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SUMMARY OF COURSE CHANGES

Deparment Name	No. of full courses deleted	No. of full courses added	No. of half courses deleted	No. of half courses added	No. of full courses changed	No. of half courses changed	Net FCEs
Astronomy	0	0	0	0	0	2	
Biology	1	0	2	5	1	5	
Chemistry	0	0	0	0	0	4	
Communication, Culture and Information Technology	0	0	0	0	0	3	
Computer Science	0	0	0	0	0	1	
Earth Science	0	0	0	0	0	0	
Economics	0	0	0	0	1	0	
Environment	0	0	0	0	1	1	
Forensic Science	0	0	0	1	0	0	
Geography	0	0	0	0	0	0	
Mathematics	0	0	0	0	2	8	
Physics	0	0	0	0	0	0	
Psychology	0	0	1	5	1	6	
Science	1	0	0	2	0	2	
Sociology	0	0	0	0	0	0	
Statistics	0	0	1	0	0	4	

New Programs

Program #1 ERMAJ1149 Biology for Health Sciences - Major

This program focuses on areas of biological science that relate to the health of humans and will provide a strong foundation for students interested in pursuing a career in the health sciences.

Limited enrolment Enrolment in the Major Program is limited to students who have completed 4.0 credits (including BIO152H5 and BIO153H5) and who have achieved a CGPA of at least 2.5

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

1. BIO152H5, 153H5; CHM140Y5; MAT132Y5/134Y5*/135Y5/137Y5

2. BIO206H5, 207H5, 210Y5, 310H5, 380H5, (BIO360H5/STA220H5/PSY201H5)

3. 1.5 credits from **one** of the following lists:

   Cell, Molecular, and Biotechnology Stream:
   BIO200H5, 215H5, 314H5, 315H5, 370Y5, 372H5, 374H5, 477H5; JBC472H5

   Neuroscience Stream:
   BIO215H5, 304H5, 315H5, 403H5, 409H5, 411H5, 434H5

   Genes and Behaviour Stream:
   BIO215H5, 315H5, 318Y5, 341H5, 361H5, 407H5, 434H5, 442H5, 443H5

*MAT134Y5 - Calculus for Life Sciences is highly recommended.

NOTE: As part of your degree requirement the 'Biology for Health Sciences' Major would be academically complemented by a Major in Psychology, Anthropology, Health Sciences Communication, Exceptionality in Human Learning, Forensic Science, and Chemistry, as well as other disciplines such as the Major in Management. This major program would also be complemented by a Minor in Biomedical Communications (Science).

Rationale for creation: This 'streamed' major program was developed to fill a niche for students in Biology at the University of Toronto Mississauga (UTM) who have an interest in human or health-related studies. This is a high demand area with many requests at the Ontario Universities Recruitment Fair and at UTM's Open House Recruitment Day. The timing is also appropriate with the partnership with the Faculty of Medicine and the Academy of Medicine and UTM and will help bridge Life Sciences at UTM with the Faculty of Medicine, especially with regard to the building of a Health Sciences Complex. The following groups have been advised about this new 'streamed' major and we have not received concerns: Chairs of - Ecology and Evolutionary Biology, Cell and Systems Biology, Anthropology, UTM, Director of Forensic Science, UTM, Director of Human Biology, University of Toronto

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Program #2 ERMIN1061 Environmental Science (Science) - Minor

Within an Honours degree, 4.0 credits are required, of which at least 1.0 must be at the 300 level.

Limited enrolment Enrollment in this program is limited to student who have completed ENV100Y5 with a mark of 60% or higher.

First Year: 1.0 credit	1. **Introduction**: ENV100Y5 *Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.*
Second Year: 2.0 credits	1. **Environmental Management Perspectives**: ENV201H5 2. **Biological & Ecological Perspectives**: 0.5 credit chosen from this list: BIO200H5, 201H5, 204H5, 205H5, 206H5 3. **Geographical & Earth Science Perspectives**: 1.0 credit chosen from this list: GGR214H5, 217H5, 227H5; ERS201H5, 202H5, 203H5
Upper Years: 1.0 credit	1. **Field, Experiential & Research Perspectives**: 0.5 credit chosen from this list: ANT318H5; BIO301H5, 302H5, 313H5, 316H5, 329H5; ERS325H5; ENV232H5, 299Y5, 399Y5; GGR317H5 (with field trip option), 379H5; SCI398H5; or another program-relevant Field, Experiential, or Research course, with permission of the Program Advisor 2. **Biogeochemical Perspectives**: 1.0 credit chosen from this list: BIO311H5, 330H5, 333H5, 373H5; CHM311H5, 333H5, 347H5, 361H5, 362H5, 391H5, 393H5; ERS315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 317H5, 321H5, 337H5, 338H5, 372H5, 375H5, 377H5, 378H5; JBG312H5; PHY331H5, 332H5

This is intended to be an interdisciplinary program. At least four different disciplines must be represented among the courses that are counted as program requirements. For example, a course list selected from ENV + BIO + ERS + GGR is acceptable, but a course list selected only from ENV + BIO + GGR is not; a course list selected from ENV + BIO + ERS + CHM is acceptable, but a course list selected only from ENV + BIO + ERS is not. Please contact the Program Advisors or Academic Counsellor if you have any questions about the validity of your course selections.

Rationale for creation: Ever since the major reorganization of Environment programs was undertaken at the University of Toronto Mississauga in 1995, students have expressed a strong interest in having the option of a Minor program in Environmental Science to complement their discipline-based studies (in fact, students have often expressed dismay at the lack of such a program). The interdisciplinarity of the Environment Major programs makes them ideal to combine with discipline-based programs; the existence of a Minor in Environmental Science will give additional flexibility for students to add an applied focus on the environment to their discipline-based studies. The Environmental Science (HBSc) programs (Specialist, Major, and now the Minor) draw from a variety of disciplines, mainly in the Sciences. The programs, including the new Minor, offer an opportunity to acquire a broad foundation in the interdisciplinary mix of sciences required to

understand and find solutions for today's complex environmental problems. Students can tailor the scientific focus of the programs to their specific interests. No matter which pathway is followed through Environmental Science, some coursework on social and policy perspectives are a required part of the program. The premise is that those who will develop our scientific knowledge and technological capacities, and whose scientific research will guide environmental policy must also have a basic understanding of the social, economic, and policy implications of their work. The Environment programs at the University of Toronto Mississauga are truly interdisciplinary. Current environmental problems require interdisciplinary solutions and we have designed these programs to provide students with appropriate backgrounds to achieve this. We have selected a core group of courses for this program that while still maintaining interdisciplinarity gives the new Minor a distinct identity, different from Minors offered by the contributing disciplines. We have made it mandatory that at least four different disciplines be represented among the program-related course selections. This Minor will allow students from the Sciences to add an environmental focus to their discipline-based studies. LEARNING OUTCOMES ARE ADDRESSED IN THE FULL VERSION OF THE PROPOSAL.

Programs - Resource Implications

Program #1 ERMAJ1061 Environmental Science (Science)

Resource implications: There are no significant resource implications to these changes. We have consulted with any department/professor with courses that would be materially affected by any of the changes proposed here, notably Chemical and Physical Sciences. A detailed list of consultations that were undertaken and the results of the consultations is available from barbara.murck@utoronto.ca or grace.chung@utoronto.ca. ENV201H5 (formerly GGR234H5 Environmental and Resource Management) becomes a core option for the Environmental Science programs. There may be enrollment implications for this course; Professor Conway is willing to expand the course to manage this additional demand. We have made minor changes in the 2nd year to take some pressure off of BIO205H5; the Biology Department has approved these changes. ERS201H5, 202H5 is now part of a group of options in this program; realistically, this should have little impact on course enrollments, as the paired options are Chemistry-heavy and will appeal mainly to those few students who would formerly have followed the Environmental Analysis program. We have added ERS103H5, 120H5 as a first-year Science option. Demand for ERS201H5 may increase as a result of its more central role in the Specialist program but the department has indicated its willingness to manage this demand.

Program #2 ERMAJ1149 Biology for Health Sciences

Resource implications: A 0.5 course stipend ($6,000) to offset extra teaching by converting BIO210H5 to BIO210Y5.

Program #3 ERMIN1061 Environmental Science (Science)

Resource implications: General: The only resource implication that we can identify would be enhanced student interest in some courses, primarily those that are featured prominently in the new program, notably ENV100Y5 and ENV201H5. Plans had already been made to move to two sections in ENV100Y5 to accommodate student demand, so this it should not be a problem to accommodate the additional students. In fact, enrollments in the course may not increase at all as a result of the new program the program enrollments may derive from students who are already taking ENV100Y5. ENV201H5 (formerly GGR234H5 Environmental and Resource Management) becomes a core course for the new Minor program, and there may be some enrollment pressure on this course as a result. Professor Conway is willing to expand the course to manage additional demand, provided TA assistance will be available to match the increase in student numbers. We have consulted with any other department/professor with courses that would be materially affected by any of the changes proposed here. All of them are happy and excited to be associated with the new program. A list with the details of these consultations is available from grace.chung@utoronto.ca or barbara.murck@utoronto.ca. Estimated Enrollment per Academic Year in the new program: We anticipate that the enrollment in this new program will start with approximately 5 students and will likely go to 30 students within the first few years of its existence. This is a conservative estimate, based on the healthy enrollments in the existing Environmental Science Major and Specialist programs. New courses necessary to mount for this program: None Additional Instructor(s) Requirements: None. We have purposely constructed the programs with a lot of flexibility around course choices, to accommodate courses that may not be taught every year. In addition, we have ensured that all of the core courses are courses that are already taught every year and would not require any additional stipend or overload funding. Teaching Assistant(s) Requirements: We do anticipate the potential for increased student interest and thus in enrollments in some core courses, notably ENV201H5, and this may eventually require additional TA support. All departments with courses that may experience growth have been consulted, as discussed above. Laboratory Equipment Requirements: None anticipated Computing Resources Requirements: None anticipated

Program #4 ERSPE1061 Environmental Science (Science)

Resource implications: The only resource implication that we can identify would be enhanced student interest in some courses, primarily those that are featured prominently in the program, notably ENV100Y5. Plans had already been made to move to two sections in ENV100Y5 to accommodate student demand, so this should not be a problem. We have consulted with any department/professor with courses that would be materially affected by any of the changes proposed here, notably in Chemical and Physical Sciences. A list with the details of these consultations is available from barbara.murck@utoronto.ca or grace.chung@utoronto.ca. We have enhanced options in the 2nd year to meet a range of student interests; the Biology Department, Geography Department, Chemical and Physical Sciences, and Geography, as well as the Science and Social Science Curriculum Committees have approved these changes. There may be a somewhat increased focus on ERS201H5 as a result of its core role in the 2nd year; the department has indicated that it has acquired the resources with which to double to laboratory sections of the course, so this should not be a problem.

Deleted Programs

Program #1 ERMAJ1080 Environmental Analysis and Monitoring (Science)

Environmental Analysis and Monitoring (Science):	This program is being deleted because enrollments have historically been low. We wish to streamline choices for students, while still maintaining the flexibility to respond to student interests, by combining this program with the better-subscribed Environmental Science Specialist Program (Science). Within the new Environmental Science Specialist it will still be feasible for students to follow a pathway that emphasizes the application of laboratory analytical sciences to environmental problems. The originator of this program has been consulted and approves the deletion of the program.

Program #2 ERSPE1080 Environmental Analysis and Monitoring (Science)

Environmental Analysis and Monitoring (Science):	This program is being deleted because enrollments have historically been low. We wish to streamline choices for students, while still maintaining the flexibility to respond to student interests, by combining this program with the better-subscribed Environmental Science Specialist Program (Science). Within the new Environmental Science Specialist it will still be feasible for students to follow a pathway that emphasizes the application of laboratory analytical sciences to environmental problems. The originator of this program has been consulted and approves the deletion of the program.

Program #3 ERSPE2005 Health Sciences Communication (SCI)

Health Sciences Communication (SCI):	This program will no longer be offered in 2010-2011. It is recommended that interested students consider the Health Science Communication Major. Since its inception in 2005, the HSC specialist program in CCIT has attracted only two students. To date, none have graduated. The reason for the low participation is that students in CCIT do not have the requisite science background for the HSC Specialist program, nor do they have the GPA. In 2007, an HSC Major program was designed to eventually replace the HSC Specialist Program. The course selection was similar to the Specialist Program, however, the number of science courses and minimum GPA were lowered.

Programs - Other Changes

Program #1 ERMAJ0205 Forensic Science

Rationale for change: In the 3th year requirements: STA310H5 and 311H5 were deleted and replaced with STA220H5 and 221H5, which were the general STA courses initially included in the FSC major. The original rationale to add STA310H5 and 311H5 was to get more forensic statistics into the Program, however they have never been taught (they are administered by STA) and students have continued to take STA220H5 and 221H5 to complete program requirements. Additionally, we have identified other related curriculum priorities (to be dealt with in next year's curriculum), such as increasing forensic content for AAFS accreditation (namely FSC BIO and FSC CHM content), so we are now looking at the possibility of incorporating the statistics components into existing FSC courses; therefore, STA310H5 and 311H5 should be deleted and replaced with STA220H5 and 221H5. In the 4th year requirements: 2.0 from the following list: CSC333H5 was deleted from the list of courses. The course is a CSC course, NOT administered by FSC, that is open to FSC Students ONLY but not open to their own Computer Science students. This course is mainly about the procedural collection, handling and analysis of physical (digital) evidence rather than science. It has run twice in the past with low enrolment and presently has very few students enrolled in it and may be cancelled this spring. In addition, we will be working on exploring a desired structure for a FSC IT or Computing Specialist for future curriculum. Therefore, in view of the limited scientific content, lack of academic science credentials of the instructor (sessional-who may be excellent in other respects), low enrollments, and a possible FSC-CSC (-IT) program the course should be removed. Also deleted in this 4th year section list of courses was BIO361H as it was included because it is listed as a prerequisite for STA311H5, which is now being deleted. In the 4th year requirements: 2.0 from the following list: the new course FSC489H5 was added to the list of courses. Minor revisions made: spelling and revision of web page url.

Before: Limited Enrolment: Admission into the Forensic Science Major program is by special application ONLY and **MUST** be completed in conjunction with a second approved Major (see Notes below). To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct on-line FSC Application, upon completing the 1st year minimum requirements . **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM140Y5 with 65% or better.
3. Completion of MAT134Y5/135Y5/137Y.
4. A minimum Cumulative Grade Point Average of at least **2.7** The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.
5. Enrolment in an Approved Second Major (See Note 1).

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/~w3fsc Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another postsecondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

Third Year	BIO338H5; STA310H5, 311H5
Fourth Year	2.0 from the following list: BIO361H5; CSC333H5; FSC300H5, 302H5, 306H5, 310H5, 350H5, 360H, 361H, 401H5, 402H5

After: Limited Enrolment: Admission into the Forensic Science Major program is by special application ONLY and **MUST** be completed in conjunction with a second approved Major (see Notes 'Second Major' below). To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC Application, upon completing the 1st year minimum requirements . **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM140Y5 with 65% or better.
3. Completion of MAT134Y5/135Y5/137Y.

4. A minimum Cumulative Grade Point Average of at least **2.7** The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.
5. Enrolment in an Approved Second Major (See Second Major Notes: 1).

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another post-secondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to submitting the Forensic Science Program application.

Third Year	BIO338H5; (STA220H5, 221H5)/ (BIO360H5, 361H5)
Fourth Year	2.0 from the following list: FSC300H5, 302H5, 306H5, 310H5, 350H5, 360H5, 361H5, 401H5, 402H5, 489H5

Program #2 ERMAJ1061 Environmental Science (Science)

Rationale for change: The modifications proposed for this interdisciplinary program result primarily from the deletion of the Environmental Analysis and Monitoring Major program. We needed to incorporate some additional flexibility into the Environmental Science Major, in order to accommodate students who are interested in a more Chemistry-based approach to the study of the environment, which formerly would have been available to students through the Environmental Analysis and Monitoring Program. The core foundation course for Environmental Science remains ENV100Y5, which is a SCI course. With the newly merged Environmental Science program, students can still follow a pathway that places emphasis on the analytical, laboratory-based sciences, including courses such as Analytical Chemistry, Physics of the Climate System, Physical Hydrology, and Environmental Modelling. Alternatively, students can elect to follow a pathway that focuses more on an integrated ecosystem model and requires significant field-based coursework, including courses such as Freshwater Biology, Landscape Biogeography, Glaciers, and Environmental Soil Science. Analogous to the Environmental Management (HBA) programs, for which students are required to take some SCI courses, we expect Environmental Science students to undertake some studies in SSc/HUM. The premise that those whose science-based research will help us understand the functioning of the natural environment must also have some understanding of the social, economic, ethical, and policy implications of their work. The Environmental Science programs also require quantitative Research Methods courses, and provide ample opportunities for independent research and experiential learning. This is consistent with the University's goals as expressed in Stepping Up.

Before: Limited Enrolment: Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher.
8.0 credits are required.

First Year	ENV100Y5; MAT134Y5/135Y5/137Y5/138Y5/ (CSC108H5, 148H5); CHM140Y5/PHY135Y5
Second Year	1. BIO205H5 2. GGR234H5 3. 1.0 credit from ERS201H5, 202H5, 203H5 4. 1.0 credit from GGR214H5, 217H5, 227H5
Higher Years	1. **Field perspectives:** 0.5 credit from BIO301H5, 302H5, 303H1, 305H1, 306H1, 308H1, 313H5, 316H5; ERS325H5; GGR379H5, 389H5; GLG445H1, 448H1 2. **Biological Perspectives:** 0.5 credit from BIO312H5, 330H5, 332Y5, 335H5, 337H5, 405H5, 418H5, 464H5 3. **Physical Geographical Perspectives:** 1.0 credit from ERS315H5, 317H5, 319H5; GGR305H5,

	307H5, 309H5, 311H5, 315H5, 316H5, 321H5, 337H5, 338H5, 372H5, 375H5, 377H5, 378H5, 406H5, 407H5, 488H5

After:

Limited Enrolment: Enrollment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher.
Within an Honours degree, 8.0 credits are required, of which at least 2.0 must be at the 300-400 level.

First Year: 3.0 credits	1. **Introduction**: ENV100Y5 2. **Quantitative Foundation**: 1.0 credit chosen from this list: (CSC108H5, 148H5), MAT132Y5, 134Y5, 135Y5, 137Y5 3. **Basic Scientific Foundation**: 1.0 credit chosen from this list: BIO152H5, 153H5; ERS103H5, 120H5; CHM140Y5; PHY135Y5 *Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.*
Second Year: 2.5 credits	1. **Environmental Management Perspectives**: ENV201H5 2. **Biological & Ecological Perspectives**: 0.5 credit chosen from this list: BIO200H5, 204H5, 205H5, 206H5, 215H5 3. **Geographical Perspectives**: 0.5 credit chosen from this list: GGR214H5, 217H5, 227H5 4. **Physical & Chemical Perspectives**: 0.5 credit chosen from this list: CHM221H5, 231H5, 242H5; ERS201H5, 202H5, 203H5; PHY237H5 5. **Analytical & Research Methods**: 0.5 credit chosen from this list: CHM211H5; BIO360H5; GGR276H5, 278H5; STA220H5; or another program-relevant 200/300-level Research Methods course (SCI), with permission of the Program Advisor
Upper Years: 2.5 credits	1. **Field, Experiential & Research Perspectives**: 0.5 credit chosen from this list: ANT318H5; BIO301H5, 302H5, 313H5, 316H5, 329H5; ERS325H5; ENV232H5, 299Y5, 331H5, 399Y5, 400Y5; GGR317H5 (with field-trip option), 379H5; SCI398H5, 498H5, 499H5; or another program-relevant Field, Experiential, or Research course (SCI), with permission of the Program Advisor 2. **Biogeochemical Perspectives**: 1.5 credit chosen from this list: BIO311H5, 312H5, 318Y5, 328H5, 330H5, 333H5, 373H5, 405H5, 406H5, 436H5, 464H5; GGR305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 317H5, 321H5, 337H5, 338H5, 372H5, 375H5, 377H5, 378H5, 403H1, 406H5, 407H5, 409H1, 413H1, 463H5, 479H5; JBG312H5; CHM310H1, 311H5, 333H5, 347H5, 361H5, 362H5, 391H5, 393H5; ENV315H1; ERS315H5, 321H5; PHY331H5, 332H5 3. **Social, Economic & Policy Perspectives**: 0.5 credit chosen from this list: ANT368H5; ECO373Y5; ENG259H5; ENV393H5; GGR329H5, 333H5, 345H5, 348H5, 349H5, 361H5, 365H5, 367H5, 369H5, 370H5, 378H5, 380H5; HIS318H5, 319H5; MGT394H5; PHL255H5, 273H5, 373H1; POL250Y5, 343Y5; SOC226H5, 319Y5, 339H5, 349H5, 355H5, 356H5; WRI375H5

Program #3 ERMAJ1095 Health Sciences Communication (Sci)

Rationale for change: If the proposed course changes are approved, many HSC courses will have a second-year science prerequisite. Therefore there must be a required second-year science course in the HSC major. BIO201H5 has been removed as the course modules change yearly and the course does not present students with advanced biological concepts.

Before:

Second Year	(1.5 credits) 1. 1.0 credit required: CCT202H5; BIO201H5; WRI203H5 2. 0.5 credit from: CCT204H5; 205H5; 206H5; 260H5; VCC201H5

After:

Second Year	(1.5 credits) 1. 0.5 credit required: CCT202H5; WRI203H5 2. 0.5 credit required: BIO204H5; BIO210H5 or BIO210Y5 3. 0.5 credit from: CCT204H5; 205H5; 206H5; 260H5; VCC201H5

Program #4 ERMAJ1160 Psychology (Science)

Rationale for change: The addition of new courses must be listed as program requirements/options.

Before:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5 2. 2.5 credits from the following courses: 0.5 credit must be taken from each group. 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Cognitive/Perception: PSY270H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5 3. 1.5 credits from the following courses: 0.5 credit must be taken from each group: 1. Biological Bases of Behaviour: PSY318H5, 346H5, 351H5, 353H5, 354H5, 355H5, 357H5, 362H5, 372H5, 393H5, 395H5, 397H5, 398H5; BIO304H5, 310H5, 318Y5, 328H5 2. Cognitive/Perception: PSY312H5, 315H5, 316H5, 331H5, 351H5, 360H5, 362H5, 371H5, 372H5, 374H5, 385H5, 393H5, 397H5; CCT316H5, 326H5, 371H5, 373H5, 379H5 3. Developmental/Abnormal/Social/Personality: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 320H5, 321H5, 324H5, 325H5, 327H5, 328H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5; CCT316H5, 326H5 4. 1.0 additional credit in Psychology. At least 0.5 must be at the 300/400 level

After:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5 2. 2.5 credits from the following courses: 0.5 credit must be taken from each group.

	1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Perception/Cognition/Communication: PSY270H5, 274H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5 3. 1.5 credits from the following courses: 0.5 credit must be taken from each group: 1. Biological Bases of Behaviour: PSY318H5, 346H5, 351H5, 353H5, 354H5, 355H5, 362H5, 372H5, 393H5, 395H5, 397H5, 398H5; BIO304H5, 310H5, 318Y5, 328H5 2. Cognitive/Perception: PSY312H5, 315H5, 316H5, 331H5, 351H5, 360H5, 362H5, 371H5, 372H5, 374H5, 376H5, 384H5, 385H5, 387H5, 393H5, 397H5; CCT316H5, 326H5, 371H5, 373H5, 379H5 3. Developmental/Abnormal/Social/Personality: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 320H5, 321H5, 324H5, 325H5, 327H5, 328H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5; CCT316H5, 326H5 4. 1.0 additional credit in Psychology. At least 0.5 must be at the 300/400 level

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Program #5 ERMAJ1688 Computer Science

Rationale for change: We reduced the grades that are required in first-year courses in order to match the new requirements at St. George. Also, we now allow students who started off in different programs to present MAT134Y5 or MAT135Y5 instead of MAT137Y5, in combination with MAT232H5.

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

1. **Prerequisite courses** A minimum of 4.0 courses to include CSC148H5(65%); MAT102H5(60%), 137Y5(60%)
2. **Cumulative Grade Point Average (CGPA)** The minimum CGPA is determined annually. It is never lower than 2.0.

The Computer Science Major is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

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

1. **Prerequisite courses** A minimum of 4.0 courses to include CSC148H5; MAT102H5; and one of (MAT137Y5, MAT232H5).
2. **Cumulative Grade Point Average (CGPA)** The minimum CGPA is determined annually.

The Computer Science Major is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

Program #6 ERMAJ1883 Exceptionality in Human Learning (Science)

Rationale for change: New courses must be listed as program requirements/ options.

Before:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5/

	2. PSY210H5, 213H5 3. 2.5 credits from the following: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 319H5, 321H5, 325H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5, 374H5, 385H5, 393H5 4. 1.0 additional credit from the following: BIO204H5, 205H5, 206H5, 207H5, 210H5, 215H5, 304H5, 310H5, 315H5, 341H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 443H5, 452H5, 477H5; ANT203Y5, 331H5, 332H5, 334H5, 339Y5, PSL201Y1

After:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5/ 2. PSY210H5, 213H5 3. 2.5 credits from the following: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 319H5, 321H5, 325H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5, 374H5, 376H5, 384H5, 385H5, 393H5 4. 1.0 additional credit from the following: BIO204H5, 205H5, 206H5, 207H5, 210H5, 215H5, 304H5, 310H5, 315H5, 341H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 443H5, 452H5, 477H5; ANT203Y5, 331H5, 332H5, 334H5, 339Y5, PSL201Y1

Program #7 ERMAJ2070 Geography (Science)

Rationale for change: GGR234H5 is deleted from second year as it is designated to ENV201H5. This better emphasizes the role of this course in the Environment programs.

Before:

Second Year	**3.0 credits:** 1.0 credit from GGR214H5, 217H5, 227H5 1.0 credit from GGR276H5, 277H5, 278H5 0.5 credit from GGR202H5, 207H5, 234H5 0.5 credit from any other 200-level GGR courses

After:

Second Year	**3.0 credits:** 1.0 credit from GGR214H5, 217H5, 227H5 1.0 credit from GGR276H5, 277H5, 278H5 0.5 credit from GGR202H5, 207H5 0.5 credit from any other 200-level GGR courses

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Program #8 ERMAJ2364 Biology (Science)

Rationale for change: Note added: *MAT134Y5 - Calculus for Life Sciences is highly recommended.
MAT137Y5 has been added as an option.

Before: 7.0 credits are required including at least 2.0 at the 300/400 level.

1. CHM140Y5; MAT132Y5/134Y5/135Y5
2. BIO152H5, 153H5, 204H5, 205H5, 206H5, 207H5
3. 2.0 in Biology from the 300 or 400 level.

Notes:

1. Although BIO215H5 is not required for a Biology Major, it is a prerequisite for many cell and molecular courses at the 300 level. Students should consider carefully which 300/400 level courses they intend to take.

2. PSL201Y1, offered on the St. George campus, will not meet the Physiology requirements for the Biology Major program and may not be substituted for BIO204H5.

After:

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

1. CHM140Y5; MAT132Y5/134Y5*/135Y5/137Y5
2. BIO152H5, 153H5, 204H5, 205H5, 206H5, 207H5
3. 2.0 in Biology from the 300 or 400 level.

*MAT134Y5 - Calculus for Life Sciences is highly recommended.

Notes:

- Although BIO215H5 is not required for a Biology Major, it is a prerequisite for many cell and molecular courses at the 300 level. Students should consider carefully which 300/400 level courses they intend to take.
- PSL201Y1, offered on the St. George campus, will not meet the Physiology requirements for the Biology Major program and may not be substituted for BIO204H5.

Program #9 ERMAJ2511 Mathematical Sciences (Science)

Rationale for change: This change is to provide much needed guidance to students as to which 300/400 level courses to select. It does not affect the distribution of the credits or overall program requirements.

Before:

Higher Years	1. STA257H5/0.5 MAT credit at the 200+ level 2. MAT301H5/315H5, 334H5 3. 2.0 addition credits, taken from MAT252H5 or any 300/400 level MAT course, of which no more than 0.5 credit is a reading course.

After:

Higher Years	1. MAT301H5, 334H5, 378H5/392H5 (*MAT392H5 is recommended for CTEP students), 402H5, 252H5/311H5/332H5/368H5, 315H5/344H5 2. STA257H5/0.5 MAT credit at the 300+ level

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Program #10 ERMIN0307 Science Education (Science)

Rationale for change: SCI398Y5 replaced by SCI395H5 and SCI396H5

Before:

Higher Years	SCI398Y5, 499H5; one of AST252H5; PHL342H5, 355H5; PHY206H5; PSY210H5, 270H5; SCI498H5; WRI307H5

After:

Higher Years	SCI395H5, SCI396H5, 499H5; one of AST252H5; PHL342H5, 355H5; PHY206H5; PSY210H5, 270H5; SCI498H5; WRI307H5

Program #11 ERMIN1160 Psychology (Science)

Rationale for change: The addition of new courses must be listed as program requirements/options.

Before:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/ 220H5 2. 1.5 credits from the following courses: 0.5 credit must be taken from each group:

	1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Cognitive/Perception: PSY270H5, 280H5 3. Developmental/Abnormal/ Social/Personality: PSY210H5, 213H5, 220H5, 230H5, 240H5 3. 1.0 credit in PSY at the 300 level. Students may take one or more of the following courses instead: CCT316H5, 326H5, 371H5, 373H5, 379H5

After:

Higher Years	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/ 220H5 2. 1.5 credits from the following courses: 0.5 credit must be taken from each group: 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Perception/Cognition/Communication: PSY270H5, 274H5, 280H5 3. Developmental/Abnormal/ Social/Personality: PSY210H5, 213H5, 220H5, 230H5, 240H5 3. 1.0 credit in PSY at the 300 level. Students may take one or more of the following courses instead: CCT316H5, 326H5, 371H5, 373H5, 379H5

Program #12 ERMIN2364 Biology (Science)

Rationale for change: Number of required credits amended to reflect the change of BIO210H5 to BIO210Y5.

Before: 4.0 credits are required, including 1.0 at the 200 level, and at least 1.0 at the 300 level.

1. BIO152H5, 153H5
2. 1.0 from BIO204H5/210H5, 205H5, 206H5, 207H5
3. 2.0 additional Biology courses, at least 1.0 at the 300/400 level.

Note: Three of the five courses in requirement 2. (above) require CHM140Y5 as a pre- or corequisite.

After: A minimum of 4.0 credits are required, including 1.0 at the 200 level, and at least 1.0 at the 300 level.

1. BIO152H5, 153H5
2. two courses from BIO204H5/210Y5, 205H5, 206H5, 207H5
3. 2.0 additional Biology courses, at least 1.0 at the 300/400 level.

Note: Three of the five courses in requirement 2 (above) require CHM140Y5 as a pre- or corequisite.

Program #13 ERSPE0482 Comparative Physiology (Science)

Rationale for change: The program now requires 14 credits because the half year BIO210 course has become a full year course. New courses, BIO329H5 and 411H5, have been added as optional courses.

Before: Within an Honours degree, 13.5 credits are required, including at least 5.0 at the 300/400 level, of which 1.0 must be at the 400 level.

Second Year	BIO204H5, 205H5, 206H5, 207H5, 210H5, 215H5
Third and Fourth Years	1. BIO304H5, 310H5, 312H5, 360H5, 409H5; CHM240Y5/(241H5, 261H5)/(242H5, 243H5) 2. At least 2.0 credits from: BIO354H5, 361H5, 372H5, 410H5, 434H5, 481Y5; CHM361H5, 362H5; PHY335H5; PSY290H5, 395H5

	3. 1.0 additional BIO credit

After: Within an Honours degree, 14 credits are required, including at least 5.0 at the 300/400 level, of which 1.0 must be at the 400 level.

Second Year	BIO204H5, 205H5, 206H5, 207H5, 210Y5, 215H5
Third and Fourth Years	1. BIO304H5, 310H5, 312H5, 360H5, 409H5; CHM240Y5/(241H5, 261H5)/(242H5, 243H5) 2. At least 2.0 credits from: BIO329H5, 354H5, 361H5, 372H5, 410H5, 411H5, 434H5, 481Y5; CHM361H5, 362H5; PHY335H5; PSY290H5, 395H5 3. 1.0 additional BIO credit

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Program #14 ERSPE1009 Forensic Science - Chemistry (Science)

Rationale for change: In the Second Year requirements, as per BIO's change, BIO210H5 was changed to BIO210Y5. Minor revisions: spelling and program web page url.

Before: Limited Enrolment: Admission into the Forensic Science-Chemistry program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct on-line FSC application, upon completing the 1st year minimum requirements . **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM140Y5 with 65% or better.
3. Completion of MAT134Y5/ 135Y5/ 137Y5.
4. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/~w3fsc Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another postsecondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

NOTES:

1. Students are strongly advised to consult program advisor regarding the program of study.
2. Corequisites for CHM371H5 are CHM361H5, 362H5.
3. Students are strongly urged to take as many forensic sciences courses as possible from the following list: ANT205H5, 306H5; BIO338H5; FSC306H5, 310H5, 350H5; PSY328H5, 344H5.
4. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
5. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
6. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written autorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Higher Years	1. BIO204H5/210H5; CHM211H5, 221H5, 231H5, 242H5, 243H5; FSC271H5/PHL271H5 2. CHM311H5, 331H5/333H5, 341H5/345H5, 347H5, 361H5, 371H5/391H5, 393H5; (BIO360H5, 361H5)/(STA220H5, 221H5) 3. FSC300H5, 302H5, 401H5, 402H5 4. CHM414H5, 416H5 5. FSC481Y5 (with chemistry focus)/CHM489Y5

After:

Limited Enrolment: Admission into the Forensic Science-Chemistry program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC application, upon completing the 1st year minimum requirements . **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM140Y5 with 65% or better.
3. Completion of MAT134Y5/ 135Y5/ 137Y5.
4. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another post-secondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

NOTES:

1. Students are strongly advised to consult the program advisor regarding their program of study.
2. Corequisites for CHM371H5 are CHM361H5, 362H5.
3. Students are strongly urged to take as many forensic sciences courses as possible from the following list: ANT205H5, 306H5; BIO338H5; FSC306H5, 310H5, 350H5; PSY328H5, 344H5.
4. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
5. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
6. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Higher Years	1. BIO204H5/210Y5; CHM211H5, 221H5, 231H5, 242H5, 243H5; FSC271H5/PHL271H5 2. CHM311H5, 331H5/333H5, 341H5/345H5, 347H5, 361H5, 371H5/391H5, 393H5; (BIO360H5, 361H5)/(STA220H5, 221H5) 3. FSC300H5, 302H5, 401H5, 402H5 4. CHM414H5, 416H5 5. FSC481Y5 (with chemistry focus)/CHM489Y5

Program #15 ERSPE1020 Ecology and Evolution

Rationale for change: BIO332Y5 and BIO337H5 have been deleted from the list of ecology/evolutionary optional courses. New courses, BIO311H5, 329H5 and 333H5, have been added to the ecology/evolutionary optional courses.
GGR227H5 and 307H5 have been added to point 7 to provide a broader choice of GGR courses.

Before:

Third and Fourth years	1. BIO313H5 2. BIO360H5 3. 1.0 credit from courses in organismal biology: BIO319H5, 325H5, 334H5/338H5, 335H5, 354H5, 356H5, 370Y5 4. 0.5 credit from field courses: BIO301H5, 302H5*, 316H5, other OUPFB** Field Courses (P.I.) 5. 2.5 credits from core ecology/evolutionary biology courses: BIO330H5, 332Y5*, 337H5*, 339H5*, 341H5, 361H5, 373H5, 406H5, 442H5, 443H5, 464H5, JBG312H5 6. 1.5 credits from other biology courses: BIO215H5, 310H5, 312H5, 318Y5, 371H5, 372H5, 407H5, 409H5, 410H5, 434H5, 481Y5 7. 1.0 credit from related courses from other departments: BIO314H5; MAT212H5, 222H5, 232H5; STA302H5, 322H5; GGR278H5 (formerly GGR261), GGR305H5/309H5/311H5, or from courses listed in #4, #5 and #6 * Offered in alternate years ** Ontario Universities Program in Field Biology

After:

Third and Fourth years	1. BIO313H5 2. BIO360H5 3. 1.0 credit from courses in organismal biology: BIO319H5, 325H5, 334H5/338H5, 335H5, 354H5, 356H5, 370Y5 4. 0.5 credit from field courses: BIO301H5, 302H5*, 316H5, other OUPFB** Field Courses (P.I.) 5. 2.5 credits from core ecology/evolutionary biology courses: BIO311H5, 329H5, 330H5, 333H5*, 339H5*, 341H5, 361H5, 373H5, 406H5, 442H5, 443H5, 464H5, JBG312H5 6. 1.5 credits from other biology courses: BIO215H5, 310H5, 312H5, 318Y5, 371H5, 372H5, 407H5, 409H5, 410H5, 434H5, 481Y5 7. 1.0 credit from related courses from other departments: BIO314H5; MAT212H5, 222H5, 232H5; STA302H5, 322H5; GGR227H5, 278H5 (formerly GGR261), GGR305H5, 307H5, 309H5, 311H5, or from courses listed in #4, #5 and #6 * Offered in alternate years ** Ontario Universities Program in Field Biology

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Program #16 ERSPE1061 Environmental Science (Science)

Rationale for change: The modifications proposed for this program result primarily from the deletion of the Environmental Analysis and Monitoring Specialist program. As a result of the deletion of that program, we needed to incorporate some additional flexibility into the Environmental Science Specialist to accommodate students who are interested in a more Chemistry-based approach to the study of the environment, which was formerly offered by the Environmental Analysis and Monitoring Program. The core foundation course for Environmental Science remains ENV100Y5, which is a SCI course. For the newly merged Environmental Science

programs, students can still follow a pathway that places emphasis on the analytical, laboratory-based sciences, including courses such as Analytical Chemistry, Physics of the Climate System, Physical Hydrology, and Environmental Modelling. Alternatively, students can elect to follow a pathway that focuses more on an integrated ecosystem model and requires significant field-based coursework, including courses such as Freshwater Biology, Landscape Biogeography, Glaciers, and Environmental Soil Science. As is the case for the Environmental Management programs, for which students are required to take some SCI courses, we expect Environmental Science students to undertake some studies in SSc/HUM. The premise is that those whose science-based research will help us understand the functioning of the natural environment must also have some understanding of the social, economic, ethical, and policy implications of their work. The Environmental Science programs also require a well-rounded foundation in basic sciences, and quantitative Research Methods courses, as well as providing ample opportunities for independent research and experiential learning, which is in line with the University's goals as expressed in Stepping Up.

Before:

Limited Enrolment: Enrolment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher.
Within an Honours degree, 12.0 credits are required.

First Year	ENV100Y5; MAT134Y5/135Y5/137Y5(CSC108H5, 148H5); CHM140Y5/PHY135Y5
Second Year	1. BIO205H5 2. GGR234H5 3. 1.0 credit from ERS201H5, 202H5, 203H5 4. 1.0 credit from GGR214H5, 217H5, 227H5
Third and Fourth Years	1. (BIO360H5, 361H5)/(STA220H5, 221H5) 2. **Field perspectives:** 1.0 credit from BIO301H5, 302H5, 303H1, 305H1, 306H1, 308H1, 313H5, 316H5, 317H5; ENV331H5; ERS325H5; GGR379H5, 389H5, 390H1; GLG445H1, 448H1 3. **Biological Perspectives:** 1.0 credit from BIO312H5, 330H5, 332Y5, 335H5, 337H5, 405H5, 418H5, 464H5 4. **Physical Geographical Perspectives:** 2.0 credits from ERS315H5, 317H5, 319H5; GGR305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 321H5, 337H5, 338H5, 372H5, 375H5, 377H5, 406H5, 407H5, 488H5 5. 1.0 credit from ENV400Y5, 490H5, 491H5, 497H5, 498Y5

After:

Limited Enrolment: Enrollment in this program is limited to students who have completed ENV100Y5 with a mark of 65% or higher, and who have a CGPA of at least 2.5.
Within an Honours degree, 12.0 credits are required, of which at least 4.0 must be at the 300-400 level, including at least 1.0 at the 400 level.

First Year: 4.0 credits	1. **Introduction**: ENV100Y5 2. **Quantitative Foundation**: 1.0 credit chosen from this list: (CSC108H5, 148H5); MAT132Y5, 134Y5, 135Y5, 137Y5 3. **Basic Scientific Foundation**: 2.0 credits chosen from this list: BIO152H5, 153H5; ERS103H5, 120H5; CHM140Y5; PHY135Y5 *Be sure to look ahead and plan to complete the prerequisites for any upper-level courses that are of interest to you.*
Second Year: 4.0 credits	1. **Biological & Ecological Perspectives**: 0.5 credit chosen from this list: BIO200H5, 204H5, 205H5, 206H5, 215H5 2. **Geographical Perspectives**: 1.0 credit chosen from this list: ENV201H5; GGR214H5, 217H5, 227H5 3. **Earth Science Perspectives**: ERS201H5

	4. **Physical & Chemical Perspectives**: 1.0 credit chosen from this list: CHM221H5, 231H5, 242H5; ERS202H5, 203H5; PHY237H5 5. **Analytical & Research Methods**: 1.0 credit chosen from this list: BIO360H5, 361H5; CHM211H5; ENV232H5; GGR276H5, 277H5, 278H5, 380H5; STA220H5, 221H5; or another program-relevant 200/300-level Research Methods course (SCI), with permission of the Program Advisor
Upper Years: 4.0 credits	1. **Field Perspectives**: 1.0 credit chosen from this list: ANT318H5; BIO301H5, 302H5, 313H5, 316H5, 329H5; ERS325H5; ENV331H5; GGR317H5 (with field-trip option), 379H5, 390H1; or another program-relevant Field course (SCI), with permission of the Program Advisor 2. **Experiential & Research Perspectives**: 1.0 credit chosen from this list: BIO400Y5; ENV399Y5, 400Y5, 497H5, 498Y5; GGR417Y5; SCI398H5, 498H5, 499H5; or another program-relevant Experiential or Research course (SCI), with permission of the Program Advisor 3. **Biogeochemical Perspectives**: 1.5 credits chosen from this list: BIO311H5, 312H5, 316H5, 318Y5, 328H5, 330H5, 333H5, 373H5, 405H5, 406H5, 436H5, 464H5; CHM310H1, 311H5, 331H5, 347H5, 361H5, 362H5, 391H5, 393H5, 416H5; ENV315H1, 393H5, 490H5, 491H5; ERS315H5, 321H5; GGR305H5, 307H5, 309H5, 311H5, 315H5, 316H5, 317H5, 321H5, 337H5, 338H5, 372H5, 375H5, 377H5, 378H5, 403H1, 406H5, 407H5, 409H1, 413H1, 463H5, 479H5, 493H5; JBG312H5; PHY331H5, 332H5 4. **Social, Economic & Policy Perspectives**: 0.5 credit chosen from this list: ANT368H5; ECO373Y5; ENG259H5; ENV393H5; GGR329H5, 333H5, 345H5, 348H5, 349H5, 361H5, 365H5, 367H5, 369H5, 370H5, 378H5, 380H5; HIS318H5, 319H5; MGT394H5; PHL273H5, 373H1; POL250Y5, 343Y5; SOC226H5, 319Y5, 339H5, 349H5, 355H5, 356H5; WRI375H5

Program #17 ERSPE1118 Biotechnology (Science)

Rationale for change: It is has been our experience that the most common reason for students not being able to meet the qualifications for entering the Specialist after the first year of study is because of a below minimum grade in CHM140Y5. Lowering the minimum grade from 65% to simply a 'C' (i.e. 63% or higher) will let several of the borderline students into the Specialist.
The current criteria for letting in students after second year is 'approval of the program advisors'. This led to many inquiries from students about what the criteria were and there was always some question as to how consistently the criteria were applied. The new wording provides a clear set of criteria that students need to meet in order to enter the Specialist after the second year of studies.
Note added: MAT134Y5 - Calculus for Life Sciences is highly recommended.
JBC201H5 has become BIO200H5.
A new mandatory course, BIO374H5, is being introduced. Rather than increasing the program requirements from 15 to 15.5 credits, we sought another solution.
PHY135Y5 is not a prerequisite for any of the required or recommended optional courses in the program and therefore can be easily removed.
The two required first year Management courses have been moved from third/fourth year to first year to replace PHY135Y5 in the required first year courses.
In order not to decrease the program credit requirements from 15 to 14.5, we are increasing the optional third year course requirements from 0.5 to 1.0 credits.
BIO360H5 fills quickly each year and its time slot conflicts with several other courses. By making STA220H5 an acceptable alternative for BIO360H5, students will find it easier to schedule courses for this program.

Before:

Limited Enrolment: Enrolment in this program is limited. Students wishing to enrol at the end of first year (4.0 credits) must obtain a grade of at least 65% in CHM140Y5 and a cumulative grade point average of at least 2.50 to qualify.
Within an Honours degree, 15.0 credits are required, including at least 6.0 at the 300/400 level, of which 2.0 must be at the 400 level.

First Year	BIO152H5, 153H5; CHM140Y5; MAT132Y5/134Y5/135Y5/137Y5; PHY135Y5
Second Year	BIO204H5, 206H5, 207H5, 215H5; CHM211H5, 242H5, 243H5; JBC201H5
Third and Fourth Years	1. BIO314H5, 315H5, 360H5, 370Y5, 372H5; CHM311H5, 361H5; MGM101H5, 102H5; JBC472H5 2. 0.5 credit from: BIO304H5, 310H5, 312H5, 341H5, 380H5, 409H5; CHM333H5 (note: CHM231H5 is prerequisite for this course), CHM341H5, 345H5, 347H5, 362H5, 371H5 3. 1.0 credit from CHM/BIO courses at the 400 level.

After:

Limited Enrolment: Enrolment in this program is limited. Students who wish to enrol at the end of first year (4.0 credits) must obtain a grade of at least C (63%) in CHM140Y5 and a cumulative grade point average of at least 2.50 to qualify. Students who do not meet these criteria after first year can apply to enter the Specialist at the end of second year (8.0 credits) with the following new requirements: a grade of at least 70% in CHM242H5 and a cumulative grade point average of at least 2.50.
Within an Honours degree, 15.0 credits are required, including at least 6.0 at the 300/400 level, of which 1.5 must be at the 400 level.

First Year	BIO152H5, 153H5; CHM140Y5; MAT132Y5/134Y5*/135Y5/137Y5; MGM101H5, 102H5 *MAT134Y5 - Calculus for Life Sciences is highly recommended.
Second Year	BIO200H5, 204H5, 206H5, 207H5, 215H5; CHM211H5, 242H5, 243H5
Third and Fourth Years	1. BIO314H5, 315H5, 360H5/STA220H5, 370Y5, 372H5, 374H5; CHM311H5, 361H5; JBC472H5 2. 1.0 credit from: BIO304H5, 310H5, 312H5, 341H5, 380H5, 409H5; CHM333H5 (note: CHM231H5 is prerequisite for this course), CHM341H5, 345H5, 347H5, 362H5, 371H5 3. 1.0 credit from CHM/BIO courses at the 400 level.

Program #18 ERSPE1160 Psychology (Science)

Rationale for change: The addition of new courses must be listed as program requirements/options.

Before:

Second Year	1. (PSY201H5, 202H5)/(BIO360H5, 361H5)/(ECO220Y5/227Y5)/(STA220H5, 221H5)/ 2. 2.5 credits from the following courses: 0.5 credit must be taken from each of the following groups and one additional 0.5 credit from groups a) or b) 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Cognitive/Perception: PSY270H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5

Third Year	1. PSY309H5 2. One laboratory course from the following: PSY319H5, 329H5, 379H5, 399H5 3. 2.5 credits from the following courses: 0.5 credit must be taken from each group: 1. Biological Bases of Behaviour: PSY318H5, 346H5, 351H5, 353H5, 354H5, 355H5, 357H5, 362H5, 372H5, 393H5, 395H5, 397H5, 398H5; BIO304H5, 310H5, 318Y5, 328H5 2. Cognitive/Perception: PSY312H5, 315H5, 316H5, 331H5, 351H5, 360H5, 362H5, 371H5, 372H5, 374H5, 385H5, 393H5, 397H5; CCT316H5, 326H5, 371H5, 373H5, 379H5 3. Developmental/Abnormal/Social/Personality: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 320H5, 321H5, 324H5, 325H5, 327H5, 328H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5; CCT316H5, 326H5
Fourth Year	1. PSY400Y5/403H5/404H5/405H5/406H5 2. one of the following: PSY402H5, 410H5, 415H5, 420H5, 430H5, 440H5, 442Y5, 471H5, 480H5, 490H5, 495H5; BIO403H5, 407H5

After:

Second Year	1. (PSY201H5, 202H5)/(BIO360H5, 361H5)/(ECO220Y5/227Y5)/(STA220H5, 221H5)/ 2. 2.5 credits from the following courses: 0.5 credit must be taken from each of the following groups and one additional 0.5 credit from groups a) or b) 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Perception/Cognition/Communication: PSY270H5, PSY274H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5
Third Year	1. PSY309H5 2. One laboratory course from the following: PSY319H5, 329H5, 379H5, 399H5 3. 2.5 credits from the following courses: 0.5 credit must be taken from each group: 1. Biological Bases of Behaviour: PSY318H5, 346H5, 351H5, 353H5, 354H5, 355H5, 362H5, 372H5, 393H5, 395H5, 397H5, 398H5; BIO304H5, 310H5, 318Y5, 328H5 2. Cognitive/Perception: PSY312H5, 315H5, 316H5, 331H5, 351H5, 360H5, 362H5, 371H5, 372H5, 374H5, 376H5, 384H5, 385H5, 387H5, 393H5, 397H5; CCT316H5, 326H5, 371H5, 373H5, 379H5 3. Developmental/Abnormal/Social/Personality: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 320H5, 321H5, 324H5, 325H5, 327H5, 328H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 345H5, 346H5, 353H5; CCT316H5, 326H5

Fourth Year	1. PSY400Y5/403H5/404H5/405H5/406H5 2. one of the following: PSY402H5, 410H5, 415H5, 420H5, 430H5, 435H5, 440H5, 442Y5, 471H5, 480H5, 490H5, 495H5; BIO403H5, 407H5

Program #19 ERSPE1237 Molecular Biology (Science)

Rationale for change: It has been our experience that the most common reason for students not being able to meet the qualifications for entering the Specialist after the first year of study is because of below minimum grade in CHM140Y5. Lowering the minimum grade from 65% to simply a "C" (i.e. 63% or higher) will let several of the borderline students into the Specialist.
The criteria for admitting students after second year have been misinterpreted by students who assumed that they still needed to have a minimum grade of 65% in CHM140Y5 even if they met the second-year criteria. The restatement of the criteria in the new description will hopefully clarify the entry requirements for students after second year.

Before: Limited Enrolment: Enrolment in this program is limited. Students wishing to enrol at the end of first year (4.0 credits) must obtain a grade of at least 65% in CHM140Y5 and a cumulative grade point average of at least 2.50 to qualify. Students enrolling after completing 8.0 credits must have achieved a grade of at least 70% in BIO206H5 and a cumulative grade point average of at least 2.50.

Fourth Year	BIO477H5/ 478H5* plus 1.0 of: BIO443H5, 452H5, 481Y5; BCH425H1, 426H1, 440H1; CHM462H5, 489Y5; JBC472H5, MGY420H1, 425H1, 428H1, 432H1, 445H1, 451H1, 452H1, 460H1, 470H1, 485H1 * In the event that BIO477H5 or 478H5 is not offered during the 4th year of student's studies, student must take 1.5 credits from the Fourth Year list above. In such a year, BIO472H1/BCH441H1 may be taken as 0.5 of the optional credit.

After: Limited Enrolment: Enrolment in this program is limited. Students wishing to enrol at the end of first year (4.0 credits) must obtain a grade of at least 'C' (63%) in CHM140Y5 and a cumulative grade point average of at least 2.50 to qualify. Students who do not meet these criteria can apply to enter the Specialist at the end of second year (8.0 credits) with the following new criteria: a grade of at least 70% in BIO206H5 and a cumulative grade point average of at least 2.50.

Fourth Year	BIO477H5/ 478H5* plus 1.0 of: BIO411H5, 443H5, 452H5, 481Y5; BCH425H1, 426H1, 440H1; CHM462H5, 489Y5; JBC472H5, MGY420H1, 425H1, 428H1, 432H1, 445H1, 451H1, 452H1, 460H1, 470H1, 485H1 * In the event that BIO477H5 or 478H5 is not offered during the 4th year of student's studies, student must take 1.5 credits from the Fourth Year list above. In such a year, BIO472H1/BCH441H1 may be taken as 0.5 of the optional credit.

Program #20 ERSPE1338 Forensic Science - Anthropology (Science)

Rationale for change: In the Second Year requirements, as per BIO's change, BIO210H5 was changed to BIO210Y5. In the Third and Fourth Year requirements: 2.0 from the following list: CSC333H5 was deleted from the list of courses. The course is a CSC course, NOT administered by FSC, that is open to FSC Students ONLY but not open to their own Computer Science students. This course is mainly about the procedural collection, handling and analysis of physical (digital) evidence rather than science. It has run twice in the past with low enrolment and

presently has very few students enrolled in it and may be cancelled this spring. In addition, we will be working on exploring a desired structure for a FSC IT or Computing Specialist for future curriculum. Therefore, in view of the limited scientific content, low enrollments, and a possible future FSC-CSC (-IT) program the course should be removed. Additionally in this same section, the new course FSC489H5 was added as an option in the list of courses. Minor revisions: spelling and program web page url.

Before:

Limited Enrolment: Admission into the Forensic Science-Anthropology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct on-line FSC Application, upon completing the 1st year minimum requirements. **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of ANT101H5 and ANT102H5 with a grade of at least 65% in each (students applying to enrol after second year must have completed 8.0 credits and achieved at least 65% in each of ANT200Y5/204Y5 and 203Y5).
3. Completion of CHM140Y5 with a grade of 65% or better.
4. Completion of MAT134Y5/135Y5/137Y
5. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/~w3fsc Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another postsecondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written autorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second Year	ANT200Y5/204Y5, 203Y5, 205H5; BIO204H5/210H5; FSC271H5/PHL271H5; PHY135Y5
Third and Fourth Years	1. ANT306H5, 334H5, 336H5/FSC310H5, ANT340H5, ANT439Y5; FSC300H5, 302H5, 481Y5; BIO360H5, 361H5 2. 1.0 credits from the following: ANT414H5, 415H5; BIO338H5; CSC333H5; FSC401H5, 402H5

After:

Limited Enrolment: Admission into the Forensic Science-Anthropology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC Application, upon completing the 1st year minimum requirements. **Meeting the minimum requirements does not guarantee admission into the program.**

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of ANT101H5 and ANT102H5 with a grade of at least 65% in each (students applying to enrol after second year must have completed 8.0 credits and achieved at least 65% in each of ANT200Y5/204Y5 and 203Y5).
3. Completion of CHM140Y5 with a grade of 65% or better.
4. Completion of MAT134Y5/135Y5/137Y

5. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another post-secondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.
NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second Year	ANT200Y5/204Y5, 203Y5, 205H5; BIO204H5/210Y5; FSC271H5/PHL271H5; PHY135Y5
Third and Fourth Years	1. ANT306H5, 334H5, 336H5/FSC310H5, ANT340H5, ANT439Y5; FSC300H5, 302H5, 481Y5; BIO360H5, 361H5 2. 1.0 credits from the following: ANT414H5, 415H5; BIO338H5; FSC401H5, 402H5; 489H5

Program #21 ERSPE1410 Forensic Science - Biology (Science)

Rationale for change: In the Second Year requirements, as per BIO's change, BIO210H5 was changed to BIO210Y5. Minor revisions made: spelling and program web page url.

Before: Limited Enrolment: Admission into the Forensic Science-Biology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct on-line FSC application, upon completing the 1st year minimum requirements. **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits; including 3.0 science credits
2. Completion of BIO152H5 and BIO153H5 with 65% or better
3. Completion of CHM140Y5 with 65% or better
4. Completion of MAT134Y5/135Y5/137Y
5. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/~w3fsc Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another postsecondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.
NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written autorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second Year	1. BIO204H5, 206H5, 207H5, 210H5/215H5; CHM242H5, 243H5; FSC271H5/PHL271H5; PHY135Y5

After:

Limited Enrolment: Admission into the Forensic Science-Biology program is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC application, upon completing the 1st year minimum requirements. **Meeting the minimum requirements does not guarantee admission into the program.**

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits
2. Completion of BIO152H5 and BIO153H5 with 65% or better
3. Completion of CHM140Y5 with 65% or better
4. Completion of MAT134Y5/135Y5/137Y
5. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another post-secondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second Year	1. BIO204H5, 206H5, 207H5, 210Y5/215H5; CHM242H5, 243H5; FSC271H5/PHL271H5; PHY135Y5

Program #22 ERSPE1505 Forensic Science - Psychology (Science)

Rationale for change: In the Second and Higher Years #2 requirements, as per BIO's change, BIO210H5 was changed to BIO210Y5. In the Third and Fourth Year requirements: #1, added PSY384H5 (new PSY course) to Third and Fourth Year options as per PSY. In the Third and Fourth Year requirements: #2: 1.0 from the following list: CSC333H5 was deleted from the list of courses. The course is a CSC course, NOT administered by FSC, that is open to FSC Students ONLY but not open to their own Computer Science students. This course is mainly about the procedural collection, handling and analysis of physical (digital) evidence rather than science. It has run twice in the past with low enrolment and presently has very few students enrolled in it and may be cancelled this spring. In addition, we will be working on exploring a desired structure for a FSC IT or Computing Specialist for future curriculum. Therefore, in view of the limited scientific content, lack of academic science credentials of the instructor (sessional-who may be excellent in other respects), low enrollments, and a possible FSC-CSC (-IT) program the course should be removed. Also in this section, the new course FSC489H5 was added to the list of course options. Minor revisions were made to: spelling and program web page url.

Before: Limited Enrolment: Admission into the Forensic Science-Psychology program is limited to a relatively small number of students per year and admission is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct on-line FSC application, upon completing the 1st year minimum requirements . **Meeting the minimum requirements does not guarantee admission into the program. Minimum Requirements**:

1. Completion of 4.0 credits, including 3.0 science credits
2. Completion of CHM140Y5 with 65% or better; MAT134Y5/135Y5/137Y
3. Completion of PSY100Y5 with a grade of at least 77%
4. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/~w3fsc Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May1 of each year NOTE:** RE - Transfer Students who have attended another postsecondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.

NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written autorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second and Higher Years	1. (PSY201H5*, 202H5)/(BIO360H5*, 361H5 *No substitute statistics course will be allowed for PSY201H5 or BIO360H5 except under exceptional circumstances. 2. FSC271H5/PHL271H5; BIO204H5/210H5 3. PSY328H5/344H5 4. PHY135Y 5. 2.5 credits from the following PSY courses: 0.5 credit must be taken from each of the following groups 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Cognitive/Perception: PSY270H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5

Third and Fourth Year	1. 2.0 credits from the following: PSY320H5, 321H5, 325H5, 327H5, 328H5, 331H5, 343H5, 333H5, 340H5, 341H5, 344H5, 345H5, 346H5, 393H5 2. 1.0 credits from the following: CSC333H5; FSC300H5, 302H5, 401H5, 402H5

After:

Limited Enrolment: Admission into the Forensic Science-Psychology program is limited to a relatively small number of students per year and admission is by special application ONLY. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC application, upon completing the 1st year minimum requirements .
Meeting the minimum requirements does not guarantee admission into the program.
Minimum Requirements:

1. Completion of 4.0 credits, including 3.0 science credits
2. Completion of CHM140Y5 with 65% or better; MAT134Y5/135Y5/137Y
3. Completion of PSY100Y5 with a grade of at least 77%
4. A minimum Cumulative Grade Point Average of at least **3.0**. The actual CGPA requirement in any particular year may exceed this value, in order to achieve a proper balance between enrolments and teaching resources.

Application for admission into the program for ALL students can be found at: www.utm.utoronto.ca/forensic Forensic Science Applications Open: **March 1 of each year** Forensic Science Application Deadline: **May 1 of each year NOTE:** RE - Transfer Students who have attended another post-secondary institution, or another faculty within the University of Toronto (including St. George and UTSC), who wish to gain admission into the program **MUST** also apply through the Ontario Universities Application Centre: www.ouac.on.ca (OUAC 105 application form), in addition to applying directly to the Forensic Science program.
NOTES:

1. The program requirements in effect at the time the student is admitted to the program must be met in order to fulfill the degree requirements.
2. Prospective students already holding a degree in Biology, Chemistry, Psychology or Anthropology may not complete a Forensic Science program in their first specialty due to the overlap of course content for courses already completed.
3. **Students without pre- and co-requisites or written permission of the instructor can be de-registered from courses at any time.** Once a student has been admitted into a FSC program stream, written authorization from the Forensic Science program advisor **MUST** be obtained for any request of change in a student's area of study within the Forensic Science program.

Second and Higher Years	1. (PSY201H5*, 202H5)/(BIO360H5*, 361H5 *No substitute statistics course will be allowed for PSY201H5 or BIO360H5 except under exceptional circumstances. 2. FSC271H5/PHL271H5; BIO204H5/210Y5 3. PSY328H5/344H5 4. PHY135Y 5. 2.5 credits from the following PSY courses: 0.5 credit must be taken from each of the following groups 1. Biological Bases of Behaviour: PSY252H5, 290H5, 295H5 2. Cognitive/Perception: PSY270H5, 280H5 3. Social/Personality/Abnormal: PSY220H5, 230H5, 240H5 4. Developmental: PSY210H5, 213H5
Third and Fourth Year	1. 2.0 credits from the following: PSY320H5, 321H5, 325H5, 327H5, 328H5, 331H5, 343H5, 333H5, 340H5, 341H5, 344H5, 345H5, 346H5, 384H5, 393H5 2. 1.0 credits from the following: FSC300H5, 302H5, 401H5, 402H5, 489H5

Program #23 ERSPE1688 Computer Science

Rationale for change: We now allow students who started off in other programs to present MAT134Y5 or MAT135Y5 in combination with MAT232H5 for admission into the Computer Science Specialist program.

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

1. **Prerequisite courses** A minimum of 4.0 credits to include CSC148H5(65%); MAT102H5(60%), 137Y5(60%)
2. **Cumulative Grade Point Average (CGPA)** The minimum CGPA is determined annually. It is never lower than 2.0.

The Computer Science Specialist is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per course basis. See www.fees.utoronto.ca for more information on the fee structures.

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

1. **Prerequisite courses** A minimum of 4.0 credits to include CSC148H5(65%); MAT102H5(60%); and one of (MAT137Y5(60%), MAT232H5(60%)).
2. **Cumulative Grade Point Average (CGPA)** The minimum CGPA is determined annually. It is never lower than 2.0.

The Computer Science Specialist is a deregulated fees program and as such, tuition fees for students enrolled in this program are higher than for other regulated fee programs. Fees are charged on a program and not a per-course basis. See www.fees.utoronto.ca for more information on the fee structures.

Program #24 ERSPE1883 Exceptionality in Human Learning (Science)

Rationale for change: The addition of new courses must be listed as program requirements/options.

Before:

Second Year	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5/ 2. PSY210H5, 213H5 3. 0.5 credit from the following: PSY202H5 (or equivalent), 240H5, 270H5, 280H5, 290H5, 295H5
Second and Higher Years	1. 3.0 credits from the following: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 319H5, 321H5, 325H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 346H5, 353H5, 374H5, 385H5, 393H5 2. PSY442Y5 and at least 0.5 credit from the following: PSY400Y5, 403H5, 404H5, 405H5, 406H5, 410H5, 415H5, 440H5, 474H5, 495H5 3. 2.0 credits from one of the following lists: 1. ANT203Y5, 204Y5, 206H5, 241Y5, 304H5, 331H5, 332H5, 333H5, 334H5, 335H5, 339Y5, 362H5, 364H5, 433H5, 434H5, 460H5 2. SOC209H5, 211H5, 216H5, 244H5, 252H5, 302H5, 305H5, 307H5, 310H5, 319Y5, 323H5, 332H5, 333H5, 348H5, 356H5, 363H5, 365H5, 368H5, 371H5, 455H5, 456H5 3. BIO204H5, 205H5, 206H5, 207H5, 210H5, 215H5, 304H5, 310H5, 315H5, 341H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 443H5, 452H5, 477H5; ANT203Y5, 331H5, 332H5, 334H5, 339Y5, PSL201Y1 NOTE: Students who took SOC100H5 must take 2.5 credits from List 3(b)

	4. 2.5 additional credits to be selected from the following (no more than 1.0 credit from any one discipline): **ANT** Any course in 3 1) not counted previously **SOC** Any course in 3 2) not counted previously **BIO** Any course in 3 3) not counted previously **CCT** CCT326H5, 379H5 **CHM** CHM242H5, 243H5, 341H5, 345H5, 347H5, 361H5, 362H5, 371H5 **ENG** ENG234H5 **FGI** FGI225Y5 **HIS** HIS308H5, 326Y5, 338H5 **LIN** LIN100Y5, 200H5, 256H5, 358H5, 372H5 **JAL** JAL253H5, 355H5 **PHL** PHL243H5, 244H5, 252H5, 255H5, 267H5, 271H5, 272H5, 274H5, 277Y5, 282H5, 283H5, 290H5, 350H5, 355H5, 375H5 **RLG** RLG224H5, 309H5, 314H5 **SCI** SCI398Y5, 499H5

After:

Second Year	1. PSY201H5/ BIO360H5/ ECO220Y5/227Y5/ SOC350H5/ STA218H5/220H5/ 2. PSY210H5, 213H5 3. 0.5 credit from the following: PSY202H5 (or equivalent), 240H5, 270H5, 274H5, 280H5, 290H5, 295H5
Second and Higher Years	1. 3.0 credits from the following: PSY310H5, 311H5, 312H5, 315H5, 316H5, 318H5, 319H5, 321H5, 325H5, 331H5, 333H5, 340H5, 341H5, 343H5, 344H5, 346H5, 353H5, 374H5, 376H5, 384H5, 385H5, 393H5 2. PSY442Y5 and at least 0.5 credit from the following: PSY400Y5, 403H5, 404H5, 405H5, 406H5, 410H5, 415H5, 440H5, 474H5, 495H5 3. 2.0 credits from one of the following lists: 1. ANT203Y5, 204Y5, 206H5, 241Y5, 304H5, 331H5, 332H5, 333H5, 334H5, 335H5, 339Y5, 362H5, 364H5, 433H5, 434H5, 460H5 2. SOC209H5, 211H5, 216H5, 244H5, 252H5, 302H5, 305H5, 307H5, 310H5, 319Y5, 323H5, 332H5, 333H5, 348H5, 356H5, 363H5, 365H5, 368H5, 371H5, 455H5, 456H5 3. BIO204H5, 205H5, 206H5, 207H5, 210H5, 215H5, 304H5, 310H5, 315H5, 341H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 443H5, 452H5, 477H5; ANT203Y5, 331H5, 332H5, 334H5, 339Y5, PSL201Y1 NOTE: Students who took SOC100H5 must take 2.5 credits from List 3(b)

	4. 2.5 additional credits to be selected from the following (no more than 1.0 credit from any one discipline): **ANT** Any course in 3a. not counted previously **SOC** Any course in 3b. not counted previously **BIO** Any course in 3c. not counted previously **CCT** CCT326H5, 379H5 **CHM** CHM242H5, 243H5, 341H5, 345H5, 347H5, 361H5, 362H5, 371H5 **ENG** ENG234H5 **FGI** FGI225Y5 **HIS** HIS308H5, 326Y5, 338H5 **LIN** LIN100Y5, 200H5, 256H5, 358H5, 372H5 **JAL** JAL253H5, 355H5 **PHL** PHL243H5, 244H5, 252H5, 255H5, 267H5, 271H5, 272H5, 274H5, 277Y5, 282H5, 283H5, 290H5, 350H5, 355H5, 375H5 **RLG** RLG224H5, 309H5, 314H5 **SCI** SCI398Y5, 499H5

Program #25 ERSPE2070 Geography (Science)

Rationale for change: GGR234H5 is deleted from second year as it is designated to ENV201H5. This better keeps up GGR count toward program requirement.

Before:

Second Year	**3.5 credits:** 1.0 credit from GGR214H5, 217H5, 227H5 1.0 credit from GGR276H5, 277H5, 278H5 0.5 credit from GGR202H5, 207H5, 234H5 1.0 credit from any other 200-level GGR courses

After:

Second Year	**3.5 credits:** 1.0 credit from GGR214H5, 217H5, 227H5 1.0 credit from GGR276H5, 277H5, 278H5 0.5 credit from GGR202H5, 207H5 1.0 credit from any other 200-level GGR courses

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Program #26 ERSPE2364 Biology (Science)

Rationale for change: New courses (BIO311H5, 329H5, 333H5, 411H5) have been added as program requirements/options.
BIO210H5 has been changed to BIO210Y5.
MAT134Y5 is marked as the highly recommended MAT course for Biology students.
BIO452H5 is no longer offered and has been deleted from the list of options in Cell, Molecular and Developmental Biology.
Additional biology-related courses have been added as options.

Before:

BIO152H5,153H5 are prerequisites for most 300-level BIO courses and should be completed by the end of second year.

It is recommended that students in the specialist program include at least 0.5 credit from each of four of the following groups:

- ◊ **Ecology and Field Biology**: BIO301H5, 302H5, 312H5, 313H5, 316H5, 330H5, 332Y5*, 337H5*, 405H5*, 418H5*, 464H5; JBG312H5; PHY335H5
- ◊ **Biology of Whole Organisms**: BIO319H5, 325H5, 334H5, 335H5, 338H5, 354H5, 356H5
- ◊ **Genetics and Evolution:** BIO341H5, 407H5, 442H5, 443H5*, 464H5
- ◊ **Cell, Molecular and Developmental Biology**: BIO314H5, 315H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 452H5*, 477H5/478H5, CHM361H5, 362H5.
- ◊ **Physiology and Behaviour**: BIO210H5, 304H5, 310H5, 312H5, 318Y5, 328H5, 409H5, 410H5, 418H5*, 434H5; PHY335H5

Additional courses: BIO361H5, 481Y5
* Offered in alternate years **Notes**:

1. Students who wish to emphasize Ecology may include 1.0 credit from the following list: GGR305H5, GGR308H5, GGR309H5, GGR311H5.
2. Students wishing to emphasize cell biology, molecular biology, microbiology, physiology or genetics, should take CHM240Y5/(241H5, 261H5)/(242H5, 243H5) in second year. Such students should take MAT132Y5/134Y5/135Y5/137Y5, a prerequisite, in their first year.
3. No substitute statistics course will be allowed for BIO360H5, except under extenuating circumstances.
4. Certain U of T Mississauga Biology courses will be treated as equivalent to corresponding St. George campus courses in satisfying requirements for certain St. George specialist programs related to Biology and Basic Medical Sciences. Students who intend to begin these programs at U of T Mississauga should consult a Biology advisor as early as possible.
5. Students intending to enrol in third year Zoology courses at St. George campus should consider taking BIO204H5 and 210H5 to fulfill a full year 200-level Physiology course requirement.

First Year	1. BIO152H5, 153H5; CHM140Y5; MAT132Y5/134Y5/135Y5/137Y5 2. 1.0 from the following: CLA201H5; ENV100Y5; ERS120H5; PHY135Y5/137Y5, PSY100Y5; WRI203H5, 307H5

After:

BIO152H5, 153H5 are prerequisites for most 300-level BIO courses and should be completed by the end of second year.

It is recommended that students in the specialist program include at least 0.5 credit from each of four of the following groups:

- ♦ **Ecology and Field Biology**: BIO301H5, 302H5, 311H5, 312H5, 313H5, 316H5, 329H5, 330H5, 333H5*, 405H5*, 418H5*, 464H5; JBG312H5; PHY335H5
- ♦ **Biology of Whole Organisms**: BIO319H5, 325H5, 334H5, 335H5, 338H5, 354H5, 356H5
- ♦ **Genetics and Evolution:** BIO341H5, 407H5, 442H5, 443H5*, 464H5
- ♦ **Cell, Molecular and Developmental Biology**: BIO314H5, 315H5, 370Y5, 371H5, 372H5, 380H5, 407H5, 477H5/478H5; CHM361H5, 362H5.
- ♦ **Physiology and Behaviour**: BIO210Y5, 304H5, 310H5, 312H5, 318Y5, 328H5, 409H5, 410H5, 411H5, 418H5*, 434H5; PHY335H5

Up to 1.0 credit may be taken from the following biology-related courses: GGR227H5, 305H5, 307H5, 309H5, 311H5; CHM347H5, 361H5, 362H5, 371H5; PHY335Y5; PSY290H5, 355H5, 357H5, 395H5, 397H5; ANT334H5, 336H5, 340H5.

Additional courses: BIO361H5, 481Y5
* Offered in alternate years

Notes:

1. Students wishing to emphasize cell biology, molecular biology, microbiology, physiology or genetics, should take CHM240Y5/(241H5, 261H5)/(242H5, 243H5) in second year. Such students should take MAT132Y5/134Y5/135Y5/137Y5, a prerequisite, in their first year.
2. No substitute statistics course will be allowed for BIO360H5, except under extenuating circumstances.
3. Certain U of T Mississauga Biology courses will be treated as equivalent to corresponding St. George campus courses in satisfying requirements for certain St. George specialist programs related to Biology and Basic Medical Sciences. Students who intend to begin these programs at U of T Mississauga should consult a Biology advisor as early as possible.

First Year	1. BIO152H5, 153H5; CHM140Y5; MAT132Y5/134Y5*/135Y5/137Y5 *MAT134Y5 - Calculus for Life Sciences is highly recommended. 2. 1.0 from the following: CLA201H5; ENV100Y5; ERS120H5; PHY135Y5/137Y5, PSY100Y5; WRI203H5, 307H5

Program #27 ERSPE2470 Behaviour, Genetics, and Neurobiology (Science)

Rationale for change: PSY357H5 has never been taught and is now removed from our course list.

Before:

Third Year	1.0 FCE from each of the following three streams: 1. Behaviour: BIO318Y5/328H5, PSY316H5, 318H5, 346H5, 351H5, 353H5, 355H5, 357H5, 360H5, 362H5, 385H5, 393H5, 395H5, 397H5, 398H5, 399H5 2. Genetics: BIO314H5, 315H5, 341H5, 372H5, 407H5, PSY355H5 3. Neurobiology: BIO304H5, 309H5, 310H5, 380H5, PSY318H5, 346H5, 385H5, 393H5, 397H5, 399H5 Third year note: ◊ Students interested in taking PSY400Y5 must take PSY309H5 in third year.

After:

Third Year	1.0 FCE from each of the following three streams: 1. Behaviour: BIO318Y5/328H5, PSY316H5, 318H5, 346H5, 351H5, 353H5, 355H5, 360H5, 362H5, 385H5, 393H5, 395H5, 397H5, 398H5, 399H5 2. Genetics: BIO314H5, 315H5, 341H5, 372H5, 407H5, PSY355H5 3. Neurobiology: BIO304H5, 309H5, 310H5, 380H5, PSY318H5, 346H5, 385H5, 393H5, 397H5, 399H5 Third year note:

	◊ Students interested in taking PSY400Y5 must take PSY309H5 in third year.

Program #28 ERSPE2511 Mathematical Sciences (Science)

Rationale for change: Because MAT301H5 is a prerequisite for MAT315H5, students can not take this two courses in arbitrary order. This is the reason for the change in "Third year" and in item 1 of "Third & Fourth years". Note 1 was removed because it is no longer relevant.

Before:

Note:

1. MAT301H5 cannot be counted under both "Third Year" and the second item of "Third and Fourth Years"; neither can MAT315H5.
2. Recommended CSC courses: CSC236H5, CSC310H5.
3. Students enrolled in this program may participate in the PEY program. For more information visit www.pey.utoronto.ca

Third Year	MAT301H5/315H5, 378H5
Third & Fourth Years	1. MAT334H5, 368H5, 392H5 2. Three of MAT302H5, 309H5, 311H5, 301H5/315H5, 332H5, 344H5 3. 1.0 additional credit in MAT at the 400 level (MAT492H5 is recommended) 4. 1.5 additional credits at the 300+ level in CSC/MAT/STA

After:

Note:

1. Recommended CSC courses: CSC236H5, CSC310H5.
2. Students enrolled in this program may participate in the PEY program. For more information visit www.pey.utoronto.ca

Third Year	MAT301H5, 378H5
Third & Fourth Years	1. MAT334H5, 368H5, 392H5 2. Three of MAT302H5, 309H5, 311H5, 315H5, 332H5, 344H5 3. 1.0 additional credit in MAT at the 400 level (MAT492H5 is recommended) 4. 1.5 additional credits at the 300+ level in CSC/MAT/STA

New Courses

Course #1 BIO311H5 Landscape Ecology (SCI)

Description:	Landscape ecology asks how spatial patterns originate and how they affect ecological processes like forest dynamics, nutrient cycling, species interactions, and the distribution and population dynamics of plants and animals. Lectures and computer labs introduce students to concepts and methods of landscape ecology and their application to current issues of land-use management and global change. The students will learn to apply GIS, spatial statistics, landscape metrics, and modelling to address problems in conservation, biodiversity, and ecosystem management. [26L, 26P]
Exclusion:	GGR311H5
Prerequisite:	BIO205H5
Corequisite:	BIO360H5/STA220H5
Rationale:	This introductory course in landscape ecology teaches Biology students the essential concepts and skills to apply ecological principles to organisms and ecosystems in their landscape context, a prerequisite for sound conservation and ecosystem management. It will be the only Biology course introducing students to spatial analysis in ecology, using GIS, spatial statistics and modeling approaches. The course should be recommended preparation for JBG312H5, and it should be an optional course for specialist programs in Biology, Ecology and Evolution, and Environmental Sciences.
No. Hours Instruction:	26L, 26P
Offered at St George:	No
Revived Course:	No

Course #2 BIO329H5 Mammalian Biology (SCI)

Description:	This course covers the adaptive radiation and diversity of mammals, major extant mammal lineages and their distinctive physiological, morphological, behavioural and ecological characteristics. Participation in the course requires one overnight field trip to live-trap and observe mammals at the Koffler Scientific Reserve at Joker's Hill and one trip to the Toronto Zoo. [26L, 39P]
Exclusion:	EEB388H1, 389H1 (formerly ZOO388H1, 389H1)
Prerequisite:	BIO204H5, 205H5
Rationale:	The course will be a valuable addition to existing courses in organismal biology. It will serve a role in the Ecology and Evolution program, and can be an option in the Comparative Physiology and Biology Specialist programs. By focusing on a single major animal taxon, students will be encouraged to integrate concepts from broad areas of biology, such as physiology, evolutionary biology and ecology.
No. Hours Instruction:	26L, 39P
Offered at St George:	No
Revived Course:	No

Course #3 BIO333H5 Freshwater Ecology (SCI)

Description:	A functional analysis of freshwater ecosystems, with emphasis on lakes. Lectures cover water chemistry; the physical structure of lakes; the different ways that algae, zooplankton, benthic invertebrates, and fish have evolved to succeed in these habitats and interact with one another; and the impact of man on freshwater systems. [26L, 18P, 5T]
Exclusion:	BIO332Y5, 337H5
Prerequisite:	CHM140Y5
Corequisite:	BIO205H5
Rationale:	This course replaces BIO332Y5 with a half course that allows more flexibility in student course scheduling and in allocating teaching resources. It is possible that after BIO333H5 stabilizes, a lecture-tutorial, non-practical course with extra assignments might be piggy-backed on it to increase enrolments without substantially affecting cost.
No. Hours Instruction:	26L, 18P, 5T

Offered at St George:	No
Revived Course:	No

Course #4 BIO374H5 Biotechnology and Society (SCI)

Description:	This course provides an overview of methods and applications of biotechnology and their relevance to society. The course covers the gambit of biotechnology applications and delves into the pros and cons of each technology and the perceived risks to society in each case. Topics may include: Bioethics, Gene Therapy, Plant Biotechnology, Marine Biotechnology, Bioinformatics and the Pharmaceutical Industry, Vaccine Development, Animal Biotechnology, Intellectual Property and Career Choices, Risk Perception of Biotechnology, Biotechnology and the Developing World, Environmental Impact of Biotechnology, Gene Screening and Pharmacogenomics, Stem Cell Biology, Microbial Biotechnology. [39L]
Prerequisite:	BIO206H5, CHM140Y5
Rationale:	This course is intended to provide Biotechnology students with a broad perspective and focus on issues critically relating to their specialty. This is of critical and central need to fourth-year students specializing in biotechnology.
No. Hours Instruction:	39L
Offered at St George:	No
Revived Course:	No

Course #5 BIO411H5 Topics in Molecular and Cellular Physiology (SCI)

Description:	An advanced, student-led seminar course on contemporary subjects in cell physiology. Students will examine, review, criticize and present primary literature on fundamental topics such as ion transport, water transport, membrane excitability, intracellular transport, and secretion applied to a variety of physiological systems. Emphasis will be placed on understanding how diverse cell types carry out specific physiological functions. [39S]
Prerequisite:	BIO310H5
Recommended Preparation:	BIO314H5, 315H5
Rationale:	This course will provide students opportunity to examine relevant topics in great detail, through the primary literature. The course will be of great value to those students planning further studies in medicine or graduate-level research. Students will present their work in oral presentations and in a review or grant style essay.
No. Hours Instruction:	39S
Offered at St George:	No
Revived Course:	No

Offered in alternate years.

Course #6 FSC489H5 Advanced Independent Project (SSc,SCI)

Description:	For students wishing to complete original research, a feasibility study, critical review of the literature or position paper leading towards a publishable report.
Prerequisite:	Permission of Program Director.
Rationale:	An introduction of an advanced independent course of this nature into the FSC Program. The course would provide our senior FSC students wishing to continue their studies in forensic sciences, an opportunity leading to a publishable paper in the field.
No. Hours Instruction:	
Offered at St George:	No
Revived Course:	No

Course #7 PSY274H5 Introduction to Psychology of Human Communication (SCI)

Description:	A survey of research on human communicative abilities from a psychological perspective. Topics include human vs. non-human communication, spoken vs. signed languages, co-speech gesture, and relationships among music, language, and general cognition. [39L]
Prerequisite:	PSY100Y5
Rationale:	This course will serve as a foundations course for a new Human Communication stream within the Psychology curriculum, feeding into existing courses such as PSY374H5 (Psychology of Language), PSY315H5 (Language Acquisition), PSY385H5 (Hearing & Hearing Disorders), PSY474H5 (Special Topics in Human Communication), the proposed Psychology of Bilingualism and the two additional 300-level courses we propose to shift to the PSY program (Music Perception & Cognition and Speech Perception & Production). The course also absorbs some content formerly taught in PSY357H5 (Animal Communication), which is being discontinued. NOTES: Despite the overlap in the titles, the proposed content does not overlap with CCT202H5 (Human Communication and Perception), which serves as a basic introduction to scientific principles related to communication for CCIT students (assuming no science or psychology background) and has a separate lab component for practical experience.
No. Hours Instruction:	39L
Offered at St George:	No
Revived Course:	No

Course #8 PSY376H5 Psychology of Bilingualism (SCI)

Description:	A survey of contemporary research on bilingualism from a psychological perspective. Topics include the representation of multiple languages in the mind/brain, the acquisition of a second language by children and adults, and effects of bilingualism on linguistic and nonlinguistic behaviour. [39L]
Prerequisite:	PSY201H5/ equivalent; PSY270H5/ 274H5/ 315H5/ 374H5
Rationale:	Bilingualism has been a topic of longstanding interest in Canadian society but is also a subfield of human communication that has seen rapid growth in recent years due to factors such as new neuroimaging techniques and emerging evidence for the potential cognitive benefits of knowing multiple languages. Bilingualism is also likely to be of special interest to the University of Toronto Mississauga undergraduates in view of their linguistic and cultural diversity. Standard survey courses on speech, language processing, and acquisition can only briefly touch on this issue due to the range of core topics that must be covered. Notes: i. This course has minimal overlap with LIN358H5 (Bilingualism and Multiple Language Acquisition). The LIN course adopts a linguistic perspective on bilingualism, focuses specifically on the topic of language acquisition, and also reflects a focus on young children (see Calendar). ii. The proposed course also has minimal overlap with the following sequence offered in Language Studies: FGI225Y5 (Teaching and Learning a Second Language), LIN380H5/FGI380H5 (Theoretical Issues in Second Language Teaching and Learning) and LIN417H5/FGI417H5 (Second Language Pedagogy), all of which are organized around the topic of language learning and which have an applied (pedagogical) focus.
No. Hours Instruction:	39L
Offered at St George:	No
Revived Course:	No

Course #9 PSY384H5 Speech Perception and Production (SCI)

Description:	The production and perception of spoken language, from an interdisciplinary perspective. Topics include perceptual and cognitive aspects of speech perception, speech signal acoustics, articulation of speech sounds, audio-visual speech integration, speech synthesis, and contextual influences on speech communication. Practical instruction in spectrogram reading and acoustic analysis. [39L]
Exclusion:	CCT379H5 (Formerly CCT379H5)
Prerequisite:	PSY201H5/ equivalent, PSY270H5/ 274H5/ 280H5/ 374H5/ LIN228H5
Rationale:	The speech sciences constitute a distinct and coherent subfield within Human Communication and reflect specific theoretical and methodological issues resulting from the complex and dynamic nature of the speech signal. Training in this area fosters skills that are relevant to career paths such as audiology, speech language pathology, and automatic speech recognition. This course has been previously listed as CCT379H5. Here, we outline the reasons motivating its transfer to

	Psychology: The course has a SCI designation and was designed to be taught by a psychologist. However, Psychology has always met its four half-course commitment to the CCIT program with four other SCI courses, most of which would not make sense to include in a PSY undergraduate curriculum and as a result truly belong in CCIT. CCT379H5 has never been taught. Currently, the only individuals with the expertise to teach this course are members of the Psychology department. As was originally intended, CCIT and PSY students with the appropriate prerequisites would continue to be able to register for the course. Finally, a course of this sort is an extremely natural offering within the Psychology of Human Communication stream being developed within the PSY program and has obvious links to other PSY courses. The content also has extremely strong links to the expertise and externally-funded research programs of at least four Psychology faculty, and would strengthen the background of students applying to the Honours program or Individual Projects. Note: The content for this proposed course is distinct from LIN228H5 (Phonetics), which includes only a cursory examination of factors related to acoustics and perception, and adopts a linguistic rather than psychological perspective.
No. Hours Instruction:	39L
Offered at St George:	No
Revived Course:	No

Course #10 PSY387H5 Music Perception and Cognition (SCI)

Description:	An examination of the cognitive foundations of music perception and performance. Consideration of processing differences between naive and experienced listeners, biological foundations of music processing, cultural contributions to music processing, theoretical perspectives on the origins of music, music and emotion, and the non-musical implications of musical training. [39L]
Exclusion:	CCT371H5 (formerly CCT371H5)
Prerequisite:	PSY201/ equivalent; PSY210H5/ 270H5/ 274H5/ 280H5.
Rationale:	This course has been previously listed and taught as CCT371H5. Here, we outline the reasons motivating its transfer to Psychology. The course has a SCI designation and was designed to be taught by a psychologist. However, Psychology has always met its four half-course commitment to the CCIT program with four other SCI courses, most of which would not make sense to include in a PSY undergraduate curriculum and as a result truly belong in CCIT. CCT371H5 has not been taught since the departure of the faculty member who taught this course a number of years ago. Currently, the only individual with the expertise to teach this course is a member of the Psychology department. As was originally intended, CCIT and PSY students with the appropriate prerequisites would continue to be able to register for the course. Finally, a course of this sort is an extremely natural offering within the Psychology of Human Communication stream being developed within the PSY program, and would constitute a cornerstone course for issues related to nonlinguistic communication.
No. Hours Instruction:	39L
Offered at St George:	No
Revived Course:	No

Course #11 PSY435H5 Advanced Topics in Naturalistic Psychology (SCI)

Description:	This seminar is intended for students interested in non-experimental research questions in abnormal/personality/social/developmental psychology, who aim to pursue graduate training (e.g., psychology, social work), Medicine, and/or related careers. Students will learn to critically assess and discuss contemporary research articles that use non-experimental approaches to study human behavior and experiences in naturalistic settings. Fundamental issues (e.g., statistical methods, measurement, causality, stability and change, genes vs. environment) will be examined using research articles on a variety of topics (e.g., marital satisfaction, well-being, aggression, self-esteem). [39S]
Prerequisite:	PSY202H5, 1.0 credit at the 300 level in Psychology
Rationale:	Seminar will provide advanced training in naturalistic methods used in social science areas in psychology. Such training is not provided in other PSY courses that tend to focus more on experimental methodology. Background in

	this area is especially helpful for students purusing graduate training in these areas. Seminar has been offered before as PSY430H5 (Special Topics in Personality) which hardly captures the essence of this course.
No. Hours Instruction:	39S
Offered at St George:	No
Revived Course:	No

Course #12 SCI395H5 Science Education: Basic Concepts (SCI)

Description:	Basic concepts in formal (school and university) and informal (public and extra-curricular) science education, as an important part of the sciences, and as an independent discipline. [26L]
Exclusion:	SCI398Y5
Prerequisite:	Enrolment in a HBSc Major or Specialist program; 10.0 completed credits.
Rationale:	This course plus SCI396H5 are to replace the deleted SCI398Y5. Students interested in preparing for being a science TA may only want the first half. Course material lends itself to this division.
No. Hours Instruction:	26L
Offered at St George:	No
Revived Course:	No

Course #13 SCI396H5 Science Education: Special Topics (SCI)

Description:	Special topics in formal (school and university) and informal (public and extra-curricular) science education. Includes focused discussions, guest lectures, and student presentations. [26L]
Exclusion:	SCI398Y5
Prerequisite:	SCI395H5
Rationale:	This course plus SCI395H5 are to replace the deleted SCI398Y5. Students interested in preparing for being a science TA may only want the first half. Course material lends itself to this division.
No. Hours Instruction:	26L
Offered at St George:	No
Revived Course:	No

Courses - Resource Implications

Course #1 AST101H5 Solar System Astronomy

Resource implications: Financial Implications: some decrease in TA hours required.

Course #2 AST201H5 Stars and Galaxies

Resource implications: Financial Implications: some decrease in TA hours required.

Course #3 BIO311H5 Landscape Ecology

Resource implications: $1200 per year for GIS software, one TA ($2,700) per 20 student lab.

Course #4 BIO329H5 Mammalian Biology

Resource implications: Specimens for laboratory such as skeletons, skins, microscope slides; bus for 2 field trips to Koffler Reserve, Joker's Hill and Toronto Zoo; 3rd field trip downtown at ROM [shuttle bus, approx. $4,000 (lower in subsequent years), one TA ($2,700) per 24 students lab.

Course #5 BIO333H5 Freshwater Ecology

Resource implications: $3960 for lab consumables, plus one TA ($2,700). This cost is offset because BIO332Y5 was cancelled.

Course #6 BIO374H5 Biotechnology and Society

Resource implications: One TA ($2,700) for marking.

Course #7 CHM211H5 Fundamentals of Analytical Chemistry

Resource implications: Financial Implications: a small decrease in TA hours required.

Course #8 CHM221H5 Introductory Physical Chemistry

Resource implications: Financial Implications: a small decrease in TA hours required.

Course #9 CHM231H5 Inorganic Chemistry I

Resource implications: Financial Implications: a small decrease in TA hours required.

Course #10 CHM242H5 Introductory Organic Chemistry I

Resource implications: Financial Implications: a small decrease in TA hours required.

Deleted Courses

Course #1 ACT244H5 Fundamental Principles of Actuarial Science

Rationale: This course is not required by our STA programs and not accepted for Actuarial Science at St. George. Historically it has low enrollment. It was going to be changed into a Finance program course, which has not happened.

Course #2 BIO332Y5 Freshwater Biology

Rationale: A new half course, BIO333H5, replaces BIO332Y5. It allows more flexibility in student course scheduling and in allocating teaching resources. It is possible that after BIO333H5 stabilizes, a lecture-tutorial nonpractical course with extra assignments might be piggy-backed on it to increase enrolments without substantially affecting cost.

Course #3 BIO337H5 Lectures in Freshwater Biology

Rationale: BIO 332Y5 (a full year course) and BIO337H5 are being replaced by BIO333H5 (a half course) that allows more flexibility in student course scheduling and in allocating teaching resources. It is possible that after BIO 333H5 stabilizes, a lecture-tutorial nonpractical course with extra assignments might be piggy-backed on it to increase enrolments without substantially affecting cost.

Course #4 BIO452H5 Advanced Topics in Cell Biology

Rationale: Course has not been offered for many years.

Course #5 PSY357H5 Animal Communication

Rationale: Course never offered as faculty member who proposed it left before it was ever taught. Not central area in PSY and no current or future planned hires interested in teaching it.

Course #6 SCI398Y5 Science Education

Rationale: Course is being divided into two half courses. Students interested in preparing for being a science TA may only want the first half. Course material lends itself to this division.

Renumbered Courses

Course #1 BIO200H5 Introduction to Pharmacology: Pharmacokinetic Principles

Before: JBC201H5

After: BIO200H5

Rationale: JBC201H5 has been to BIO200H5. BIO201H5 is already in use; therefore a new number had to be chosen- BIO200H5. The new title reflects the biology (not BIO/CHM) course content. This course cannot be used as credit for a Chemistry program.

Course #2 MAT382H5 Mathematics for Teachers

Before: MAT282H5

After: MAT382H5

Rationale: The course was entered into the calendar last year - but never offered. It was developed together with UTSC for the CTEP program, and will be offered on both campuses. The content of the course is aimed at 3rd/4th year students.

Course #3 STA219H5 Mathematics of Investment and Credit

Before: ACT239H5

After: STA219H5

Rationale: The ACT designation remains for historical reasons only.

Reweighted Courses

Course #1 BIO210Y5 Fundamentals of Human Anatomy and Physiology

Before: BIO210H5

After: BIO210Y5

Rationale: BIO210H5 has been changed from a half year to a full year course for the following reasons: (1) in a half year format the content can only be given in an abbreviated manner; a full year format would allow students to cover the different aspects of this course fully; (2) this course can be used as the full year life science course needed towards professional programs (this alleviates pressure on other courses such as BIO204H5 and BIO310H5); and (3) it is fundamentally two half courses combined to create a stronger experience at the full year level.

Courses - Description Changes

Course #1 AST101H5 Solar System Astronomy

Before: This course traces our understanding of solar system objects from prehistoric times to the present. The impact of telescopes and space observatories is outlined. This course is for "non-science" students as defined by the exclusion below. [26L, 13T]

After: This course traces our understanding of solar system objects from prehistoric times to the present. The impact of telescopes and space observatories is outlined. This course is for "non-science" students as defined by the exclusion below. [39L]

Rationale: Change [26L, 13T] to [39L]: There are now no astronomy graduate students or senior undergraduates based at University of Toronto Mississauga. This makes it nearly impossible to find TAs. The additional lecture hours will not be used to increase lecture course content. It will be used for demonstrations, problem solving and quizzes similar to what is currently done in the tutorials.

Course #2 AST201H5 Stars and Galaxies

Before: This course surveys current ideas about the structure and evolution of astronomical objects ranging from the stars to the universe as a whole. This course is intended for "non-science" students as defined by the exclusion below. This course does not require AST101H5, but it may be combined with AST101H5 for a full-course credit in science for distribution purposes. [26L, 13T]

After: This course surveys current ideas about the structure and evolution of astronomical objects ranging from the stars to the universe as a whole. This course is intended for "non-science" students as defined by the exclusion below. This course does not require AST101H5, but it may be combined with AST101H5 for a full-course credit in science for distribution purposes. [39L]

Rationale: Change [26L, 13T] to [39L]: There are now no astronomy graduate students or senior undergraduates based at University of Toronto Mississauga. This makes it nearly impossible to find TAs. The additional lecture hours will not be used to increase the lecture course content. It will be used for demonstrations, problem solving and quizzes similar to what is currently done in the tutorials.

Course #3 BIO208H5 Communication in Biology

Before: A course designed to address the fundamental skills needed for comprehension and effective communication in the biological sciences. The focus is on critical analysis of texts (primary literature, review papers, textbooks), interpretation and presentation of data; information gathering and writing skills (lab reports, critical essays) and oral presentations. Specific examples will be drawn from a variety of current research topics in biology. [13L, 26T]

After: A course designed to address the fundamental skills needed for comprehension and effective communication in the biological sciences. The focus is on critical analysis of texts (primary literature, review papers, textbooks), interpretation and presentation of data; information gathering and writing skills (lab reports, critical essays) and oral presentations. Specific examples will be drawn from a variety of current research topics in biology. Tutorials are mandatory. [13L, 26T]

Rationale: A note regarding tutorials has been added as students sometimes enquire whether tutorials are optional.

Course #4 BIO210Y5 Fundamentals of Human Anatomy and Physiology

Before: The design of the human body. Topics include locomotory and other major organ systems, integrating structure and function. A comparative approach is taken, placing the design of the human body in an evolutionary context. [26L, 13T]

After: The design of the human body. Topics include locomotory and other major organ systems, integrating structure and function. A comparative approach is taken, placing the design of the human body in an evolutionary context. [52L, 26T]

Rationale: The number of lecture and tutorial hours have been increased because this is a full-year course.

Course #5 BIO315H5 Human Cell Biology

Before: This course uses the information learned in prerequisite courses to cover advanced details in specific areas and to introduce students to many exciting new topics in the structure and function of normal and diseased cells. Areas of focus include cell adhesion, intercellular communication, signal transduction, the cytoskeleton, chemotaxis, motor proteins, receptor mediated endocytosis and intracellular trafficking with an eye towards understanding their underlying roles in disease. In the tutorials, students will learn about the underlying approaches, methods and experimentation used by researchers including polyacrylamide gel electrophoresis, western blotting, immunolocalization and various means of

localizing proteins within cells. [26L, 13T]

After: This course uses the information learned in prerequisite courses to cover advanced details in specific areas. The course will also introduce students to many exciting new topics in the structure and function of normal and diseased cells. Areas of focus include cell adhesion, intercellular communication, signal transduction, the cytoskeleton, chemotaxis, motor proteins, receptor mediated endocytosis and intracellular trafficking with an eye towards understanding their underlying roles in the disease process. In the tutorials, students will learn about the underlying approaches, methods and experimentation used by biomedical researchers including polyacrylamide gel electrophoresis, western blotting, immunolocalization and various means of localizing proteins within cells. [26L, 13T]

Rationale: Minor changes have been made to the description to improve accuracy of course content.

Course #6 ENV232H5 Environmental Sustainability Practicum

Before: This course, offered in collaboration with campus administrative offices of the University of Toronto Mississauga, provides Environment Students with practical collaborative work experience. In preparation for upper-year field courses and internships. Students will work with the campus Sustainability Coordinator and participating faculty to develop skills in communication, interdisciplinary teamwork, problem identification, and reporting while working on an environmental project on campus or in the local community. This course is strongly recommended for Specialist students in any of the Environment Programs. [26P,26S]

After: This course, offered in collaboration with campus administrative offices of the University of Toronto Mississauga, provides Environment Students with practical collaborative work experience, in preparation for upper-year field courses and internships. Students will work with the campus Sustainability Coordinator and participating faculty to develop skills in communication, interdisciplinary teamwork, problem identification, and reporting while working on an environmental project on campus or in the local community. This course is strongly recommended for Specialist and Major students in any of the Environment Programs. [26P,26S]

Rationale: ENV232H5 is added to enhance opportunities for students in the Environment programs to engage in experiential, field, and research projects.

Course #7 MAT134Y5 Calculus for Life Sciences

Before: **This course cannot be used for the Computer Science programs.**

After: **Priority is given to students enrolled in a Life Sciences Program.**

Rationale: We want to encourage more students with an interest in Life Sciences to take this course. This course can now be used for the CSC specialist or major in combination with MAT232H5.

Course #8 MAT135Y5 Calculus

Before: **This course cannot be used for the Computer Science programs.**

After:

Rationale: The phrase was removed because this course can now be used for CSC programs in combination with MAT232H5.

Course #9 MAT202H5 Introduction to Discrete Mathematics

Before: Mathematics derives its great power from its ability to formulate abstract concepts and techniques. In this course, students will be introduced to abstraction and its power, mainly through a study of topics from abstract algebra, discrete mathematics, geometry, and other fields. The course will emphasize active participation of the students in discussion and written assignments. [39L, 13T]

After: Mathematics derives its great power from its ability to formulate abstract concepts and techniques. In this course, students will be introduced to abstraction and its power through a study of topics from discrete mathematics. The topics covered will include: Sets, relations and functions; Basic counting techniques: subsets, permutations, finite sequences, inclusion-exclusion; Discrete probability: random variables paradoxes and surprises; Basic number theory: properties of the integers and the primes. The course will emphasize active participation of the students in discussion and written assignments. [39L, 13T]

Rationale: The change will better reflect the specific content of the course.

Course #10 MAT202H5 Introduction to Discrete Mathematics

Before: **Open to students enrolled in the mathematics specialist or major programs.**

After: **Priority is given to students enrolled in the Mathematics Specialist or Major programs.**

Rationale: The change will better reflect the specific content of the course.

Course #11 MAT392H5 Ideas of Mathematics

Before:

After: Limited enrolment; priority is given to students enrolled in the MAT Specialist.

Rationale: We added this phase in order to tell students that enrolment is limited. Capacity will be capped at 20 students, because this is a writing course. Priority should be given to those students enrolled in the math specialist program.

Changes in Course Name

Course #1 BIO315H5 Human Cell Biology

Before: Advanced Cell Biology
After: Human Cell Biology
Rationale: The change in name will have two effects: there will be a large increase in enrolment and students will strive harder to do well. Simply changing the name of Developmental Biology to Human Development (BIO380H5) has allowed the professor to teach more students with much greater success and it is believed this name change will do the same.

Course #2 MAT202H5 Introduction to Discrete Mathematics

Before: Introduction to Abstraction
After: Introduction to Discrete Mathematics
Rationale:

Course #3 STA107H5 An Introduction to Probability and Modelling

Before: An Introduction to Probability and Modeling
After: An Introduction to Probability and Modelling
Rationale:

Course #4 STA312H5 Topics in Statistics: Applied Statistical Modelling

Before: Topics in Statistics
After: Topics in Statistics: Applied Statistical Modelling
Rationale: To give a more informative description, which better reflects the content of the course.

Course #5 STA313H5 Topics in Statistics: Applications of Statistical Models

Before: Topics in Statistics
After: Topics in Statistics: Applications of Statistical Models
Rationale: To give a more informative description, which better reflects the content of the course.

Courses - Other Changes

Course #1 BIO200H5 Introduction to Pharmacology: Pharmacokinetic Principles

Before: Course Exclusion: PCL201H1

After: Course Exclusion: PCL201H1, JBC201H5

Rationale: JBC201H5 has been to BIO200H5. BIO201H5 is already in use; therefore a new number had to be chosen- BIO200H5. The new title reflects the biology (not BIO/CHM) course content. This course cannot be used as credit for a Chemistry program.
JBC201H5 has been added as an exclusion.

Course #2 BIO210Y5 Fundamentals of Human Anatomy and Physiology

Before: Course Exclusion:

After: Course Exclusion: BIO210H5

Rationale: BIO210H5 has been replaced by BIO210Y5 and is therefore an exclusion to BIO210Y5.

Course #3 BIO310H5 Integrative Animal Physiology

Before: Prerequisite: BIO204H5/210H5

After: Prerequisite: BIO204H5/210Y5

Rationale: Prerequisite changed to show BIO210Y5 as a full year course.

Course #4 BIO315H5 Human Cell Biology

Before: Prerequisite: BIO206H5, 207H5, 215H5

After: Prerequisite: BIO206H5, 207H5

Rationale: Deletion of the prerequisite BIO215H5.
Since the course does not have labs, this requirement was superfluous and only served to keep some students out of the course.

Course #5 BIO354H5 Vertebrate Form and Function

Before: Prerequisite: (BIO152H5, 153H5), 210H5

After: Prerequisite: (BIO152H5, 153H5), 210Y5

Rationale: Prerequisite changed to reflect BIO210Y5 as a full course.

Course #6 CHM211H5 Fundamentals of Analytical Chemistry

Before: Prerequisite: CHM140Y5; MAT132Y5/134Y5/135Y5/137Y5/138Y5

After: Prerequisite: MAT132Y5/134Y5/135Y5/137Y5/138Y5; A mark of 60% or higher in CHM140Y5

Rationale: Students with less than 60% in CHM140Y5, who have not mastered the fundamentals of chemistry, are very rarely successful in this course.

Course #7 CHM221H5 Introductory Physical Chemistry

Before: Prerequisite: CHM140Y5; MAT132Y5/134Y5/135Y5/137Y5/138Y5

After: Prerequisite: MAT132Y5/134Y5/135Y5/137Y5/138Y5; A mark of 60% or higher in CHM140Y5

Rationale: Students with less than 60% in CHM140Y5, who have not mastered the fundamentals of chemistry, are very rarely successful in this course. Web page link deleted. No longer needed.

Course #8 CHM231H5 Inorganic Chemistry I

Before: Prerequisite: CHM140Y5; MAT132Y5/134Y5/135Y5/137Y5/138Y5

After: Prerequisite: MAT132Y5/134Y5/135Y5/137Y5/138Y5; A mark of 60% or higher in CHM140Y5

Rationale: Students with less than 60% in CHM140Y5, who have not mastered the fundamentals of chemistry, are very rarely successful in this course.

Course #9 CHM242H5 Introductory Organic Chemistry I

Before: Prerequisite: CHM140Y5

After: Prerequisite: A mark of 60% or higher in CHM140Y5

Rationale: Students with less than 60% in CHM140Y5, who have not mastered the fundamentals of chemistry, are very rarely successful in this course.

Course #10 CSC411H5 Machine Learning and Data Mining

Before: Recommended Preparation: CSC338H5/350H5

After: Recommended Preparation: CSC338H5

Rationale: Removal of CSC350H5 from "Recommended Preparation". CSC350H5 was changed to CSC338H5 (though it continues to be called CSC350H1 at the St. George campus).

Course #11 ECO220Y5 Quantitative Methods in Economics

Before: Course Exclusion: BIO360H5, 361H5; ECO227Y5; MAT(123H1,124H1); STA107H5, 218H5, 220H5, 221H5, STA250H1, 248H5/258H5, 255H1, 257H5, 261H5; PSY201H5, 202H5; SOC300Y5

After: Course Exclusion: BIO360H5, 361H5; ECO227Y5; MAT(123H1,124H1); STA218H5, 220H5, 221H5, STA250H1, 248H5/258H5, 255H1, 257H5, 261H5; PSY201H5, 202H5; SOC300Y5

Rationale: Removed STA107H5 from Exclusion list as it does not apply.

Course #12 ENV232H5 Environmental Sustainability Practicum

Before: Prerequisite: 2nd year standing in any of the ENV Specialist Programs.

After: Prerequisite: 2nd-year standing in any of the ENV Specialist and Major Programs.

Rationale: ENV232H5 is added to enhance opportunities for students in the Environment programs to engage in experiential, field, and research projects.

Course #13 HSC300H5 Written Communication for Health Care

Before: Prerequisite: CCT101H5 and WRI203H5/BIO152H5

After: Prerequisite: BIO152H5 and WRI203H5/ENG205H5

Rationale: CCT101H5 (Contemporary Communication Technologies) has been removed as biology and writing courses are more relevant and necessary prerequisites for this writing course.
BIO152H5 Intro to Evol & Evolutionary Genetics is now a required course and not an "or" option with WRI203H5.
The number of suitable writing prerequisite courses has been expanded from one to two to give students choice:
WRI203H5 Expressive Writing is a sound prerequisite that explores expressive narrative; and ENG205H5 Rhetoric focuses on prose as strategic persuasion.

Course #14 HSC302H5 Biocommunication Visualization

Before: Prerequisite: BIO152H5/ANT101H5
Course Exclusion:

After: Prerequisite: BIO204H5/BIO206H5/BIO210H5/BIO210Y5/ANT203Y5
Course Exclusion: HMB304H1

Rationale: The number of science prerequisites for this course has been increased because, in past years, non-science students have lacked the knowledge needed for the assignments and science students have done noticeably better in this course.
BIO204H5 Introduction to Physiology

BIO206H5 Introductory Cell and Molecular Biology
BIO210H5/BIO210Y5 Fundamentals of Human Anatomy and Physiology (changed to Y course)
ANT203Y5 Biological Anthropology
An *exclusion* is required as the HMB304H1 course offered on the St. George campus in the Human Biology Group is similar to this course, however, the focus is on biology and not health communication. Due to a partial overlap, it is recommended that an "exclusion" be added.

Course #15 HSC403H5 Visualization of Forensic Demonstrative Evidence

Before: Prerequisite: ANT101H5/FSC239Y5/BIO152H5
Corequisite:

After: Prerequisite: FSC239Y5/BIO210H5/BIO210Y5 and ANT306H5 and completion of 10.0 credits.
Corequisite: ANT306H5

Rationale: First-year level prerequisite courses are not appropriate for a fourth-year HSC science course. Therefore it is recommended that BIO210H5/BIO210Y5 (Fundamentals of Human Anatomy and Physiology) and ANT306H5 replace ANT101H5 and BIO152H5.
Both courses are more relevant to the content explored in HSC403H5 and will therefore provide students with stronger background knowledge for higher-level applications as required in this course.

Course #16 MAT135Y5 Calculus

Before: Prerequisite: Grade 12 Advanced Functions (MHF4U) *Highly Recommended:* Grade 12 Caclulus and Vectors (MCV4U)

After: Prerequisite: Grade 12 Advanced Functions (MHF4U) *Highly Recommended:* Grade 12 Calculus and Vectors (MCV4U)

Rationale: The phrase was removed because this course can now be used for CSC programs in combination with MAT232H5.
Typo of calculus in prerequisites.

Course #17 MAT202H5 Introduction to Discrete Mathematics

Before: Course Exclusion: This course may not be taken for program credit by any student who has taken or is currently enrolled in any 400-level MAT course.

After: Course Exclusion:

Rationale: The change will better reflect the specific content of the course.

Course #18 MAT242H5 Differential Equations I

Before: Prerequisite: MAT233H5 or Corequisite MAT232H5
Corequisite: MAT223H5

After: Prerequisite: MAT233H5 or Corequisite MAT232H5.
Corequisite: MAT223H5.

Rationale: No change made.

Course #19 MAT252H5 Differential Equations II

Before: Prerequisite: MAT102H5, 232H5/233H5, 223H5, 242H5

After: Prerequisite: MAT102H5, 232H5/233H5, 223H5, 212H5/242H5

Rationale: MAT212H5 provides sufficient background and can be taken instead of MAT242H5.

Course #20 MAT311H5 Partial Differential Equations

Before: Prerequisite: MAT102H5, 232H5/233H5, 242H5

After: Prerequisite: MAT102H5, 232H5/233H5, 212H5/242H5

Rationale: MAT212H5 provides sufficient background and can be taken instead of MAT242H5.

Course #21 MAT332H5 Introduction to Nonlinear Dynamics and Chaos

Before: Prerequisite: MAT232H5/233H5, 223H5, 224H5, 242H5

After: Prerequisite: MAT232H5/233H5, 223H5, 224H5, 212H5/242H5

Rationale: MAT212H5 provides sufficient background and can be taken instead of MAT242H5.

Course #22 MAT378H5 Foundations of Analysis

Before: Prerequisite: MAT102H5, (223H5, 224H5)/248Y5, 242H5/258Y5

After: Prerequisite: MAT102H5, (223H5, 224H5)/248Y5, 212H5/242H5/258Y5

Rationale: MAT212H5 provides sufficient background and can be taken instead of MAT242H5.

Course #23 PSY315H5 Language Acquisition

Before: Prerequisite: PSY201H5/equivalent, PSY210H5/213H5/270H5/374H5/LIN200H5/ JAL253H5

After: Prerequisite: PSY201H5/equivalent, PSY210H5/ 213H5/ 270H5/ 274H5/ LIN100Y5/ 200H5

Rationale: LIN100Y5 added (this is the full-year core introductory survey course for LIN students, LIN200H5 is a half-year catch-up "crash course" for those students who didn not take LIN100Y5). If we accept LIN200H5, we should definitely accept LIN100Y5. PSY274H5 (new) added JAL253H5 removed (this is not offered at the University of Toronto Mississauga anymore) PSY374H5 removed (redundant-- the prerequisites for PSY374H5 are a subset of the prerequisites for PSY315H5)

Course #24 PSY321H5 Cross-cultural Psychology

Before: Prerequisite: PSY210H5/213H5/220H5/ 230H5/240H5/270H5
Course Exclusion: PSY325H5 taken before 1999-2000.

After: Prerequisite: PSY210H5/213H5/220H5/230H5/240H5/270H5
Course Exclusion:

Rationale: Exclusion referred to course offered over 8 years ago.

Course #25 PSY325H5 Psychology of the Self

Before: Course Exclusion: PSY320H5 taken before 1999-2000.

After: Course Exclusion:

Rationale: Exclusion referred to course offered over 8 years ago.

Course #26 PSY343H5 Theories of Psychotherapy

Before: Prerequisite: PSY201H5/equivalent, 230H5

After: Prerequisite: PSY201H5/equivalent, 230H5/240H5

Rationale: Course content has changed when renumbered PSY343H5 from PSY332H5 and now provides a stronger focus on abnormal behaviour in addition to personality. As such, 200 series courses in either personality or abnormal behaviour provide adequate preparation for taking this course.

Course #27 PSY372H5 Human Memory

Before: Course Exclusion: PSY397H5 (taken before 1999)

After: Course Exclusion:

Rationale: Exclusion removed as it was last offered 8 years ago.

Course #28 PSY374H5 Psychology of Language

Before: Prerequisite: PSY201H5/equivalent, 270H5/315H5

After: Prerequisite: PSY201H5/equivalent, 270H5/ 274H5/ 315H5

Rationale: PSY274H5 (new course) added to list of prerequisites.

Course #29 PSY442Y5 Practicum in Exceptionality in Human Learning

Before: Prerequisite: 10.0 completed credits, including PSY210H5/213H5, 1.0 additional 200+ level credit in Psychology
After: Prerequisite: 10.0 completed credits, including PSY210H5/213H5, 1.0 300 level credit in Psychology
Rationale: To ensure that students have third year preparation before taking a senior 4th year seminar.

Course #30 SCI498H5 TOPS: Teaching Opportunity Program in the Sciences

Before: Recommended Preparation: Prerequisite or Corequisite of SCI398Y5
After: Recommended Preparation: Prerequisite or Corequisite of SCI398Y5/SCI395H5
Rationale: SCI398Y5 replaced by SCI395H5 and SCI396H5

Course #31 SCI499H5 Science Education Project

Before: Recommended Preparation:
Distribution:
After: Recommended Preparation: Prerequisite or Corequisite of SCI398Y5/(SCI395H5, SCI396H5)
Distribution: SCI
Rationale: SCI398Y5 replaced by SCI395H5 and SCI396H5

Course #32 STA107H5 An Introduction to Probability and Modelling

Before: Course Exclusion: STA257H5, ECO227H5
After: Course Exclusion: STA257H5, ECO227Y5
Rationale: Exclusion Typo
