courses address specific topics such as theories of human nature, theories of mind, theories of knowledge, metaphysics, techniques of argumentation, ethics, politics, feminism, and art as well as specific periods in the History of Philosophy. Since they have no prerequisites they also serve as entry-points to philosophy.

C-level seminars in Philosophy are advanced courses for students with typically 1.5 credits in Philosophy (Instructors will admit students whose courses in other disciplines have adequately prepared them for a seminar. Students must provide transcripts when requesting special permission to enroll in a seminar).

D-level seminars in Philosophy are advanced courses for students with 3.5 credits in philosophy including 1.0 credits at the C-level. (Instructors will admit students whose courses in other disciplines have adequately prepared them for a seminar. Students must provide transcripts when requesting special permission to enroll in a seminar).

D-level independent study courses are intended for qualified students who wish to engage in advanced level work on a well-defined topic of their choice. These courses are only available with the prior agreement of an instructor.

The Philosophy Study Guide is available at: http://www.arts.utoronto.ca/venger/study.html

Guidelines for 1st year course selection
Students who intend to complete a Philosophy program should include PHIL10H & PHIL11H in their 1st year course selection. Students are also strongly encouraged to take HUMA01H (Exploring Key Questions in Humanities) as early as possible in their studies.

Note: For Co-op opportunities related to the Major Program in Philosophy, please see the Co-operative Program in Humanities section of this Calendar.

SPECIALIST PROGRAM IN PHILOSOPHY
Program Supervisor: S. Selby Email: philosophy-program-supervisor@utoronto.ca

Program Requirements
Students must complete at least 12.0 credits in Philosophy, including at least 4.0 credits at the C- or D-level of which 1.0 must be at the D-level. MATC09H can be used as a Philosophy course for these purposes. Students are encouraged, though not required, to complete at least 0.5 credit as a reading course at the D-level.
MAJOR PROGRAM IN PHILOSOPHY
Program Supervisor: S. Sedivy Email: philosophy-program-supervisor@uts.cc.utoronto.ca

Program Requirements
Students must complete at least 7.0 credits in Philosophy of which at least 2.0 credits must be at the C- or D-level. MATC09H1 can be used as a Philosophy course for these purposes.

MINOR PROGRAM IN PHILOSOPHY
Program Supervisor: S. Sedivy Email: philosophy-program-supervisor@uts.cc.utoronto.ca

Program Requirements
Students must complete 4.0 credits in Philosophy of which at least 1.0 credit must be at the C- or D-level. MATC09H1 can be used as a Philosophy course for these purposes.

PHLAB10H3 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. Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: PHDL17H1

PHLAB11H3 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 that both presents basic theories of ethics and considers their application to contemporary moral problems. Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: PHIL275H1

PHLB03H3 Philosophy of Art
An examination of challenges posed by the radical changes and developments in modern and contemporary art forms. For example, given the continuously exploding nature of art works, what do they have in common – what is it to be an artwork? Breadth requirement: Arts, Literature & Language Studies.
Exclusion: PHIL285H1

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. Breadth requirement: Social & Behavioural Sciences.

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? Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: MTCC59H1, PHIL295H1

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. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 100

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. Breadth requirement: History, Philosophy & Cultural Studies Limited enrolment: 100

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: concepts of health and disease, patients' rights, informed consent, allocation of scarce resources, euthanasia, risks and benefits in research and others. Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL231H, PHIL231Y

PHLB11H3 Philosophy of Law
A discussion of right and rights, justice, legality, and related concepts. Particular topics may include: justifications for the legal enforcement of morality, particular ethical issues arising out of the intersection of law and morality, such as punishment, freedom of expression and censorship, autonomy and paternalism, constitutional protection of human rights. Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL277H1

PHLB13H3 Philosophy and Feminism
What is feminism? What is a woman? Or a man? Are gender relations natural or inevitable? Why do gender relations exist in virtually every society? How do gender relations intersect with other social relations, such as economic class, culture, race, sexual orientation, etc.? Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL267H1
PHLB151H Philosophy of Education
A philosophical study of the nature, practice 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL272H

PHLB165H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL265H. Note: PHLB16H may not be taken after or concurrently with PHLB70H.

PHLB170H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL265H. Note: PHLB170H may not be taken after or concurrently with PHLB70H.

PHLB201H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL230H.

PHLB303H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL220H.

PHLB313H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL200Y, PHL202H.

PHLB333H Concepts of God
For many philosophers "God" is a central concept because it signifies the fundamental cause of the universe, even Nature in a whole. Is God just this first cause, or also a benevolent agent? Can we have an idea of God? Can we prove the existence of God? Topics by Plato, Aristotle, Anselm, Hobbes, Pascal, Spinoza, Leibniz, Hume, Kant, Nietzsche, Godel.
Breadth requirement: History, Philosophy & Cultural Studies
Recommended preparation: PHLA101H or PHLA11H.

PHLB353H 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. Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHL210Y.

PHLB356H Nature and Ethics in the Early Modern Era
17th century thinkers vigorously debated what constitutes the correct picture of the world (what are the basic entities, how things are caused, how minds and bodies relate) and its consequences for morality (whether people can be moral, and ought to be moral). Readings from Descartes to Kant.
Breadth requirement: History, Philosophy & Cultural Studies
Recommended preparation: PHLA101H or PHLA11H.

PHLB359H 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 an appreciation of and practice in techniques, for example, the formal analysis of English statements and arguments, and for construction of clear and rigorous proofs.
Breadth requirement: Quantitative Reasoning
Exclusion: PHL245H.

PHLB363H 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.
Breadth requirement: Arts, Literature & Language
Exclusion: PHL247H, TRN200Y.

PHLB553H Puzzles and Paradoxes
Philosophy often begins with a puzzle or paradox. Zeno once convincingly argued that motion was impossible, but people continue to move. The " liar's paradox" seems to show that everything is both true and false, but that cannot be right. In this course, we will puzzle through these and related issues.
Breadth requirement: History, Philosophy & Cultural Studies
PHLB89H3 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 interpretable formal systems.
Breadth requirement: Social & Behavioural Sciences.

PHLB91H3 Topics in Human Nature
An exploration of theories which provide answers to the question "What is a human being?" answers that might be summarized with catchphrases such as: 'Man is a rational animal,' 'Man is a political animal,' 'Man is inherently individual,' 'Man is inherently social,' etc. Authors studied are: Aristotle, Hobbes, Rousseau, Darwin, Marx, Freud and Sartre.
Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: PHIL244H, PHIL291H.

PHLC39H3 Topics in the Philosophy of Art
An exploration of some current issues concerning the various forms of art such as: the role of the museum, the loss of beauty and the death of art.
Breadth requirement: Arts, Literature & Language.
Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy.

PHLC59H3 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.
Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: PHIL291H, PHIL375H.
Prerequisite: Any 5 full credits, including PHIL111H and another 1.0 full credit in Philosophy.
Recommended: Any B-level PHIL Ethics course.

PHLC59H3 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.
Breadth requirement: History, Philosophy & Cultural Studies.
Exclusion: PHIL291H, PHIL375H.
Prerequisite: Any 5 full credits, including PHIL111H and another 1.0 full credit in Philosophy.
Recommended: Any B-level PHIL Ethics course.

PHLC139H3 Topics in Philosophy and Feminism
Feminist philosophy includes both criticism of predominant approaches to philosophy that may be exclusionary for women and others, and the development of new approaches to various areas of philosophy. One or more topics in feminist philosophy will be discussed in some depth. Particular topics will vary with the instructor.
Breadth requirement: History, Philosophy & Cultural Studies.
Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy.
PHLC20H3 Topics in the Theory of Knowledge
A follow up to PHLB20H. 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy

PHLC33H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL310H
Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy of which at least 1.0 full credit must be at the B-level.
Recommended: PHIL335H

PHLC36H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL311H
Prerequisite: PHILB55H or PHIL660H & 1.0 further credit in Philosophy

PHLC43H3 History of Analytic Philosophy I
This course explores 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, its motivations from and consequences for metaphysics and the philosophy of mind.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL325H
Prerequisite: Any 5 full credits, including 0.5 full credit in logic, either PHILB50H, PHILC51H, (PHILC54H) or MATC09H, and 1.0 other full credit in Philosophy at the B- or C-level.
Recommended: PHILB60H or PHILB80H or PHLC90H

PHLC41H3 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 metatheory of the propositional logic learned in Symbolic Logic I.
Breadth requirement: Quantitative Reasoning
Exclusion: PHIL345H
Prerequisite: PHILB50H or CSCE36H or MATB24H or MAT403H

PHLC56H3 Philosophy of Mathematics
What are numbers? Are they physical? Mental? Created by humans? How do we know anything about numbers, if we never see or touch them? What is mathematical truth? Such questions should concern mathematics students interested in the foundations of mathematics; and philosophy students, as a rich source of philosophical puzzlement.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL346H
Prerequisite: [Two MAT courses & one PHIL course] or [One MAT course & (PHILB56H & one other PHIL course)] or permission of the instructor.

PHLC80H3 Topics in Metaphysics
A follow up to PHLB60H. 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: PHIL311H, PHIL330H (UTM only)
Prerequisite: PHILB66H & 1.0 further credit in Philosophy or permission of the instructor.

PHLC72H3 Topics in the Philosophy of Science
A follow up to PHLB70H. 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: PHILB70H & 1.0 further credit in Philosophy or permission of the instructor.

PHLC84H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: 2.0 credits in Philosophy or permission of the instructor.
PHL369H3 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 Gödel’s theorem that there is an unbridgeable gap between human minds and machine capabilities, Searle’s Chinese Room thought experiment. Breadth requirement: History, Philosophy & Cultural Studies. Prerequisite: 2.0 credits in PHL or permission of the instructor.

PHL383H3 Topics in Analytic Philosophy
Advanced topic(s) in Analytic Philosophy. Sample contemporary topics: realism/antirealism; truth; interrelations among metaphysics, epistemology, philosophy of mind and science. For details for a given academic year, please consult the U of T Scarborough Philosophy Study Guide. Breadth requirement: History, Philosophy & Cultural Studies. Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy.

PHL392H3 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. Breadth requirement: History, Philosophy & Cultural Studies. Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy of which at least 1.0 full credit must be at the B-level.

PHL393H3 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, John Rawls, Michael Sandel, Iris Young. Breadth requirement: History, Philosophy & Cultural Studies. Prerequisite: Any 5.0 full credits, including 1.5 full credits in Philosophy of which at least 1.0 full credit must be at the B-level.

PHL395H3 Topics in the Philosophy of Mind
Advanced topics in the Philosophy of mind, such as an exploration of philosophical problems and theories of consciousness. Topics to be examined may include: the nature of consciousness and qualitative experience, the existence and nature of animal consciousness, the relation between consciousness and intentionality, as well as various philosophical theories of consciousness. Breadth requirement: History, Philosophy & Cultural Studies. Prerequisite: 2.0 credits in PHL including PHL383H or permission of the instructor.

PHL395H3 Advanced Seminar in Rationalism
This course offers in-depth examination of the philosophical approach offered by one of the three principal Rationalist philosophers, Descartes, Spinoza or Leibniz. Limited enrolment: 20. Prerequisite: 3.5 full credits in Philosophy, including at least 2 courses at the C-level, at least 1 course in the history of philosophy at the C-level.

PHL443H3 Advanced Seminar in History of Analytic Philosophy
This course examines 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. Breadth requirement: History, Philosophy & Cultural Studies. Exclusion: PHL325H, PHL443H. Prerequisite: PHL43H.

PHL551H3 Metaphysics
Symbolic Logic 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, Metaphysics treats systems themselves as objects of study, from the outside. Breadth requirement: Quantitative Reasoning. Exclusion: PHL348H, PHL541H. Prerequisite: PHL31H.

PHL579H3 Advanced Seminar in Metaphysics of Mind: the Metaphysics of Persons
What is a person? Are persons primarily physical, primarily psychological, or both? What physical and psychological changes can a person undergo and still be the same person? In this course, we will explore several answers to these questions, offered by philosophers including Plato, Aristotle, Locke, Hume, Parfit, Lewis, and others. Limited enrolment: 20. Prerequisite: 3.5 FCE in Philosophy, at least 1.0 credit at the C-level.

PHL693H3 Independent Study
These courses are intended for qualified students who wish to engage in advanced level work on a well-defined topic of their choice. These courses are only available with the prior arrangement of an 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. Irrescucible
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
tyears. Students are advised to consult with their Program Supervisor(s) to find out when particular courses will be available.

Science Engagement Courses

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science
Engagement section of this Calendar.

EARLY TEACHER PROJECT

Coordinator: C.C. Dyer (416-287-7706) Email: dyer@ts.uc.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 Scarboroue 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 Students: S. Dallali (416-387-7215) Email: dallali@ts.uc.utoronto.ca

Co-op Contact: sdcop@ts.uc.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
and the Joint Specialist Program in Environmental Science and Technology, 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)
- Natural Sciences
- Physical and Mathematical Sciences
- Physics and Its Applications (with concentrations in Astronomy and Physics, Physics and Physics Teaching)
- Quantitative Analysis

Alternatively, with the approval of the Co-op Supervisor of Studies, students may select one of the Major Programs offered in the Department of Physical and Environmental Sciences or the Department of Computer and Mathematical Sciences, except for Computer Science, as their primary major, and take this in combination with a second Major Program thus fulfilling the requirements for the 20 credit degree. Currently, the eligible Major Programs are:

- Astrophysics and Physics
- Biochemistry
- Chemistry
- Environmental Science
- Mathematics
- Physical Sciences
- Statistics

The second major may be from those offered in the Department of Physical and Environmental Sciences, or from another Department. All double-major combinations must be discussed with and approved by the Supervisor of Studies. The second major may be in Computer Science. Students must meet all the requirements for admission to and continuation in this or any other limited enrollment Major Program.

For academic program descriptions and requirements, please refer to the sections of the Calendar related to each discipline.

All program registrations must be approved and confirmed each year by the Supervisor of the Co-op Program and the Supervisor of the particular program(s).

Students are individually responsible for ensuring that they have correctly completed all program and degree requirements for graduation.

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 at: www.uts.utoronto.ca/subjectpost. The minimum qualifications for entry are:

1. Astrophysics & Physics (Major): 4.0 full credits including ASTA01H, ASTA02H, MATA30H, [MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5
2. Biochemistry (Major): 4.0 full credits including BIOA00H, BIOA02H, CHMA11H, CHMA11H plus a cumulative GPA of at least 2.5
3. Biological Chemistry (Specialist): 4.0 full credits including BIOA01H, BIOA02H, CHMA11H, CHMA11H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5
4. Chemistry (Major): 4.0 full credits including CHMA11H, CHMA11H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5
5. Chemistry (Specialist): 4.0 full credits including CHMA11H, CHMA11H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5
6. Environmental Biology (Specialist): 4.5 full credits as follows: BIOA01H, BIOA02H, CHMA11H, CHMA11H, EESA01H, EESA06H, MATA30H, [MATA35H or MATA36H or MATA37H] & PHYA10H plus a cumulative GPA of at least 2.5
7. Environmental Chemistry (Specialist): 4.5 full credits as follows: BIOA01H, BIOA02H, CHMA11H, CHMA11H, EESA01H, EESA06H, MATA30H, [MATA35H or MATA36H or MATA37H] & PHYA10H plus a cumulative GPA of at least 2.5
8. Environmental Geosciences (Specialist): 4.5 full credits as follows: BIOA01H, BIOA02H, CHMA11H, CHMA11H, EESA01H, EESA06H, MATA30H, [MATA35H or MATA36H or MATA37H] & PHYA10H plus a cumulative GPA of at least 2.5
9. Environmental Physics (Specialist): 4.5 full credits as follows: CHMA11H, CHMA11H, EESA01H, EESA06H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5
Environmental Science (Major): 4.0 full credits including BIOA401H, BIOA402H, EESA406H plus a cumulative GPA of at least 2.5.

Mathematics (Major): 4.0 full credits including [CSCA48H or PSCB57H], MATA23H, MATA30H & [MATA36H or MATA37H] plus a cumulative GPA of at least 2.5.

Mathematics (Specialist): 4.0 full credits including [CSCA48H, MATA23H, MATA30H, MATA37H, PHYA10H & PHYA21H] plus a cumulative GPA of at least 2.5.

Mathematics & its Applications (Specialist): CSCA48H, MATA23H, MATA30H & MATA37H plus a cumulative GPA of at least 2.5.

The Computational Physical Sciences stream also requires MATA10H, MATA20H, PHYA10H & PHYA21H.

Natural Sciences (Specialist): 4.0 full credits including BIOA401H, BIOA402H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5.

Physical Sciences (Major): 4.0 full credits as follows: MATA10H, MATA20H, CHMA10H, CHMA11H, MATA30H, [MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5.

Physical & Mathematical Sciences (Specialist): 4.0 full credits including: MATA10H, MATA20H, MATA23H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5.

Physics & its Applications (Specialist): 4.0 full credits including MATA10H, MATA20H, MATA23H, MATA30H, [MATA35H or MATA36H or MATA37H], PHYA10H & PHYA21H plus a cumulative GPA of at least 2.5.

Quantitative Analysis (Specialist): 4.0 full credits including CSCA48H, CSCA65H, MATA23H, MATA30H & MATA37H plus a cumulative GPA of at least 2.5.

Statistics (Major): 4.0 full credits including CSCA48H, MATA23H, MATA30H & MATA37H 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 full credits. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

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, MATH401H is a co-requisite for PHYB21H.

The Department of Physical and Environmental Sciences offers interdisciplinary courses under the PSC 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 PSC 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 broad number of disciplines.

SPECIALIST PROGRAM IN NATURAL SCIENCES
Supervisor of Studies: N. Cherniak <n.cherniak@utoronto.ca>

This program is currently being reorganized in order to ensure that it contains at least 1.0 credit at the D-level and at least 3.0 other C- or D-level credits in accordance with the program regulations introduced as of the 2010 Summer Session.

Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should check the online 2010/11 UTSC Calendar periodically for updates.

SPECIALIST PROGRAM IN PHYSICAL AND MATHEMATICAL SCIENCES
Supervisor: J. Lowther <jlowther@utoronto.ca>

This program is currently being reorganized in order to ensure that it contains at least 1.0 credit at the D-level and at least 3.0 other C- or D-level credits in accordance with the program regulations introduced as of the 2010 Summer Session.

Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should check the online 2010/11 UTSC Calendar periodically for updates.
MAJOR PROGRAM IN PHYSICAL SCIENCES
Supervisor: G. Lorincz (416-287-7248) Email: lorincz@utsc.utoronto.ca
This program is currently being restructured in order to ensure that it contains at least 2.0 other C- or D-level credits in accordance with the program regulations introduced as of the 2010 Summer Session.

Students who first registered at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar. Other students should check the on-line 2010/11 UTSC Calendar periodically for updates.

PSC801H3 The Instrumentation of Science
This is a study of the computer control of various digital instruments used in the sciences. The course will provide a background in the principles of basic electricity and digital circuits sufficient to understand the working and limitations of modern electronic instruments. It will provide hands on experience, including simple programming, using the sensors of modern science, the associated instruments, and the transfer of data to a controlling computer. Activities will be selected from as large a range of subject areas as possible in: Physics, Chemistry, Environmental and Life Sciences.
Breadth requirement: Natural Sciences
Prerequisite: PHYA10H or PHYA11H

PSC857H3 Introduction to Scientific Computing
This course is an introduction to the use of computers in the physical and biological sciences emphasizing the choice and design of algorithms and their implementation in a high-level computer language for the solution of problems arising in the physical and biological sciences. Topics will include elementary numerical analysis, such as numerical integration, mathematical modeling of physical systems, data fitting and interpolation. (Intended primarily for physical and biological science students who do not plan to pursue any of the programs in computer science or cognitive science.)
Breadth requirement: Quantitative Reasoning
Corequisite: [MATA36H or MATA37H] or [MATA35H with permission of the instructor] & one A-level science course

PSCD01H3 The Physical Sciences in Contemporary Society
Current issues involving physical science in modern society: interconnection between theory, concepts, and applications; characteristics of premature, pathological, and pseudo-science; organization and funding of scientific research in Canada; role of communication and publishing; public misunderstanding of scientific method. These will be discussed using issues arising in chemistry, computer science, earth sciences, mathematics, and physics.
Note: Where PSCD01H is a Program requirement, it may be replaced by PHY341H with the approval of the Program supervisor.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PHY341H
Prerequisite: Completion of at least one-half of the credits required in any one of the programs offered by the Department of Physical & Environmental Sciences.
Corequisite: Continued participation in one of the Physical and Environmental Sciences programs.

PSCD02H3 Current Questions in Mathematics and Science
Topics of current prominence arising in chemistry, computer science, earth sciences, mathematics, and physics will be discussed, usually by faculty or outside guests who are close to the areas of prominence. Topics will vary from year to year as the subject areas evolve.
Note: Where PSCD02H is a Program requirement, it may be replaced by PHY342H with the approval of the Program supervisor.
Breadth requirement: Natural Sciences
Exclusion: PHY342H
Prerequisite: Completion of at least 3.5 credits of a Physical Sciences program
Corequisite: Continued participation in one of the Physical Sciences programs.

PSCD10H3 Physical Sciences Project
This course is intended to introduce students to current topics of research in the physical sciences under the supervision of a professorial faculty member. Students will undertake an independent project or series of projects involving theoretical, computational, experimental laboratory or field work in the Physical or Environmental 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: PSCC10H1
Prerequisite: 14.0 credits & a cumulative GPA of at least 2.5
Physics

(B.Sc.)

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., (Toronto) Ph.D. (Saskatchewan), Professor Emeritus
P.J. O'Donnell, B.Sc., Ph.D. (Glasgow), Professor Emeritus
J.M. Per, B.A.Sc., M.A.Sc. (Toronto), Ph.D. (Cantab), Professor Emeritus
P. Armatoglou, M.Sc. (Warsaw University) Ph.D. (In. Copernicus Astron. Center, Polish Academy of Sciences), Professor
C.C. Dyer, B.Sc. (Bishop's), M.Sc., Ph.D. (Toronto), Professor
J.P. Lomax, B.Sc. (Toronto), M.Sc., Ph.D. (York, Canada), Assistant Professor
G. Machic, B.Sc., M.Sc. (Toronto), Senior Lecturer
S. Tawfik, B.Sc., M.Sc. (Al-Mayar Anis) Ph.D. (Trieste, Italy), Senior Lecturer
J. Boyer Carpenters, B.Sc. (Los Andes, Bogota), M.Sc., Ph.D. (Toronto), 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, plasmas, 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 up to the point where these enter our senses, as well as x-ray, 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 stream), 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.

Notes:

1. MAT37H is the preferred prerequisite for PHYA21H1, although MAT34H1 or MAT34H6 is an acceptable alternative. However, only MATA37H1 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 MAT37H.

2. The Specialist Program in Physics and its Applications includes Faculty of Arts and Science courses among its requirements and options. Students are reminded that there is a restriction on the number of courses they can take on other campuses in the course of their degree. For this reason, students are advised, where possible, not to take courses off campus if the equivalent course is offered at UTSC so that they leave themselves some flexibility towards the end of their program.

Science Engagement Courses

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN PHYSICS AND ITS APPLICATIONS

Supervisor: J. Lowman (416-208-4880) Email: lowman@uts.montana.ca

This program is currently being reconstructed in order to ensure that it contains at least 1.0 credit at the D-level and at least 3.0 other C- or D-level credits in accordance with the program regulations introduced as of the 2010 Summer Session.

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PHYA10H3 Introduction to Physics IA
The course is intended for students in physical, environmental and mathematical sciences. 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-ray, will also be studied.

Breadth requirement: Natural Sciences
Prerequisite: [Physics 12L] or SPH4U (Grade 12 Physics) & Calculus and Vectors (MCV4U) or Advanced Functions (MIF4U) or (PHYS4H)
Corequisite: MATA3H

PHYA11H3 Introduction to Physics IB
This first course in Physics at the university level is intended for students enrolled in the Life sciences. It covers fundamental concepts of classical physics and its applications to macroscopic systems in one and three dimensions. It deals with two main themes: which are Particle and Fluid Mechanics and Waves and Oscillations. The approach will be phenomenological with applications related to life and biological sciences.

Breadth requirement: Natural Sciences
Exclusion: PHYA10H, PHY131H, PHY135Y, PHY151H, (PHY110Y), (PHY138Y)
Prerequisite: Grade 12 Advanced Functions (MIF4U)
Corequisite: [MATA3H] or [MATA3H]
Recommended preparation: Grade 12 Physics (SPH4U)

PHYA21H3 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.

Breadth requirement: Natural Sciences
Prerequisite: PHYA10H
Corequisite: [MATA3H] or [MATA3H] or [MATA3H]
(MATA3H does not allow for any future programs in science.)

PHYA22H3 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.

Breadth requirement: Natural Sciences
Prerequisite: PHYA10H or PHYA11H or (PHYA01H)
Corequisite: [MATA2H] or [MATA3H] or [MATA3H] or [MATA3H]
Note: [MATA2H] & [MATA3H] do not allow for any future programs in science.

PHYB10H3 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.

Breadth requirement: Natural Sciences
Limited enrollment: 25
Exclusion: (PHYB2H)
Prerequisite: PHYA21H
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PHYB11H3 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 on several experiments in Physics and Astrophysics including electricity and magnetism, optics, solid state physics, atomic and nuclear physics.
Breadth requirement: Natural Sciences
Limited enrolment: 20
Prerequisite: PHYB10H1
Corequisite: PHYB11H

PHYB20H3 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.
Breadth requirement: Natural Sciences
Prerequisite: PHYA12H & [MATA30H or MATA37H]
Corequisite: MATB41H & MATB44H

PHYB21H3 Electricity and Magnetism
A first course at the intermediate level in electricity and magnetism. The course provides an in-depth study of electrostatics and magnetostatics. Topics examined include Coulomb's Law, Gauss's Law, electrostatic energy, conductors, Ampère's Law, magnetostatic energy, Lorentz Force, Faraday's Law and Maxwell's equations.
Breadth requirement: Natural Sciences
Exclusion: PHYC24H, PHYC25H
Prerequisite: PHYA21H & MATB41H
Corequisite: MATB42H

PHYB25H3 Foundation of Modern Physics
The course introduces the basic 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.
Breadth requirement: Natural Sciences
Exclusion: PHYC24H, (PHYC24H or PHY241H)
Prerequisite: PHYA21H or PHYA22H or PHY132H or (PHY138Y) or PHY152H

PHYB52H3 Thermal Physics
The quantum statistical basis of macroscopic systems; definition of entropy in terms of the number of accessible states of a many particle system leading to simple expressions for absolute temperature, the canonical distributions, and the laws of thermodynamics. Specific effects of quantum statistics at high densities and low temperatures.
Breadth requirement: Natural Sciences
Exclusion: PHYC52H
Prerequisite: PHYA21 or PHY132 or (PHY138Y) or PHY152H
Corequisite: MATB42H

Political Science (B.A.)

Faculty List
E.G. Andrew, B.A. (British Columbia), Ph.D. (London), Professor Emeritus
S.J. Colman, M.A. (Oxon), Professor Emeritus
R. Manzer, B.A., B.Ed. (New Brunswick), M.A. (Oxon), Ph.D. (Harvard), Professor Emeritus
A. Rubinstein, B.A. (Allegheny), M.A., Ph.D. (Chicago), Professor
G.S. Stakgoud, B.A., M.A. (Alberta), Ph.D. (British Columbia), Professor
S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), Professor
J. Tochman, B.A., M.A., Ph.D. (Toronto), Professor
M. Hoffmann, B.S. (Michigan Technological University), Ph.D. (George Washington University), Associate Professor
P. Kingston, B.A., M.A. (Toronto), D.Phil. (Oxford), Associate Professor
M.L. Kohn, B.A. (Williams College), M.A., Ph.D. (Cornell University), Associate Professor
C. Noord, B.A. (Carleton), M.A., Ph.D. (Geneva), Associate Professor
C. Codefino, B.A. (St. Thomas), M.A. (McGill), Assistant Professor
H.M. Gibbs, B.A. (Huron College, Waterloo), M.A. (McManus), Assistant Professor
R. Hark, B.A. (Toronto), M.A., Ph.D. (Cornell), Assistant Professor
R. Reis, Ph.D. (New Mexico), Assistant Professor
W. Skrobek, M.A. (British Columbia), Ph.D. (Toronto), Assistant Professor
P. Tristaffopolos, B.A. (Toronto), M.A., Ph.D. (New School NYA), Assistant Professor
L. Way, B.A. (Harvard), M.A., Ph.D. (UC, Berkeley), Assistant Professor
R. Levine, B.A., (Rochester), Ph.D. (Duke), Lecturer
Discipline Representative: TBA
Undergraduate Counsellor: J. Roopnarinesingh. Email: social-sciences-counsellor@uts.cc.utoronto.ca

Contemporary states and societies are beset by political crises 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 sovereignies of nation-states and their capacity to implement national policies of economic and social welfare are being transformed by transnational forces in 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 exploding 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 (Developing 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 deal 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: SOCA1H, SOCA12H & one of the Computer Science courses listed in Requirement 1 of the program.

SPECIALIST PROGRAM IN POLITICAL SCIENCE

Program Requirements

Students must complete at least 12.0 full credits in Political Science including:

1. 1.0 full credit from among the A-level political science courses (no more than 1.0 full credit at the A-level may be counted towards the program requirements)
2. POLB70H1 Classic Texts in Political Theory I
   and
   POLB73H1 Classic Texts in Political Theory II
3. POLB50H1 Canada's Political Institutions
   and
   POLB52H1 Canadian Politics: Connecting Citizens and Governments
4. At least four of the following (2.0 full credits):
   POLB80H1 Introduction to International Relations
   POLB81H1 International Conflict and Conflict Management
   POLB90H1 Comparative Development in International Perspective
   POLB91H1 Comparative Development in Political Perspective
   POLB92H1 Comparative Politics: Revolution, Democracy and Authoritarianism in Modern Europe
   POLB93H1 Comparative Politics: Ethnic Conflict and Democratization in Europe after the Cold War
5.  POLC75H1
6. 6.5 full credits in political science at the C- and/or D-level, of which at least 1.0 must be at the D-level
MAJOR PROGRAM IN POLITICAL SCIENCE

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. POLB700H Classic Texts in Political Theory I and POLB711H Classic Texts in Political Theory II
3. POLB500H Canada's Political Institutions and POLB523H Canadian Politics: Connecting Citizens and Governments
4. At least four of the following (two full credits):
   - POLB800H Introduction to International Relations
   - POLB811H International Conflict and Conflict Management
   - POLB900H Comparative Development in International Perspective
   - POLB911H Comparative Development in Political Perspective
   - POLB923H Comparative Politics: Revolution, Democracy and Authoritarianism in Modern Europe
   - POLB933H Comparative Politics: Ethnic Conflict and Democratization in Europe after the Cold War
5. Two full credits in political science at the C- and/or D-level.

MINOR PROGRAM IN POLITICAL SCIENCE

Program Requirements
This 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).

- e) Quantitative Methods: POLD621H, POLD641H, POLD901H, POLD941H

MAJOR PROGRAM IN PUBLIC POLICY

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 7.0 full credits from the following list:

1. SOCA101H Introduction to Sociology I
2. SOCA201H Introduction to Sociology II
3. 1.5 credits in Research Methods. At least 0.5 credit must be Quantitative Methods and at least 0.5 must be at the C-level:
   - ANTC314H Quantitative Methods in Anthropology
   - ECONB111H Quantitative Methods in Economics I
   - ECONB121H Quantitative Methods in Economics II
   - ECONB09Y Quantitative Methods in Economics
ECMC11H Introduction to Regression Analysis
GGRA30H Geographic Information Systems (GIS) and Empirical Reasoning
(GGRA47H) Introduction to Research in Human Geography
PSYB07H Data Analysis in Psychology
SOCB05H Logic of Social Inquiry
SOCB06H Social Statistics
STARZ2H Statistics I
Many of these course have prerequisites; please plan accordingly. In addition, it is advisable to take methods courses from within your disciplinary major program.

3. 0.5 credit in Social Theory
POLL78H Political Analysis I

4. POLS50H Canada's Political Institutions
POLS52H Canadian Politics: Connecting Citizens and Governments

5. 0.5 credit from among the following:
CITB01H Canadian Cities and Planning
ECMB53H Economic Aspects of Public Policy

6. POLC06H Public Policy-Making
POLC07H Public Policy in Canada

7. 1.0 credit at the C- or D-level from among the following list:
ANTC32H Political Anthropology
ANTC61H 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 Public Sector: Expenditures
ECMC33H The Economics of Canadian Public Policy
ECMC34H Labour Economics I
ECMC35H Labour Economics II
GGRG30H Urban Residential Geography
GGRG31H Urban Political Geography
GGRG33H Urban Transportation Policy Analysis
GGRG34H Issues in Rural Development
GGRG35H The Toronto Region
(GGRG37H) Countryside Conservation
HSCA45H Immigrants and Race Relations in Canadian History
HSDA46H Selected Topics in Canadian Women's History
HTEC33H Politics of Canadian Health Care Policy
MGTC42H Public Management
POLC33H Canadian Environmental Politics I
POLC34H Intergovernmental Relations in Canada
POLC35H Intergovernmental Relations and Public Policy
POLC36H The New International Agenda
POLD30H Political Interests, Political Identity, and Public Policy
POLD31H Canadian Political Ideals I
POLD32H Canadian Political Ideals II
POLD33H Political Analysis I
POLD34H Exploring the New International Agenda
SOCR30H Sociology of Gender and Work
SOCR31H Sociology of Urban Growth
SOCR32H Sociology of Urban Growth
SOCR33H Sociology of Urban Growth
SOCR35H Sociology of Urban Growth
SOCR36H Sociology of Urban Growth
SOCR37H Environment and Society
VPA13H Cultural Policy

8. A D-level course in Public Policy. Any of POLD50H, POLD51H, POLD64H or POLD98H
Students are encouraged to take ENGA10H (Introduction to Twentieth-Century Literature and Film: 1890 to World War II), ENGA11H (Introduction to Twentieth-Century Literature and Film: 1945 to Today) and ENGB05H (Critical Writing about Literature)
MAJOR (CO-OPERATIVE) PROGRAM IN PUBLIC POLICY

Co-op Contact: asccoop@utsc.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 analysis 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 at: www.utsc.utoronto.ca/subjectpos. 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 credits, including 5.0 credits as a University of Toronto Scarborough student including those specified. Students must also successfully complete Arts & Science Coop Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

Course Requirements
See requirements for Major Program in Public Policy above.

Courses to be completed before the first work term:

Year 1
1. SOC-A01H Introduction to Sociology I
2. SOC-A20H Introduction to Sociology II
   Prerequisite to Statistics course (if not STA-B22H or SOC-B06H)

Year 2
1. POLA-551H Canadian Political Institutions
2. POLA-552H Canadian Politics: Connecting Citizens and Governments
3. One of:
   - CIT-890H Canadian Cities and Planning
   - ECON-351H Public Decision Making
   - ECON-358H Economic Aspects of Public Policy
4. Statistics course

POLA515H3 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.

Breadth requirement: Social & Behavioural Sciences

POLA804H3 Cultures of Conflict: Politics, Society and War Since 1812
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.

Breadth requirement: Social & Behavioural Sciences

POLA704H3 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.

Breadth requirement: Social & Behavioural Sciences
POLA81H3 Leaving Home: Politics and Emigration
This course provides a study of the causes and patterns of emigration in the twentieth century. The course examines the variety of political factors (war and revolution, ethnic-racial discrimination, poverty, dilemmas of conscience) that triggered emigration in the twentieth century. Sources include political and historical works, novels and films.
Breadth requirement: Social & Behavioural Sciences

POLA83H3 Exploring Globalization
This course introduces students to a series of issues in global politics and their consequences for Canadian citizens, including the globalization economy, terrorism, and environmental degradation. The course probes how these major issues are beginning to change the landscape of world politics and present challenges to political authority and collective identity.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (POL.100Y), (POL.102Y)

POLA84H3 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (POL.100Y), (POL.102Y)

POLA89H3 Politics, Corruption and Violence
This course uses basic tools in comparative political analysis to examine the origins, dynamics and relationship between corruption and violence in less developed countries. Discussion will be in the context of recent developments in the global economy and of their political and social consequences within a variety of country case studies. The course will conclude with some reflections on non-violent alternatives to political action.
Breadth requirement: Social & Behavioural Sciences

POLB50H3 Canada's Political Institutions
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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (POL.100Y), (POL.102Y), POL.214Y
Prerequisite: Any 4.0 credits

POLB52H3 Canadian Politics: Connecting Citizens and Governments
This course examines the participatory vehicles 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (POL.100Y), (POL.102Y), POL.214Y
Prerequisite: POL.B50H1.
Note: It is strongly recommended that students take POLB50H1 and POLB52H1 in consecutive sessions.

POLB70H3 Classic Texts in Political Theory I
This course examines central political texts from the ancient Greeks to the Renaissance, including Plato's Republic, Aristotle's Politics, Machiavelli's The Prince.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: POL.209Y
Prerequisite: Any 4.0 credits.

POLB71H3 Classic Texts in Political Theory II
This course examines texts from the Glorious Revolution to the French Revolution, including Hobbes Leviathan, Locke's Second Treatise, Rousseau's Social Contract and the Discourse on Inequality.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: POL.209Y
Prerequisite: POL.B70H1
Note: It is strongly recommended that students take POLB70H1 and POLB71H1 in consecutive sessions.

POLB80H3 Introduction to International Relations
This course examines different approaches to international relations, the characteristics of the international system, and the factors that motivate foreign policies.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL.208Y
Prerequisite: Any 4.0 credits

POLB81H3 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL.208Y
Prerequisite: POL.B80H1
Note: It is strongly recommended that students take POLB80H1 and POLB81H1 in consecutive sessions.

POLB90H3 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 control, multinational 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL.209Y
Prerequisite: Any 4.0 credits
POLB9103 Comparative Development in Political Perspective
This course examines the role of politics and the state in the processes of development in less developed countries. Topics include the role of the military and bureaucracy, the relationship between the state and the economy, and the role of religion and ethnicity in politics.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL201Y
Prerequisite: POLB901H
Note: It is strongly recommended that students take POLB901H and POLB91H in consecutive sessions.

POLB9203 Comparative Politics: Revolution, Democracy and Authoritarianism in Modern Europe
This course explores the origins of modern political institutions in Europe through an examination of revolutions, democracy, and authoritarianism in Europe since 1789. Specific case studies include the French Revolution, democratization in Britain and Spain, the Russian Revolution and the rise of the Nazis in Germany.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: Any 4.0 credits

POLB9303 Comparative Politics: Ethnic Conflict and Democratization in Europe After the Cold War
This course explores post-Cold War politics in Europe through an examination of democratization and ethnic conflict since 1989 - focusing in particular on the role of the European Union in shaping events in Eastern Europe. The first part of the course will cover theories of democratization, ethnic conflict as well as the rise of the European Union while the second part of the course focuses on specific cases.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLB921H
Note: It is strongly recommended that students take POLB921H and POLB931H in consecutive sessions.

POLC4081H Current Topics in Politics
Topics will vary depending on the instructor.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: One B-level full credit in Political Science

POLC4281H Topics in Comparative Politics
Topics will vary depending on the regional interests and expertise of the Instructor.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: One B-level full credit in Political Science

POLC5303H Canadian Environmental Politics
This course examines the ideas and success of the environmental movement in Canada. The course focuses on how environmental policy in Canada is shaped by the ideas of environmentalists, economic and political interests, public opinion, and Canada's political-institutional framework. Combined lecture-seminar format.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLA51H or POLB501H or permission of the instructor

POLC5403H Intergovernmental Relations in Canada
This course examines relations 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 regionalisation and globalization. The legitimacy and performance of the federal system are appraised. Lecture-seminar format.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL316Y
Prerequisite: POLA31H or POLB501H or equivalent

POLC5703H 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL316Y
Prerequisite: [POLB501H or equivalent] & POLC541H

POLC6681H Public Policy Making
This course provides a study of current theories of public policy-making and the processes that are involved in making public polices. 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLA51H or POLB501H or POLB51H

POLC6703H Public Policy in Canada
This course is a survey of contemporary patterns of public policy in Canada. Selected policy studies including managing the economy from post-war stabilization policies to the rise of global capitalism, developments in the Canadian welfare state and approaches to external relations and national security in the new international order.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLA51H or POLB501H or POLB51H

POLC7303H Modern Political Theory
This course is a study of the major political philosophers of the nineteenth century, including Hegel, Marx, J.S. Mill and Nietzsche.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: POL320Y
Prerequisite: [POLB701H & POLB71H] or equivalent

POLC7403H Contemporary Political Thought
This course is a study of the major political philosophers of the twentieth century. The theories covered will vary from year to year.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: POL320Y
Prerequisite: POLB701H & POLB71H
POLC78H3 Women in Political and Social Thought I
This course explores male theorists' views of the role of
women in state, society, and family and current feminist
thinking of the roles assigned them. The focus of the
course is on current feminist reinterpretations of classical
texts.
Breadth requirement: History, Philosophy & Cultural
Studies
Exclusion: JPP341Y
Prerequisite: Any 4.0 credits

POLC77H3 Women in Political and Social Thought II
This course examines twentieth century female thinkers,
androgynists and non-feminists.
Breadth requirement: History, Philosophy & Cultural
Studies
Exclusion: JPP341Y
Prerequisite: POLC76H

POLC78H3 Political Analysis I
This course examines the methods of analysis used in the
literature on politics. The course teaches students to
distinguish between adequate and inadequate use of evidence and between warranted and
unwarranted conclusions.
Breadth requirement: History, Philosophy & Cultural
Studies
Prerequisite: Two full credits in Political Science

POLC82H3 The Formulation of American Foreign Policy
This course examines the process by which American
foreign policy is formulated.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL326Y
Prerequisite: One full credit from: POL380H1, POL381H1,
POL392H1, POL393H

POLC83H3 The Application of American Foreign Policy
This course examines the foreign policy of the United
States by analyzing its context and application to a number of
specific regions and problems in the world.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL326Y
Prerequisite: One full credit from: POL380H1, POL381H1,
POL392H1, POL393H

POLC84H3 Canadian Foreign Policy I
This course introduces Canadian foreign policy since 1945.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL326Y
Prerequisite: POL380H1 & POL382H1 & POL381H1

POLC85H3 Canadian Foreign Policy II
This course considers the issues and influences which
have determined Canadian foreign policy.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL326Y
Prerequisite: POL384H1

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,
etnic politics and dissent. Particular attention is paid to the
attempts to reform communism before 1991.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL324Y
Prerequisite: One B-level full credit in Political Science

POLC97H3 International Cooperation and Institutions
This course explores the possibilities and limits for
international cooperation in different areas and an examination
of how institutions and the distribution of power shape
bargained outcomes.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POL380H1 & POL381H1

POLC98H3 The New International Agenda
Traditional International Relations Theory has concentrated
on relations between states, either failing to discuss, or missing
the complexities of important issues such as terrorism, the role
of women, proliferation, globalization of the world economy,
and many others. This course serves as an introduction to these
issues - and how international relations theory is adapting in
order to cover them.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POL380H1 & POL381H1 or equivalent

POLC98H3 Politics and Government in Post-Communist
Russia
This course examines the attempts to create democracy and a
market economy in post-communist Russia. Topics include
federalism and regional politics, organized crime, the decline of
the welfare state, and Russia's place in the world.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL324Y
Prerequisite: One B-level full credit in Political Science

POLC99H3 Development Studies: Political and Historical
Perspectives
This course provides students with a more advanced
examination of issues in development studies, including some of
the mainstream theoretical approaches to development studies
and a critical examination of development practice in historical
perspective. Seminar format.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POL380H1 & POL381H1

POLC91H3 Latin America: Dictatorship and Democracy
This course explores the origins of Latin America's cycles of
brutal dictatorship and democratic rule. It examines critically
the assumption that Latin American countries have made the
transition to democracy.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POL305Y
Prerequisite: POL380H1 & POL381H1 or equivalent
POLC3913 The American Political Process
This course synthesizes the American federal system and the institutions and processes of government in the United States.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POLC2031
Prerequisite: One full credit in Political Science at the B-level

POLC3933 Public Policies in the United States
This course focuses on selected policy issues in the United States.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POLC2031
Prerequisite: One full credit in Political Science at the B-level

POLC4940 Globalization, Gender and Development
This course explores the gendered impact of economic globalization and the various forms of resistance and mobilization that women of the global south have engaged in their efforts to cope with that impact. The course pays particular attention to regional contextual differences (Latin America, Africa, Asia and the Middle East) and to the perspectives of global south women, both academic and activist, on major development issues.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLC9901

POLC5950 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: [POLC8001 & POLC8111] or equivalent; familiarity with basic economic concepts is recommended

POLC8960 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 monarchies, the developmental effects of oil revenues, and the prospects for both secular and Islamist social protest movements.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLC8001 & POLC8111

POLC8793 Politics and Society in the Middle East II
This course covers contemporary issues in Middle East politics. Topics include the politics 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLC8001 & POLC8111

POLC9893 International Political Economy of Finance
This course explains why financial markets exist, and their evolution, by looking at the agents, actors and institutions which generate demand for them. We also consider the consequences of increasingly integrated markets, the causes of systemic financial crises, as well as the implications and feasibility of regulation.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: [POLC9801 & POLC9811]

POLC9933 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: POLC305Y
Prerequisite: [POLC9001 & POLC9111] or equivalent

POLD0913 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 unfolding research.
Limited enrolment: 15
Exclusion: POLD911H may not be taken after or concurrently with POLD780H.
Prerequisite: 2.0 credits in Political Science and a cumulative GPA of at least 3.2.
Corequisite: POLC783H is recommended but not required.

POLD0273 Research Seminar in International Relations
This course provides an opportunity to carry out individual research on an international relations topic. After class readings on the topic under study, research methods and design, and research ethics, students will propose and carry out the research. The seminar provides opportunities to present and discuss their unfolding research.
Limited enrolment: 15. Restricted to students in the Specialist Program in Political Science.
Prerequisite: POLC8801 & POLC8811

POLD4193 Current Topics in Politics
Topics will vary depending on the instructor.
Limited enrolment: [POLC411H]
Prerequisite: One B-level full credit in Political Science

POLD5903 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: POLA531H or [POLB350H & POLB321H]
POL551H1S 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: POLS850H & POLS852H

POL562H1S Immigration and Canadian Political Development
Immigration has played a central role in Canada’s development. This course explores how policies aimed at regulating migration have both reflected and helped construct conceptions of Canadian national identity. We will pay particular attention to the politics of immigration policy-making, focusing on the role of the state and social actors.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: POLS850H & POLS852H
Recommended preparation: POLS676H & SOCI852H

POL641H1S 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: 1.0 credit at the B- or C-level in comparative or Canadian politics.

POL787H1S Topics in Political Theory
This seminar explores the ways in which political theory can deepen our understanding of contemporary political issues. Topics may include the following: cities and citizenship, multilateralism and religious pluralism; the legacies of colonialism; global justice; democratic theory; the nature of power.
Limited enrolment: 25
Prerequisite: POLS870H & POLS871H
Recommended preparation: POLS731H or POLS741H

POL787H1S Canadian Political Ideas I
This course introduces students to the ideas informing Canadian political movements and parties.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 25
Prerequisite: One full credit from: POLS850H, POLS852H, POLS870H, POLS871H or equivalent

POL787H1S Canadian Political Ideas II
This course is an in-depth examination of the ideas informing Canadian political movements and parties.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 25
Prerequisite: POLS787H

POL879H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: POLS79H

POL885H3 The End of the Cold War and its Aftermath
This course explores the end of the Cold War and its impact on political and economic evolution of countries in the developing world. With a focus on the former Soviet Union and Africa, this course will examine the nature and impact of new post Cold War pressures for political and economic change.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: One B- or C-level course in Comparative Politics.

POL887H3 Rational Choice and International Cooperation
This course is 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 economy literature to understand the behaviour of states in the international realm.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 20
Prerequisite: POLS80H & POLS81H

POL888H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: POLS88H

POL899H3 Global Environmental Politics
Examines the challenges faced by humanity in dealing with global environmental problems and the politics of addressing them. Focuses on both the underlying factors that shape the politics of global environmental problems – such as scientific uncertainty, North-South conflict, and globalization – and explores attempts at the governance of specific environmental issues.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: POLS890H & POLS891H

POL899H3 Public Policy and Human Development in the Global South
While domestic and international political factors have discouraged pro-human development public 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Prerequisite: A social sciences or humanities course on the global south or on development
POLS941H3 Selected Topics on Developing Areas
Topics vary according to instructor.
Prerequisite: A Social Sciences or Humanities course on the Third World or Development.

POLS951H3 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 POL595H3 during the Fall Session. It is the student's responsibility to find a faculty member who is willing to supervise the project, and the student must obtain consent from the supervising instructor before registering for this course. During the Fall Session, the student must 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

POLS953H3 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: POL495Y
Prerequisite: One B-level course in Political Science & permission of the instructor.

Psychology
(B.Sc.)

Faculty List

G.B. Friedman, B.Sc. (CUNY), Ph.D. (NYU), Professor Emeritus

J.E. Foley, B.A., Ph.D. (Sydney), Professor Emeritus

B. Forin, B.A. (Toronto), M.A., Ph.D. (Michigan), Professor Emeritus

A. Kakla, A.B., M.A., Ph.D. (UCLA), Professor Emeritus

N.W. Milgram, B.A. (UCLA), M.A., Ph.D. (McGill), Professor Emeritus

M.C. Smith, B.A. (Toronto), Ph.D. (MIT), Professor Emeritus

J. M. Kennedy, B.Sc., M.Sc. (Belfast), Ph.D. (Cornell), University Professor

J. N. Basili, B.A. (McGill), Ph.D. (Cornell), Professor

G.C. Cuppelli, B.A. (Michigan), M.A., Ph.D. (Wisconsin), Professor

K.K. Dzon, B.A. (Wellesley), Ph.D. (Minnesota), Professor

K.N. Dunbar, B.A., M.A., (University College Dublin), Ph.D. (Toronto), Professor

G.O. Ivo, B.A. (Drew), Ph.D. (California), Professor

S. Jordens, B.A. (New Brunswick), M.A., Ph.D. (Waterloo), Professor

T.L. Pett, B.Sc., M.A. (Louisiana), Ph.D. (Florida), Professor

I.A. Pettini, B.Sc. (Rampage College), M.Sc. (NYU), Ph.D. (Harvard), Professor

M.A. Schumaker, B.A. (SUNY-Binghamton), Ph.D. (Cornell), Professor

G.S. Cren, B.A., M.A., Ph.D. (Western), Associate Professor

S. Teh, B.Sc. (Wilfrid Laurier), M.A., Ph.D. (Concordia), Associate Professor

M.A. Fournier, B.A., Ph.D. (McGill), Associate Professor

M. Niederer, M.A. (Hamburg), Ph.D. (Technical), Associate Professor

R. Prybyl, B.A. (Carleton), M.Sc. (Alberta), Ph.D. (Alberta), Associate Professor

K.K. Zakrzevska, B.A., M.A., Ph.D., C.Psych (York), Associate Professor

D. W. O御lee, B.A. (Annapolis), M.A. (San Francisco), Ph.D. (Albuquerque), Assistant Professor

G. Ilee, B.A., M.A. (York), Ph.D. (Toronto), Assistant Professor

M. Ulrich, B.Sc. (McGill), M.Sc., Ph.D. (Brown), Assistant Professor

D. Nussbaum, B.A., M.A. (York), Ph.D. (Waterloo), Assistant Professor

E. Pag-Gould, B.Sc. (Cambridge Mellon), Ph.D. (UC Berkeley), Assistant Professor

D. A. Boms, B.A. (Florida), M.A. (Rajputs), Ph.D. (Toronto), Senior Lecturer

J.C. LeBoutillier, B.Sc., M.A., Ph.D. (Toronto), Senior Lecturer

Associate Chair and Program Supervisor: Until 31 December, 2010: G. Cere; From January 1, 2011: S. Jordens; Email: psychology-program-supervisor@utsc.utoronto.ca

Psychology is that branch of science which seeks to understand behaviour and mind. Why organisms - human and non-human - 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 means. Psychology uses the methods of scientific enquiry to address the question.

The areas of interest encompassed by the discipline of psychology include: How humans learn, adapt, and remember; how they change over their lifetimes; how they are affected by the presence of others; how their behaviour relates to their physiological functions; how mental processes can exhibit pathologies and how these pathologies can be treated. 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 focuses on normal thought, feelings and behaviour whereas the Specialist Program in Mental Health Studies focuses on abnormal psychological processes. The Specialist Program in Psychology is intended both for students with a strong interest in the science of psychology and for those who wish to pursue graduate work in psychology after the first degree. The Specialist in Mental Health Studies is intended for students with a strong interest in pathologies of the mind and in their treatment. Students considering graduate study should plan to include the PSYD9FY (thesis course) in their undergraduate Program.

Two co-operative programs are offered, the Specialist (Co-operative) Program in Psychology and the Specialist (Co-operative) Program in Mental Health Studies. Admission to these programs which involve practical work experience is limited.

The Major Program in Psychology and the Major Program in Mental Health Studies are designed to introduce students to the main areas within each of these related disciplines. The Minor Program in Psychology is designed for students who are interested in a less intensive exposure to the field. Often, students wish to concentrate their studies in two areas, in which case a double Major Program combining psychology with another discipline is ideal. Programs in Mental Health Studies and Psychology cannot, however, be combined.

Students particularly interested in the relation of brain to behaviour should consider the Neuroscience Programs described earlier in this Calendar.

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 PSY100Y and 200H, 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.

Program Exclusion

Programs in Mental Health Studies and Psychology cannot be combined.

First-Year Students in Psychology

PSYA01H & PSYA02H are recommended in first year for students intending to pursue a Specialist or Major Program in Psychology or Mental Health Studies.

Courses in Neuroscience

Students interested in including Neuroscience courses in their Psychology or Mental Health Studies Program should consult the Neuroscience section for details.

Science Engagement Courses

For those experiential learning through community outreach, classroom in-teach and team research, please see the Science Engagement section of this Calendar.

SPECIALIST PROGRAM IN MENTAL HEALTH STUDIES

Program Supervisor: Until 31 December, 2010: G. Cree; From January 1, 2011: S. Joordens Email: psychology-program-supervisor@utsc.utoronto.ca
Course Support & Program Advisor: Hanan Kayyali Email: kayyali@utsc.utoronto.ca

Program Requirements

The program requires completion of 12.5 credits as follows including at least 4.0 credits at the C- or D-level of which at least 3.0 must be at the D-level:

1. PSYA01H Introductory Psychology: Part I
   and
   PSYA02H Introductory Psychology: Part II
   (1.0 credit)
2. Statistical Methods (1.0 credit)
   a) PSYB07H Data Analysis in Psychology
   and
   b) PSYC08H Advanced Data Analysis in Psychology
3. Laboratory Methods (1.0 credit)
   a) PSYB001H Psychological Research Laboratory
   and
   b) PSYC37H Psychological Assessment
4. PSYC02H Scientific Communication in Psychology (0.5 credit)
5. History & Approaches (0.5 credit)
   a) PSYC34H Psychology & the Scientific Mind or
   b) PSYC55H History of Psychology
6. PSYB38H1 Personality and
   PSYB32H1 Abnormal Psychology (1.0 credit)
7. Students are required to take 2.0 credits from either the psycho-social grouping or the psycho-biological grouping listed below, as well as 1.0 credit from the other grouping (3.0 credits):
   a) Psycho-Social Grouping
      PSYB45H1 Behaviour Modification
      PSYC18H1 The Psychology of Emotion
      PSYC33H1 Advanced Personality Psychology
      PSYC36H1 Psychotherapy
      PSYC39H1 Psychology and the Law
   b) Psycho-Biological Grouping
      PSYB64H1 Physiological Psychology
      PSYB65H1 Human Brain & Behaviour
      PSYC33H1 Clinical Neuropsychology
      PSYC33H1 Neuropsychological Rehabilitation
      PSYC62H1 Drugs and the Brain
8. Students are required to take 1.0 D-level credit, with at least 0.5 from the following list (1.0 credit)
   PSYD30H1 Current topics in Personality Psychology
   PSYD31H1 Current topics in Abnormal Psychology
9. Additional credits in Psychology (1.5 credits)
10. Students must select 2.0 credits from the following courses:
    HLTB03H1 Health, Aging, and the Life Cycle
    HLTB02H1 Issues in Child Health and Development
    HLTB03H1 Foundations in Health Studies
    HLTB02H1 Women and Health: Past and Present
    LINB20H1 Sociolinguistics
    PHIL11H1 Introduction to Ethics
    PHIL11H1 Happiness and Freedom
    PHIL29H1 Biomedical Ethics
    SOCAC0H1 Introduction to Sociology I
    SOCAC0H1 Introduction to Sociology II
    SOC348H1 Family and Society
    SOC358H1 Deviance and Normality I
    SOC358H1 Deviance and Normality II
    SOC139H1 Criminal Behaviour

SPECIALIST (CO-OPERATIVE) PROGRAM IN MENTAL HEALTH STUDIES

Program Supervisor: Until December 31, 2010: J. LeBoitiller Email: leboitiller@utsc.utoronto.ca; From January 1, 2011: S. Erb Email: erb@utsc.utoronto.ca
Course Support & Program Advisor: Harun Kayysi Email: kayysi@utsc.utoronto.ca

The Program combines academic studies in the field of mental health with practical work experience: The work experience provided by the program enables students to explore career opportunities relevant to their studies in mental health. Completion of the program does not, however, represent a professional qualification in psychology, which requires further study at the graduate level. Work settings may also provide students with the opportunity to observe and assist psychologists engaged in clinical practice; 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 may provide the opportunity for clinical engagement under close supervision. 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 at: www.utoronto.ca/undergrad. The minimum qualifications for entry are 4.0 credits including 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 10.0 credits, including PSYB01H, PSYB07H, PSYC02H and PSYC08H. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term. Certain other courses specified below before the first work term is undertaken.

To be eligible for their second work term, students must have completed at least 12.5 credits, including certain courses specified below, and have received satisfactory evaluation for their performance and for their report on their first work term.

Course Requirements

The program requires 12.5 credits as follows including at least 4.0 credits at the C-level of which at least 1.0 must be at the D level:

1. PSYA01H Introductory Psychology: Part I and PSYA02H Introductory Psychology: Part II (1.0 credit)
2. Statistical Methods (1.0 credit)
   a) PSYB07H Data Analysis in Psychology*
      and
   b) PSYC08H Advances Data Analysis in Psychology*
3. Laboratory Methods (1.5 credits)
   a) PSYB01H Psychological Research Laboratory*
      and
   b) PSYC02H Clinical Neuropsychology Laboratory*
      and
   c) PSYC07H Psychological Assessment**
4. PSYC03H Scientific Communication in Psychology* (0.5 credit)
5. History & Approaches (0.5 credit)
   a) PSYC04H Psychology & the Scientific Mind
   b) PSYC05H History of Psychology
6. PSYB03H Personality and PSYB02H Abnormal Psychology* (1.0 credit)
7. Students are required to take 2.0 credits from either the psycho-social grouping or the psycho-biological grouping listed below, as well as 1.0 credit from the other grouping (3.0 credits):
   a) Psycho-Social Grouping
      PSYB04H Behaviour Modification
      PSYC33H The Psychology of Emotion
      PSYC35H Advanced Personality Psychology
      PSYC36H Psychotherapy
      PSYC39H Psychology and the Law
   b) Psycho-Biological Grouping
      PSYB06H Physiological Psychology
      PSYB05H Human Brain & Behaviour*
      PSYC33H Neuropsychological Rehabilitation**
      PSYC06H Drugs and the Brain
8. Students are required to take 1.0 D-level credit, with at least 0.5 credit from the following list
   PSYD03H Current topics in Personality Psychology
   PSYD03H Current topics in Abnormal Psychology
   PSYD03H Clinical Psychopharmacology
9. Additional credits in Psychology (1.0 credits)
10. Students must select 2.0 credits from the following courses:
    HLTB01H Health, Aging, and the Life Cycle
    HLTB02H Issues in Child Health and Development
    HLTB03H Foundations in Health Studies
HLTC02H Women and Health: Past and Present
LINB20H Sociolinguistics
PHLA11H Introduction to Ethics
PHL307H Happiness and Freedom
PHL309H Biomedical Ethics
SOC101H Introduction to Sociology I
SOC102H Introduction to Sociology II
SOC348H Family and Society
SOC350H Deviance and Normality I
SOC351H Deviance and Normality II
SOC355H Criminal Behaviour

* These credits must be successfully completed before the first work term.
** These credits must be successfully completed before the second work term.

MAJOR PROGRAM IN MENTAL HEALTH STUDIES
Program Supervisor: Until 31 December, 2010: G. Cruess; From January 1, 2011: S. Joordens Email: psychology-program-supervisor@utsc.utoronto.ca
Course Support & Program Advisor: Hanan Kayali Email: kayali@utsc.utoronto.ca

Program Requirements:
The program requires 7.0 credits as follows of which at least 2.0 must be at the C- or D-level:

1. PSY101H Introductory Psychology: Part I
   and
   PSY102H Introductory Psychology: Part II
   (1.0 credit)
2. PSY207H Data Analysis in Psychology
   (0.5 credit)
3. Laboratory Methods (1.0 credit)
   PSY301H Psychological Research Laboratory
   and
   PSYC378H Psychological Assessment
4. PSY380H Personality
   and
   PSY332H Abnormal Psychology
   (1.0 credit)
5. Students are required to take 1.0 credit from either the psycho-social grouping or the psycho-biological grouping listed below, as well as 0.5 credit from the other group (1.5 credits):
   a) Psycho-Social Grouping
      PSY453H Behaviour Modification
      PSYC188H The Psychology of Emotion
      PSYC250H Advanced Personality Psychology
      PSYC368H Psychotherapy
      PSYC398H Psychology and the Law
   b) Psycho-Biological Grouping
      PSYB441H Physiological Psychology
      PSYB501H Human Brain & Behaviour
      PSYC311H Clinical Neuropsychology
      PSYC333H Neuropsychological Rehabilitation
      PSYC621H Drugs and the Brain
6. Credits at the D-level (0.5 credit)
7. Additional credits in Psychology (1.5 credits)
SPECIALIST PROGRAM IN PSYCHOLOGY

Associate Chair and Program Supervisor: Until 31 December, 2010: G. Cree; From January 1, 2011: S. Joordens. Email: psychology-program-supervisor@utsc.utoronto.ca
Course Support & Program Advisor: Hakan Kayyali. Email: kayyali@utsc.utoronto.ca

Program Requirements
The Program requires completion of 12.5 credits as follows including at least 4.0 at the C- or D-level of which at least 1.0 must be at
the D-level:

1. PSYA01H Introductory Psychology: Part I
   and
   PSYA02H Introductory Psychology: Part II
   (1.0 credit)
2. Statistical Methods (0.0 credit)
   a) PSYB07H Data Analysis in Psychology
   and
   b) PSYC00H Advanced Data Analysis in Psychology
3. Laboratory Methods (1.0 credit)
   a) PSYB01H Psychological Research Laboratory
   and
   b) 0.5 credit from among the following:
    PSYC04H Brain Imaging Laboratory
    PSYC06H Psychophysiology Laboratory
    PSYC11H Social Psychology Laboratory
    PSYC26H Developmental Psychology Laboratory
    PSYC28H Cognitive Psychology Laboratory
    NROC38H Neuroscience Laboratory

4. PSYCO2H Scientific Communication in Psychology (0.5 credit)
5. History and Approaches (0.5 credit)
   a) PSYC04H Psychology and the Scientific Mind
   or
   b) PSYC05H History of Psychology
6. Credits at the B-level and C-level (3.0 credits)
   Students are required to take 3.0 credits at the B-level or C-level from one of the two content groups listed below and 2.0 credits
   from the other group:
   a) Social and Developmental (courses listed in the 10- and 20-series);
   b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)
7. Credits at the D-level (1.0 credit)
   Students must take a 0.5 credit from each of the groupings listed below:
   a) Group One
    PSYD15H Current Topics in Social Psychology
    PSYD16H Critical Analysis in Social Psychology
    PSYD18H Psychology of Gender
    PSYD20H Current Topics in Developmental Psychology
    PSYD22H Socialization Processes
    PSYD34H Human Intelligence
    PSYD37H Cognition, Health, Culture and Decision Making
   b) Group Two
    PSYD25H The Bilingual Brain
    PSYD26H Genes, Brain, and the Development of Mind
    PSYD35H Current Topics in Memory and Cognition
    PSYD31H Current Topics in Perception
    PSYD36H Creativity, Reasoning and Problem Solving
    PSYD38H The Scientific Study of Conscious and Unconscious Influences
    PSYD66H Current Topics in Human Brain and Behaviour
    PSYD40H Seminar in Computational Cognitive Neuroscience
8. Additional credits in Psychology (2.5 credits)
   Students must choose 2.5 further credits from any of the remaining courses in Psychology. In selecting the 2.5 credits, 1.0 credit
   must be at the C- or D-level. Supervised study or thesis courses may be used to fulfil a maximum of 0.5 credit.
SPECIALIST (CO-OPERATIVE) PROGRAM IN PSYCHOLOGY

Program Supervisor: Until December 31, 2010: J. Ledoux
Course Support & Program Advisor: Hanan Kayyal
Email: h.kayyal@atc.utoronto.ca
Co-op Contact: askcoop@atc.utoronto.ca

The program combines academic studies in the field of psychology with practical work experience. The work experience provided by the program enables students to explore career opportunities relevant to their studies in psychology. Completion of the program does not, however, represent a professional qualification in psychology, which requires further study at the graduate level. Work settings may also provide students with the opportunity to observe psychologists 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 basic or applied research. 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 at www.atc.utoronto.ca/subject. The minimum qualifications for entry are 4.0 credits including PSY A01H & PSY A02H plus a cumulative GPA of at least 2.75.

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 10.0 credits, including PSY B01H, PSY B07H, PSY C02H and PSY C08H. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term. Certain other courses specified below before the first work term is undertaken.

To be eligible for their second work term, students must have completed at least 12.5 credits, including certain courses specified below, 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 12.5 credits as specified for the Specialist Program in Psychology.

The program provides a theoretical and methodological foundation for the study of psychological processes relevant to social behaviour, life-span development, perception, memory, language and thought. Students can apply for work term employment in settings such as survey research firms and in government departments and other agencies involved in providing support to persons with disabilities, educational organizations, and research and development departments in industry.

Program Requirements
The Program requires completion of 12.5 credits as follows including at least 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level:

1. PSY A01H Introductory Psychology: Part I and PSY A02H Introductory Psychology: Part II (1.0 credit)
2. Statistical Methods (1.0 credit)
   a) PSY B07H Data Analysis in Psychology* and PSY C08H Advanced Data Analysis in Psychology*
3. Laboratory Methods (1.0 credit)
   a) PSY B01H Psychological Research Laboratory* and b) 0.5 credit from among the following: PSY C04H Brain Imaging Laboratory PSY C06H Psychophysiology Laboratory PSY C11H Social Psychology Laboratory PSY C26H Developmental Psychology Laboratory PSY C58H Cognitive Psychology Laboratory SRSC 038H Neuroscience Laboratory
4. PSY C02H Scientific Communication in Psychology (0.5 credit)*
5. History and Approaches (0.5 credit)
   a) PSY C34H Psychology and the Scientific Mind or
b) PSYC25SH History of Psychology

6. Credits at the B-level and C-level (5.0 credits)
   Students are required to take 3.0 credits at the B-level or C-level from one of the two content groups listed below and 2.0 credits from the other group:
   a) Social and Developmental (courses listed in the 10- and 20-series);
   b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series);

7. Credits at the D-level (1.0 credit)
   Students must take 0.5 credit from each of the groupings listed below:
   a) Group One
      PSYD15H Current Topics in Social Psychology
      PSYD14H Critical Analysis in Social Psychology
      PSYD18H Psychology of Gender
      PSYD20H Current Topics in Developmental Psychology
      PSYD22H Socialization Processes
      PSYD36H Human Intelligence
      PSYD37H Cognition, Health, Culture and Decision Making
   b) Group Two
      PSYD22H The Bilingual Brain
      PSYD26H Genes, Brain, and the Development of Mind
      PSYD34H Current Topics in Memory and Cognition
      PSYD35H Current Topics in Perception
      PSYD56H Creativity, Reasoning and Problem Solving
      PSYD58H The Scientific Study of Conscious and Unconscious Influences
      PSYD66H Current Topics in Human Brain and Behaviour
      PSYD90H Seminar in Computational Cognitive Neuroscience

8. Additional credits in Psychology (2.5 credits)
   Students must choose 2.5 further credits from any of the remaining courses in Psychology. In selecting the 2.0 credits, 1.0 credit must be at the C or D level. Supervised study or thesis courses may be used to fulfill a maximum of 0.5 credit.

* These credits must be successfully completed before the first work term.

MAJOR PROGRAM IN PSYCHOLOGY

Associate Chair and Program Supervisor: G. Cree Email: psychology-program-supervisor@utsc.utoronto.ca
Course Support & Program Advisor: Hanan Kayssi Email: kayssi@utsc.utoronto.ca

Program Requirements

The Program requires completion of 7.0 credits as follows of which at least 2.0 credits must be at the C- or D-level:

1. PSYA01H Introductory Psychology: Part I and PSYA02H Introductory Psychology: Part II (1.0 credit)
2. PSYB01H Psychological Research Laboratory (0.5 credit)
3. STAT22H Statistics I (recommended) or PSYB07H Data Analysis in Psychology
   or SOCB06H Social Statistics (0.5 credit)
4. Credits at the B-level and C-level (2.5 full credits)
   Students are required to take 2.0 credits at the B level or C level from group (a) or (b) and 0.5 credit from the other group:
   a) Social and Developmental (courses listed in the 10- and 20-series);
   b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)
5. Credits at the D-level (0.5 full credit)
   Students must choose one half credit from the D-level offerings in Psychology. Certain D-level NRO courses may be used to fulfill this requirement with the approval of the Supervisor of Studies.

Note: A 300-level course in PSY offered on another campus is comparable to 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 400-level count as D-level courses.

6. Additional credits in Psychology (2.0 credits)
   Students must choose 2.0 further credits from any of the remaining courses in Psychology. At least 1.0 credit from these must be at the C- or D-level.
MINOR PROGRAM IN PSYCHOLOGY
Associate Chair and Program Supervisor: Until 31 December, 2010: G. Cree; From January 1, 2011: S. Jeerendra. Email: psychology-program-supervisor@uta.utoronto.ca
Course Support & Program Advisor: Humay Kayali. Email: kayali@uta.utoronto.ca

Program Requirements
The Program requires completion of 4.0 credits as follows of which at least 1.0 credits must be at the C-level:

1. PSYA01H Introductory Psychology: Part I
   and
   PSYA02H Introductory Psychology: Part II
   (1.0 credit)
2. PYSB01H Psychological Research Laboratory
   (0.5 credit)
3. STAB22H Statistics I (recommended)
   or
   PYSB07H Data Analysis in Psychology
   or
   SOCIO9H Social Statistics
   (0.5 credit)
4. Students are required to select 0.5 credit at the B-level or C-level from each of the two content groups listed below (1.0 credit):
   a) Social, Developmental and Personality (courses listed in the 10-, 20- or 30-series);
   b) Learning, Perception, Cognition and Physiology (courses listed in the 40-, 50- or 60-series);
5. 1.0 additional credit in Psychology at the C-level.

PSYA01H 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.
Breadth requirement: Natural Sciences
Exclusion: PSY100H, PSY100Y, (PSY101H)

PSYA02H 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY100H, PSY100Y, (PSY101H)

PSYB01H 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: PSYA01H & PSYA02H

PSYB07H 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, Psycholinguistics or Neuroscience will be given priority for this course.
Breadth requirement: Quantitative Reasoning

PSYB10H Introduction to Social Psychology
Surveys a wide range of phenomena relating to social psychology. 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY220H
Prerequisite: PSYA01H & PSYA02H

256 Psychology
PSYB30H1 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSYB21H, PSY210H
Prerequisites: PSYA01H & PSYA02H

PSYB21H3 Introduction to Developmental Psychology: Focus on Education
Child and adolescent development in education.
This course presents students with a broad and integrative overview of child development as it pertains to education. Topics are organized chronologically beginning with prenatal development and continuing through selected issues in adolescence and life-span development. In addition to the lecture component, students will complete a field placement in which they observe children's behaviour and think critically about development.
Breadth requirement: Social & Behavioural Sciences
Exclusion: CTE100H, PSYB20H, PSY210H
Prerequisites: Enrolment in CTEP
Recommended preparation: PSYA01H & PSYA02H

PSYB30H3 Personality
This course is intended to introduce students to the scientific study of the whole person in biological, social, and cultural context. The ideas of classical personality theories will be discussed in reference to findings from contemporary personality research.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY120H
Prerequisites: PSYA01H & PSYA02H

PSYB22H3 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 than we would like. However, this course will focus on the ways in which psychopathologists have been trying to learn the causes of abnormal behaviour and what they know about preventing and alleviating it.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY240H
Prerequisites: PSYA01H & PSYA02H

PSYB45H1 Behaviour Modification: Origins and Applications
A survey of attempts to regulate abnormal human behaviour.
Basic principles of behaviour change including reinforcement, extinction, punishment and stimulus control; operant and respondent conditioning procedures; research strategies. Other topics include behavioural contracting, cognitive-behaviour therapy, rational-emotive therapy, and systematic desensitization; treatment of phobias; treatment of alcohol and drug abuse.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY240H
Prerequisites: PSYA01H & PSYA02H

PSYB51H3 Perception and Cognition
Theory and research on perception and cognition, including visual, auditory and tactile perception, representation, and communication.
Topics include cognition and perception in the handicapped and normal perceiver; perceptual illusion, noise, perspective, shadow patterns and motion, possible and impossible scenes, human and computer scene-analysis, ambiguity in perception, outline representation. The research is on adults and children, and different species. Demonstrations and exercises form part of the course work.
Breadth requirement: Natural Sciences
Prerequisites: PSYA01H & PSYA02H

PSYB52H3 Memory and Cognition
Discussion of experiments and theories in human memory and cognition. This course provides an analysis of the research on encoding, storage and retrieval of information in human memory. Also surveyed are the related topics of attention, thinking, and problem solving, and their role in a general model of information processing.
Breadth requirement: Natural Sciences
Exclusion: PSY3700H
Prerequisites: PSYA01H & PSYA02H
Recommended: PSY100H or STA202H or their equivalent

PSYB44H3 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 behaviours, sleep and arousal), sensory processes and attention, learning and memory, and language.
Breadth requirement: Natural Sciences
Exclusion: NROG61H, PSY250H
Prerequisites: PSYA01H & PSYA02H

PSYB40H2 Human Brain and Behaviour
The neurological basis of human behaviour: an introduction to human neuro-psychology. Hemispheric specialization, diseases of the cerebral 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.
Breadth requirement: Natural Sciences
Prerequisites: PSYA01H & PSYA02H
PSYC2001 Scientific Communication in Psychology
How we communicate in psychology and why. The differences between scientific and non-scientific approaches to behaviour and their implications for communication are discussed. The focus is on improving the student’s ability to obtain and organise information and to communicate it clearly and critically, using the conventions of the discipline.
Breadth requirement: Natural Sciences
Limited enrolment: Limited to students in the Specialist Programs in Psychology and in Mental Health Studies.
Prerequisite: PSYB01H & [PSYB07H or SOC360H or STAR223H]
Corequisite: PSYC008H

PSYC304H1 Brain Imaging Laboratory
The course introduces brain imaging techniques, focusing on techniques such as high-density electromyography (EEG) and transcranial magnetic stimulation (TMS), together with magnetic-resonance-imaging-based neuroimaging. Furthermore, the course will introduce eye movement recordings as a behavioural measure often co-registered in imaging studies. Students will learn core principles of experimental design, data analysis and interpretation in a hands-on manner.
Breadth requirement: Natural Sciences
Limited enrolment: 35
Prerequisite: PSYB06H & PSYB07H

PSYC306H1 Psychophysiology Laboratory
This course will provide students with an introduction to physiological processes that are related to psychological processes. Students will gain a theoretical background in psychophysiology as well as review empirical papers related to the psychological correlates of each physiological system. This course will be a primary methods course for psychology specialists, such that students will acquire advanced skills involved in the acquisition of psychophysiological data and become well-versed in appropriate psychophysiological theory and inference.
Breadth requirement: Natural Sciences
Limited enrolment: 35
Prerequisite: PSYB06H
Recommended preparation: PSYB07H & PSYC02H

PSYC408H1 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 to multiple regression, including discussions of design issues and interpretation problems.
Breadth requirement: Quantitative Reasoning
Exclusion: STAT352H, PSY202H
Prerequisite: [PSYB07H or SOC360H or STAR223H] & one additional B-level half-credit in Psychology & [if PSYB07H is not taken as the prerequisite, completion of a bridging module & permission of the instructor - for information see www.sm.web.utoronto.ca/psych/undergraduates].

PSYC1101 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 questionnaires, observational methods for studying ongoing social interaction). Discussion and laboratory work.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 25
Exclusion: PSY329H
Prerequisite: PSYB06H & [PSYB07H or SOC360H or STAR223H] & PSYB101H

PSYC1201H The Psychology of Prejudice
A detailed examination of selected social psychological topics introduced in PSYB04H.
This course examines the nature of attitudes, stereotypes and prejudice, including their development, persistence, and automaticity. It also explores the impact of stereotypes on their targets, including how stereotypes are perceived and how they affect performance, attribution, and coping.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY329H
Prerequisite: [PSYB07H or SOC360H or STAR223H] & PSYB101H plus one additional B-level half-credit in PSY

PSYC1401H 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 acculturation in the context of immigration will also be explored.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY329H
Prerequisite: [PSYB07H or SOC360H or STAR223H] & PSYB101H plus one additional B-level half-credit in PSY

PSYC1401H The Psychology of Emotion
Emotion is 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, behaviourism, social constructionism, and phenomenology.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY349H
Prerequisite: PSYB101H

PSYC2101H Advanced Developmental Psychology
An examination of selected issues pertaining to child development and aging.
Examples of topics which may be considered include: adaptation to parenthood, work-related functioning, continuity versus change in adulthood.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY313H
Prerequisite: PSYB205H plus one additional B-level half-credit in PSY
Recommended: PSYB07H or STAR223H or their equivalent
PSYC23H3 Developmental Psychobiology
Breadth requirement: Natural Sciences
Prerequisite: PSYB20H

PSYC23H3 How the Child Discovers Language
The effortless way that young children acquire language remains its most miraculous characteristic. Here, we discover the biological capacities and the important social factors that work together in language acquisition. We challenge assumptions about Language versus Communication, establish the basic milestones, and evaluate prevailing theories stemming from leading brain imaging methods.
Breadth requirement: Natural Sciences
Prerequisite: PSYB20H & one course from the 50 or 60 series

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 planes 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 24
Exclusion: PSY313H
Prerequisites: PSYB10H & (PSYB20H or SOC360H or STAB22H) & PSYB30H

PSYC31H3 Clinical Neuropsychology
Clinical neuropsychology is an applied science concerned with the behavioural expression of brain dysfunction. In this course we will first examine the brain and localization of neureuropsychological function. We will then explore the science and practice of clinical neuro-psychology 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 Specialist (Co-operative) Program in Mental Health Studies should enrol in PSYC32H, not in this course.
Breadth requirement: Natural Sciences
Limited enrolment: 75
Exclusion: PSYC32H
Prerequisites: PSYB10H & (PSYB20H or SOC360H or STAB22H) & PSYB30H & PSYB60H

PSYC33H3 Clinical Neuropsychology Laboratory
The applied science concerned with the behavioural expression of brain dysfunction for students in the Behavioural Disorders stream of the Co-operative 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.
Breadth requirement: Natural Sciences
Limited enrolment: Enrolment is limited to students in the Specialist (Co-operative) Program in Mental Health Studies. Exclusion: PSYC31H
Prerequisites: PSYB10H & (PSYB20H or SOC360H or STAB22H) & PSYB30H & PSYB60H

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 Specialist (Co-operative) Program in Mental Health Studies will have priority for entry to the course.
Breadth requirement: Natural Sciences
Prerequisite: PSYC31H or PSYC32H & PSYB30H

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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: PSY35H
Prerequisites: (PSYB20H or SOC360H or STAB22H) & PSYB30H plus one additional 3.0-level half-credit in PSY

PSYC36H3 Psychotherapy
This course will provide students with an introduction to prominent behavioral change theories (i.e., psychodynamic, cognitive-behavioral, humanistic/existential) as well as empirical evidence on their efficacy. The role of the therapist, the patient and the processes involved in psychotherapy in producing positive outcomes will be explored.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: Limited to students in the Mental Health Studies program.
Prerequisite: PSYB20H
PSYC3793 Psychological Assessment
This course deals with conceptual issues and practical problems of identification, assessment, and treatment of mental disorders and their psychological symptomatology. Students have the opportunity to familiarize themselves with the psychological tests and the normative data used in mental health assessments. Lectures and demonstrations on test administration and interpretation will be provided.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: Limited to students in the Mental Health Studies program.
Prerequisite: PSYB2H1

PSYC3803 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (PSYC33H1)
Prerequisite: PSYB2H1

PSYC3543H 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.
Breadth requirement: Natural Sciences
Prerequisite: [PSYB2H7H or SOCIR0H8H or STAB22H1] & a PSYB320-series or a PSYB390-series half-credit

PSYC3593H 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.
Breadth requirement: Natural Sciences
Exclusion: PSYB30H3
Prerequisite: PSYB26H7 & PSYB26H5

PSYC5643H 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 passages. 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.
Breadth requirement: Natural Sciences
Prerequisite: [PSYB210H or PSYB203H] & [PSYB207H or SOCIR0H8H or STAB22H1] & a PSYB390-series half-credit

PSYC5583H 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.
Breadth requirement: Natural Sciences
Limited enrolment: 40
Prerequisite: PSYB20H1 & [PSYB207H or SOCIR0H8H or STAB22H1] & [PSYB255H3 or PSYB255H5]
Corequisite: PSYC30H1 is recommended but not required.

PSYC5623H Drugs and the Brain
An examination of behavioural 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.
Breadth requirement: Natural Sciences
Exclusion: PSYB390H1 & PCL1475Y
Prerequisite: [PSYB207H or its equivalent] & [at least one of PSYB46H1 or PSYB46H5] & (one additional B-level or C-level half-credit in PSY or NRO)

PSYC5643H Psychology and the Scientific Mind
This course examines how scientists think and make discoveries, gender differences in scientific thought, and how science is learned and taught. Are there similarities in the learning of concepts across all fields of inquiry such as music, politics and literature? We will also explore the media's role in shaping people's understanding of science.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: PSYB20H1 & one other B-level half-credit in Psychology
PSYC360H1 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 Fifteenth 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 students in Specialist Programs in Psychology, Mental Health Studies & Psychobiology.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 25
Exclusion: PSY330H1
Prerequisite: Two B-level half-credits in Psychology or permission of the instructor
Recommended: PSYB07H1 or STAAR22H1 or their equivalent

PSYC369H3 Supervised Study in Psychology
An intensive research project intended to provide laboratory/field experience in data collection and analysis. The project must be completed over 2 consecutive terms. These courses provide an opportunity to engage in research in an area after completing basic coverage in regularly scheduled courses. The student must demonstrate a background adequate for the project proposed and should present a clear rationale to prospective supervisors. Regular consultation with the supervisor is necessary, and extensive data collection and analysis will be required. Such a project will culminate in a written research report.
Students must first find a supervisor before the start of the academic term in which the project will be initiated. They must then obtain a permission form from the Department of Psychology’s website (www.utoronto.ca/psych/undergraduate) that is to be completed and signed by the intended supervisor, and returned to the Psychology Office. At that time, the student will be provided with an outline of the schedule and general requirements for the course, including the structure of the required log-book.
Students seeking supervision off campus are further advised to check the appropriateness of the proposed advisor with the Program Supervisor. If the proposed supervisor is not appointed to the Psychology faculty at UTSC then a secondary advisor, that is appointed at UTSC, will be required.
Exclusions for PSYC390H1, COGS391H1, NROD391H1, PSY390H1, PSY391H1
Prerequisite: 3.0 full credits in Psychology & permission of the proposed supervisor. (Note: Normally students need a cumulative GPA of at least 2.7 for permission to be granted.)

PSYT15H3 Current Topics in Social Psychology
An intensive examination of selected issues and research problems in social psychology.
Limited enrolment: 25
Exclusion: PSY326H1, PSY420H1
Prerequisite: PSYB10H1 & [PSYC12H1 or PSYC14H1]

PSYD16H3 Critical Analysis 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 approaches to phenomena are contrasted. Students are taught to observe the lived-world, choose a social phenomenon of interest to them, and then intervene 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 24
Exclusion: PSY420H1
Prerequisite: PSYC11H1 or PSYC12H1 or [PSYB10H1 plus one C-level half-credit in PSY]

PSYD71H3 Social Neuroscience
This course provides an overview of the emerging field of social neuroscience. It explores how integrating theory and methods from cognitive psychology, physiology, and neuroscience can be used to address fundamental questions in social psychology and, ultimately, broaden our understanding of mind, brain, and behaviour in a social world.
Breadth requirement: Natural Sciences
Limited enrolment: 24
Prerequisite: PSYC12H1 & [PSYB64H1 or PSYB65H1]

PSYD18H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 24
Exclusion: PSY323H1
Prerequisite: PSYB10H1 plus two C-level half-credit in PSY

PSYD29H3 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: 24
Exclusion: PSY410H1
Prerequisite: PSYC21H1 or PLIC26H1 or [PSYB20H1 plus one C-level half-credit in PSY]
PSYD239H3 Socialization Processes
The processes by which an individual becomes a member of a particular social system (or systems). The course examines both the concept 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 24
Exclusion: PSYC311H, PSY410H1
Prerequisite: PSYB101H & PSYB201H plus one C-level half-credit in PSY

PSYD259H3 The Bilingual Brain
Prevalent views about bilingualism and the minds and brains of bilinguals are explored. Recent technological breakthroughs are considered that look inside the bilingual brain, and, for the first time, adjudicate among competing views. We further explore the bilingual brain as a new lens into the nature of cognitive and linguistic processing in all human brains.
Breadth requirement: Natural Sciences
Limited enrolment: 24
Prerequisite: PSYC25H1. (In 2008/09 only PSYC25H1 may be taken as a corequisite.)

PSYD269H3 Genes, Brain and the Development of Mind
This course explores a new direction in developmental science that combines genetics, brain imaging, and human behavioral/psychological and cognitive methods. Together, these three disciplines afford a new lens into the evolution of the human mind and its cognitive processes (including, attention, numeracy, language, reading disorders) and aspects of emotion and social cognition.
Breadth requirement: Natural Sciences
Limited enrolment: 24
Exclusion: PSYD26H1 (if taken in the 2009 Winter Session)
Prerequisite: PSYB101H & [PSYB511H or PSYB571H]

PSYD309H3 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: 24
Exclusion: PSY430H1
Prerequisite: PSYB301H plus one C-level half-credit in PSY

PSYD339H3 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: 24
Exclusion: PSY440H1
Prerequisite: PSYB32H1 plus one C-level half-credit in PSY

PSYD349H3 Human Intelligence
Part I of this course reviews the classical theories 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 estimated, and its application to the investigation of individual and group differences on IQ tests.
Breadth requirement: Natural Sciences
Limited enrolment: 24
Prerequisite: PSYB101H & [PSYB307H or SOC204H or STAB22H]. PSYB301H also recommended.

PSYD389H3 Clinical Psychopharmacology
This course reviews the psychopharmacological strategies used for addressing a variety of mental health conditions including anxiety, depression, psychosis, impulsivity, and dementia. It will also address the effects of psychotropic drugs on patients or clients referred to mental health professionals for intellectual, neuropsychological and personality testing. Limitations of pharmacotherapy and its combinations with psychotherapy will be discussed.
Breadth requirement: Natural Sciences
Limited enrolment: This course is restricted to students in the Mental Health Studies program.
Prerequisite: PSYB635H & PSYB62H

PSYD509H3 Current Topics in Memory and Cognition
An intensive examination of selected topics. The specific content will vary from year to year.
Limited enrolment: 24
Exclusion: PSY470H1, PSY471H
Prerequisite: PSYB57H plus one C-level half-credit in PSY

PSYD519H3 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, neuropsychological results, synesthesia and an introduction to the Bayesian mechanisms of multisensory integration.
Limited enrolment: 24
Prerequisite: PSYB51H

PSYD569H3 Creativity, Reasoning and Problem Solving
The goal of this course is to look at the ways that brain mechanisms underlie creativity and the evolution of human thought. Special attention will be given to the way people think and change their thinking to create new concepts. These are the fundamental abilities that make us human.
Breadth requirement: Natural Sciences
Limited enrolment: 24
Prerequisite: PSYB57H

PSYD579H3 Cognition, Health, Culture and Decision Making
This will be a seminar course in which key topics in contemporary cognitive theory are discussed in relation to decision making tasks in domains such as health, the natural world and the economy. The common framework is that people use to represent and modify concepts and the roles that culture plays in decision making will be discussed.
Limited enrolment: 24
Exclusion: PSYD50H1 (if taken in the 2008 Winter Session)
Prerequisite: Any C-level half-credit in the 50-series.
PSYD883 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 poster presentation. 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 investigation.

Students must first find a supervisor, which is usually confirmed before the start of the academic term in which the project will be initiated. Students will meet as a group with the coordinator as well as individually with their supervisor. This course is restricted to Specialists in Psychology and Mental Health Studies with a cumulative GPA of 3.3 or higher.

Students planning to pursue graduate studies are especially encouraged to enrol in the course. Students must obtain a permission form from the Psychology departmental website (www.arts.utoronto.ca/psych/undergraduate) that is to be completed and signed by the intended supervisor, and submitted to the Psychology 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.

Exclusion: NROD98Y, COGD100H, PSY400Y
Prerequisite: PSYD80H4 & PSYD80H7 & PSYD88H1, Psychology or Mental Health Studies Specialist, cumulative GPA of 3.3 or higher.

Note: Registration in D-level courses on 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.

PSYD82H3 Second Language Acquisition
PLIC15H3 Speech Perception
PLIC245H3 First Language Acquisition
PLIC550H3 Psycholinguistics
PLIC556H3 Quantitative Methods in Linguistics
PLIC557H3 The Psycholinguistics of Reading
PLIC640H3 Acquisition of the Mental Lexicon
PLIC650H3 Disorders of Speech and Language

These courses may be used as Psychology courses to fulfill Psychology program requirements. (See the Linguistics section of this Calendar for full descriptions.)

Religion

Faculty List
D. Perley, B.A. (Carleton), M.A., Ph.D. (Toronto), Assistant Professor
H.C.H. Shih, B.A., M.A., Ph.D. (Toronto), Assistant Professor

Program Director and Supervisor: H. Shih (416-287-7128) Email: religion-program-supervisor@arts.utoronto.ca

The Program in Religion aims at fostering a student’s understanding of religion as one of the primary expressions of the human condition and as a historically powerful force in the shaping of human cultures and societies. It also seeks to develop a student’s appreciation of the difficulties and possibilities inherent in undertaking a critical, disciplined study of religion. The location of the Program in the Department of Humanities and its use of courses from a variety of areas of study signal that neither the study of religion nor its data are the privileged possession of a single discipline. The hallmark of the Program at University of Toronto Scarborough is its interdisciplinary structure. Faculty from Anthropology, Classics, History, English, Sociology, and Visual Arts provide students with the opportunity to examine religious artifacts, texts, institutions, and communities within particular cultural and historical contexts and in the context of comparable manifestations within the general history of religion.
Guidelines for first year course selection
Students who intend to complete a Religion program should include RLGA01H & RLGA02H in their first year course selection. Students are also strongly encouraged to take HUMA01H (Exploring Key Questions in Humanities) as early as possible in their studies.

MAJOR PROGRAM IN RELIGION
The Major Program in Religion is currently under review and new enrolment in it has been suspended indefinitely. Degree students who first enrolled at UTSC prior to the 2010 Summer Session should refer to the 2009/10 UTSC Calendar.

MINOR PROGRAM IN RELIGION
Program Requirements
Students must complete 4.0 full credits as follows:

1. RLGA01H World Religions I
2. RLGA02H World Religions II
3. RLGB08H Introduction to the Study of Religion
4. 2.5 additional full credits from the following list, with at least 1.0 full credit at the C- or D-level:
   - RLGB01H The "Holy Book" in Judaism, Christianity, and Islam
   - RLGB02H Living Religions: Rituals and Experiences
   - RLGB03H Introduction to Chinese Philosophy
   - RLGC02H The Five Books of Moses
   - RLGC03H The Gospels
   - RLGC04H Paul and the Invention of Christianity
   - RLGC05H The Qur'an in Interpretive and Historical Context
   - RLGC06H Saints and Mystics in Buddhism
   - RLGC07H Topics in Buddhist Philosophy: Buddhist Ethics
   - RLGC08H Topics in Chinese Philosophy: Confucianism
   - RLGC09H Islam in Asia
   - RLGC10H Hinduism in South Asia and the Diaspora
   - RLGC11H Theravada Buddhism
   - RLGC12H Contemporary Engaged Buddhist Movements in Asia
   - RLGC13H Religious Diversity in Speech and Text
   - RLGC14H Religion and Globalization: Continuities and Transformations
   - RLGC40H Selected Topics in the Study of Religion I
   - RLGC41H Selected Topics in the Study of Religion II
   - RLGD01H Supervised Readings in the Study of Religion
   - RLGD02H Seminar in Religion
   - CLA05H Ancient Mythology I: Mesopotamia and Egypt
   - CLA06H Ancient Mythology II: Greece and Rome
   - GNAS30H Asian Religions and Culture
   - VPHB04H Representing Religions: The Rise of States, World Religions, and Patronage
   - VPHB05H Religion in the Arts: Buddhist Arts and Cultures
   - VPHB07H Music in Religion and Ritual

Students may also take courses from the following list, but they are advised that these courses have additional pre-requisites:

- ANTC13H Ritual and Religious Action
- ANTC33H Conceptualizing Religion
- ANTC55H Muslim Societies
- CLAC22H Religions of the Ancient Mediterranean
- ENGC16H The Bible and Literature I
- ENGC17H The Bible and Literature II
- HISD63H The Crusades: I
- HISD64H The Crusades: II
- SOC21H Sociology of Religion
- VPHC58H Religion in the Arts: Hinduism and Buddhism
- VPHB07H Religion in the Arts: Judeo-Christian Traditions
- VPHC55H Religion in the Arts: Seminar in Buddhism and Art
RLG8103 Islam in Asia
The course examines the development Islam in the contexts of Asian religions and cultures, and the portrayal of the Muslim world in Asian popular culture.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: RLG091H or (HUMB04H)
Recommended preparation: RLG051H

RLC110H3 Hinduism in South Asia and the Diaspora
An examination of Hinduism in its contemporary diasporic and transnational modes in South Asia. Attention is also paid to the development of Hinduism in the context of colonialism.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: RLG01H1 or (HUM408H)
Recommended preparation: RLG802H

RLG101H3 Theravada Buddhism
Theravada is the oldest surviving school of Buddhism now preserved in South Asia, (including Sri Lanka, Thailand, Laos, Cambodia, and Burma (Myanmar).). A conservative tradition, Theravada upholds some of the earliest teachings of Buddhism. A study of this tradition allows students to understand the foundational teachings of Buddhism.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: RLG206Y, RLG206H
Prerequisite: RLG01H1 or (HUM408H)

RLG121H3 Contemporary Engaged Buddhist Movements in Asia
The course will introduce a comprehensive survey of Engaged Buddhism, which calls for the need to apply traditional Buddhist teachings to improve our society. Focus will be on the contemporary engaged Buddhist movements in Vietnam, Tibet, China & Taiwan, Sri Lanka, Thailand, and India.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: NEW214Y, (RLG070H)
Prerequisite: RLG01H1 or (HUM408H)

RLG131H3 Religious Diversity in Speech and Text
Philosophical, anthropological, historical, and linguistic discussions about language use in a variety of religious contexts. The course examines the function of language through an analysis of its use in both oral and written form.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: Any 5 full credits, including RLG01H1 or RLG02H1 or RLG101H1

RLG141H3 Religion and Globalization: Continuities and Transformations
The course cultivates an appreciation of the global perspective of religions in the contemporary world and how religious frameworks of interpretation interact with modern social and political realities. It provides a viewpoint of religion through ideas and issues related to globalization, syncretism, and modernity.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: Any 5 full credits, including RLG01H1 or RLG02H1 or RLG101H1
RLGC40H3 Selected Topics in the Study of Religion I
Intensive study of selected topics discussed in RLGA01H (World Religions I) that will vary with each offering of the course.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HUMC44H1
Prerequisite: 2.0 full credits in REL & permission of the instructor

RLGC41H3 Selected Topics in the Study of Religion II
Intensive study of selected topics discussed in RLGA02H (World Religions II) that will vary with each offering of the course.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HUMC43H1
Prerequisite: 2.0 full credits in REL & permission of the instructor

RLGD01H3 Supervised Readings in the Study of Religion
A student-initiated research project to be approved by the Department and supervised by one of the faculty members.
Prerequisite: 2.0 full credits in REL at the C-level & permission of the instructor

RLGD02H3 Seminar in Religion
A seminar for religion majors in which students have the opportunity, under the supervision of a member of the Religion faculty, to develop and present independent research projects focused around a set of texts, topics, and/or problems relevant to the study of religion.
Limited enrollment: 15
Prerequisite: RELB10H & 2 C-level courses in Religion

Science Engagement

Coordinator: K. Persaud  Email: scieng@utsc.utoronto.ca
Website: www.utsc.utoronto.ca/ct/Science_Engagement/index.html

Science Engagement is a trans-disciplinary approach to science education. The goal of Science Engagement is to deepen students' understanding of their discipline by helping them actively practice concepts and approaches outside of the typical classroom environment. By experiencing the relevance of what they study, students regain an appreciation of and motivation for science learning. Through a range of activities, we simultaneously strengthens the U of T Scarborough research endeavour, reach out to our community and broaden the way we help our undergraduates learn science. There are two major categories of activities: Team Research and Service Learning (which includes both community outreach and classroom in-reach).

Team Research
A group of 3-5 students work as a team to develop and/or implement a project. Faculty members provide general guidance, and students meet weekly with a graduate student. Participation requires (1) enrolment in a subject POGO offered by the departments of Biological Sciences, Computer & Mathematical Sciences, Physical and Environmental Sciences or Psychology, (2) acceptance by a faculty member willing to serve as a project supervisor.

Biology students enrol in Team Research through BIOC99H, "Biology Team Research" (see "Biological Sciences" section of this Calendar). All other students enrol in Team Research using the course code of the supervised study course offered by their department.

Service Learning
Service Learning is a pedagogical approach which links discipline-specific concepts and approaches with direct practice through the continual, transformative process of critical reflection. Through Science Engagement, students can carry out their service and actively apply their academic knowledge in either of two ways:

1. Community outreach, where students bring concepts and approaches taught in the science classroom to science interested parties within the off-campus community such as area schools, NGOs, community groups and laboratories or
2. Classroom in-reach, where students deepen their knowledge by using their own educational experience in a completed UTSC undergraduate science course to enrich the learning of students currently in that course.

Students enrol in Service Learning (whether community outreach or classroom "in-reach") through SCB10H, "Introduction to Service Learning in the Sciences". For placement opportunities and complete application procedures, students should visit the website: www.utsc.utoronto.ca/ct/Science_Engagement/index.html.
SCIB03H3 Introduction to Service Learning in the Sciences

A service learning course in which students work with science-interested parties and apply discipline-specific academic concepts while in the service of others. Students might work with (1) the instructor of a course previously taken to enhance the learning of students currently taking that course ("classroom in-residence"), or (2) science-interested community partners such as area schools, research laboratories or charitable organizations ("community outreach"). Problem solving, professional communication and self reflective learning skills will be developed.

Evaluation is based on participation, self reflective writing and experiential eportfolio creation.

Limited enrolment: 30

Exclusion: (SCIB01H3), (SCIB02H3)

Prerequisite: (1) Completion of 4.0 full credits & (2) selection of a U of T Scarborough major or specialist subject POSI offered by Biological Sciences, Computer & Mathematical Sciences, Physical & Environmental Sciences, or Psychology & (3) acceptance of the Science Engagement application form which can be downloaded from the website, (www.utsc.utoronto.ca/Science_Engagement/index.html) and should be emailed to sciseng@utsc.utoronto.ca. GPA and communication skills will also be considered. SCIB03H3 involves a 6-7 hour/week placement component and a 2 hour/week in-class component.

Society and Environment (B.A.)

MAJOR PROGRAM IN SOCIETY AND ENVIRONMENT

The Major Program in Society and Environment has been withdrawn from the curriculum. Every effort will be made to ensure that students currently enrolled in the program are able to complete it.

SOED01H3 Environmental Internship

This course offers students the opportunity to gain practical research experience as an intern with an environmental organization. Students will be required to arrange their own internship and to complete at least 50 hours of work with the organization. Evaluation will be based on a research paper.

Prerequisite: Completion of at least 10 full credits and prior permission of the program supervisor.

Sociology (B.A.)

Faculty List

W.W. Jauj, B.A. (LaSalle), M.A., Ph.D. (Catholic Univ. of America), Professor Emeritus
R. O'Toole, B.A. (Leeds), P.C.E. (London), M.A., (McMaster), Ph.D. (Toronto), Professor Emeritus
J. Hannigan, B.A., M.A. (Western Ontario), Ph.D. (Ohio State), Professor
A. Sevrey, B.A., M.A. (Windsor), Ph.D. (York, Canada), Professor
J. Turner, B.Sc. (London) P.G.C.E. (Leicester), M.A., Ph.D. (Alberta), Professor
J. Hermer, B.A. (Western), M.A. (Carleton), D.Phil. (Oxon.), Associate Professor
P.C. Huang, B.A. (National Chiao-tung), M.A. (Chinese Cultural), Ph.D. (UCLA), Associate Professor
P. Landolt, B.A., M.A. (York), M.A., Ph.D. (Johns Hopkins), Associate Professor
A. Mullen, B.A. (California), M.A., Ph.D. (Yale), Associate Professor
S. Unagar, B.A. (McGill), M.A., Ph.D. (York, Canada), Associate Professor
K. Liddle, B.A. (Oberlin), M.A. (Auburn), Ph.D. (Emory), Assistant Professor
D. Silver, B.A. (Berkeley), M.A., Ph.D. (Chicago), Assistant Professor

Discipline Representative: P. Landolt

Undergraduate Counselor: J. Roopnarinesingh Email: social-sciences-counsellor@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 explains 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 co-operation, competition, and conflict. Students may wish to take Sociology courses as a part of a general education, in anticipation of the usefulness of certain courses in future occupations or professions, or as part of a Specialist, Major or Minor Program.

The introductory courses, SOCA01H and SOCA02H, are intended to familiarize students with the distinctive theories, methods and questions of sociology as a part of a liberal education. In addition, the courses provide a minimum background of knowledge about sociology and hence are a prerequisite to all of the more advanced courses.

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, SOCA01H and SOCA02H should be taken during the first year, SOCB03H, SOCB06H, SOCB04H and SOCB05H should be taken during the second year and SOCC08H and SOCC11H should be taken during the third year. Failure to do so may lead to timetable difficulties.
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 indicated 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 enrollment.

**SPECIALIST PROGRAM IN SOCIOLOGY**

**Program Admission**

Enrolment in the Specialist Program is limited. Students must normally apply to enter the Program after completing 4 or 5 full credits including SOC401H and SOC402H. 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 SOC401H and SOC402H. 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 SOC306H, SOC322H, SOC343H, SOC423H & SOC432H, for fall-winter sessions, in the summer early registration period.

**Program Requirements**

The Program requires completion of 12.0 full credits as described below. No more than 14.0 full credits in Sociology may be included in a four-year degree.

1. SOC401H Introduction to Sociology I
2. SOC402H Introduction to Sociology II
3. SOC405H Logic of Social Inquiry
4. SOC406H Social Statistics
5. SOC423H Classical Sociological Theory Part I
6. SOC424H Classical Sociological Theory Part II
7. SOC431H Contemporary Sociological Theory, Part I
8. SOC432H Contemporary Sociological Theory, Part II
9. SOC432H Practicum in Qualitative Research Methods or
   SOC331H Practicum in Quantitative Research Methods
10. 4.5 full credits in Sociology at C- or D-level of which at least 1.0 must be at the D-level.

**Note:** Students may substitute courses from cognate disciplines with the prior approval of the program supervisor.

11. 1.0 other full credit in Sociology.

**SPECIALIST (CO-OPERATIVE) PROGRAM IN SOCIOLOGY**

Co-op Contact: askcoop@uottawa.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, the private sector, public institutions, and non-government organisations.

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 enrolment 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 Programs section in this Calendar. Current U of T Scarborough students: Application procedures can be found at the Registrar’s Office website at www.uottawa.ca/registrar/coop. The minimum qualifications for entry are 4.0 credits including SOC401H & SOC402H 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 SOC305H, SOC306H, SOC342H and SOC437H. Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

**Course Requirements**

Students must complete the requirements for the Specialist Program in Sociology (see below), with the following additional requirements:

Either SOC342H or SOC355H
MAJOR PROGRAM IN SOCIOLOGY

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 SOCA01H and SOCA02H. Decisions are made on Program admission only twice a year, in May and in August, and are based on student requests submitted to the Registrar through RGIS. Admission is determined on the basis of a student's overall GPA and grades in SOCA01H and SOCA02H. For students applying after 8-10 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 SOCB00H, SOCB42H and SOCB43H for fall-winter sessions, in the summer early registration period.

Program Requirements
The Program requires completion of 7.0 full credits in Sociology including:

1. SOCA01H Introduction to Sociology I
2. SOCA02H Introduction to Sociology II
3. SOCB00H Logic of Social Inquiry
4. SOCB06H Social Statistics
5. SOCB42H Classical Sociological Theory I
6. SOCB43H Classical Sociological Theory II
7. 4.0 full credits in Sociology, at least 2.0 of which must be at the C- or D-level

MINOR PROGRAM IN SOCIOLOGY

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 4.0 full credits in Sociology including:

1. SOCA01H Introduction to Sociology I
2. SOCA02H Introduction to Sociology II
3. SOCB05H Logic of Social Inquiry
4. SOCB42H Classical Sociological Theory I
5. SOCB43H Classical Sociological Theory II
6. 1.5 additional full credits in Sociology including 1.0 at the C-level

SOCA01H Introduction to Sociology I
An introduction to the basic concepts, principles and methods of Sociology as a discipline for the study of society. Sociology I covers theory, methods, culture, social interaction and social stratification. Breadth requirement: Social & Behavioural Sciences Exclusion: SOC101Y

SOCA02H 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 behaviour. Breadth requirement: Social & Behavioural Sciences Exclusion: SOC101Y

SOCB05H 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. Breadth requirement: Quantitative Reasoning Limited enrolment: 170 Exclusion: SOCB200H, SOCB200Y, (SOCB40H), (SOCB41H) Prerequisite: SOCA01H & SOCA02H

SOCA01H Introduction to Sociology I
An introduction to the basic concepts, principles and methods of Sociology as a discipline for the study of society. Sociology I covers theory, methods, culture, social interaction and social stratification. Breadth requirement: Social & Behavioural Sciences Exclusion: SOC101Y

SOCA02H 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 behaviour. Breadth requirement: Social & Behavioural Sciences Exclusion: SOC101Y

SOCB05H 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. Breadth requirement: Quantitative Reasoning Limited enrolment: 170 Exclusion: SOCB200H, SOCB200Y, (SOCB40H), (SOCB41H) Prerequisite: SOCA01H & SOCA02H
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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SO214Y
Prerequisite: SOCA01H & SOCA02H

SOCB45H3 Urban Sociology: Micro-Analysis
Examines the organizational and social psychological dimensions of urbanism 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SO215Y
Prerequisite: SOCA01H & SOCA02H & SOCB44H

SOCB47H3 Social Inequality
A sociological examination of the ways in which individuals and groups have been differentiated and ranked historically and cross-culturally. Systems of differentiation and devaluation examined may include gender, race, ethnicity, class, sexual orientation, citizenship/legal status, and ability/disability.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SO215Y
Prerequisite: SOCA01H & SOCA02H

SOCB48H3 Family and Society
Focuses on the interaction 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SO215Y
Prerequisite: SOCA01H & SOCA02H

SOCB49H3 Family in Transition
This course explores the family as a social institution, which shapes and at the same time is shaped by, the society in North America. Specific attention will be paid to family patterns in relation to class, gender, and racial/ethnic stratifications. Selected focuses include socialization; cohabitation; heterosexual, gay and lesbian relations; gender division of labour; immigrant families; childrearing and childrearing; divorce; domestic violence; elderly care.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SO214Y
Prerequisite: SOCA01H & SOCA02H
SOCB85H3 Deviance and Normality I
This course explores how deviance and normality is constructed and contested in everyday life. The course revolves around the themes of sexuality, gender, poverty, race and intercultural. Particular attention will be paid to the role of official knowledge in policing social norms.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC212Y
Prerequisite: SOC401H & SOC62H

SOCB85H3 Deviance and Normality II
This course explores how deviance and normality is constructed and contested in everyday life. The course revolves around the themes of sexuality, gender, poverty, race and intercultural. Particular attention will be paid to the role of official knowledge in policing social norms.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC212Y
Prerequisite: SOC401H & SOC62H

SOCB52H3 International Migration and Immigrant Incorporation
This course provides an overview of competing theories and concepts in the field of international migration and immigrant incorporation. Discussion uses the Canadian case in comparative perspective.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC212Y
Prerequisite: SOC401H & SOC62H

SOCB83H3 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC212Y
Prerequisite: SOC401H & SOC62H

SOCB44H3 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 "professions", but not others.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC207Y, SOC317Y, SOC370Y
Prerequisite: SOC401H & SOC62H

SOCB85H3 Sociology of Work and Industry II
Is it just about the money? This course examines the factors that shape workplace behaviour—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 unionizing in the workplace.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 170
Exclusion: SOC207Y, SOC317Y, SOC370Y
Prerequisite: SOC401H & SOC62H

SOCB85H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 170
Exclusion: SOC115H, SOC269Y
Prerequisite: SOC401H & SOC62H

SOCB83H3 Collective Behaviour
The study of institutionalized group behavior: crowds, parades, riots, and the genesis of social movements.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: SOC401H & SOC62H & [SOC805H or (SOCB40H & (SOCB41H)) & SOC42H & SOC64H]

SOCB44H3 Social Movements
The development of an approach to social movements which includes the following: the origin of social movements, mobilization processes, the role of the movement and its routinization. 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: SOC401H & SOC62H & [SOC805H or (SOCB40H & (SOCB41H))] & SOC42H & SOC64H

SOCB88H3 Gender and Information Technology
Examines transformation and perpetuation of gender stratification in relation to information technologies. 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC255Y
Prerequisite: SOC401H & SOC62H & [SOC805H or (SOCB40H & (SOCB41H))] & SOC42H & SOC64H
SOCC209H Sociology of Gender and Work
Explores the interaction of gender and work, both paid and unpaid work. Critically assesses 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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC368H1
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC404H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC168H3 Gendered Selves, Gendered Lives and Inequalities
Individuals are socialized to act, think, behave and get treated in ways that are genderized. This course is a critical examination of gender in work, health, education, interpersonal relations, family life and parenthood. Socially constructed inequalities on the basis of gender will be challenged.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC355H, SOC365Y
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC111H3 Policing and Security
This course examines the character of policing and security programs in advanced liberal democracies. Attention will be paid to the nature and enforcement of modern law by both state and private agents of order, as well as the dynamics of the institutions of the criminal justice system.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC315Y, SOC366Y
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC169H3 Sociology of Conflict and Co-operation
An examination of international conflict and cooperation in the context of global change. This course begins with an examination of the nuclear arms race, then explores how technology, economics, population growth, and environment interact to create interdependencies and afford new opportunities for world order. Special attention is given to North-South relations and to climate change.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC317Y & SOC323H & SOC355H1 or (SOC404H1 & (SOC413H1)) & SOC421H & SOC433H

SOCC210H3 Sociology of Religion
An examination of religion as a social institution. Consideration of the problem of appropriate definition precedes close analysis of the writings of major classic theorists on the topic of religious belief and practice. The continuing significance of this work in contemporary theory and research is investigated.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC219Y, REL210Y
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC240H3 Changing Family Life in Canada
A theoretical and empirical examination of different forms of family and the major changes in the structure and interaction of family life in Canada. Of special interest are topics like women and work, race/ethnicity and family diversities, declining birth-rates, high divorce rates and new reproductive technologies.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC253H3 Ethnicity, Race and Migration
A theoretical and empirical examination of ethnic identity formation, race and racism, and their relationship to international migration.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC269H3 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 operation of urban social networks.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Exclusion: SOC366Y
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]

SOCC299H3 Cross-Cultural Family Forms
A sociological and historical analysis of diverse family forms across the ages and in different geographic locations. How consensus versus conflict theories account for the changes in family forms and how subsistence patterns such as hunting-gathering, horticulture, agrarian and industrial patterns shape and after the family forms and gendered roles will be analysed.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 60
Prerequisite: SOC301H & SOC302H & [SOC305H1 or (SOC304H1 & (SOC413H1)) & SOC421H & SOC433H]
SOCC301H Criminal Behaviour
The young figure prominently in people’s views about, and fears of, crime. This course examines definitions of crime, how crime problems are constructed and measured. It looks at schools and the street as sites of criminal behaviour, and considers how we often react to crime in the form of moral panics.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Exclusion: SOC306Y
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCD4B0H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC333H 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCD4B0H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC441H2 Migration & Transnationalism
Examines the relationship between contemporary modes of international migration and the formation of transnational social relations and social formations. Considers the impact of transnationalism on families, communities, nation-states, etc.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCD4B0H) & (SOCB41H)] & [(SOCD42H & SOCB43H) or DSBS01H]]

SOCC533H 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCD4B0H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC573H Environment and Society
This course links studies in the classical sociology of resources and territory (as in the works of Harold Innis, S.D. Clark, and the Chicago School), with modern topics in ecology and environmentalism. The course will include empirical research, and theoretical issues, in the relationship of various social systems to their natural environments.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Exclusion: SOC385H
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC582H2 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC583H 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC443H 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Exclusion: (SOCC05Y)
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC444H Contemporary Sociological Theory Part II
The development of sociological theory from the 1960s to the present. Phenomenological, Social-biological, Rational-Choice and other perspectives are explored.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC443H 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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 60
Exclusion: (SOCB54B), (SOCB57H)
Prerequisite: SOCA01H & SOCA02H & [SOCB05H or [(SOCB40H) & (SOCB41H)] & SOCB42H & SOCB43H]

SOCC201H Research Methods in Qualitative Research Methods
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.
Breadth requirement: Social & Behavioural Sciences Limited enrolment: 15
Exclusion: SOC387H, (SOC23H)
Prerequisite: 10 credits including SOCA01H, SOCA02H, SOCB05H, SOCB04H & (a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy).
SOC390H1: Practicum in Quantitative Research Methods

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, write up and present their findings.

Breadth requirement: Quantitative Reasoning

Limited enrollment: 15
Exclusion: SOC300H1, SOC310H3
Prerequisite: 10 credits including SOC301H1, SOC320H1, SOC351H1, SOC360H1, [a cumulative GPA of at least 2.7 or enrolment in the Specialist Program in Sociology or the Major Program in Public Policy]

SOC349H1

SOC349H1: Supervised Independent Research

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.

Exclusion: SOC390Y, SOC391H1, SOC392H
Prerequisite: Completion of at least 15 full credits including SOC301H & SOC302H & SOC303H & [SOC340H1 & SOC341H] & SOC342H & SOC343H & permission of the instructor & permission of the sociology supervisor of studies.

SOC449H1: Advanced Seminar in Sociological Theory

Exploration of significant topics of interest in contemporary sociological theory. Designed for and restricted to students enrolled in the final year of the Specialist Program in Sociology.
Prerequisite: SOC401H & SOC402H & [SOC403H or [SOC404H & SOC405H] & SOC406H & SOC407H & SOC408H & SOC409H & SOC410H & SOC411H]

SOC449H1: Advanced Seminar in Issues in Contemporary Sociology

Exploration of current debates and controversies surrounding recent scholarly developments. Restricted to final year students taking a Specialist Program in Sociology.
Prerequisite: SOC401H & SOC402H & [SOC403H or [SOC404H & SOC405H] & SOC406H & SOC407H & SOC408H & SOC409H & SOC410H & SOC411H]

Statistics

BSc.

Faculty List

M. Evans, B.Sc. (Western Ontario), M.Sc., Ph.D., Professor
R. Virag, Ph.D. (Berkeley), Associate Professor
E. Butler, Ph.D. (Simon Fraser University), Lecturer
M. Moras, Ph.D. (York), Lecturer
M. Samaeezooz, M. Sc (Alberta), Ph. D (Toronto), Lecturer

Discipline Representative: TBA

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 efficacies of different vaccines.

STAT22H and STAT27H serve as non-technical introduction to statistics. These courses are designed for students from disciplines where statistical methods are applied. STAT22H is a mathematical treatment of probability. STAT27H is an introduction to the methods and theory of statistical inference. The C-Level courses build on the introductory material to provide a deeper understanding of statistical methodology and of its practical implementation.

Guidelines for 1st year course selection

Students who intend to complete the major Program in Statistics should include [CISC4A8H1 or PSCB57H1] MATA21H3, MATA36H3 & MATA37H3] in their 1st year course selection.

Co-operative programs & Concurrent Teacher Education

The Specialist Program in Quantitative Analysis and the Major Program in Statistics 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, the Co-operative Programs and the Concurrent Teacher Education sections of this Calendar for further information.

Science Engagement Course

For science experiential learning through community outreach, classroom in-reach and team research, please see the Science Engagement section of this Calendar.
SPECIALIST PROGRAM IN QUANTITATIVE ANALYSIS

Supervisor of Studies: M. Evana Email: evana@sc.toronto.ca

The Program in Quantitative Analysis is an interdisciplinary program designed for students interested in applying mathematical ideas and analysis to problems in the biological sciences, social and health sciences, physical sciences, and in finance and risk management. After completing this program students will be well prepared to pursue professional careers as quantitative analysts, go on to professional masters programs in such areas of application or to pursue research degrees in the areas in these fields that require a strong training in quantitative methods.

The program requires 13.0 credits in total. Students will be required to complete a culminating project course in their final year of studies that applies the computational, mathematical, or statistical skills they have acquired. It is strongly recommended that they complete the equivalent of a minor in an area of application. Suggested areas are: Mathematical Finance, Biological Sciences, Physical Sciences, and Social and Health Sciences. The program has streams corresponding to these. Students should select an area of application in consultation with the Supervisor of Studies. For the project course the student needs a supervisor in the appropriate department, also selected in consultation with the Supervisor of Studies.

The Specialist Program in Quantitative Analysis is 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.

Program Requirements
This program requires 13.0 credits including at least 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level.

Writing requirement (0.5 credits)
(Should be completed by the end of second year.)

One of:

First Year (3.0 credits specified)
CSCA48H Introduction to Computer Programming
CSCA49H Introduction to Computer Science
CSCA50H Mathematical Expression and Reasoning for Computer Science
MAT43H4 Linear Algebra I
MAT43H7 Calculus I
MAT43H7 Calculus II for Mathematical Scientists

Second Year (4.0 credits specified)
CSCB07H Software Design
CSCB56H Introduction to the Theory of Computation
CSCB63H Design and Analysis of Data Structures
MATB24H Linear Algebra II
MATB41H Techniques of the Calculus of Several Variables I
MATB44H Differential Equations I
STAB22H Introduction to Probability
STAB57H Introduction to Statistics

Second, Third and Fourth Years
Students should choose a stream during their second year of studies which fits with the area of application that interests them.

Biological and Life Sciences Stream (5.0 credits)
CSCC43H Introduction to Databases
CSCD41H Machine Learning and Data Mining
MATB42H Techniques of the Calculus of Several Variables II
[MATB63H Linear Programming and Optimization or CSCC73H Algorithm Design and Analysis]
MATC46H Differential Equations II
STAC52H Experimental Design
STAC52H Stochastic Processes
STAC67H Regression Analysis
STAD77H Multivariate Analysis
Plus 0.5 additional full credits from ACT, CSC, MAT or STA courses at the B or above level.
**Statistics**

**Physical Sciences Stream (5.0 credits)**
- CSCE501H Numerical Algebra and Optimization
- CSCE511H Numerical Approximation, Integration and Ordinary Differential Equations
- MATB426H Techniques of the Calculus of Several Variables II
- MATB453H Introduction to Analysis
- MATC348H Complex Variables
- MATC351H Chaos, Fractals and Dynamics
- MATC468H Differential Equations II
- STAT231H Stochastic Processes
- Plus 1.0 additional full credits from ACT, CSC, MAT or STA courses at the B or above level of which at least 0.5 must be at the D-level.

**Mathematical Finance, Management and Economics Stream (5.0 credits)**
- ACIT449H Fundamentals of Investment and Credit
- CSCE401H Numerical Methods
- CSCE411H Machine Learning and Data Mining
- MATB452H Techniques of the Calculus of Several Variables II
- MATB603H Linear Programming and Optimization
- MATC461H Differential Equations II
- STAT231H Stochastic Processes
- STAT271H Regression Analysis
- STAT273H Statistics and Finance
- STAT357H Time Series Analysis

**Social and Health Sciences Stream (5.0 credits)**
- CSCE341H Introduction to Databases
- MATB413H Linear Programming and Optimization
- STAT232H Experimental Design
- STAT238H Stochastic Processes
- STAT274H Regression Analysis
- STAT373H Multivariate Analysis
- STAT377H Time Series Analysis
- Plus 1.0 additional full credits from ACT, CSC, MAT or STA courses at the B or above level.

**Fourth year (0.5 credits)**
- One of:
  - CSCE494H Computer Science Project
  - MATD494H Mathematics Project
  - STAT494H Statistics Project

**MAJOR PROGRAM IN STATISTICS**

**Supervisor of Studies:** M. Morris  
**Email:** mike.morris@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 8.0 full credits.

**First Year**
- [CSCE488H Introduction to Computer Science or PSCE37H Introduction to Scientific Computing]
- MATB247H Linear Algebra I
- MATB362H Calculus I
- [MATA31H Calculus II for Physical Sciences or MATA35H Calculus II for Mathematical Sciences (recommended)]

**Second Year**
- MATB241H Linear Algebra II
- MATB411H Techniques of the Calculus of Several Variables I
- MATB426H Techniques of the Calculus of Several Variables II
- STAT232H An Introduction to Probability*  
- STAT357H An Introduction to Statistics*
MINOR PROGRAM IN STATISTICS

Program Requirements
This program requires 4 full credits.

First Year (2.0 credits)
CSCA20H3 Introduction to Computer Programming
MATA23H3 Linear Algebra I
MATA30H3 Calculus I
MATA36H3 or MATA37H3 Calculus II for Physical/Mathematical Sciences

Second Year (1.0 credit)
STAB52H3 An Introduction to Probability
STAB57H3 An Introduction to Statistics

Third and Fourth Year (1.0 credit)
STAC67H3 Regression Analysis

In addition 0.5 credits must be chosen from any C or D level STA course but not STAD20H.

SPECIALIST PROGRAM IN MATHEMATICS AND ITS APPLICATIONS

This program has a Statistics stream. For more information, see the Mathematics section of this Calendar.

SPECIALIST PROGRAM IN NATURAL SCIENCES

(See the Physical Sciences section of this Calendar for more information.)

ACTB40H3 Fundamentals of Investment and Credit
This course is concerned with the concept of financial interest. Topics covered include: interest, discount and present values, as applied to determine prices and values of annuities, mortgages, bonds, equities, loan repayment schedules and consumer finance payments in general, yield rates on investments given the costs on investments.
Breadth requirement: Quantitative Reasoning
Exclusion: ACTB40H3, MGTB20H3, (MGTB09H).
Prerequisite: [MATA30H3 & one of MATA35H3, MATA36H3 or MATA37H3] or [(MATA21H3) & a cumulative GPA of 2.5 or higher]

Note: Students enrolled in or planning to enrol in any of the BBA programs are strongly urged not to take ACTB40H3 because ACTB40H3 is an exclusion for MGTC80H3, MGTC03H3 and MGTC05H3, as a required course in the BBA degree.
Students in any of the BBA programs will thus be forced to complete MGTC80H3 (MGTC07H), even if they have credit for ACTB40H3, but will only be permitted to count one of ACTB40H3 and MGTC80H3 (MGTC07H) towards the 20 credits required to graduate from U of T Scarborough.

ACTB47H3 Introductory Life Contingencies
This course provides an introduction to insurance and annuity concepts from a mathematical point of view. Topics covered include: probability theory applied to survival and to cost and risks of life assurances, life annuities, and pensions, analysis of survival distributions, international actuarial notation, annuity benefit premium.
Breadth requirement: Quantitative Reasoning
Exclusion: ACTB40H3 & MGTC40H3 & STAB52H3

STAB22H3 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.
Breadth requirement: Quantitative Reasoning
STAB22H Regression Analysis
Breadth requirement: Quantitative Reasoning
Exclusion: STA303H
Prerequisite: STAB37H

STAC10H Statistics and Finance
The course discusses the use of statistical methods in finance. Topics covered include returns, random walks and the efficient market hypothesis, portfolio theory, the capital asset pricing model, options pricing, value-at-risk, time series and GARCH models.
Breadth requirement: Quantitative Reasoning
Prerequisite: ACTB40H & STAC67H

STAD22H Statistics for Life & Social Sciences
The course discusses many advanced statistical methods used in the life and social sciences. Emphasis is on learning how to become a critical interpreter of these methodologies while keeping mathematical requirements low. Topics covered include multiple regression, logistic regression, discriminant and cluster analysis, principal components and factor analysis.
Breadth requirement: Quantitative Reasoning
Exclusion: All C-level/300-level & D-level/400-level STA courses or equivalents except STA320H.
Prerequisite: STAB22H

STAD23H Multivariate Analysis
Breadth requirement: Quantitative Reasoning
Exclusion: STA437H, (STAC42H)
Prerequisite: STAC67H

STADB2H Time Series Analysis
An overview of methods and problems in the analysis of time series data. Topics covered include descriptive methods, filtering and smoothing time series, identification and estimation of time series models, forecasting, seasonal adjustment, spectral estimation. Instruction in the use of SAS.
Breadth requirement: Quantitative Reasoning
Exclusion: STA457H, (STAC57H)
Prerequisite: STAC62H

STADB4H Statistics Project
A significant project in any area of statistics. The project may be undertaken individually or in small groups. This course is offered by arrangement with a statistics faculty member. 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.
Studio
See the Visual and Performing Arts section of this Calendar.

Visual and Performing Arts
(B.A.)

Faculty List
G. Sciacca, M.A., Ph.D. (Turin), Professor Emeritus
M.S. Shaw, M.A., Ph.D. (Bryn Mawr), Professor Emeritus
M. Gervers, A.B. (Princeton), M.A. (Pittsburgh), Ph.D. (Toronto), Professor
W.R. Bowan, M.A., Ph.D. (Toronto), Associate Professor
L. Carney, M.A. (Columbia), Associate Professor
E.A. Harvey, M.A., Ph.D. (London), Associate Professor
J. Mayo, M.A., Ph.D. (Toronto), Associate Professor
M.Q. Schönberg, M.A., Ph.D. (Toronto), Associate Professor
P. Sperák, B.A., M.A. (McGill), Ph.D. (Toronto), Associate Professor
A. Staunton, M.A. (Wolverhampton), Ph.D. (Carleton), Associate Professor
Y. Gu, B.A., M.A. (Fudan), Ph.D. (Brown), Assistant Professor
S.D. Lee, B.Mus., M.A. (Western), Ph.D. (UBC), Assistant Professor
K.A. McLeod, M.A. (McMaster), Ph.D. (McGill), Assistant Professor
S.L. Hulvey, B.A. (Osgoode), M.A. (Toronto), Senior Lecturer
T. Larrick, B.A. (Dalhousie), M.F.A. (York), Senior Lecturer
T. Marx, Senior Lecturer
A. Rapoport, M.A., Mus.Doc. (Toronto), Senior Lecturer
D. Bowman, Dip.L.A. (Emily Carr), MVS (Toronto), Lecturer
Y. Brotman, B.A. (Manitoba), B.Ed., M.V.S. (Toronto), Lecturer
M. Hlady, B.F.A. (Victoria), M.F.A. (York), Lecturer
D. Hlumský, B.F.A. (Ohio State), Lecturer
W. Kwan, B.A. (Toronto), M.F.A. (Columbia), Lecturer
A. MacDonald, B.A. (York), AOCAD, Lecturer
A. Sanger, B.A. (Darlington), Ph.D. (Queen's, Belfast), Lecturer
C. Smith, M.A., Ph.D. (Toronto), Lecturer
E. Webster, B.A., M.A. (Toronto), Ph.D. (Case Western Reserve), Lecturer
L. Whiting, Dip.Op.Perf. (Toronto), Lecturer
K. Wright, Lecturer

Program Director: TBA. Email: art.culture.program.supervisor@utoronto.ca

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 arts events offered at U of T Scarborough, which include exhibitions in the Doris McCarthy Gallery and readings, plays, films and concerts. Events listings may be obtained from Arts & Events Programming (416-284-4569). Students should also consider participating actively in the choir or instrumental ensembles, the student gallery, or in the public productions in the Leige Lee Brown Theatre. Please contact the program supervisors in music, studio or drama for details.

Specialist Programs
Art Management
Art and Culture
Major Programs
Art History
Music and Culture
Studio
Theatre & Performance Studies
Minor Programs
Art History
Music and Culture
Studio
Theatre & Performance Studies
Visual and Performing Arts

See below for co-op opportunities related to the Specialist Program in Arts Management. 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.

The VPA Study Guide is available at: http://www.atne.tooronto.ca/~bisemis/VPA/vpa_overview_new.htm

SPECIALIST PROGRAM IN ART AND CULTURE

Program Supervisor: TBA Email: art-culture-program-supervisor@atne.tooronto.ca

All prospective students must consult with the program director before enrolling in this program. This program provides training in the visual and performing arts, both for students who want a conceptual and historical knowledge of the arts and the inter-relationships 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 want a thorough knowledge of history, theory, and practice in the arts.

The core courses give a basic knowledge of music, visual art and theatre and performance studies, as well as opportunities to develop writing and computing skills and to explore arts concepts and theories. 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 Theatre and Performance Studies, Music and Studio streams of this Program should consult the Major Programs in these areas for instructions concerning the required courses in Performance and Studio.

Program Requirements

The Specialist Program in Art and Culture requires the completion of between 13.5 and 14.5 full credits depending on the stream, including 4.0 credits at the C- or D-level of which 1.0 must be at the D-level. The program has five streams: Art History, Curatorial Studies; Music, Studio; and Theatre & Performance Studies. These streams are designed to provide in-depth study in the Visual and Performing Arts.

Art History stream

The Specialist in Art and Culture (Art History) requires 13.5 credits, including 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level as follows:

1. The Major Program in Art History
   a. Plus
   - Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside of the Art History Major
   b. Core courses:
      - HUMB111H Critical Thinking, Reasoning and Decision Making
      - VPAA608H Visual and Performing Arts in the Digital Age
      - VPAB053H Introduction to Contemporary Cultural Theory
      - VPAC302H Intermediate Seminar
      - VPAC478H The Body in Modernity: Theories and Representations
      - VPAC485H The Body in Contemporary Culture: Theories and Representations
      - VPAD091H Senior Project
   c. At least 1 additional full credit at the B-, C- or D-level from the Visual & Performing Arts or another appropriate discipline, chosen in consultation with the Program Director.

Curatorial Studies stream

The Specialist in Art and Culture (Curatorial Studies) requires 13.5 credits, including 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level as follows:

1. HUMA001H Exploring Key Questions in Humanities
   - VPA110H Introduction to Arts Management
   - VPAB158H Arts Education and Outreach
   - VPAC200H Visual Arts Management: Principles and Practices
   b. Seven full credits in Art History including:
      - VPRA643H Ways of Seeing: Introduction to Art Histories
      - VPHE711H Exhibiting Art
      - VPED720H Museum and Curatorial Practice: Theoretical and Ethical Issues
      - VPHE740H Art Writing
      - VPHE720H Art, the Museum, and the Gallery
      - VPHE430H Curating Contemporary Art
      - VPED441H Curating Historical Art
   c. Core courses:
      - HUMB111H Critical Thinking, Reasoning and Decision Making
      - VPAB053H Introduction to Contemporary Cultural Theory
      - VPAB668H Challenging Normative Values in Social, Political and Cultural Institutions
VPAC301H Intermediate Seminar
VPAC471H The Body in Modernity: Theories and Representations
VPAC481H The Body in Contemporary Culture: Theories and Representations
VPAD05H Senior Project

4. At least 1 additional full credit at the B-, C- or D-level from the Visual & Performing Arts or another appropriate discipline, chosen in consultation with the Program Director.

Students in Curricular Studies must maintain a minimum GPA of 2.5

Music stream

The Specialist in Art and Culture (Music) requires 14.5 credits, including 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level as follows:

1. The Major Program in Music and Culture
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside of the Music Major

2. Core courses:
   HUMB11H Critical Thinking, Reasoning and Decision Making
   VPAA09H Visual and Performing Arts in the Digital Age
   VPAB05H Introduction to Contemporary Cultural Theory
   VPAC03H Intermediate Seminar
   VPAC471H The Body in Modernity: Theories and Representations
   VPAC481H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 additional full credit at the B-, C- or D-level from the Visual & Performing Arts or another appropriate discipline, chosen in consultation with the Program Director.

Studio stream

The Specialist in Art and Culture (Studio) requires 14.5 credits, including 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level as follows:

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:
   HUMB11H Critical Thinking, Reasoning and Decision Making
   VPAA09H Visual and Performing Arts in the Digital Age
   VPAB05H Introduction to Contemporary Cultural Theory
   VPAC03H Intermediate Seminar
   VPAC471H The Body in Modernity: Theories and Representations
   VPAC481H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 additional full credit at the B-, C- or D-level from the Visual & Performing Arts or another appropriate discipline, chosen in consultation with the Program Director.

Theatre and Performance Studies stream

The Specialist in Art and Culture (Theatre and Performance Studies) requires 13.5 credits, including 4.0 credits at the C- or D-level of which at least 1.0 must be at the D-level as follows:

1. The Major Program in Theatre & Performance Studies
   plus
   Two full credits at the A- and/or B-level in Visual and Performing Arts from areas outside of the Theatre & Performance Studies Major.

2. Core courses:
   HUMB11H Critical Thinking, Reasoning and Decision-Making
   VPAA09H Visual and Performing Arts in the Digital Age
   VPAB05H Introduction to Contemporary Cultural Theory
   VPAC03H Intermediate Seminar
   VPAC471H The Body in Modernity: Theories and Representations
   VPAC481H The Body in Contemporary Culture: Theories and Representations
   VPAD05H Senior Project

3. At least 1 additional full credit at the B-, C- or D-level from the Visual & Performing Arts or another appropriate discipline, chosen in consultation with the Program Director.
VPAC503H3 Collaborations in the Visual and Performing Arts
An introduction to interdisciplinary collaboration in art and culture. Drawing on a wide range of examples from the disciplines of visual art, music, and theatre, this course explores relationships between and across the arts, tracing the history and development of interdisciplinarity. Breadth requirement: Arts, Literature & Language
Prerequisite: At least 5 full credits in the Specialist in Art and Culture including one credit at the B-level.

VPAC504H3 "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 reviews the dynamics of time, space and existence, and asks fundamental questions about the body and performance. Breadth requirement: Arts, Literature & Language
Limited enrolment: 12
Exclusion: (VPDC006H1, VPDC57H3)
Prerequisites: [(VPDC601H1 & VPDC602H1) or (VPSC177H1) & permission of instructor]

VPAC474H3 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 representing normality or perversion, "feminine" or "masculine", as heroic, as beauty in monstrosity, legitimacy or illegitimacy, nature or culture. Same as ENGC76H3
Breadth requirement: Arts, Literature & Language
Limited enrolment: 45
Exclusion: (ENGCC76H1, VPAC47H3)
Prerequisites: Two full credits at the B level or above from ENG, WST, VPA, VPH, and/or VPS, or permission of the instructor.

VPAC484H3 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, culture, and ethnicity. Same as ENGC77H3
Breadth requirement: Arts, Literature & Language
Limited enrolment: 45
Exclusion: (ENGCC77H1, VPAC48H3)
Prerequisites: Two full credits at the B level or above from ENG, WST, VPA, VPH, and/or VPS, or permission of the instructor.

VPAC891H3 Sound and Spectacle: Intersections and Exchanges in Music and the Visual Arts
Bringing together students and instructors from music and art history, the seminar investigates selected historical and cultural themes through a study of unique intersections between these fields. An interdisciplinary approach encourages critical analysis and evaluation of interpretation, cultural context and reception from a variety of perspectives. Breadth requirement: History, Philosophy & Cultural Studies
Prerequisites: [VPHA46H1 & at least one VPH course at the B-level] or [at least one course from the sequence VPMB801H1-VPMB82H1]
Recommended preparation: HUMA401H
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 in 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 practice in 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.

VPAC47H and VPAC48H are also art history courses and count towards the Art History Major and Minor programs.

Guidelines for 1st year course selection
Students who intend to complete an Art History program should include HUMA01H and an A level Art History course in their 1st year course selection.

Art History Study Guide is available at: http://www.unc.utoronto.ca/7ehumdev/VPA/ArtHistory/studyguide/

MAJOR PROGRAM IN ART HISTORY
Program Supervisor: L. Carney (416-287-7171) Email: art-history-program-supervisor@unc.utoronto.ca

Program Requirements
Students must complete 2.5 full credits as follows:
1. HUMA01H plus one-half credit at the A-level in Art History.
2. VPBH39H
3. 3.5 full credits at the B-level in Art History (VPAB05H & VPAB06H may be used towards this requirement).
4. 2.5 full credits in Art History at the C-/D-level (which may include VPAC47H, VPAC48H, VPAC99H, and/or HISC52H).

MINOR PROGRAM IN ART HISTORY
Program Supervisor: L. Carney (416-287-7171) Email: art-history-program-supervisor@unc.utoronto.ca

Program Requirements
Students must complete 4.0 full credits from the courses below as follows:
1. HUMA01H plus one-half credit at the A-level in Art History.
2. VPBH39H
3. 1.0 full credit at the B-level in Art History.
4. 1.5 full credits in Art History at the C- or D-level (which may include VPAC47H, VPAC48H, VPAC99H, and/or HISC52H).

VPHIA46H3 Ways of Seeing: Introduction to Art Histories
How and why are objects defined as Art? How do these 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 arts.

Breadth requirement: Arts, Literature & Language
Exclusion: (FAH100Y), FAH102H

VPHIB07H3 Agency and Pluralism in Social and Cultural Transformations
Transformations in social and cultural institutions have been achieved through the agency of individuals who have embodied the values of pluralism in their personal and professional lives. Students will explore model examples and will develop projects they might use to advance this aim in a variety of professional situations.

Breadth requirement: Social & Behavioural Sciences
Prerequisite: VPAB06H or VPAB07H

VPHIB03H3 Ten Key Words in Art History: Unpacking Methodology
Key concepts in art history, including intention, meaning, style, materiality, identity, production, reception, gender, visibility, and history. Students will explore critical questions such as whether and how to read artist's biographies into their art. This course helps students understand the discipline and develops critical thinking and research skills required in advanced courses.

Breadth requirement: Arts, Literature & Language
Recommended preparation: VPAIA46H
Exclusion: FAH102H
284 Art History

VFHS3153 The Human Figure in Greek Art (6th - 4th Centuries B.C.)
A study of representations of men and women in sculpture and vase painting, two of the richest media in Greek art. This study reveals narratives of myth and legend, reflections of everyday life in Greece, and social values such as the perception of gender.
Breadth requirement: Arts, Literature & Language
Corequisite: Art course in art history or VPA465H or HUMA401H

VFHS4220 Carolingian and Romanesque Art and Architecture
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. Ideal for the art of the invasion period.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH2125H

VFHS4860 Paris: The Capital of the 19th Century: Impressionism and Post-Impressionism
Impressionist painting as a turning point in Western art, based in the rapidly expanding modernized city of Paris, "the capital of the nineteenth century," but ultimately turning to landscape as a major source of inspiration.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH346H, (FAH378H)

VFHS5200 Africa Through the Photographic Lens
The centrality of photographic practice to African cultures and histories from the period of European imperialism, the rise of modernist "primitive" and the birth of ethology and anthropology to contemporary African artists living on the continent and abroad.
Breadth requirement: Arts, Literature & Language
Prerequisite: None. Visual art studio students are encouraged to enrol.

VFHS5220 Ancient Art and Architecture (ca. 900 B.C. - 300 A.D.)
The artistic achievements of Greece and Rome. This course examines Greek architectural design with its concerns for ideal proportion and balance, Roman technical innovations; and Classical painting and sculpture and their enormously influential techniques for creating illusions of the real world.
Breadth requirement: Arts, Literature & Language
Exclusion: (FAH205H), FAH320H
Prerequisite: VPH4A4H recommended

VFHS5370 Medieval Art
The origins of European artistic traditions in the early Christian, Mediterranean world; how these traditions were influenced by classical, Byzantine, Gothic 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.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH1246H, (FAH251H)
Prerequisite: VPH4A4H recommended.

VFHS5780 Women in the Arts: Hot Mamas, Amazonas, and Madonnas
Women artists of the last 150 years, their relationships to "mainstream" art, and the influences of feminism on the production and reception of art.
Breadth requirement: Arts, Literature & Language
Exclusion: VIS209H
Prerequisite: [WSTA401H & WSTA403H or WSTA402H] or VPH4A4H or permission of the instructor.

VFHS5860 Modern Art and Culture
Nineteenth and twentieth century art in relation to the modern world. What "modern" means when used to describe art, and how art is affected by the dynamic cultural, economic, social, and political contexts of the modern world.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH246H, (FAH257H), (FAH258H)

VFHS590H Current Art Practices
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.
Breadth requirement: Arts, Literature & Language
Exclusion: (FAH289H)

VFHS6800 Canadian Visual Art
What Canadian artists have made in the country's diverse cultural contexts, from 18th century churches of Quebec, designed and decorated by talented family studios, to First Nations art and major twentieth century Anglo-Canadian and Quebecois painters.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH248H, (VFHS474H)

VFHS6810 Space, Place and the Arts
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 in perspective in painting, performance, installation and other arts, and what these may communicate to us.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH390H, FAH390Y
VPHEB393H Fame, Glory and Spectacle: 14th-16th Century Art in Italy
This course is an introduction to art and visual culture produced in Italy ca. 1350-1550. Students will explore new artistic media and techniques, along with critical issues of social, cultural, intellectual, theoretical and religious contexts that shaped the form and function of art made during this era.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH236H1, FAH274H1
Prerequisite: VPHEA46H1

VPHEB649H3 Baroque Visions
This course introduces the art and culture of 17th century Europe and its colonies. Art of the Baroque era offers rich opportunities for investigations of human exploration in geographic, spiritual, intellectual and political realms. We will also consider the development of the artist and new specializations in subject and media.
Breadth requirement: Arts, Literature & Language
Exclusion: FAH231H1, FAH279H1
Prerequisite: VPHEA46H1

VPHEB659H3 Exhibiting Africa: Spectacle and the Politics of Representation
Students will read critical texts on the politics of representation, postcolonialism, museology, and institutional critique to apply to the histories of exhibition and reproduction of African arts, in particular, and the arts of non-Western cultures in general.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPHEA46H1 or ATSA01H1
Corequisite: VPAB89H1 or VPAB90H1

VPHEB679H3 Religion in the Arts: Buddhist Arts and Cultures
This course will serve as an introduction to the field of Buddhist art historiography, with an emphasis on the relationships between visual arts, Buddhist philosophy and religion, and the cultural manifestations of the faith and its arts across the world. The classes will take advantage of collections at the ROM.
Breadth requirement: Arts, Literature & Language

VPHEB689H3 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 intersection of the political, economic and aesthetic aspects of mass media with the realm of "fine" arts across history and cultures. We will explore notions of the public, the mass, and the simulation.
Breadth requirement: Arts, Literature & Language

VPHEB709H3 Topics in Global Visual Culture
This course will focus on changing themes in the study of visual culture (visual arts, film, new media) within a global context.
Breadth requirement: Arts, Literature & Language
Exclusion: VCC320H1, VCC304H1
Prerequisite: VPHEA46H1

VPHEB719H3 Exhibiting Art
A critical look at ways of exhibiting art, from a variety of international, historical and contemporary perspectives with emphasis on today's displays in public and private institutions, and on beyond-the-gallery installation, performance, and virtual art practices.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPHEA46H1

VPHEB729H3 Museum and Curatorial Practice: Theoretical and Ethical
This course will introduce students to the theoretical contexts of museum practices and explore the ethics of curatorial practice. Students will investigate interpretations of sensitive material, including historical, cultural and religious artworks, and examine case studies of problematic challenges to curatorial responsibilities.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPHEA46H1

VPHEB739H3 Visualizing Asia
A survey of the art of China, Japan, Korea, India, and Southeast Asia. We will examine a wide range of artistic production, including ritual objects, painting, calligraphy, architectural monuments, textiles, and prints. Special attention will be given to social contexts, belief systems, and interregional exchanges.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPA010H1 or VPHEA46H1

VPHEB749H3 Art in Early Modern Europe: Renaissance Outside of Italy
This course explores the rich visual culture produced in northern and central Europe 1400-1600. Topics such as the rise of print culture, religious conflict, artistic identity, contacts with other cultures and the development of the art market will be explored in conjunction with new artistic techniques, styles and materials.
Breadth requirement: Arts, Literature & Language
Recommended preparation: VPA010H1
Exclusion: FAH231H1

VPHEB759H3 Religion in the Arts: Hinduism and Jainism
This course explores Eastern religions and artworks, 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, beliefs and performance. The classes will take advantage of collections at the ROM.
Breadth requirement: Arts, Literature & Language
Recommended preparation: VPHEA46H1 or RELA01H1 or RLG02H1 or HISB57H1 or GAS01H1
Exclusion: (VPHEB53H1, VPHEC51H1)
VPHC5162 Word and Image
The interface between modern and contemporary arts and the communicative power of language, the 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.
Breadth requirement: Arts, Literature & Language
Preerequisite: (VPHA46H1 or VPHB58H1) or permission of instructor

VPHC5353H3 The Silk Routes
The Silk Routes were a lattice 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 Scarborough will focus on the art produced along the Silk Routes in 7th to 9th century Afghanistan, India, China and the Taklamakan region.
Breadth requirement: Arts, Literature & Language
Prequisite: One full credit in art history or in Asian or medieval European history or permission of instructor

VPHC4563H3 Art Writing
Art criticism as a complex set of practices 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).
Breadth requirement: Arts, Literature & Language
Limited enrolment: 25
Prequisite: 2 full credits at the B level from VPA, VPH, and/or VPS

VPHC4863H3 Explorations in Early Modern Art
This seminar-format course will offer students the opportunity to investigate critical theories and methodologies of the early modern period (roughly 1400-1700). Focusing on such topics as a single artist, artwork or theme, students will become immersed in an interdisciplinary study that draws on impressive local materials from public museum and library collections.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prequisite: VPHA46H1 and [one of VPHB63H1 or VPHB64H1 or VPHB74H1]

VPHC4863H3 Art in Global Cities
This course looks at the global city as a hub for the creation of visual, performing arts and architecture. How have 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?
Breadth requirement: Arts, Literature & Language
Exclusion: (VPHC32H1)
Prequisite: (VPHB58H1 or VPHB59H1) or permission of instructor
VPHC720H3 Art, the Museum, and the Gallery

Art and the settings in which it is seen in cities today. Some mandatory classes to be held in Toronto museums and galleries, giving direct insight into current exhibition practices and their effects on viewer's experiences of art; students must be prepared to attend these classes.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPHB71H & VPHB72H

VPHC730H3 Home, Away and In Between: Artists, Art, and Identity

The interplay among visual, performing and literary arts and experience of exile, diaspora, displacement and placemaking; how the normative, transitional nature of today's world influences contemporary artists' practices.

Readings from art history, visual anthropology, cultural studies, ethnic studies and literary criticism. Considerations of memory, autobiography, community and liminality in relation to experiences of local Canadian artists.

Breadth requirement: Social & Behavioural Sciences
Exclusion: (VPA/B90H)

VPHC740H3 A Tale of Three Cities: Introduction to Contemporary Art in China

An introduction to Chinese contemporary art focusing on three cities: Beijing, Shanghai, and Guangzhou. Increasing globalization and China's persistent self-envasion has brought radical changes to cities, a subject of fascination for contemporary artists. The art works will be analyzed in relation to critical issues such as globalization and urban change.

Breadth requirement: Arts, Literature & Language
Prerequisite: 2 full credits at the B-level in Art History, Asian History, and/or Global Asia Studies, including at least one of VPHB39H, VPHB73H, HHS39H, GASS33H, GASS33HR, or GASS33SH.

VPHD410H3 VPHD427S Supervised Reading in Art History

A course offering the opportunity for advanced investigation of an area of interest; for students who are nearing completion of art history programs 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.

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.

VPHD431H3 Curating Contemporary Art

Curatorial practice and the responsibilities of the curator, such as the intellectual and practical tasks of producing a contemporary art exhibition, researching Canadian contemporary art and artists, building a permanent collection, and administrating a public art competition, and critical writing about works of visual art in their various contexts. Studio and/or gallery visits required.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: 1.0 full credits including VPHB39H, VPHB71H & VPHB72H

VPHD440H3 Curating Historical Art

Time and history bring different factors to our understanding and interpretation of artworks. Students will explore both intellectual and practical factors concerning curating historical art, from conservation, research, and handling issues to the importance of provenance, collecting, and display, through workshops, critical writing and discussion, field trips, and guest speakers.

Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: 1.0 full credits including VPHB39H & VPHB71H & VPHB72H

VPHD450H3 Seminar in Art and Anthropology

This seminar will address the entanglements of art historical and anthropological approaches to objects, images, creativity, and interpretation. Looking at the power of images within societies, we will consider the role of the artist/media, the identity of the audience/viewer, and the challenges of interpreting them through cross cultural, transcultural frameworks.

Prerequisite: 1.0 full credits including VPHA41H & VPHB39H

VPHD460H3 Visual Encounter: The Meeting of Eastern and Western Art

This course explores the cultural construction of vision with a particular focus on the encounters between two cultural systems: Euro-American and East Asian. The collision of West and East yielded dramatic results in the realm of visual culture, altering the ways of seeing.

Breadth requirement: Arts, Literature & Language
Prerequisite: 1.0 full credits, including at least one of VPHB39H, VPHB73H, HHS39H, GASS33H, GASS33HR, or GASS33SH & a further 1.5 full credits at the B- or C-level in Art History, Asian History, and/or Global Asia Studies or permission of the instructor.

Arts Management

SPECIALIST PROGRAM IN ARTS MANAGEMENT

Program Supervisor: S.L. Helwig (416-287-7160) Email: arts-management-program-supervisor@utsc.utoronto.ca

Arts Management is designed for students with an interest both in the arts and in the business of the arts, primarily from a not-for-profit perspective. It provides students with a solid grounding in the knowledge and skills necessary for fulfilling professional careers in producing, presenting and exhibiting organizations (theatres, opera companies, orchestras, dance companies, galleries, museums), arts councils, arts service organizations, government, and many other related areas, or for graduate studies in disciplines such as Arts Management, Cultural and Public Policy, and Museum or Curatorial Studies. For further information, see http://www.utsc.utoronto.ca/artsmanagement/.
Program Admission
Enrollment in the program is limited and entry is competitive. Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, and demonstrated interest and potential ability in Arts Management.

Program Requirements
Students complete seven full credits in the arts management core program, two full credits in the management field, six to eight full credits from one or two related fields(s). Continuous consultation with the Program Supervisor is strongly encouraged for all students in each year of their program.

1. Arts Management Core Courses
   Students must complete seven full credits as follows:
   a) The following five full credits:
      VPA110H Introduction to Arts Management
      VPA120H Audience and Resource Development
      VPA165H Introduction to Contemporary Cultural Theory
      VPA207H Equity & Diversity in Arts Organizations
      VPA210H Financial Management for Arts Managers
      VPA215H Arts Education and Outreach
      VPA310H Managing and Leading in Cultural Organizations
      VPA315H Planning and Project Management in the Arts and Cultural Sector
      VPA315H Cultural Policy
      VPA325H Senior Seminar in Arts Management
   b) One half credit from the following list:
      VPA175H Arts Marketing
      VPA185H Fundraising and Development in the Arts
   c) One half credit from the following list:
      VPC195H Performing Arts Management: Principles and Practices
      VPC205H Visual Arts Management: Principles and Practices
   d) One full credit from the following list:
      VPA140H Legal and Human Resource Issues in Arts Management
      VPA200E Agency & Pluralism in Social & Cultural Transformations
      VPA315H Arts, Culture, and Policy
      VPA325H Independent Studies in Arts Management

2. Management Field of Study
   The following two full credits are required:
   a) MGT303H Introduction to Management I
   b) MGT304H Introduction to Management II
   c) Plus one additional full credit from Management or Economics (normally at the C level).
   Note: Arts Management students have access to the following Management courses: MG223H, MGT229H, MGTC33H, MGTC44H & MGTD4SH. Arts Management students interested in other Management courses must approach the Arts Management Program Supervisor before or very early in the enrolment period to discuss suitability and to request access. Prerequisite knowledge is required for these courses.

3. Related Field(s) of Study
   Six to eight full credits, including at least one half credit at the C- or D-level, from one or two related fields of study. These courses must:
   a) Consist of six full credits of those credits required within the Major program in one of the artistic disciplines within Visual and Performing Arts (Art History, Music, Studio and Theatre & Performance Studies). Students choosing this option may wish to take one or two additional credits necessary to complete the Major program in place of unrelated elective courses.
   b) Consist of the eight full credits required of two Minor programs, at least one of which must be in a Visual and Performing Arts artistic discipline.

   The completion of a Major program in a chosen artistic field is particularly valuable for students contemplating graduate studies; additional areas of studies (offered by the double Minor option) may be valuable in certain fields of work and further studies.

   Depending on the option chosen in 3 above (Related Field(s) of Study) students require a further three to five full credits in order to meet the Honours B.A. requirement of twenty credits. Arts Management students are encouraged to use these credits to take courses outside their area(s) of concentration in order to broaden their understanding of contemporary issues and their historical context, to enhance their communication skills and to fulfill the breadth requirements. Arts Management courses that are not chosen to fulfill requirements in 1b, 1c and 1d above may be taken as electives.
Courses in the first two years of the program

The first year of study would normally consist of five full credits (10 courses - five in each of two sessions) including VPA010H, VPA121H, MGT043H, MGT044H, at least three courses from the related field(s) of study (including HUMA01H), and electives (preferably including HUMB11H). The second year of study would normally consist of five full credits to include VPAB05H, VPAB15H, VPAB16H, possibly VPAB07H & VPAB13H, and courses in the related field(s) of study.

SPECIALIST (CO-OPERATIVE) PROGRAM IN ARTS MANAGEMENT

Program Supervisor: S.L. Helbig (416-287-7160) Email: arts-management-program-supervisor@utsc.utoronto.ca
Co-op Contact: usacoop@utsc.utoronto.ca

The Co-operative Program in Arts Management is designed for students with an interest both in the arts and in the business of the arts, primarily from a not-for-profit perspective, and normally requires a four to five years to complete. It combines academic study in a wide variety of subjects with practical paid work experience, preparing students with a solid grounding in the knowledge and skills necessary for fulfilling professional careers in producing, presenting and exhibiting organizations (theatres, opera companies, orchestras, dance companies, galleries, museums), arts councils, arts service organizations, government, and many other related areas, or for graduate studies in disciplines such as Arts Management, Cultural and Public Policy, and Museum or Curatorial Studies. For further information, see http://www.utsc.utoronto.ca/artsmanagement/

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

Note: For information on the Co-operative Program in Humanities or the Management Programs which operate separately from the Specialist (Co-operative) Program in Arts Management, please see the Humanities Co-operative Program or the Management sections of this Calendar respectively.

Program Admission

Enrolment in the program is limited and entry is competitive.

Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, and demonstrated interest and potential ability in Arts Management.

Program Requirements

Co-op students follow the course requirements specified above for the Specialist Program in Arts Management, plus the non-credit Arts & Science Co-op Work Term Preparation Course and the completion of two work terms of twelve to sixteen weeks each.

Courses in the first two years of the program

The first year of study would normally consist of five full credits (10 courses - five in each of two semesters) including VPA010H, VPA121H, MGT043H, MGT044H, at least three courses from the related field(s) of study (including HUMA01H), and electives (preferably including HUMB11H).

The second year of study would normally consist of five full credits to include VPAB05H, VPAB15H, VPAB16H, possibly VPAB07H & VPAB13H, and courses in the related field(s) of study.

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 (with a minimum 2.5 cumulative grade point average) and have completed at least 9.0 full credits including:

• Two full credits from Art History, Music, Studio or Theatre & Performance Studies
• VPA010H Introduction to Arts Management
• VPA121H Audience and Resource Development [or (VPAB12H) & (VPAB14H)]
• MGT043H Introduction to Management I
• MGT044H Introduction to Management II

Students must also successfully complete Arts & Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

To be eligible for their second work term, students must be in good standing in the program (with a minimum 2.5 Cumulative Grade Point Average), have completed at least 12.5 full credits and have received a satisfactory evaluation of their performance and work term report for their first placement.
VPAA10H3 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.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPA10H1

VPAA12H3 Audience and Resource Development
An introduction to the essential and interconnected areas of marketing and fundraising in the arts.
Breadth requirement: Arts, Literature & Language Exclusion: (VPAB12H, VPAB14H)
Prerequisite: VPA10H1

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.
Breadth requirement: Social & Behavioural Sciences Exclusion: MGMT0H1
Prerequisites: VPA10H1 & [VPA12H1 or (VPAB12H1 or VPAB14H1)]

VPAB15H3 Arts Education and Outreach
An introduction to public programming, community arts, and education within the arts organization and beyond. This course will consider the practical and the broader historical, social, and policy issues related to the relationship between arts programming and audiences.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 4.0 credits including VPA10H1

VPAB16H3 Managing and Leading in Cultural Organizations
An introduction to the theories and practice of leadership, employee and volunteer management, and organizational behaviour as they apply to the not-for-profit arts sector.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPA10H1 & (VPAB12H1 or VPAB14H1) or permission of instructor

VPAC15H3 Cultural Policy
A survey of the principal 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.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPAB10H1

VPAC16H3 Legal and Human Resources Issues in Arts Management
This course is a study of legal and practical human resource issues from an arts management perspective. Topics will include copyright, freedom of expression, censorship, and issues related to labour relations and contracts in the cultural sector.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 30
Prerequisite: 8.0 credits including VPA10H1

VPAC17H3 Arts Marketing
An advanced study of marketing within the arts and cultural sector. This course facilitates a sophisticated 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.
Breadth requirement: Arts, Literature & Language
Prerequisites: VPA10H1 & [(VPA12H1 & VPA15H1) or (VPAB12H1)]

VPAC18H3 Fundraising and Development in the Arts
An advanced study of fundraising and resource development within the arts and cultural sector. This course facilitates a sophisticated understanding of the knowledge and skills required for an arts manager to develop and increase contributed revenue to support the artistic mission of cultural organizations.
Breadth requirement: Arts, Literature & Language
Prerequisites: VPA10H1 & [(VPA12H1 & VPA16H1) or (VPAB14H1)]

VPAC19H3 Performing Arts Management: Principles and Practices
An advanced investigation of arts management practice within theatre, music and other live performing arts organizations. This course will allow students to develop discipline-specific knowledge and skills and apply foundational knowledge to an understanding of the unique needs of this sector.
Breadth requirement: Arts, Literature & Language
Prerequisites: VPA10H1 & at least 2 full credits in Music or Theatre and Performance Studies & [VPA12H1 or permission of the instructor]

VPAC20H3 Visual Arts Management: Principles and Practices
An advanced investigation of arts management practice within Canadian art galleries, museums and heritage institutions. This course will allow students to build on foundational studies and develop discipline-specific knowledge and skills through experiential methods and objective study.
Breadth requirement: Arts, Literature & Language
Prerequisites: VPA10H1 & at least 2 full credits in Studio Art History & [VPA12H1 or enrolment in Curatorial Studies or permission of the instructor]
VPAD12H3 Senior Seminar in Arts Management

A seminar course providing the opportunity for students to reflect on and synthesize the knowledge and skills gained in previous courses and related experiences.

Prerequisite: At least 16.0 full credits including VPAC13H1.

VPAD13H3 Art, Culture, and Policy

An exploration of current theoretical issues in cultural policy and arts management, enabling students to synthesize and develop their prior knowledge of cultural theory and cultural policy. Adopting a case study approach, the course will examine issues and controversies in both the performing and visual arts.

Breadth requirement: Arts, Literature & Language

Prerequisite: VPAC13H1.

VPAD14H3 Independent Studies in Arts Management

A directed research and/or project-oriented course for students who have demonstrated a high level of academic maturity and competence. Qualified students will have the opportunity to investigate an area of interest to both student and supervisor in traditional or emerging subjects related to the field of Arts Management.

Limited enrolment: 6

Exclusion: MGTD80H1

Prerequisite: At least 1 full credit 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 session.

Music

Guidelines for course selection: Music studies normally begin with VPMA79H1, VPMA80H1, and VPMA90H1, which serve as the prerequisites for more advanced courses in all areas. These core music program courses are designed for students with RCM Grade II Rudiments or equivalent competence (fluency in reading music notation and tonal music rudiments).

Incoming students must register in the course appropriate to their level of musical training, based on the results of an online music placement test. The placement test is MANDATORY for all students who register for the first time in VPMA79H1, VPMA80H1, and VPMA90H1, and should be completed before the beginning of classes in September. Any students who are not admissible into the initial program courses VPMA79H1 and VPMA80H1 on the basis of their placement test results will be advised to take VPMA89H1 as a preparation for future program study. Students should complete the online placement test, and then register in the appropriate level of course according to the results specified by the test. Enrolment status in VPMA79H1, VPMA89H1, and VPMA90H1 will show an INH until placement results are confirmed. Students who register for these courses without completing the test will be deregistered. Please see the Humanities Music webpage for details and a link to the online placement test.

Note that students should take VPMA79H1, VPMA80H1 and VPMA90H1 within the first year of program study, and that the core music program courses must be taken in appropriate sequence. Normally, an A-level VP course should not be taken at the same time as, or after, a B-level VP course. Please do not hesitate to consult Program Supervisors and other faculty members for further advice about course selection and Programs.

Performance Courses

The following performance courses are available to all qualified faculty, staff and students, some on a non-credit basis. Enrolment is by interview/audition held during Orientation or the first week of classes in Fall and Winter sessions. Details are posted on the bulletin board outside AA-303 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/audition.

- VPMA70H1 Vocal Ensemble 1a
- VPMA71H1 Vocal Ensemble 1b
- VPMA72H1 Vocal Ensemble 2a
- VPMA73H1 Vocal Ensemble 2b
- VPMA74H1 Vocal Ensemble 3a
- VPMA75H1 Vocal Ensemble 3b
- VPMO70H1 Vocal Ensemble 4a
- VPMO71H1 Vocal Ensemble 4b
- VPMO72H1 Vocal Ensemble 5a
- VPMO73H1 Vocal Ensemble 5b
- VPMO74H1 Vocal Ensemble 6a
- VPMO75H1 Vocal Ensemble 6b

There are two separate groups available under Vocal Ensemble. They are identified in the timetable and elsewhere by section numbers as follows: Concert Choir - Section 01, Jazz Choir - Section 02.

- VPMA73H1 Instrumental Ensemble 1a
- VPMA74H1 Instrumental Ensemble 1b
- VPMA75H1 Instrumental Ensemble 2a
- VPMA76H1 Instrumental Ensemble 2b
- VPMA77H1 Instrumental Ensemble 3a
- VPMA78H1 Instrumental Ensemble 3b
- VPMA79H1 Instrumental Ensemble 4a
- VPMA80H1 Instrumental Ensemble 4b

There are four separate groups available under Instrumental Ensemble. They are identified in the timetable and elsewhere by section numbers as follows: Concert Band - Section 01, String Ensemble - Section 02, Flute Choir - Section 03, Jazz Band - Section 36.

General Interest Courses

- Language of Music
- Listening to Music
- Elementary Musicianship
- Music of the World's Peoples
- Music for the Theatre
- Jazz
- Popular Music
- Film Music

Assume no previous experience in music.
Major and Minor Program Courses
The three core B level courses, VPMB09H1 VPMB12H1, cycle frequently during the three academic sessions. C-level courses are offered on a three-year rotational cycle during the F and W sessions only. 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
Program Supervisor: S. Lee (416-287-7194) Email: music-program-supervisor@music.utoronto.ca
Program Requirements
Students are required to complete eight (8.0) credits as follows:

1. HUMA01H1 Exploring Key Questions in Humanities
   VPMX79H1 Introduction to Music and Culture I
   VPAH80H4 Introduction to Music and Culture II
   VPMG89H1 Materials of Music I
   VPMG99H1 Music of the World's Peoples
   VPMG99H3 Materials of Music II
2. One and one-half (1.5) credits from the sequence VPMB09H1 to VPMB12H1.
3. One half (0.5) credit chosen from the following courses:
   VPMG75H3 Music in Islamic Cultures
   VPMG77H3 Music in Religion and Ritual
   VPMG78H1 Balinese Gamelan: Performance and Context
   VPMG79H3 Performing Arts of Asia
   VPMG89H1 Popular Music in a Cross-Cultural Context
4. Two (2.0) credits chosen from VPCG05H1 and the sequence VPMG04H1 to VPMG07H1. Qualified students may substitute one half credit from VPMG08H1 and the sequence VPMG05H1 to VPMG07H1. Depending on topic, IEEC71H1, IEEC72H1, IEEC81H1 or IEEC82H1 may also be substituted with the permission of the program supervisor.
5. One (1.0) full credit in Performance.

MINOR PROGRAM IN MUSIC AND CULTURE
Program Supervisor: S. Lee (416-287-7191) Email: music-program-supervisor@music.utoronto.ca
Program Requirements
Students are required to complete 4.0 full credits as follows:

1. VPMG79H1 Introduction to Music and Culture I
   VPAH80H4 Introduction to Music and Culture II
   VPMG89H1 Materials of Music I
   VPMG99H1 Music of the World’s Peoples
2. 1.0 credit from the sequence VPMB09H1 to VPMB12H1.
3. 1.0 credit chosen from VPCG05H1 and the sequence VPMG04H1 to VPMG07H1. Depending on topic, IEEC71H1, IEEC72H1, IEEC81H1 or IEEC82H1 may also be substituted with the permission of the program supervisor.

VPMG69H5 Chamber Music I
The practical study of small ensemble performance through chamber music repertoire, including public presentations and group rehearsals.
Prerequisite: Audition/Interview required.

VPMG70H3 Vocal Ensemble Ia
The practical study of vocal ensemble performance. A continuation of VPMG70H1. The practical study of small ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/Interview required. Students may participate in more than one ensemble concurrently with a maximum of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMG70H1

VPMG71H3 Vocal Ensemble Ib
A continuation of VPMG70H1. The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/Interview required. Students may participate in more than one ensemble concurrently with a maximum of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMG70H1
VPMATH 353 Instrumental Ensemble Ia
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 02), Flute Choir (Section 03), and Jazz Band (Section 04). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble. Breadth requirement: Arts, Literature & Language Exclusion: (VPMATH 253)

VPMATH 454 Instrumental Ensemble Ib
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 02), Flute Choir (Section 03), and Jazz Band (Section 04). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble. Breadth requirement: Arts, Literature & Language Exclusion: (VPMATH 254)

VPMATH 373 Introduction to Music and Culture I
A study of the basic materials, principles of design, and cultural significance of Western music, preparing students for further studies in music at the university level. Online music placement test required. Students are normally expected to complete VPMATH 373 and VPMATH 473 in the same academic year. Breadth requirement: History, Philosophy & Cultural Studies Prerequisite: Royal Conservatory of Music Grade 4 Rudiments or equivalent; online music placement test required.

VPMATH 473 Introduction to Music and Culture II
A continuation of VPMATH 373 (Introduction to Music and Culture I). Students are normally expected to complete VPMATH 373 and VPMATH 473 in the same academic year. Breadth requirement: History, Philosophy & Cultural Studies Prerequisite: VPMATH 373

VPMATH 393 The Language of Music
This course develops students’ understanding of the elements of Western tonal music, emphasizing the ability to recognize sound structures and to read and write them in musical notation. It prepares students for study in the music major and minor programs and provides foundations for a wide range of musical activities. Breadth requirement: Arts, Literature & Language Prerequisite: Online music placement test required.

VPMATH 493 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 and musical training. Online music placement test required. Breadth requirement: Arts, Literature & Language Prerequisite: Royal Conservatory Grade II Rudiments or equivalent; online music placement test required.

VPMATH 393 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. Breadth requirement: History, Philosophy & Cultural Studies Exclusion: VPMATH 393 may not be taken after or concurrently with VPMATH 493 or VPMATH 494.

VPMATH 393 Elementary Musicianship I
A practical introduction to musicianship and music rudiments through the development of basic vocal or instrumental techniques and an emphasis onaural skills. Breadth requirement: Arts, Literature & Language

VPMATH 393 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 important role in social and cultural life. Audio-visual materials feature prominently. No previous musical experience is necessary. Breadth requirement: Social & Behavioural Sciences Exclusion: MUS200H

VPMATH 893 Chamber Music II
The practical study of small ensemble performance through chamber music repertoire, including public presentations and group recitals. Breadth requirement: Arts, Literature & Language Prerequisite: VPMATH 493. Audition/interview required.

VPMATH 703 Vocal Ensemble Ila
A continuation of VPMATH 703 (Vocal Ensemble I). Students are normally expected to complete VPMATH 703 and VPMATH 803 in the same academic year. Breadth requirement: History, Philosophy & Cultural Studies Prerequisite: VPMATH 703

VPMATH 803 Vocal Ensemble Iib
The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble. Breadth requirement: Arts, Literature & Language Prerequisite: VPMATH 803

VPMATH 713 Vocal Ensemble IIIb
A continuation of VPMATH 713 (Vocal Ensemble II). The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble. Breadth requirement: Arts, Literature & Language Prerequisite: VPMATH 713
VPM873H3 Instrumental Ensemble IIA
A continuation of VPM747H1.
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 02), Flute Choir (Section 03), and Jazz Band (Section 04). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breath requirement: Arts, Literature & Language
Exclusion: (VPM872H1)
Prerequisite: VPM747H1 or VPM872H1

VPM874H3 Instrumental Ensemble IIb
A continuation of VPM873H1.
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 02), Flute Choir (Section 03), and Jazz Band (Section 04). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breath requirement: Arts, Literature & Language
Exclusion: (VPM872H1)
Prerequisite: VPM872H1

VPM875H3 Music in Islamic Cultures
An exploration of the relationship between music and Islam, and its manifestation in different genres (religious, folk, classical, popular) and regions (from the Middle East to Indonesia, as well as the global diaspora). This course examines the variety of musical expression within cultures linked by Islamic religious and values.
Breath requirement: Social & Behavioral Sciences
Prerequisite: None
Recommended preparation: VPM899H1

VPM877H3 Music in Religion and Ritual
An examination of the role of music in the context of religion and ritual in many cultures. We will examine general theories and several ethnographic examples ranging from ancient shamanistic and animistic rituals in Central Asia and Indonesia, to music in Christian, Buddhist, Hindu, and Muslim world religions.
Breath requirement: Social & Behavioral Sciences
Prerequisite: None
Recommended preparation: VPM899H1

VPM876H3 Balinese Gamelan: Performance and Context
An introduction to the repertoire and performance of Balinese Gamelan. Combines practical music-making and academic study. Students will learn to play the Balinese Gamelan - an orchestra of bronze percussion instruments - and examine the integral function of gamelan in Balinese cultural, ceremonial, and religious life.
Breath requirement: Arts, Literature & Language
Prerequisite: None
Recommended preparation: VPM899H1

VPM879H3 Performing Arts of Asia
An examination 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.
Breath requirement: History, Philosophy & Cultural Studies
Prerequisite: None
Recommended preparation: VPM899H1

VPM880H3 Music in the Baroque and Classical Eras
An examination of music in Western Society during the period ca. 1600 to ca. 1800. This course integrates close analysis of selected compositions with a study of the historical, social, cultural, and political contexts of music-making during this period.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: (VPM877H1)
Prerequisite: VPM746H1 & VPM800H1 & VPM899H1

VPM881H3 Music in the Romantic Era
An examination of music in Western society during the period ca. 1800 to ca. 1900. This course integrates close analysis of selected compositions with a study of the historical, social, cultural, and political contexts of music-making during this period.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: (VPM883H3)
Prerequisite: VPM746H1 & VPM800H1 & VPM899H1

VPM882H3 Music in the Modern and Contemporary Eras
An examination of music in Western society during the period ca. 1900 to the present. This course integrates close analysis of selected compositions with a study of the historical, social, cultural, and political contexts of music-making during this period.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: (VPM889H3)
Prerequisite: VPM746H1 & VPM800H1 & VPM899H1

VPM886H3 Materials of Music II
A continuation of VPM890H1.
Breath requirement: Arts, Literature & Language
Prerequisite: VPM890H1 or Royal Conservatory Grade III harmony or equivalent.

VPM883H3 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.
Breath requirement: History, Philosophy & Cultural Studies
Prerequisite: None
Recommended preparation: VPM880H1 or VPM899H1

VPM884H3 Jazz
A history of jazz from its 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.
Breath requirement: History, Philosophy & Cultural Studies
VPMB5913 Elementary Musicianship II
A continuation of Music 1, preparing students for further theoretical studies and/or participation in one of the performance ensembles (Concert Choir, Concert Band, Jazz Choir, Jazz Band, String Ensemble).
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMA591H

VPMB691H 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.
Breadth requirement: History, Philosophy & Cultural Studies

VPMB697H 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.
No previous musical experience required.
Breadth requirement: History, Philosophy & Cultural Studies

VPMB699H Popular Music in a Cross-Cultural Context
Development of popular music in a global context. Topics include mass media (recordings, film, radio, etc.), urbanization, social and political issues, pop texts, dance and cultural migration.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: None
Recommended preparation: VPMA699H

VPMC691H Chamber Music III
The practical study of small ensemble performance through chamber music repertoire, including public presentations and group recitals.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMB691H
Audition/interview required.

VPMC701H Vocal Ensemble III
A continuation of VPMB71H.
The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMB71H

VPMC701H Vocal Ensemble IV
The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMB71H

VPMC710H Vocal Ensemble IIb
A continuation of VPMC701H.
The practical study of vocal ensemble performance. There are two available ensembles: Concert Choir (Section 01) and Jazz Choir (Section 02). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPMB71H

VPMC730H Instrumental Ensemble IIb
A connection of VPMC741H.
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 01), Flute Choir (Section 03), and Jazz Band (Section 03). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Exclusion: VPMC720H
Prerequisites: VPMC741H or VPMC792H

VPMC741H Instrumental Ensemble IIb
A continuation of VPMC73H.
The practical study of instrumental ensemble performance. There are four available ensembles: Concert Band (Section 01), String Ensemble (Section 01), Flute Choir (Section 03), and Jazz Band (Section 30). Audition/interview required. Students may participate in more than one ensemble concurrently with a limit of 3.0 credits in total. Students are normally expected to complete both Fall and Winter sessions (a and b) in the same ensemble.
Breadth requirement: Arts, Literature & Language
Exclusion: VPMC720H
Prerequisite: VPMC73H

VPMC781H Opera
An investigation of opera as a multimedia art form involving music, drama, and spectacle, through the study of works and attendance at live performances. The course also examines opera's entanglement with media and technologies, and the way vital social and cultural issues are represented on the operatic stage.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisites: VPMB800H & one course from the series VPMB800H-VPMB821H or (VPMB860H) or permission of instructor.

VPMC820H 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 analysis of musical compositions.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisites: VPMA691H & one course from the series VPMB800H-VPMB821H or (VPMB860H) or (VPMB891H)
VPMSC3H3 Music and Gender
An inquiry into the construction and reflection of gender and sexual identities in Western music. The course will emphasize discourses surrounding feminism and the role of women in music, masculinity studies, and gay, lesbian, bisexual and transgender studies and their relationships to musical genres, works, production and reception.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: HMUS207H
Prerequisite: VPM808H & two courses from the sequence
VPM860H-VPM862H or (VPM860H+VPM862H)

VPMSC3H3 Issues, Approaches, and Exchanges in Popular Music
An examination of issues in the study of western and non-western popular music and their intersection with other fields of humanistic inquiry. It will explore models of critical analysis and questions surrounding ideology, performance, reception, technology and the relationship of popular music to other media including cyberspace, film and television.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 1.0 full credit in Humanities at the B level.

VPMSC3H3 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: VPM808H & one course from the series
VPM860H-VPM862H or (VPM860H+VPM862H)

VPMSC3H3 Music and Politics
An inquiry into how music functions as a political force both historically and in contemporary society. Introducing students to uses of music that both reflect and shape various political positions, the course draws on methodologies from political science, history, classical studies, anthropology, cultural and literary theory.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 1.0 full credit in Humanities at the B level.

VPMSC3H3 Materials of Music III
A continuation of VPM808H, with an emphasis on analysis.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPM899H

VPMSC9H3 Introduction to Electronic Music
An introduction to understanding electronic, electroacoustic and computer generated music and developing creative skills in these media through theoretical, aesthetic, and practical perspectives.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 12
Prerequisite: VPM899H, and at least one other VPM course at the B level
Recommended: VPM882H

VPMSC9H3 Orpheus
An examination of the myth of Orpheus and the variety of interpretations it has inspired in music and the other arts.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (VPM872H)
Prerequisite: Two courses from the series
VPM880H-VPM882H
Recommended: VPM899H

VPMSC9H3 Musical Diasporas in Canada and the USA
This course examines the unique role of music and the arts in the construction and maintenance of transnational identity in the North American diaspora. Examples under study will cover a wide range of communities (e.g. Asian, Caribbean and African) and places (e.g. Los Angeles, Toronto and Detroit).
Breadth requirement: Social & Behavioural Sciences
Prerequisite: VPM899H & 1.0 full credit in VPM courses at the B level or permission of instructor

VPMSC9H3 Music in the Medieval and Renaissance Eras
An examination of music in Western society during the period ca. 500 to ca. 1600. This course integrates close analysis of selected compositions with a study of the historical, social, cultural, and political contexts of music-making during this period.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (VPM861H)
Prerequisite: VPM899H & 2 courses from VPM860H-BM22H

VPMSC9H3 Music, Technologies, Media
An exploration of music's relationships to media and technology, and how these shape musical practices, consumption, and understanding in historical and contemporary contexts. Topics include music printing, music journalism, development of acoustic, mechanical, and electronic instruments, the recording industry, radio, electroacoustic and computer composition, and digital dissemination via the internet.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: At least 1.0 full credit in Humanities at the B level.
VPMD601H 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 Choir, Jazz Band, String Ensemble)

Note: Students must submit a proposed plan of study for approval, and must obtain consent from the supervising instructor and the music program supervisor.

Prerequisite: A minimum overall average of B+ in VPM courses, and at least one (1.0) full credit in music at the C-level, not including credits in performance. Students in the Composition option must also have completed VPM602H. Students in the Performance/research option must also have completed VPM602H or VPM604H. Students are strongly advised to arrange their independent study well in advance of the beginning of the session.

VPAC399H3 Sound and Spectacle: Intersections and Exchanges in Music and the Visual Arts
See the general Visual and Performing Arts section of this Calendar for a full course description.

Studio

The Studio curriculum is built around the idea that visual art is a means of expressing and understanding the human condition. The Studio program is intended to expand the student’s conception of what art is, why and how it is made with a focus on the development of technical, theoretical, conceptual and critical skills. We offer a range of courses in drawing, painting, sculpture, photography, performance art, video, new media and conceptual art. We do not offer courses in commercial art. Instead, our curriculum advances an understanding of art as a tool for examining and intervening in visual culture at large by providing a broad exposure to the various processes of art making and to recent developments in contemporary art theory and criticism. Our curriculum looks at art from aesthetic, intellectual, social, and political perspectives, and it looks comparatively at the differences in such constructions in different times and places, or for different people. Visual and Performing Arts/Studio also offers students a framework for analyzing the ideas and theories connecting the arts, and encourages students to explore the related fields of literature, history, anthropology, and other areas of the Humanities and Social Sciences.

The Studio Study Guide is available at: http://www.arts.utoronto.ca/ehual/vpa/studio/studyguide/

Guidelines for first-year course selection
VPAA62H Foundation Studies in Studio, which covers basic media and concepts through practice and discussion, must be taken with its co-requisite VPAM63H1 But Why is it Art? 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

This program will give the student a full and broad exposure both 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.

Program Requirements
Students must complete eight full credits including:

1. VPAA62H Foundation Studies in Studio
2. VPAA63H1 But Why is it Art?
3. HUMA101H Exploring Key Questions in Humanities
4. VPAA46H1 Ways of Seeing: Introduction to Art Histories
5. VPAA70H1 Drawing I
6. VPAB74H1 Drawing II
7. At least one-half credit from:
   - VPSC65H1 Theory and Practice: Two-Dimensional Work
   - VPSC65H1 Theory and Practice: Two-Dimensional Work
   - VPSC65H1 Theory and Practice: Art in a Globalizing World
   - VPSC70H1 Theory and Practice: New Media in Studio
8. An additional half credit at the C-level and one full credit at the D-level.
9. 3.0 additional credits from courses in VPS. Students may substitute one full credit from VPA or another discipline with the prior written permission of the Program Supervisor.
MINOR PROGRAM IN STUDIO

Program Requirements
Students are required to complete a total of four full credits as follows:

1. VPSA62H1 Foundation Studies in Studio
   VPSA63H1 But Why Is It Art?
2. HUMA40H1 Exploring Key Questions in Humanities
3. VPSA70H1 Drawing I
4. At least one-half credit from:
   VPSC66H1 Theory and Practice: Two-Dimensional Work
   VPSC68H1 Theory and Practice: Time-based Work
   VPSC69H1 Theory and Practice: Art in a Globalizing World
5. 1.5 credits in VPS, including 1 full credit at the C- or D-level.

VPSA61H3 Painting I
An investigation of the basic elements and concepts of painting through experimentation in scale and content.
Breath requirement: Arts, Literature & Language
Limited enrolment: 20 per section
Exclusion: (VPSB61H), VPS21H
Prerequisite: VPSA62H1 & VPSA63H1 & [VPSA70H1 or (VPSJ70H1)]

VPSA62H3 Foundation Studies in Studio
An introduction to the importance of content and context in the making of contemporary art.
Breath requirement: Arts, Literature & Language
Limited enrolment: 20 per section
Exclusion: VSI106H
Corequisite: VPSA63H

VPSA63H1 But Why Is It Art?
This introductory seminar examines the key themes, concepts, and questions that affect the practice of contemporary art. We will look at specific cases in the development of art and culture since 1900 to understand why and how contemporary art can exist as such a wide-ranging set of forms, media and approaches.
Breath requirement: History, Philosophy & Cultural Studies
Exclusion: VSI126H

VPSA70H3 Drawing I
An investigation of the various approaches to drawing, including working from the figure and working with ideas.
Breath requirement: Arts, Literature & Language
Limited enrolment: 20 per section
Exclusion: (VPSB70H), VSI205H
Recommended: It is recommended that students take VPSA62H1 & VPSA63H1 at the same time or before taking this course, particularly if they want to pursue a Major or Minor in Studio.

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.
Breath requirement: Arts, Literature & Language
Limited enrolment: 15. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs.
Prerequisite: VPSA62H1 & VPSA63H

VPSA72H3 Introduction to Photography
An introduction to fundamental photographic concepts including: form, focus, stopped time, lighting, and photographic composition in contrast to similar fundamental concerns in drawing and painting. A practical and historical discourse on the primary conceptual streams in photography including various documentary traditions, staged photographs and aesthetic approaches from photographic modernism to postmodernism.
Breath requirement: Arts, Literature & Language
Limited enrolment: 20. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs.
Prerequisite: VPSA62H1 & VPSA63H
Corequisite: VPSA74H

VPSA73H3 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.
Breath requirement: Arts, Literature & Language
Limited enrolment: 15. Preference will be given to students in Arts Management Co-op, Humanities Co-op, Studio and VPA specialist programs.
Exclusion: VSI202H
Prerequisite: VPSA62H1 & VPSA63H
VPSA74H3 Introduction to Digital Studio Practice
An introduction to pixel and vector-based, two-dimensional image processing, printmaking and web illustration. Basic digital skills and quality control issues will be addressed through study investigation of Adobe Photoshop and the production of professional digital prints.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS218H
Prerequisite: VPSA42H & VPSA63H

VPSB2H3 Painting II
A continuation of Painting I with an emphasis on images and concepts developed by individual students.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS228H
Prerequisite: VPSA64H1 or (VPSB61H1)

VPSB3H3 Sculpture Concepts
Contemporary sculptural practice is a diverse and expanding field that covers a range of strategies that confound traditional definitions of sculpture and blur the boundaries with other contemporary art forms. We will explore key ideas that transform sculpture into three-dimensional practices that embrace time, found material, architecture and audience interaction.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS260H
Prerequisite: VPSA42H & VPSA63H & 0.5 full credit in Studio at the A-level.

VPSB7H3 Books and Multiples
Exploring the production, history and use of artists' books, students will focus on visuals and text, incorporating low-tech and printmaking approaches to multiples.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS321H
Prerequisite: VPSA70H1 & [VPSA61H1 or VPSA71H1 or VPSA41H1]

VPSB74H3 Drawing II
A continuation of VPSA70H1 with an increased emphasis on the student's ability to express her/his personal understanding of the meaning of drawing.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS211H
Prerequisite: VPSA62H & VPSA63H & [VPSA70H1 or VPSB750H1]

VPSB75H3 Photo-based Work
A studio course in digital photography as it relates to the critical investigation of contemporary photo-based art.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: VPSA72H & VPSA74H
Concurrent: VPSB68H

VPSB76H3 Intermediate Video
This course is designed to provide a history of contemporary video art production. The course will familiarize students with more advanced methods of production and contemporary video works. Classes will include technical instruction, screenings and discussions of tapes, critiques, written assignments and assigned readings.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS302H
Prerequisite: VPSA73H1 or permission of instructor

VPSB77H3 Introduction to Performance Art
This course covers the history and practice of performance art. Students will employ contemporary performance strategies such as duration, ritual, repetition, intervention, tableaux vivants, endurance and excess of materials in their projects. We will also study the relationship of performance to other art disciplines and practices such as theatre and sculpture.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS280H
Prerequisite: One half credit in VPS or [VPDA10H1 & VPDA11H1] or [VPDA01H1 & VPDA02H1] or permission of 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, seamless collage, invisible retouching and quality control techniques for fine art production. Project themes will be drawn from a critical analysis of contemporary painting and photo-based art.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS310H
Prerequisite: VPSA74H
Recommended preparation: VPSA72H

VPSB83H3 Introduction to Web-based Work
Information Age artists are employing inexpensive, global, web-based strategies to publish and promote their work. Other artists use blogs and desktop broadcasting to produce original, on-line e-zines that can engage distant and critical collaborations in real time. Artists will each create an elementary, personal web site toward these ends.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPSA74H

VPSB84H3 Art and Activism
This course will explore contemporary artistic practices that blur the boundary between art and activism.
We will examine how artists address political issues and the techniques they use to reach different types of audiences.
Students will do research and develop projects that address specific local issues and wider social concerns.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 20
Exclusion: VIS307H
Prerequisite: VPSA62H & VPSA63H & 0.5 full credit in Studio at the A-level.
VPSS84H1 Expanded Portraiture
Expanded Portraiture attempts to stretch the traditional idea of portraiture, exploring different methods and media for representing identity and the self. We will look at the role of facial representations in painting and photography and then move beyond the pictorial to consider how sound, text, moving images, and objects can be used to create new encounters with the subject.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 20
Exclusion: VBR322H
Prerequisite: VPSA62H & VPSA63H & 0.5 full credit in Studio at the A-level

VPSS85H0 Text as Image/Language as Art
An elementary study of the typographic arts will inform presentation strategies, but the investigation of cultural discourse through language as visual art will form the most important content of this course. How do visual artists employ words in their art?
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPSA62H & VPSA63H & 0.5 full credit in Studio at the A-level

VPSS86H0 Material Applications for Time-Based Sculpture
Students will be introduced to the both the principles and practicalities of working with the concept of change as it relates to sculpture. Students will use both traditional and non-traditional materials in combination with technologically based media and processes including such things as simple circuits, machines, switches, LEDs, etc.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: VPSA71H

VPSS87H0 Documentary Photography
Photography has a rich tradition both as an art form and as a documentary practice. Each of these has engendered its own technique, aesthetic and cultural context. This course is designed to introduce students to the documentary branch of photography through focused, personal, photo-journalistic projects accomplished outside of the studio.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPSA72H & VPSA74H
Recommended preparation: VPSS75H

VPSS88H0 Introduction to Sound Art
Students will be introduced to sound as a medium for art making. Listening, recording, mapping, editing, and contextualizing sounds will be the focus of this course. Sound investigations will be explored within both contemporary art and experimental sound/music contexts.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: [VPSA62H & VPSA63H] or VPMA80H

VPSS89H0 Introduction to Animation Techniques
This studio course is designed to introduce students to animated film/video making. Students will explore handmade and digital animation techniques (cellular, flip-books, scratched film, claymation, rotoscoping and other forms of digital animation). Readings, screenings and assignments practically and theoretically familiarize students with the animated image from its early beginnings.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPSA62H & VPSA63H & VPSA76H & VPSA71H

VPCS32H3 Documentary Video
This course is designed to introduce students to documentary video/film making. Students will gain insight into the history and evolution of the genre through in-class screenings, readings, field trips and assignments. The course will provide students with the means to research, develop, and produce a short documentary film/video work.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Prerequisite: VPSA72H & VPSB76H

VPCS33H0 Kinetic Sculpture
Students will produce art projects using mechanical principles to create sculptural forms that change over time. Students will be encouraged to use shared machines, simple electronic components and a wide range of materials.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VPSS86H
Prerequisite: VPSA71H & VPSS86H

VPCS34H0 Painting III
An advanced course for students who are able to pursue individual projects in painting, with a focus on contemporary practice and theory.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VBR301H
Prerequisite: VPSB62H & VPSB74H & an additional 0.5 credit at the B- or C-level in Studio

VPCS55H0 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VBR301H
Prerequisite: VPSB74H & an additional 0.5 credit in Studio at the B- or C-level
VPSCS6H3 Studio Practice
A supervised course focusing 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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 20
Exclusion: VIS511H
Prerequisite: 4.0 full credits in Studio including at least 1.0 full credit at the B-level in the stated area of study.

VPSCS6H3 Advanced Photo Concepts
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.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS513H
Prerequisite: VPSS80H1 & VPSS87H1

VPSCS6H3 Advanced Installation and Site-Specific Art
This course will focus on all aspects of large-scale installation including architecture, projections, multi-media, and conceptual works.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: VPSS83H1 & 1.5 additional full credits in Studio at the B- or C-level

VPSCS6H3 Advanced Video
An advanced course focusing on complex video techniques and contemporary presentation strategies. The course will cover such areas as video projection, multi-channel works, feature length projects and advanced post-production techniques.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS502H
Prerequisite: VPSS85H1 & 1.5 additional full credits in Studio at the B- or C-level

VPSCS6H3 Theory and Practice: Two-Dimensional Work
An exploration of ideas and practice with an emphasis on two-dimensional work, including digital imaging.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS521H
Prerequisite: At least 1.0 full credit at the B- or C-level in courses dealing with two dimensions or permission of instructor.

VPSCS6H3 Theory and Practice: Time-Based Work
An exploration of ideas and practice with an emphasis on time-based media: performance, video, audio, and installation.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS510H
Prerequisite: 1.0 full credit in VIS at the B- or C-level in courses dealing with time-based media or permission of the instructor.

VPSCS6H3 Theory and Practice: Art in a Globalizing World
This course will focus on the influence of global visual culture on contemporary art practices; exploring how artists respond to orientational, colonial histories, migration, media, tourism, and the international art world. The culturally diverse backgrounds of students and their understanding of global media will be starting points for studio projects.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 15
Exclusion: VIS525H
Prerequisite: 1.0 full credit in Studio at the B- or C-level or permission of instructor.

VPSC7H3 Theory and Practice: New Media in Studio
Information technologies are radically and rapidly transforming our culture. Networking, robotics, WiFi, GPS, ubiquitous computing, data mining, RFID, biotech, kinetic art, surveillance, sound installation, digital image processing and interactive display are all offering new opportunities for the artist as well as new critical issues to address. Students will create affordable projects that address these issues.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: [VPSS80H1 & VPSS87H1 or VPSS82H1 or VPSCS5H1 or VPSCS6H1 or VPSCS7H1] & 0.5 additional credit at the B- or C-level in Studio] or permission of instructor.

VPSC7H3 Performing with Cameras
This course investigates the relationship of the body to the camera. Using both still and video cameras and live performance students will create works that unite the performative and the mediated image. The course will cover how the body is framed and represented in contemporary art, advertising and the media.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: [VPSS87H1 or [VPSS80H1 & VPSS82H1]] & [VPSS87H1 or VPSS87H1 or VPSCS5H1 or VPSCS6H1] or permission of instructor.

VPSC7H3 Interdisciplinary Drawing Concepts
Interdisciplinary Drawing Concepts will extend drawing into a range of other media, allowing students to explore the sculptural, temporal and performative potential of mark-making.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Exclusion: VIS523H
Prerequisite: VPSS874H & 0.5 additional credit at the B- or C-level in Studio.
VPS074H3 Advanced Web-Based Projects
This studio course will encourage students to refine basic web design skills developed in Intro to Web by exploring web-based communities, social networks, blogging, video sharing sites and other collaborative projects. Course assignments, readings and in-class discussions foster an increased criticality about web culture, interactivity and on-line authorship.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: VPS082H3 & 1.0 additional full credit at the B- or C-level in Studio

VPS175H3 Advanced Sculpture
Advanced Sculpture will provide students with an opportunity for a deeper investigation into various materials and fabrication techniques. This course will focus on the theory and practice of object making through studio assignments that develop a critical and technical literacy towards both traditional and non-traditional sculpture materials.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 15
Prerequisite: VPS171H & VPS183H & (0.5 additional credit at the B- or C-level in Studio or permission of instructor)

VPS105H3 Advanced Special Topics in Studio
Selected topics for intensive practical and theoretical study in studio. Topics will change from session to session.
Limited enrolment: 20
Exclusion: VSI40H1, VSI40H2, VSI40H3, VSI40H4, VSI41H1
Prerequisite: 1.5 full credits at the C- and/or D-level in Studio

VPS106H3 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 exhibition in the student-run gallery. Students may work in their choice of media with the written permission of the instructor.
Limited enrolment: 20
Exclusion: VSI326H, VSI40H1, VSI40H2, VSI40H3, VSI40H4
Prerequisite: 3.5 full credits in Studio at the C- and/or D-level

VPS057H3 Advanced Seminar: Interdisciplinary Practice
An opportunity for students in VPS to explore aspects of contemporary intermedia practice and theory. Students will make work in their choice of media with the written permission of the instructor.
Limited enrolment: 20
Exclusion: VSI40H1, VSI40H2, VSI40H3, VSI40H4
Prerequisite: 1.5 full credits at the C- and/or D-level in Studio

VPS108H3 Advanced Seminar: Two-Dimensional Work
Students who have developed strong portfolios in painting, drawing or printmaking and intend to pursue professional exhibition careers will continue their investigations into two-dimensional expression and develop professional quality projects with thorough preparatory strategies.
Limited enrolment: 15
Prerequisite: 1.5 full credits at the C- and/or D-level in Studio including (VPS160H1 or VPS171H or VPS183H or VPS190H or VPS180H or VPS190H)

VPS109H3 Advanced Seminar: Three-Dimensional Work
This studio-seminar will address contemporary issues in sculpture and installation art through independent art production, research, discussions, presentations and assigned readings. Students are expected to develop a body of exhibition quality work and professional support materials.
Limited enrolment: 15
Prerequisite: 1.5 full credits at the C-level in Studio including (VPS160H1 or VPS171H or VPS183H or VPS190H or VPS190H)

VPS103H3 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: VSI40H1, VSI40H2, VSI40H3, VSI40H4
Prerequisite: At least 15 full credits & completion of the major in studio & written permission of the instructor in the previous session.

VPHD43H3 Curating Contemporary Art
See Art History in the Visual and Performing Arts section of this Calendar for a full course description.
Exclusion: (VPHD06H1, VPHD57H1)

Theatre and Performance Studies
The Theatre and Performance Studies Program has been devised to serve students who intend to major or minor in Theatre and Performance, students who intend to specialize in Visual and Performing Arts, and students who have a casual interest in theatre and performance.

We offer both historical and contemporary theory-based and practical courses, which provide students with opportunities to investigate aspects of theatre and performance from the origins of theatre to contemporary performance practice. In the practical courses, students acquire experience in elements of theatre production, as actors, directors, and technicians. In order to be admitted into the performance side of the program, students must successfully complete VPD101H1 Introduction to Theatre.
Guidelines for 1st year course selection

Students who intend to complete a Theatre and Performance Studies program should include HUMA001H, VPDA101H & VPDA111H in their 1st year course selection.

The Theatre and Performance Studies Study Guide is available at: http://www.utoronto.ca/EHumDiv/VPADrama/studyguide/

MAJOR PROGRAM IN THEATRE AND PERFORMANCE STUDIES

Program Supervisor: P. Sperdakis (416-287-7168) Email: drama-program-supervisor@utoronto.ca

Program Requirements

Students must complete seven full credits as follows:

1. HUMA001H Exploring Key Questions in Humanities
2. VPDA101H Introduction to Theatre
   VPDA111H Introduction to Performance
   VPDB011H Intermediate Workshop in Performance I
   VPDB021H Intermediate Workshop in Performance II
3. VPDB101H Studies in Theatre History I: From the Greeks to 1642
   VPDB111H Studies in Theatre History II: From 1642 to World War One
   VPDB121H Studies in Modern and Contemporary Theatre
   [VPDB131H Theatre in Canada or ENGC071H Canadian Drama]
4. ENGC261H Drama: Tragedy
   ENGC271H Drama: Comedy
5. 1.5 additional credits in VPD, one full credit of which must be at the C- or D-level.

In fulfilling requirement #5, students may substitute one full credit from VPA or another discipline with the Supervisor's written permission. The following courses are particularly recommended:

VPAB761H Intermediate Video
VPAS771H Introduction to Performance Art
VPMB751H Performing Arts of Asia
VPMB993H Music for the Theatre
ENGH141H Twentieth-Century Drama
ENGH321H Shakespeare in Context I
ENGH331H Shakespeare in Context II
(ENGH630H) Creative Writing: Scripts and Drama
ENGH701H Introduction to Cinema
IEEC711H Exchanges in Performance and the Arts I
IEEC721H Exchanges in Performance and the Arts II
IEEC811H Exchanges in Music and Media I
IEEC821H Exchanges in Music and Media II
VPA-C471H The Body in Modernity: Theories and Representations
VPA-C481H The Body in Contemporary Culture: Theories and Representations

MINOR PROGRAM IN THEATRE AND PERFORMANCE STUDIES

Program Supervisor: P. Sperdakis (416-287-7168) Email: drama-program-supervisor@utoronto.ca

Program Requirements

Students must complete four full credits as follows:

1. HUMA001H Exploring Key Questions in Humanities
2. VPDA101H Introduction to Theatre
   VPDA111H Introduction to Performance
   VPDA151H Introduction to the Fundamentals of Acting
   [VPDA111H Introduction to Performance or VPDA151H Introduction to the Fundamentals of Acting]
   And at least two of the following courses: ENGC071H, VPDB101H, VPDB111H, VPDB121H, VPDB131H
   Note: Students who do not qualify for either VPDA111H or VPDA151H should take at least four of the following courses:
   VPDB101H, VPDB111H, VPDB121H, VPDB131H, VPDB141H
3. 1.5 additional credits in Drama, one full credit of which must be at the C- or D-level.
VPDA101H Introduction to Theatre
A general introduction to theatre as a social institution and a collaborative performing art. This course will survey the nature and function of the various components of the theatrical production process, providing a background for further theatre studies.
The successful completion of VPDA101H will admit students to subsequent VP performance courses.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 80
Exclusion: DRM202Y, (VPDA01H), (VPDA02H)

VPDA111H Introduction to Performance
An introduction to performance in its broadest application. This course investigates a wide range of performance practices and theories including traditional Western approaches to basic acting technique and contemporary performance approaches informed and inspired by the visual arts, music, dance and theatre.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 18
Exclusion: DRM202Y, (VPDA01H), (VPDA02H), VPDA151H
Prerequisite: VPDA101H & permission of Theatre & Performance Studies Teaching Staff

VPDA151H Introduction to the Fundamentals of Acting
An introduction to basic acting techniques for those with little or no performance experience. This course focuses on developing the essential skills necessary for the craft of acting through the use of improvisation and acting exercises. Students are also introduced to the foundations of monologue and scene work.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 16
Exclusion: (VPDA01H), VPDA111H
Prerequisite: VPDA101H & permission of Theatre & Performance Studies Teaching Staff

VPDB011H 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.
Breadth requirement: Arts, Literature & Language
Prerequisite: (VPDA101H & VPDA111H) or (VPDA01H) & (VPDA02H) & permission of the U of T Scarborough Theatre & Performance Studies Teaching Staff

VPDB021H Intermediate Workshop in Performance II
A continuation of VPDB011H with an emphasis on more advanced performance techniques.
Breadth requirement: Arts, Literature & Language
Prerequisite: VPDB011H & permission of the permission of the UTSC Theatre & Performance Studies Teaching Staff

VPDB031H 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.
Breadth requirement: Arts, Literature & Language
Exclusion: DRM254Y

VPDB041H Experiencing the Live Theatre
Discovering the special nature of various forms of live theatre.
Breadth requirement: Arts, Literature & Language

VPDB101H Studies in Theatre History I: From the Greeks to 1642
A study of theatre history from classical Greece until the closing of the theatres in England.
Breadth requirement: Arts, Literature & Language
Exclusion: DRM260H, DRM262H

VPDB111H Studies in Theatre History II: From 1642 to World War One
A study of theatre history from the Restoration 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.
Breadth requirement: Arts, Literature & Language

VPDB121H Studies in Modern and Contemporary Theatre
A study of twentieth-century theatre history.
Breadth requirement: Arts, Literature & Language
Exclusion: DRM266H

VPDB131H Theatre in Canada
An examination of the development of professional theatre in Canada from 1945 to the present.
Breadth requirement: Arts, Literature & Language
Exclusion: DRM266H

VPDB141H Introduction to Asian Theatrical Traditions
An introduction to some of the major theatrical traditions of Asia.
Breadth requirement: Arts, Literature & Language
VPDC51H3 Advanced Workshop: Performance
A continuation of the exploration of advanced performance techniques begun in VPDS80H2. 
Breadth requirement: Arts, Literature & Language 
Exclusion: DRM400Y 
Prerequisite: VPDS80H1 & VPDS80H2 & permission of the U of T Scarborough Theatre & Performance Teaching Staff 

VPDC52H3 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. 
Breadth requirement: Arts, Literature & Language 
Limited enrolment: 8 
Prerequisite: VPDS80H1 & VPDS80H2 plus 1 other full credit in Theatre & Performance Studies & permission of instructor 

VPDC53H3 Technical Production II 
A continuation of Technical Production I. 
Students will explore in greater depth the practical application of the technical elements of theatrical production. As part of the course, students will assume responsibility for some of the technical positions available in U of T Scarborough productions. 
Breadth requirement: Arts, Literature & Language 
Prerequisite: VPDS80H3 

VPDC54H3 American Musical Theatre 
A survey of the development of American musical theatre. 
Through research into and discussion of American musical theatre history, artists, and landmark productions, students will develop a critical understanding of the form; attendance at a local professional musical production will allow for discussions about the influence of the form on theatre in Canada. 
Breadth requirement: Arts, Literature & Language 
Limited enrolment: 40 
Prerequisite: 2 full credits in Visual & Performing Arts courses or permission of instructor 

VPDC55H3 Physical Theatre 
An exploration of a wide range of physical acting techniques such as mime, clown, mask performance, stage acrobatics, unarmed stage fighting, and so on. This course is designed to further advance students' performance skills by increasing their vocabulary of physical expression and theatrical communication. 
Breadth requirement: Arts, Literature & Language 
Limited enrolment: 12 
Prerequisite: VPDS80H1 & VPDS80H2 & permission of instructor
Women's and Gender Studies

Faculty List
C. Bertrand-Jennings, L. as L. (Paris), Ph.D. (Wayne State), Professor Emerita
F. Iacovetta, M.A., Ph.D. (York, Canada), Professor
A. Sevitt, B.A., M.A. (Windsor), Ph.D. (York, Canada), Professor
L. Carney, M.A. (Columbia), Associate Professor
M.B. Goldman, M.A., (Victoria), Ph.D. (Toronto), Associate Professor
P.C. Huang, B.A. (National Chiaming), M.A. (Chinese Culture), M.A., Ph.D. (UCLA), Associate Professor
L.M. Lange, B.A., M.A. (Mountb), Ph.D. (Toronto), Associate Professor
M. Malins, B.A. (Dundee), Ph.D. (London), Associate Professor
D. McCarthy, B.A. (Toronto), Associate Professor
A. Mullen, B.A. (California), M.A., Ph.D. (Yale), Associate Professor
P. O'Sullivan, B.A. (McGill), M.A., Ph.D. (Toronto), Associate Professor
D.E. Bender, M.A., Ph.D. (New York), Assistant Professor
A. Hachitmi, B.A. (Monay, Iran), M.A. (Hawaii), Ph.D. (Hawaii), Assistant Professor
K.R. Lamont, M.Phil., M.Sc. (Oxford), Ph.D. (Toronto), Assistant Professor
K. Liddle, B.A. (Oberlin), M.A. (Auburn), Ph.D. (Urbana), Assistant Professor
A. Maurice, M.A., Ph.D. (Cornell), Assistant Professor
J. Park, B.A., M.A. (Sokcho), M.S., Ph.D. (Illinois), Associate Professor
V. Selvas, B.A. (York, Canada), Assistant Professor
C. Gobier, B.A. (Montreal), M.I.E.S. (York), Senior Lecturer
N.C. Johnston, M.A., Ph.D. (York, Canada), Senior Lecturer
T. Lampe, B.A. (Dalhousie), M.A. (York), Senior Lecturer
T. Mars, Senior Lecturer
J. English, M.A., Ph.D (Toronto), Lecturer

Program Director: N. Johnston. Email: johnston@utsc.utoronto.ca (416-287-4767)

Women's and Gender Studies is an interdisciplinary program that examines the development, transmission, and transformation of ideas and attitudes about women and gender across different historical periods, societies, and cultures. The program integrates theory and practice by introducing students to scholarship from a wide range of disciplinary perspectives and challenging them to work for change and equality in their communities and in their daily lives. Women's and Gender Studies courses invite students to consider topics such as women's roles in society, history, philosophy, and religion; gender and the media; women and work; gender, race, and class; international development; gender and sexuality; women and politics; women and literature; gender and language; women and social change; women and the family; and gender and the arts. The Women's and Gender Studies program at U of T Scarborough is unique in that it builds on the interdisciplinary nature of the Humanities department while also reaching further across disciplinary boundaries through its strong affiliation with the Social Sciences. Students will develop critical and analytical skills as thinkers, writers, and researchers that will shape their research and their ability to work on issues involving women and equity at the community level. The program at U of T Scarborough also emphasizes the diversity of women's lives and experiences globally, particularly in relation to differences in race, ethnicity, class, age, sexual orientation, and disability; the diversity of our student body greatly enriches our consideration of these issues. A degree including Women's and Gender Studies will enable students to assess how women's roles across disciplines impact our understanding of society and history and our actions, past and present, within local and global communities. Students preparing for a career in education, research, business, administration, government, law, journalism, social work, equity issues, or activism are encouraged to consider enrolling in a Women's and Gender Studies program.

Guidelines for 1st year course selection
Students who intend to complete a Women's and Gender Studies program should include WSTA01H & WSTA03H in their 1st year course selection. Students are also encouraged to take HUMA01H (Exploring Key Questions in the Humanities) as early as possible in their studies.

The Women's Studies Study Guide is available at: http://www.utsc.utoronto.ca/%7Elumidiv/Womens_Studies/studyguide/index.html

MAJOR PROGRAM IN WOMEN'S AND GENDER STUDIES
Program Supervisor: L. Carney (416-287-7171). Email: wst-program-supervisor@utsc.utoronto.ca

Program Requirements
Students must complete seven full credits as follows:

1. WSTA01H Introduction to Women's and Gender Studies
   and
  WSTA03H Introduction to Theories of Feminism

2. WSTB02H Fundamentals of Research in Women's and Gender Studies
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WSTB11H</td>
<td>Race, Class and Gender</td>
</tr>
<tr>
<td>WSTC02H</td>
<td>Applied Research in Women's and Gender Studies</td>
</tr>
<tr>
<td>WSTD01H</td>
<td>Senior Project in Women's and Gender Studies</td>
</tr>
<tr>
<td>or WSTD05H</td>
<td>Senior Seminar in Health, Sexualities and the Gendered Body/Representations and Constructions of Women and Gender</td>
</tr>
<tr>
<td>or WSTD04H</td>
<td>Senior Seminar in Gender, Equity and Human Rights/Gender, Local and Global Communities</td>
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<tr>
<td>or One D-level elective cross-listed with WST, with the approval of the program supervisor</td>
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<td>6.</td>
<td>One further credit in WST</td>
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<td>7.</td>
<td>3.0 credits from the list below of which at least 1.0 must be at the C- or D-level. (Students should check course descriptions for prerequisites.)</td>
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</tbody>
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**Note:** Not all courses in 87 are offered every year.

Please note that courses have been organized into four thematic clusters to assist students in planning - there is no program requirement related to the clusters.

**Cluster #1: Health, Sexualities, and the Gendered Body**
- ANTC15H | Genders and Sexualities |
- ANTDS1H | The Body in Culture and Society |
- ENGC74H | VPAAC4H | The Body in Modernity: Theories and Representations |
- ENGC77H | VPAAC4H | The Body in Contemporary Culture: Theories and Representations |
- GCRD10H | Health and Sexuality |
- HLTCS2H | Women and Health: Past and Present |
- PSYD12H | Psychology of Gender |
- PSYD22H | Socialization Processes |
- WSTB12H | Women: Issues of Violence and Safety |

**Cluster #2: Representations and Constructions of Women and Gender**
- ENGB51H | Women and Literature: Forging a Tradition |
- ENGC34H | Gender and Genre |
- ENGC51H | Contemporary Art: Women Writers |
- ENGD80H | Women and Canadian Writing |
- LINC28H | Language and Gender |
- PHIL13H | Philosophy and Feminism |
- PSYD13H | Psychology of Gender |
- SOC62H | Sociology of Gender |
- SOCO80H | Gelder and Information Technology |
- VPHU77H | Women in the Arts: Hot Mamas, Amazonas, and Madonna |
- VPAAC3H | Music and Gender |
- WSTB13H | Women and the Media |
- WSTC12H | Writing the Self: Autobiographies of Global Francophone Women |
- WSTC15H | Criminal: Women: Gender, Justice and the Media |
- WSTC22H | Women and Film |

**Cluster #3: Gender, Equity, and Human Rights**
- GASC20H | Gender and Social Institutions in Asia |
- MGTC23H | Diversity in the Workplace |
- POLC67H | Women in Political and Social Thought I |
- POLC77H | Women in Political and Social Thought II |
- SOC69H | Sociology of Gender and Work |
- SOCC10H | Gendered Selves, Gendered Lives and Inequalities |
- SOCC31H | Gender and the Sociology of Higher Education |
- WSTB15H | Women: Initiatives for Change |
- WSTC14H | Women, Community and Policy Change |
- WSTC15H | Feminism, Education, and Literacy |

**Cluster #4: Gender, Local and Global Communities, and Diaspora**
- ANTC14H | Feminism and Anthropology |
- GASC20H | Gendering Global Asia |
- GCRD09H | Feminist Geographies |
- HISCAEH | Immigrant and Race Relations in Canadian History |
- HISDAH | Gendering America |
- HISDAH | Selected Topics in Canadian Women's History |
- HISD56H | Coolies' and Others: Asian Labouring Diasporas in the British Empire |
MINOR PROGRAM IN WOMEN'S AND GENDER STUDIES
Program Supervisor: L. Curley (416-287-7171) Email: wgs-program-supervisor@uts.toronto.ca

Program Requirements
Students must complete four full credits as follows:

1. WSTA01H Introduction to Women's and Gender Studies
   and
   WSTA03H Introduction to Theories of Feminism
2. WSTB05H Fundamentals of Research in Women's and Gender Studies
3. WSTB11H Race, Class and Gender
4. Two further credits in Women's and Gender Studies at the B, C or D level and/or from the list of courses in other disciplines which deal with women's gender issues provided in #7 in the Major Program; at least one of these credits must be at the C- or D-level.

WSTA01H Introduction to Women's and Gender 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (NEW160Y), WGS160Y

WSTA03H Introduction to Theories of Feminism
An introduction to feminist theories with a focus on the diverse, multidisciplinary and multicultural expressions of feminist thought. An overview of the major themes, concepts and terminologies in feminist thinking and an exploration of their meanings.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (NEW160Y), WGS160Y, WGS200Y

WSTB05H Fundamentals of Research in Women's and Gender Studies
An examination of topical and critical research in women's issues from a cross-cultural and interdisciplinary perspective. Fundamentals of conducting research are examined.
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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: WSTA01H & (WSTA03H or WSTB05H) or permission of the instructor

WSTB10H3 Women: Initiatives for Change
An examination of local and global movements for change, past and current, which address issues concerning women.
This course will survey initiatives from the individual and community to the national and international levels to bring about change for women in a variety of spheres.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (WSTA02H)
Prerequisite: [WSTA01H & WSTA03H] or permission of the instructor

WSTB11H3 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.
Breadth requirement: Social & Behavioural Sciences
Prerequisite: WSTA01H & (WSTA03H or (WSTB05H) or permission of the instructor

WSTB12H3 Women: Issues of Violence and Safety
An analysis of violence against women and initiatives toward creating safety.
We will take a historical, cultural, and structural approach to studying family, state, economic, and ideological violence against women. We will explore initiatives toward making communities safer, including strategies for prevention and education.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (NEW373H), WGS373H
Prerequisite: WSTA01H & (WSTA03H or (WSTB05H or WSTB11H) or one half credit from the list provided in #7 in the Major Program) or permission of instructor.
WSTB13H 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.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: (NEW271Y), WGS271Y
Prerequisite: WSTA00H & [WSTA03H or (WSTA02H)] or permission of the instructor

WSTC02H3 Applied Research in Women’s and Gender Studies
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.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 15
Exclusion: (WSTD06H)
Prerequisite: WSTA01H & WSTA03H & WSTB05H & 1.5 full credits taken from the courses listed in 63 and 67 in the Major Program

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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: [WSTA01H & WSTA03H or (WSTA02H)] or (ENGB01H or (ENGB02H) 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.
Breadth requirement: Social & Behavioural Sciences
Exclusion: (WSTC10H)
Prerequisite: WSTC10H

WSTC13H3 Writing the Self: Autobiographies of Global Francophone Women
An exploration of the ways in which French-speaking women from different countries construct the gendered subject in their representations of childhood, sexuality, work, maturity and illness. Texts will be read in English and an emphasis will be placed on the cultural contexts of gender, ethnicity and class.
Breadth requirement: Arts, Literature & Language
Limited enrolment: 50
Prerequisite: ENGB03H or (WSTA01H & [WSTA03H or (WSTA02H)]) & any ENG or FRL literature course) or permission of instructor.
Recommended preparation: WSTB13H

WSTC13H3 Women, Gender and Islam
Explores historical and contemporary debates regarding the construction of gender in Islam. Topics include the historical representations of Muslim women, veiling, sexuality, Islamic law and Islamic feminism. This course situates Muslim women as multidimensional actors as opposed to the static, Orientalist images that have gained currency in the post-9/11 era.
Breadth requirement: History, Philosophy & Cultural Studies
Exclusion: WSTC10H (if taken in the 2008 Winter Session)
Prerequisite: [WSTA01H & [WSTA03H or (WSTA02H)]] or permission of the instructor

WSTC14H3 Women, Community and Policy Change
An examination of the impact of social policy 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.
Breadth requirement: History, Philosophy & Cultural Studies
Prerequisite: WSTA01H & [WSTA03H or (WSTA02H)] or permission of the instructor

WSTC15H3 Feminism, Education, and Literacy
Introduction to feminist education theories and practices focusing on global literacy development for women and girls: feminist debates and pedagogical practices in education from historical and cross-cultural contexts; empowerment and human rights goals for literacy, NGO and community teacher training initiatives; and international efforts to promote education reform.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: [WSTA01H & [WSTA03H or (WSTA02H)]] or permission of the instructor

WSTC16H3 Criminal Women: Gender, Justice and the Media
Examining popular media and history, 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.
Breadth requirement: History, Philosophy & Cultural Studies
Limited enrolment: 40
Prerequisite: [WSTA01H & [WSTA03H or (WSTA02H)]] or 1.0 full credit in Sociology or permission of instructor
Recommended (but not required): WSTB13H

WSTC16H3 Gender in East Asian Science and Technology
This course examines how gender issues influence the history and contemporary development of science and technology in East Asian societies, including China, Japan, and Korea. Students will gain a critical perspective on the role of gender in shaping scientific knowledge and technological advancements in the context of East Asia.
Breadth requirement: Social & Behavioural Sciences
Limited enrolment: 50
Prerequisite: Any 5.0 full credits
Recommended preparation: [WSTA01H & [WSTA03H or [GAS401H & GASA02H]] or GASB01H]
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.
Breath requirement: Social & Behavioural Sciences
Prerequisite: Two full credits in WST, or permission of the instructor

WSTC21H3 Gender, Health, Science in Transnational Perspective
This course provides an advanced introduction to feminist scholarship on science, health, and technology. It examines a history and culture of modern scientific research, health practice, and technologies in western and non-western societies.
Breath requirement: Social & Behavioural Sciences
Limited enrolment: 50
Prerequisite: Any 5.0 full credits
Recommended preparation: [WSTA01H & WSTA03H] or [GASA01H & GASA02H] or GASA01H

WSTC22H3 Women and Film
This course examines narrative, documentary and experimental films by a selection of global women directors from a social, critical and historical perspective. We will analyze the filmic representations of race, class, gender and sexual orientation, and explore how cinema made by women can challenge or perpetuate notions of gender.
Breath requirement: History, Philosophy & Cultural Studies
Limited enrolment: 50
Prerequisite: Any 5 credits, including [WSTA01H & WSTA03H or (WSTA02H)] or [any ENG, FREN or GASA cinema class]
Recommended preparation: WSTB13H

WSTC30H3 Selected Topics in Women's/Gender Studies
An examination of a current topic relevant to women's and gender. Students will have the opportunity to explore recent scholarship in a specific content 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 & [WSTA03H or (WSTA02H)] or permission of the instructor

WSTC31H3 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 content 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 & [WSTA03H or (WSTA02H)] or permission of the instructor

WSTD01H3 Senior Project in Women's and Gender Studies
Students will choose a topic of special interest to them, and undertake an in-depth investigation of the topic under the supervision of a Women's and Gender Studies faculty member.
A substantial essay on the approved topic will be given to two evaluators - the course co-ordinator and the supervising faculty member.
This course is only open to Women's and Gender Studies Major program students with a strong record who are completing the last 5 credits of their degree. Enrolment must be approved by the program supervisor and the course coordinator in the term prior to the start of the course.
Prerequisite: At least 15 TCE including WSTA01H & [WSTA03H or (WSTA02H)] & WSTB05H & 1.5 full credits taken from the courses listed in #3 and #7 in the Major Program.

WSTD03H3 Senior Seminar in Health, Sexualities and the Gendered Body: Constructions of Women and Gender
An advanced and in-depth examination of selected topics related to health, sexualities, the gendered body, and the representations and constructions of women and gender. The course will be in a seminar format with student participation expected. It is writing intensive and involves a major research project.
Limited enrolment: 20
Prerequisite: WSTA01H & [WSTA03H or (WSTA02H)] & WSTB11H & two C-level courses from Clusters 1 & 2 in Requirement 7 of the Major Program.

WSTD04H3 Senior Seminar in Gender, Equity and Human Rights: Gender, Local and Global Communities
An advanced and in-depth examination of selected topics related to women and gender, equity, diversity and human rights in the context of local and global communities, and diaspora. The course will be in a seminar format with student participation expected. It is writing intensive and involves a major research project.
Limited enrolment: 20
Prerequisite: WSTA01H & [WSTA03H or (WSTA02H)] & WSTB11H & WSTA01H & [WSTA03H or (WSTA02H)] & WSTB11H & two C-level courses from Clusters 5 & 4 in Requirement 7 of 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 in absence of three or more consecutive sessions (at least 13 months) must submit an "Application To Re-Enroll" at the Registrar’s Office. This form may be printed from our web site: www.utsa.utoronto.ca/registratr 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 to review official transcripts from the other institution(s).

Enrollment 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 widest availability of courses when the "course selection period" begins, students are strongly advised to apply to re-enroll by the dates listed below:
1. Mid-March for the Summer Session
2. Mid-June for both the Fall and the Winter Sessions.

Late applications for re-enrollment will be considered ONLY if received before classes begin in the session. For further information on 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. For details, contact Admissions and Student Recruitment at 416-287-7529.

Admissions

The following is a brief description of undergraduate 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
172 St. George Street 1265 Millway Trail
Toronto, Ontario, Canada M5S 3A3 Toronto, Ontario, Canada M1C 1A4
website: www.utsa.utoronto.ca website: www.utsa.utoronto.ca/admissions

Applicants interested in graduate studies should contact the School of Graduate Studies.

Website: www.sgs.utoronto.ca
Telephone: 416-978-6614

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 U of T (internal U of T transfers) will apply using a 105 application that is available on-line at the Ontario Universities Application Centre’s website at www.uoac.on.ca (telephone: 519-823-1940).

Internal U of T Transfer applications, Part-time Degree and Non-Degree on-line applications are available at the Admissions and Awards website: www.utsa.utoronto.ca

Upon receipt of the application from OUAC, the University of Toronto’s Admissions and Awards office sends confirmation and refers the applicant to an on-line Applicant Instruction 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. All of these programs require a supplementary application (to be completed online at the U of T Scarborough Admissions & Student Recruitment website).
  - Applicants to the Concurrent Teacher Education Programs should apply well in advance of the February 1 deadline (as Applicant Profile, to be filled on-line at the Programs website, is required).
  - 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.

2010 Summer Session Deadline
- March 1 for Part-time degree and Non-degree applications
- May 1 for Non-Degree Visiting Students applying from other North American universities on a Letter of Permission
2010/2011 Fall/Winter Session Deadlines:

Full-time degree study:
• February 1 for applications to the Concurrent Teacher Education Program.
• March 1 for (i) applications, for applicants who are currently enrolled full-time in an Ontario high school.
• April 1 for 1050D 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 U of T degree applications, for applicants who have registered in other divisions of U of T.
• April 1 for 1059F applications, for applicants who reside outside Canada who are not currently attending an Ontario secondary school (or Ontario or abroad) in a daytime program of study.

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.

General Admission Requirements to the University of Toronto Scarborough for 2010-2011

Applicants from Ontario Secondary Schools Under 1999 OSSD Diploma (4 year) requirements
• Applicants must be eligible to receive the Ontario Secondary School Diploma (OSSD).
• 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 enroll.
• Applicants must satisfy English Facility Requirements.

Applicants from Ontario Secondary Schools under 1989 OSIS Diploma (5 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 OAS English 1/English 2/English 3.
• Applicants must present credits to satisfy any prerequisites of specific courses or specific programs in which they intend to enroll.
• Applicants must satisfy English Facility Requirements.

English Facility Requirements

Applicants may request the English Facility Requirements brochure from Admissions and Awards or visit the website: wwwadm.utoronto.ca/eff

Telephone: 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 system.

2. Applicants who are required to present proof of English facility shall be exempt from the normal admission requirement of having to present ENGL4U 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 + 22 on Writing
  - Paper-Based Test - total score of 600 and 5.0 on TWE
  - 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.
• Academic English Course completed at the University of Toronto, English Language School, School of Continuing Studies (http://learnenglish.utoronto.ca). The minimum requirement is a grade of B at the 60 (Advanced) level.

For other acceptable tests and requirements, please refer to: wwwadm.utoronto.ca/eff

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 the U of T Scarborough brochures, the U of T Scarborough website or consult with Admissions and Student Recruitment staff.

Examples:
- Management and Computer Science programs require both MHF4U Advanced Functions and MCV4U Calculus & Vectors
- Most programs in Biological Sciences require MHF4U Advanced Functions, MCV4U Calculus & Vectors and SCH4U Chemistry

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 equivalent prerequisites you need.

Applicants 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 CEGEP 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 will apply.) Students must consult with the Program Supervisor before taking courses required for the program at another campus.

Applicants from Ontario Colleges of Applied Arts and Technology (CAAT)
1. 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 credits will be considered as 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 credits 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 not 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.utsc.utoronto.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.
http://webapps.utsc.utoronto.ca/admissions/requirements

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.
http://webapps.utsc.utoronto.ca/admissions/requirements
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 with international credentials may be obtained from the Admissions and Awards website.

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 (Convention 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 courses 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.wcds.utoronto.ca or by contacting Woodsworth College (416-978-7487).

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 or a degree program in science programs may have to do additional study 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) or 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 proceeding towards 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.utoronto.ca/admissions forms

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. 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 cooperative 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. Such students may be admitted "on condition". Students on condition have special academic requirements that must be met and should refer to the "Overall Standing" section of this Calendar specifically the entry on "Determination of academic status for students admitted on condition". 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.
Scholarships and Awards

The following section of the calendar provides general information about scholarships and awards at the University of Toronto Scarborough. For complete information, please visit our website at: www.uts.toronto.ca/register.

University of Toronto Scarborough seeks to recognize excellent academic achievements of students registered in undergraduate degree programs. We consider students for awards in the following categories:

1. Admission Awards: Available to new students entering University of Toronto Scarborough directly from secondary school.
   a. Automatic Consideration
   b. Application or nomination based

2. In-course Awards: Available to students continuing their studies at the University of Toronto Scarborough. In this category,
   a. Automatic Consideration
   b. Application or nomination based

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 enrolment 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 standard. To be considered for any award, a student must be enrolled in or graduating from an Honours Bachelor program.

Admission Awards

For complete information on admission scholarships and awards, please visit our website at: www.uts.toronto.ca/admissions.

University of Toronto Scarborough allocates entrance scholarships to students entering first-year directly from secondary school. A limited number of entrance scholarships are available to international students. 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 marks are the result of a single attempt at each course.

In-course Awards and Prizes

In-course awards are given to students who have completed their First, Second or Third year of study towards a Bachelor's degree. For award purposes, a year of study is defined as the completion of 5.0 credits at University of Toronto Scarborough. Decisions for in-course awards are made in the summer, and notification letters are normally sent out in August. In order to give more students an opportunity to be recognized for excellent academic achievement, the policy of the University of Toronto Scarborough Awards Committee permits a student to hold only one major award. An awards ceremony is normally held in November.

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 5th, 10th, 15th and 20th credit.

Graduation Awards

Graduation awards are given at the time of graduation. They include medals and prizes awarded for outstanding achievement during the undergraduate years of study.

Students who graduate at the Fall Convocation are considered for graduation awards in the following year together with students who are graduating at the Spring Convocation. An awards ceremony is normally held in June.

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 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.

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Financial Aid

There are a variety of financial aid programs that provide assistance to full-time and part-time students through student loans and/or grants. Generally, assistance will depend on the student’s demonstration of financial need. Before turning to university-administered programs, students are expected to have applied for government student loans programs.

Government Financial Aid

Each province administers a student loans program to assist full-time students with educational and living expenses during the study period. In Ontario, this program is known as OSAP. Eligible students must be Canadian citizens, permanent residents or protected persons. Students are expected to apply to the province of residence. These types of loans (federal and provincial) are interest-free and non-repayable as long as the student remains enrolled in full-time studies. Information is available at the Office of the Registrar’s Website: www.utoronto.ca/registrar

University of Toronto Grants

Grants (or bursaries) are non-repayable amounts of financial assistance. U of T Scarborough students have access to two grant programs. They are:
1. University of Toronto Advance Planning for Students (UTAPS); and
2. University of Toronto Scarborough Bursary for Full-Time Students

Both of these programs are designed to assist students who have qualified for government financial assistance, but who still need more help to balance their budget. Visit the Office of the Registrar’s website (www.utoronto.ca/registrar) for full details on how to be considered for one or both of the above grants.

University of Toronto Work-Study Program

This program is funded by the University and the Ministry of Training, Colleges and Universities, and provides on-campus, part-time employment to students with financial need. Students must enrol in and maintain a full-time course load for the duration of the study period. At U of T Scarborough there are two hiring periods: the Fall session for the Fall/Winter sessions and the Summer session. Information and applications are available from the Academic Advising and Career Centre AC213 (www.utoronto.ca/acccnet).

Other Programs

Visit the financial aid section of the website of the Office of the Registrar (www.utoronto.ca/registrar) for complete details.

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 are responsible for seeking guidance from a responsible officer if they are in any doubt; misunderstanding, or advice received from another student will not be accepted as cause for dispensation from any regulation, deadline, program or degree requirement. 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. Students whose registration contravenes the regulations may be withdrawn from courses, regardless of when the contravention comes to light.

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.

This Calendar is published in both online and printed editions. Every effort has been made to ensure the compatibility of both versions. In the case of any discrepancy, the online version shall apply. Any post-publication corrections and/or updates to the print edition of this Calendar will be updated to the online Calendar at www.utoronto.ca/calendar. Students are strongly advised to check back regularly to keep informed of changes.

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 (TCards)

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. New 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. Replacement cards are issued in the
Library Text Office (see http://utnc.library.utoronto.ca/services/loan-services/teards-library-cards for more information). A fee is charged to replace cards.

Students in debt to the University
If, at the end of the academic session, all debt to the University has not been paid, the University of Toronto Scarborough imposes the following academic sanctions until such time as the debt is cleared:

- Transcripts are not issued.
- Diplomas are not released, nor is oral or written confirmation of degree and program completion provided. However, indebted graduates will be allowed to participate in the ceremony and have their names appear in the Convocation program.
- Further studies are denied.
- Written certification of degree and program status is not provided.
- Confirmation of enrollment status is not provided.
- 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
- Loans made by colleges, faculties or the University
- Health service accounts
- Unreturned or damaged instruments, materials and equipment
- Fines 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 use ROSI to access a variety of online enrollment services, such as:

- Course and Subject ROSI enrollment
- Viewing grades, GPAs and academic status
- Requesting transcripts
- Viewing their financial account
- Updating personal information
- Listing their ROSI transactions

Login to ROSI to see a complete list of services available from ROSI’s main menu.

Access to ROSI is through student number and a six-digit personal identification number (PIN). All PINs are set initially to your month and day of birth (e.g. 920323 = March 23, 1992) 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 also set up 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 provided they set up the PIN reactivation feature on ROSI in advance. Students who did 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 about ROSI is included in the Registration Guide.

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
- Check different sets of program requirements

All student information (e.g. course, 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 records are currently available.

There may be instances where some students have concerns about their academic audit. Should this happen, we encourage you to use the “CONTACT US” option in Degree Navigator. The University welcomes any comments or questions.
Course selection

In selecting their courses, students must adhere to the following regulations:

1. Prerequisites and corequisites for each course, as stated in the course description, must be met, unless waived by the instructor. Prerequisites do 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. The Faculty of Arts & Science and the U of T Mississauga 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 if 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. When this occurs, the course is counted as extra (see "Extra (EX) Courses" in the "Standing in a Course" section of this Calendar). This rule does not apply in the case of non-specific prerequisites (such as "one B-level credit in History") or in the case where one of two or more courses that are not exclusions of each other may serve as prerequisite.

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 averages 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. Except where specific restrictions are listed, students may normally select as many courses as they wish each session. Students should note the following:
   • 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.
   • BBA students should read the "Management" section of this Calendar regarding the overall course load limit.
   • Students with approved deferred final examinations should read the "Special considerations, petitions and appeals" section of this Calendar.

7. Students who wish to register in courses in the Faculty of Arts and Science or at the University of Toronto at Mississauga should refer to the "Courses on other campuses" section of this Calendar. There are limits to the number of courses that may be taken on other campuses.

8. Full-time students are those students who register in at least 1.5 full credits in a session.

9. Students who are restricted to part-time studies may have a load of no more than 1.25 full credits in any session until they have completed at least 3.0 full credits and have a cumulative grade point average of at least 2.00.

10. Students must register for their courses in accordance with instructions issued each session by the Registrar's Office. Students who wish to change their registration:
   • may do so only until the deadlines for adding and dropping courses, stated in the Sessional Dates section of this Calendar;
   • must notify the Registrar's Office of any change through ROSI.

11. Where multi-sectioned courses have a common examination, students enrolled in an evening section of the course may be required to sit an examination during the day and vice versa. Students may also be required to write Saturday or Sunday term tests or examinations.

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 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.)

Course selection

Courses may be selected through ROSI. For regulations on course selection, see above.

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 credit.)
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 how to pay fees is included in the Registration Guide and at www.utoronto.ca/registration. An electronic invoice is available to view on ROSI; printed invoices are not routinely mailed to students. For further information go to www.utoronto.ca or contact Student Accounts, University of Toronto, 215 Huron St, 5th Floor, Toronto, Ontario, M5S 1A2; telephone: 416-978-2142; fax: 416-978-2610 or 416-978-5572; email: info.studentaccounts@utoronto.ca

Program (Subject POSI) 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 POSI codes can be found at www.utoronto.ca/subjectposi. (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 2009 Summer, the 2009 Fall or the 2010 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 or visit the Registrar's Office webpage for information at www.utoronto.ca/register (see "Re-enrolling" in the Admissions section of this Calendar).

Fall & Winter Sessions
Students who registered at U of T Scarborough in the 2009 Fall, the 2010 Winter or the 2010 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 or visit the Registrar's Office webpage for information at www.utoronto.ca/register (see "Re-enrolling" in the Admissions section of this Calendar).

Year of Study
The following is used to define the year of study for 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
5th year = (CTEP students only) = has 19.0 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.

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 Activity 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 session by Student Accounts at http://www.utoronto.ca). 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 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.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 thereafter. Note: For some course sections, changes are not permitted on ROSI - these are listed in the timetable at www.utoronto.ca/timetable.
Standing in a course

Dropping a course

There are two academic deadlines for dropping courses. (See the "Sessional Dates" section of this Calendar.)
- If students withdraw from a course by the earlier deadline, no record of registration is shown on the student’s transcript.
- If students withdraw from a course by the later deadline, the course remains on the student’s record with a grade of EWD indicating late withdrawal. Students are permitted to withdraw late from a maximum of 3.0 credits during their studies within the University of Toronto, Faculty of Arts and Science and University College.

If students cease to complete course requirements but do not withdraw officially by the later 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 Adviser 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></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></td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>63-66</td>
<td>Adequate</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></td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>53-56</td>
<td>Marginal</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
<td>50-52</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>No value</td>
<td>No value</td>
<td>Credit in a Credit/No credit course</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>49</td>
<td>Wholely Inadequate</td>
</tr>
<tr>
<td>NCR</td>
<td>No value</td>
<td>No value</td>
<td>No credit in Credit/No credit course</td>
</tr>
<tr>
<td>N/C</td>
<td>0.0</td>
<td>No value</td>
<td>No credit in Credit/No credit course</td>
</tr>
</tbody>
</table>

Grades of "F" and "N/C" 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

There are two kinds of credit/no credit courses:

1. Courses in which students have opted to be graded on a credit/no credit basis

Effective with the 2010 Summer Session, UTSC degree students may select up to 1.0 full credit of their degree credits to be assessed on a Credit/No Credit basis. Students must choose this mode of assessment no later than the last day to enrol in the relevant course. Once the deadline has passed, students may not under any circumstances reverse this decision.

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

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

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

2. Courses in which all students are graded on a credit/no credit basis

In some courses, such as certain visual and performing arts courses, it may be more appropriate to grade students on a Credit/No credit (CR/NCR) basis rather than assigned specific letter grades. The grade of "No credit" is a failing grade.
Overall standing 321

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.

**Aggregate standing**

On petition, a grade of "Aggregate" (AEG) 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 65% of the work of the course with a grade of C minus or better. Where a student is assigned Aggregate 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 Selections" 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 nor 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:

| LWD | Late withdrawal. (See the "Sessional Dates" section of this Calendar. This grade is assigned to courses dropped after the initial deadline but before the examination period begins.) |
| 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 |
| NDF | Standing deferred on the basis of incomplete course work because of medical or similar reasons. |
| PR | In progress |

**Grade Reports**

Grade reports are not issued to students. Instead, final grades, grade point averages and academic standing are made available through ROSI. Grades are available as soon as they have been submitted and approved. Grade point averages for individual students are available shortly after the student's last grade is approved and academic standing is available in September, January and May. In addition, letters are mailed to students who are on academic probation, suspended or refused further registration.

**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 credits taken.
2. A sessional grade point average is calculated on the basis of all courses taken in a given session (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. Sessional and cumulative grade point averages are calculated at the end of each session and included on the student's academic record and transcript.

**Determination of academic status**

Note: The following rules apply to all students except visiting students whose academic status is not assessed or as indicated in "Determination of academic status for students admitted on condition" in "Determination of academic status for students with academic status 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 credits 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 credits and have a cumulative GPA of less than 1.60 are placed on probation.
   - Students returning from suspension (see 5 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).
   - 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 credits per session.
   - Students who are to have their probation reviewed for continued registration must drop all courses above the 2.0 full credits maximum. Failure to do so within 7 days of notification will result in withdrawal from all courses. Students who successfully petition to re-enrol back into the appropriate course load are subject to a late registration fee.
   - 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.
2. 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 and at www.utsc.utoronto.ca/registrar.)

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. Academic status will be assessed for students admitted on condition at the end of the session in which they attempt their third full credit at the University of Toronto Scarborough.
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-enroling 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-enrollment. 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 credits since beginning their studies:
1. In good standing
   Students who maintain a cumulative grade point average of at least 2.00 are said to be in good standing.
2. Refused further registration
   Students who, at the end of a given session, have not achieved a cumulative GPA of at least 2.00 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 sent 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

Undergraduate Courses in the Faculty of Arts & Science or at the University of Toronto Mississauga

Students are permitted to take up to 5.0 full credits in other undergraduate arts and science divisions of the University of Toronto. No more than 1.0 of a student’s first 4.0 full credits as a U of T Scarborough student may be taken on another campus. (Note: Students who plan on taking fewer than 1.5 credits in their first semester as a UTSC student must enroll in UTSC courses only). Students may be withdrawn from courses after classes have started if their registration violates these rules. (Students who first registered at UTSC 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 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.

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 may differ from those in the other arts and science divisions. Students are urged to consult the Admissions and Awards Office at 172 St. George Street 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 courses for 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: Student Exchange Program, Study Elsewhere Program and Letter of Permission. To enhance their academic and cultural experience, students often choose to undertake full-time study at accredited universities abroad. Students go on Student Exchange Programs if they choose universities with which University of Toronto has exchange agreements in place. Where the University of Toronto does not have any exchange agreements in place with the universities at which students intend to study, they can apply to go on the Study Elsewhere Program. One advantage of the Student Exchange Program is that students pay their regular tuition fees at the University of Toronto. 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. As you will note below, the regulations governing the program differ. Another option for studying abroad is through the Summer Abroad Program administered by Woodsworth College, where Faculty of Arts and Science (St. George Campus) courses are being offered at several locations around the world. 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. Assistance with applying to study abroad opportunities offered by the University of Toronto, is available from the International Student Centre (ISC) at U of T Scarborough. Consult the ISC in the Student Centre, Room SL151, at 416-287-7518, or at isc@utsc.utoronto.ca.

Grades and Accountability

Students registering in courses offered by the University of Toronto earn credit and receive grades in the normal 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. Therefore, students taking courses for transfer credit will not be able to improve their grade point averages. However, grades achieved may be taken into consideration for award eligibility if achievement is excellent or, if achievement is poor, may affect academic standing or program status. Students must arrange for the host universities 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 their 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.
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Fees and Aid
Students on Letters of Permission or in a Study Elsewhere program pay the appropriate fees to the host university. Those 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. Contact Admissions and Awards (315 Bloor Street W.) at 416-978-2190.

1. Letters of Permission
Application available at: www.utsc.utoronto.ca/registrar.
Deadline to apply: Apply at least three weeks prior to the start of the course. (Also pay attention to deadlines at the host universities.)

To take a course at another university, students must, in advance, apply for and receive a "Letter of Permission" from U of T Scarborough. To be considered, a student must have completed 4.0 full credits at U of T Scarborough and be in good standing. Courses requested must be appropriate for degree credit at U of T Scarborough. In addition the student must give reasons why the Letter of Permission is necessary. A maximum of 5.0 full credits may be obtained on a Letter of Permission and only 1.0 full credit at the C level or D level is permitted. 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. Students must have the prerequisites for the requested courses. If a course is needed to meet a program requirement, the student must also obtain the approval of the Program Supervisor. A student who is completing the final credits for the degree on a Letter of Permission during the Winter Session may not apply to graduate at the June convocation but may apply for graduation at the November convocation.

Application Process: Obtain an application from the Registrar's Office website or pick up an application from Admissions and Student Recruitment, Room AA128. Students must provide compelling reasons for needing to take courses on a Letter of Permission; therefore, a written statement giving the rationale for needing a Letter of Permission must be submitted with the application. When assessing an application, we will also take into consideration a student's performance in courses related to the proposed course and performance in prerequisite courses. A fee will be charged for each Letter of Permission.

To receive credit for a course taken on a Letter of Permission, the course must be successfully completed with a grade above the minimum passing grade.

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 co-operation 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.explore.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/registrar
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 U of T Scarborough. 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 U of T Scarborough to complete the final year of study. A maximum of 5.0 full credits will be considered for transfer. The number of transfer credits given on admission may affect eligibility for consideration or the number of transfer credits allowed to be taken while on Study Elsewhere. Since it may take a considerable amount of time to gather information about foreign universities, students should begin their proposal 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 U of T Scarborough. 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.utoronto.ca/student.exchange
Deadline to apply: Mid January for some programs and late February, for most programs. (Refer to the International Student Exchange Office website.)

The University of Toronto operates several institution-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, U of T Scarborough normally requires that the applicant have a cumulative grade point average of 2.25 or better. A maximum of 5.0 full credits will be considered for transfer. The number of transfer credits given on admission may affect eligibility for consideration or the transfer of transfer credits allowed to be taken while on exchange.

Interested students apply through the International Student Exchange Office (ISXO). A typical application is comprised of an application form, academic transcripts, résumé 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 ISXO on behalf of the student. Though it rarely happens, partner institutions reserve the right to refuse nominated students. As the Hermonotoccus Castle Program (CUSAP) and the Study Abroad Program at Nairies are not exchange programs, the application procedures are different – contact ISXO 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 once the student is nominated.

A list of institutions at which undergraduate programs are available is at: www.utoronto.ca/student.exchange

For further information, applications and an up-dated 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.exchange

4. U of T 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, Kenya and Southern Europe. Students take regular full-year U of T Faculty of Arts and Science undergraduate degree courses that are relevant to the host site. All classes 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 U of T courses, the course code and final grade will appear on the student’s record just as any other U of T course does.

For more information, contact:
Professional and International Programs Office
Woodsworth College
119 St. George St. 3rd Floor
Phone 416-978-9713
e-mail: summer.abroad@utoronto.ca
website: 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.
Academic transcripts

The academic transcript is the official statement of the academic record of each student.

Contents
The transcript records the following information:
1. Information to identify the student: full name and university student number.
2. The student’s academic record, listed chronologically by session:
   • each course attempted, in the abbreviated title, and its grade including courses from which late withdrawal has been approved (see “Dropping courses” above);
   • the sessional grade point average;
   • the cumulative grade point average at the end of the session;
   • the annual grade point average;
   • the student’s academic status at the end of the session: in good standing, on academic probation, suspended for four months, suspended for twelve months, refused further registration, or suspension deferred;
   • completion of Co-operative Program;
   • completion of degree and Program requirements, and date of conferment of the degree;
   • graduation with high distinction or with distinction.
3. The following kinds of special consideration granted by petition. (See “Special Consideration, Petitions and Appeals” below in this section of the Calendar.)
   • withdrawal without academic penalty from a course after the relevant deadline. (See “Standing in a course” above in this section of the Calendar.)
   • deferral of suspension;
   • award of segregat standing;
   • other consideration deemed to have altered the academic record.

Ordering Official Copies
Students may obtain copies of their academic transcripts, subject to reasonable notice and upon payment of a fee (per transcript copy). All 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. Requests may also be made in person or by writing to the University of Toronto Transcript Centre, 100 St. George Street, Room #1006, Toronto, ON M5S 3G5. (See also the U of T Transcript Centre website: http://www.ato.ca/undergraduate/transcripts).

Payment by mail should take the form of a cheque, money order, Visa or Master Card 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 (ROSI): 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 (including deferred 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.

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

Examination timetable conflicts
Students scheduled to write two examinations at the same time should report their conflicts through eService on the Registrar’s Office website (http://www.utoronto.ca/registrar). Arrangements 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 at least one term in advance of the commencement of examinations and will not be considered after that time.
Students with three consecutive examinations
Students may request special arrangements if they are scheduled to write examinations in three consecutive time slots as follows:
• Morning, Afternoon, Evening
• Afternoon, Evening, Morning
• Evening, Morning, Afternoon
No other combination is considered to be three consecutive time slots. Requests for such arrangements must be made through the Service on the Erskine's Office website (www.utoronto.ca/registrar) no later than two full weeks before the commencement of examinations. Requests will not be considered after that time. Note: This accommodation does not apply to students writing deferred examinations (see “B. Final Examinations” in the “Special consideration, petitions and appeals” section of this Calendar.)

Accommodation for Religious Observances
It is the policy of the University of Toronto to arrange reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays. If the date of a final examination falls on a holy day observed by a student, the student should write to the Vice Dean (Vice Deans, Faculty of Arts, www.utoronto.ca) requesting an accommodation no later than two full weeks before the commencement of examinations. This will normally be granted.

Special consideration regarding examinations
See the “Special consideration, petitions and appeals” section of this Calendar below.

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
U of T Scarborough 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 familiarize themselves with the Code of Behaviour on Academic Matters which can be found at:
   http://www.governingcouncil.utoronto.ca/policies.
2. Students are advised to arrive at the examination room at least twenty minutes before the scheduled examination time.
3. Invigilators will begin the actual examination at the scheduled time.
4. No persons shall be allowed in an examination room during an examination except the students writing the examination and those supervising it.
5. 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.)
6. 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 place their purses on the floor beneath their chairs.
7. The invigilator has the authority to assign seats to candidates.
8. 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. 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, Compaq Disc Players, and Mini Disc Players.
9. Candidates bringing any unauthorized materials or electronic devices into an examination room or who assist, or obtain assistance from other candidates or from an unauthorized source, are liable to penalties under the Code of Behaviour on Academic Matters, including the loss of academic credit for the course and expulsion from the University.
10. In general, candidates will not be permitted to enter an examination room later than fifteen minutes after the commencement of the examination not to leave the examination room except under supervision until at least half an hour after the examination has commenced.
11. Candidates shall not leave the examination room within the final ten minutes of an examination, during which time they shall remain quietly seated at their desks.
12. 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.
13. Examination books and other material issued for the examination shall not be removed from the examination room without the authority of the invigilator.
14. 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 you 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 Faculty of Arts & Science and the University of Toronto Mississauga Calendars for regulations regarding their courses. You are responsible for observing the regulations governing any courses you take on other campuses. However, all U of T Scarborough students must adhere to U 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.

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 request 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. As of the 2016 Summer Session, students may no longer automatically defer final examinations. If you miss a final examination, you will be required to petition through eService on the Registrar’s Office website (www.utoronto.ca/registrar) within 72 hours of the missed examination.
   - Petitions will be considered only for cases of illness or extreme emergency at the time of an examination.
   - Petitions based on medical grounds must be supported by an original medical certificate stating both that the student was examined and diagnosed at the time of illness and was examined on the day of the exam or immediately after (i.e. the next day). A statement from the physician that merely confirms a report of illness and or disability made by the student will not be acceptable.
   - If the petition is not based on medical grounds, other supporting documentation must be provided.
   - All supporting documents must be in original form; photocopies or faxes will not be accepted.
   - Petitions to defer final examinations based on vacation, employment, or personal plans will not be considered. The examination period is published in advance and students are expected to be available during this period.
   - Late petitions will not be accepted.

2. If you choose to write an examination, you may not petition to rewrite it. In truly exceptional circumstances such as a significant illness that manifests itself during an examination, you may petition to defer the exam that you have begun (see D below). This would require both corroboration from the examination invigilator and documentation from a health care professional.

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 or the study break that precedes it.
   - exams deferred from August are held in the December examination period or the study break that precedes it.

   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 $75.00 by the given deadline to write any University of Toronto Scarborough deferred examination. Failure to pay the fee will result in loss of privilege to sit the examination.

5. If you are writing deferred examinations, your course load in the session leading up to the deferred examinations plus the number of deferred examinations you are to write may not exceed 2.5. You will have until the end of the first week of classes in that session to make appropriate adjustments to your course load. Failure to do so by the deadline (see the “Sensational Dates” section of the Calendar) will result in the cancellation of all your courses. Exceptions will be made only where there is strong and compelling evidence that a student can handle a larger course load.

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 examination, you will receive a mark of zero for the examination in the calculation of your final grade in the course. Only under exceptional circumstances (e.g. hospitalization or severe personal emergency), and when supported by strong and compelling evidence, will a petition for a second deferral of the examination be considered.
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. 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 at an outside centre are also responsible for all costs of registration, courier charges and other related expenses. Since these may exceed $100.00 per examination, students are advised to assess the total costs before petitioning.

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 check 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 using eService on the Registrar’s Office webpage. After that date, examinations are destroyed. A non-refundable fee is charged.

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 recheck of the calculation using eService on the Registrar’s Office webpage. (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. Whenever 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 redcheck the calculation of term and final marks.

4. Appealing Assigned Grades
   If you grade appeal is rejected, 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.

   (c) If you wish to withdraw from a course after the last day to withdraw without academic penalty on the grounds of a violation of the Grading Practices Policy, you must submit a formal petition (see D below). If your petition is granted because a violation of the Policy has occurred, no record of your registration in the course will appear on your transcript. You cannot petition to withdraw from a course on the grounds that no work was returned to you before the last day to withdraw without academic penalty if this is the result of your having been given an extension to complete your work for reasons relating to you and not the rest of your class.

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 E below). Even if a petition has been filed by the deadline, it will not be considered if documentation is not provided within ten business days of its submission.
Special consideration, petitions and appeals

1. Petitions are submitted online using eService. This service can be found on the Registrar’s Office webpage at www.utoronto.ca/registrar.

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 more 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 meet with an academic advisor in the Academic Advising & Career 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 medical grounds.
   You are urged to use the University of Toronto Scarborough Student Medical Certificate for this purpose. A copy of the Student Medical Certificate may be downloaded from www.utoronto.ca/registrar - select the eService tab. 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- or over-evaluated substantially. A photocopy of the examination or term work and supporting evidence must be submitted with the petition.

5. You will be notified online via eService of the decision on your petition. The petition 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 (U/W or W/D depending on the circumstances)
   • deferral of suspension ("suspension deferred")
   • award of regular standing (ARE)

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: 72 hours after the missed examination.

Missed Deferred Examinations
   • petitions to write a deferred examination which has been missed: 72 hours after the missed examination.
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 term: 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

F. Appeals
1. You may appeal denial of a petition to the Sub-committee on Academic Appeals. Such appeals must be commenced no later than ninety days after the decision being appealed has been communicated to you in writing. An appeal is commenced by filing a Notice of Appeal on the form provided for this purpose through the Office of the Vice Dean, Room A433 (telephone 416-287-7566). Full information may be obtained from that office.
2. You may appeal a decision of the Sub-committee on Academic Appeals to the Academic Appeals Committee of Governing Council. Such appeals must be commenced no later than ninety days after the decision being appealed has been communicated to you in writing. An appeal is commenced by filing a Notice of Appeal to the Director or Coordinator of Appeals, Discipline and Faculty Grievances on the form provided for this purpose. The Coordinator, Appeals, Discipline and Faculty Grievances is responsible for managing the administration of the Academic Appeals Committee.
3. Full information may be obtained from:
   Office of Appeals, Discipline and Faculty Grievances
   Office of the Governing Council
   Room 106, Simcoe Hall
   St. George Campus (Telephone: 416-946-5764)

University of Toronto Policies

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

All University policies can be found at: http://www.governingcouncil.utoronto.ca/policies.htm. Those which are of particular importance to students are:
   • Policy on Access to Student Academic Records
   • Code of Behaviour on Academic Matters
   • Code of Student Conduct
   • Grading Practices Policy
   • Policy on Official Correspondence with Students

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

Maps

For directions to the University of Toronto Scarborough and for campus maps, go to: http://www.atm.utoronto.ca/~advancement/find/
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