Changes to the Calendar

Program/Course Changes

Actuarial Science

**Actuarial Science Specialist**, Higher Years, point 3 should read:

3. **ECO206Y1, ECO208Y1, STA352Y1, MAT244H1, MAT246H1** are recommended

**ACT349H1** prerequisite should read:

**Prerequisite**: **ACT240H1** (minimum grade C); **ACT245H1** (minimum grade C);
**ACT247H1** (minimum grade C); (STA257H1, STA261H1); **MAT237Y1**

Anthropology

**JAL328H1** prerequisite should read:

**Prerequisite**: **ANT100Y1/LIN100Y1/LIN200H1**

Biochemistry

**BCH311H1** prerequisite should read:

**Prerequisite**: **BCH210H1**

**Biochemistry Major Program** admission requirements should read:

The Biochemistry Major program is a Type 3 program. Only students with a GPA of 2.5 or higher will be considered for entrance into the Major program. Enrollment is limited and selection is based upon performance in First Year courses. Students may combine this Biochemistry Major with another suitable Major within Science, Humanities, or Social Sciences. In order to be admitted into the program you must have taken at least 4.0 full course equivalents; enrollment is limited. For more information, refer to the Biochemistry web site at www.biochemistry.utoronto.ca

Biology

**Zoology Specialist** program, #4, should read:

4. 5.5 FCEs (at least 3.0 must be 300+ series and 1.0 400-series) from:
ANT436H1; BIO; CSB325H1, CSB327H1, CSB328H1, CSB330H1,
CSB331H1, CSB332H1, CSB343H1, CSB346H1, CSB347H1, CSB349H1,
CSB351Y1, CSB425H1, CSB429H1, CSB430H1, CSB431H1, CSB445H1,
Zoology Major program, #3, should read:

3. 3.0 FCEs (at least 2.0 must be 300+ series) from: ANT436H1, BIO;
BIO260H1/HMB265H1; CSB325H1, CSB327H1, CSB328H1, CSB330H1,
CSB331H1, CSB332H1, CSB343H1, CSB346H1, CSB347H1, CSB349H1,
CSB351Y1, CSB425H1, CSB429H1, CSB430H1, CSB431H1, CSB445H1,
CSB472H1, CSB473H1, CSB483H1, CSB484H1, CSB497H1, CSB498Y1,
CSB499Y1; EEB263Y1, EEB265Y1, EEB301H1, EEB302H1, EEB303H1,
EEB305H1, EEB306H1, EEB307H1, EEB308H1, EEB309H1, EEB310H1,
EEB311H1, EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1,
EEB324H1, EEB328H1, EEB335H1, EEB360H1, EEB361H1, EEB362H1,
EEB365H1, EEB370H1, EEB375H1, EEB384H1, EEB386H1, EEB388H1,
EEB389H1, EEB459H1, EEB460H1, EEB461H1, EEB462H1, EEB465H1,
EEB468H1, 469H1, EEB471H1, EEB494Y1, EEB495Y1, EEB496Y1,
EEB497H1/EEB498Y1, EEB499Y1; ENV234Y1, HMB321H1, JHE353H1,
JHE355H1; MGY312H1; PSY397H1, PSY497H1; ZOO (excluding ZOO200Y1,
214Y1, 215H1, 216H1)

Zoology Minor program, #3, should read:

3. 2.0 FCEs (at least one must be 300+ series) from: BIO;
BIO260H1/HMB265H1; CSB325H1, CSB327H1, CSB328H1, CSB330H1,
CSB331H1, CSB332H1, CSB343H1, CSB346H1, CSB347H1, CSB349H1,
CSB351Y1, CSB425H1, CSB429H1, CSB430H1, CSB431H1, CSB445H1,
CSB472H1, CSB473H1, CSB483H1, CSB484H1, CSB497H1, CSB498Y1,
CSB499Y1; EEB263Y1, EEB265Y1, EEB301H1, EEB302H1, EEB303H1,
EEB305H1, EEB306H1, EEB307H1, EEB308H1, EEB309H1, EEB310H1,
EEB311H1, EEB318H1, EEB319H1, EEB321H1, EEB322H1, EEB323H1,
EEB324H1, EEB328H1, EEB335H1, EEB360H1, EEB361H1, EEB362H1,
EEB365H1, EEB370H1, EEB375H1, EEB384H1, EEB386H1, EEB388H1,
EEB389H1, EEB459H1, EEB460H1, EEB461H1, EEB462H1, EEB465H1,
EEB468H1, 469H1, EEB471H1, EEB494Y1, EEB495Y1, EEB496Y1,
ENV234Y1, HMB321H1, JHE353H1, JHE355H1; MGY312H1; PSY397H1,
PSY497H1; ZOO (excluding ZOO200Y1, 214Y1, 215H1, 216H1)

Cell & Molecular Biology Major

Cell & Molecular Biology Major, #5, should read:

5. 1.5 FCE (at least 0.5 FCE must be at the 300+level) from: BCH422H1,
BCH444H1, BCH445H1, CSB299Y1, CSB327H1, CSB328H1, CSB330H1,
CSB331H1, CSB332H1, CSB340H1, CSB347H1, CSB350H1, CSB351Y1,
CSB352H1, CSB427H1, CSB428H1, CSB429H1, CSB435H1, CSB458H1,
CSB459H1, CSB460H1, CSB475H1, CSB497H1, CSB498Y1, CSB499Y1. No
more than 0.5 FCE in BCH can be used towards this requirement.

New Note for Cell & Molecular Biology Major:

Note: Students admitted to the Faculty of Arts & Science in 2007-08 or earlier
and have taken BCH 311H1, can use this in lieu of CSB 349H1. Students
admitted to the Faculty of Arts & Science in 2008-09 or later must take CSB 349H1 to complete the Cell and Molecular Biology Major program.

Prerequisite for CSB328H1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1/BIO255Y1, BIO260H1/HMB265H1

Prerequisite for CSB350H1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1/BIO255Y1, BIO260H1/HMB265H1

Prerequisite for CSB351Y1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1/BIO255Y1

Prerequisite for CSB353H1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1

Prerequisite for CSB431H1 should read:

*Prerequisite: CSB328H1/(BIO240H1, BIO241H1)/250Y1/BIO255Y1, BIO260H1/HMB265H1 and permission of instructor

Prerequisite for CSB450H1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1/BIO255Y1, BCH210H1

Prerequisite for CSB472H1 should read:

*Prerequisite: (BIO240H1, BIO241H1)/250Y1/BIO255Y1

Chemistry

New contact hours, course description, and change to prerequisite for CHM417H1:

**CHM417H1**

**Instrumentation for Chemists [24L, 10P]**

This course provides an introduction to building and using optics- and electronics-based instrumentation for laboratory research, as well as for implementing custom software control. Lecture topics include passive electronic components, diodes and transistors, operational amplifiers, light sources and detectors, reflectors, refractors, polarizers, and diffractors, LabView programming and many others. Lectures on Tuesdays are supplemented by laboratories on Thursdays (time to be determined) in which students work in teams to build fluorescent detection systems for chromatography over the course of several weeks.

Recommended preparation: CHM317H1

Economics

**Computer Science & Economics Specialist program**, Higher Years, #3, should read:

3. ECO206Y1, 208Y1, 325H1, 326H1, 375H1, 376H1, 416H1/418H1

Prerequisite for ECO220Y1 should read:

Prerequisite: ECO100Y1(67%)/ECO105Y1(80%); MAT133Y1/(MAT123H1, MAT124H1)/MAT135Y1/MAT137Y1/MAT157Y1

Environment, Centre for
Prerequisite for ENV332H1 removed.
Prerequisite for ENV333H1 removed.
Prerequisite for ENV335H1 removed.

Environment & Science, Major Program -- note added:

This program is designed as a cognate program for students also studying another science program. Students enrolling in the Environment & Science major program must also be enrolled in a specialist, major or minor program designated as a "Science program" in the Calendar.

Environment & Society, Major Program -- note changed:

This program may be taken in conjunction with either science programs or other arts programs. However, the Major program in Environmental and Society may not be combined with a Major or Minor program in Environmental Policy and Practice.

Environmental Policy & Practice, note added to Group A and B courses:

Note: A course in Group A/Group B cannot be double-counted as both a required course and an elective course for a program.

Environment & Health, Specialist Program, First Year, should read:

First Year: Students must complete BIO150Y1; (CHM138H1, CHM139H1)/CHM151Y1 and one FCE from:
GGR100Y1/(GGR100H1,GGR101H1);
MAT135Y1/MAT137Y1/MAT157Y1/JMB170Y1;
PHY110Y1/138Y1/140Y1/(PHY131H1,PHY132H1)/(PHY151H1,PHY152H1)
(PHY138Y1/(PHY131H1,PHY132H1) recommended); PSY100H1. *Students are encouraged to select an FCE from ANT/ECO/GGR/HIS/SOC to maximize elective course choice in later years.

Environment & Health, Specialist Program, Second Year, should read:

Second Year*:
(BCH210H1, CHM247H1); BIO250Y1/BIO255Y1/(BIO240H1, 241H1);
ENV222Y1/GGR222Y1/JGE221Y1; ENV234Y1/(ENV235Y1/ENV236Y1)**;
P HL273H1; BIO260H1/HMB265H1

Environmental Toxicology, Specialist Program, Second Year, #1, should read:

Second Year:
1. BCH210H1/BCH242Y1; BIO250Y1/BIO255Y1/(BIO240H1, 241H1);
ENV222Y1/GGR222Y1/JGE221Y1;
CSB/(ZOO270H1,271H1)/PSL201Y1/PSL302Y1; PCL201H1

Environmental Ethics, Major Program, Group A should read:

Group A: ABS402H1; ANT450H1; ECO105Y1; ENV335H1, ENV447H1;
FOR302H1; HIS318Y1/404H1; HPS202H1, HPS307H1; JAG321H1;
P HL275H1, PHL295H1, PHL375H1, PHL394H1, PHL395H1, PHL413H1;
PSY335H1; RLG228H1, 311H1, RLG345H1, RLG484H1

Environmental Anthropology Minor Program, #2, should read:

2. ANT200Y1/204Y1/(204H1 + ANT course approved by Program Advisor)

Physical & Environmental Geography Minor Program, #3 and #4, should read:
3. GGR390H1, (GGR301H1/GGR303H1/GGR305H1), (GGR272H1/GGR307H1/GGR310H1)
4. A half course from ENV236Y1; GGR201H1, GGR203H1, GGR205H1, GGR206H1, GGR301H1, GGR303H1, GGR305H1, GGR307H1, GGR308H1, GGR310H1, GGR314H1, GGR333H1 GGR402H1, GGR403H1, GGR404H1, GGR409H1, GGR413H1, GGR490H1, JGE347H1, JGE348H1

Prerequisite for ENV235Y1 should read:

Prerequisite: (CHM138H1, CHM139H1)/CHM151Y1/157Y1, MAT135Y1/MAT137Y1/JMB170Y1, PHY138Y1/140Y1/(PHY131H1,PHY132H1)/(PHY151H1, PHY152H1) or permission of the department

Prerequisite for ENV341H1 should read:

Prerequisite: ENV222Y1/GGR222Y1/JGE221Y1 and enrolment in a Centre program; or (BIO240H1, BIO241H1)/BIO250Y1/BIO255Y1 and enrolment in a Human Biology program; or permission of the Undergraduate Student Advisor

History

Exclusion to HIS328H1 should read:

Exclusion: JMC201Y1, HIS328Y1, ASI430H1

HIS360H1 should be HIS360Y1.

Prerequisite for HIS472H1 should read:

Prerequisite: HIS262Y1/HIS263Y1 (minimum 73%)

Italian

Course description for ITA360H1 should read:

ITA360H1
Italian Linguistics [24L]
For students having a knowledge of Italian and/or Italian dialects but no background in linguistics. Concepts of general linguistics. Italy as a linguistic entity. The structure of contemporary Italian, with special regard to its sound system and grammatical categories. This course includes a component designed to enhance students’ research experience.
Prerequisite: ITA250Y1/ITA251Y1/ITA252Y1/ITA253Y1

Joint Courses

JAL328H1 prerequisite should read:

Prerequisite: ANT100Y1/LIN100Y1/LIN200H1

Mathematics

Applied Mathematics Specialist, Third and Fourth Years, #2, should include MAT332H1.

Mathematics Specialist: total number of courses needed should read "12.0".

Mathematics and Its Applications Specialist: total number of courses needed should read "11.0-12.0".

Mathematics and Its Applications Specialist (Teaching Concentration), #2, should include MAT332H1
Mathematics and Its Applications Specialist (Computer Science Concentration), #1, should include MAT332H1.

Mathematical Applications in Economics and Finance Specialist: total number of courses needed should read "11.5-12.0".

Mathematical Applications in Economics and Finance Specialist, Higher Years, “Two of” section should include MAT332H1.

Exclusions to MAT137Y1 should read:

Exclusions: MAT125H1, MAT126H1, MAT135Y1, MAT136Y1, MAT157Y1

Modern Languages & Literatures

Section on combined language specialists added.

Near & Middle Eastern Civilizations

NMC366Y1 and NMC369Y1 should read:

NMC366Y1
Archaeology from Alexander to Muhammad [12L]
An overview of late antique Greek, Arab and Persian material culture, as seen through the archaeological record of Syria, Iraq, and Iran.

NMC369Y1
The Islamic City [24L]
Materials and technology help define the cultures and civilizations that use them, especially for archaeologists. Focusing on the Near and Middle East, this course is aimed at promoting understanding of the nature of materials used by the peoples of the region from the earliest prehistory until recent times. This course has a hands-on emphasis. (Offered in alternate years)
Recommended preparation: NMC260Y1
Exclusion: NMC369H1

New College

NEW214Y1 should be NEW214H1.

NEW322Y1 should be NEW322H1.

Philosophy

Specialist Program in Philosophy & Sociology, Sociology requirements total number of courses, should read "8.0 courses". Total number of courses needed should read "15.0".

Physics

Physics Specialist Program, Second or Third Year, should read:

Second or Third Year:
PHY324H1/307H1/308H1/309H1/326H1/407H1/408H1/409H1

Physics Specialist Program, Third or Fourth Year, should read:

Two of (PHY353H1, PHY452H1/480H1, PHY456H1/457H1, PHY459H1/PHY460H1); plus PHY4XXH1, PHY3/4XXH1/JGP438H1/JPH441H1, PHY424H1/326H, 305H1/307H1/308H1/309H1/405H1/PHY407H1/PHY408H1/409H1/PHY426H1

Physics Major Program, Third Year, should read:
**Third Year:**

1. **MAT244H1, PHY305H1/307H1/308H1/MAT309H1/326H1/324H1/405H1/407H1/408H1/MAT409H1**
2. One full course equivalent from: any PHY300+ courses, including JPA305H1
3. A half course from: any PHY400+ level course, including JPA405H1, JGP438H1, JPH441H1

Prerequisite for PHY331H1 should read:

**Prerequisite:** PHY231H1/PHY224H1/225H1 (or permission of instructor)

Prerequisite for PHY357H1 should read:

**Prerequisite:** PHY355H1/356H1

Prerequisite for PHY431H1 should read:

**Prerequisite:** MAT235Y1/MAT237Y1/MAT257Y1; PHY238Y1/251H1/PHY331H1/250H1

**Political Science**

POL324Y1 should be **POL324H1**.

POL375Y1 should be **POL375H1**.

**POL412H1:** new title and course description.

POL427Y1 should be **POL427H1**.

POL431Y1 should be **POL431H1**.

**Psychology**

**Group 2** list should read:

**Group 2:**

- BIO150Y1/252Y1 (formerly ZOO252Y1)/BIO270H1/BIO271H1 (formerly BIO252Y1); CSB332H1 (formerly ZOO332H1); ENG290Y1; HIS498H1; HMB200H1/HMB202H1 (formerly NRS201H1)/204H1/300H1/310H1 (formerly NRS302H1)/320H1 (formerly NRS202H1)/400Y1/420H1; JLS474H1; LIN100Y1/LIN200H1; NEW232Y1 (formerly NEW402Y1 AND432Y1)/302Y1/303H1/333H1/433H1; PCL475Y1;
- PHL240H1/PHL243H1/PHL340H1; POL313Y1;
- PSL100H1/PSL301H1/PSL302Y1/PSL440Y1/PSL444Y1;
- RLG211Y1/RLG301H1/RLG302H1/RLG421H1; TRN320Y1; UNI250Y1 (formerly JUP250Y1)/370H1/401H1 (formerly JUP450H1)/402H1/470H1;
- WDW260H1/WDW360H1/WDW365H1; WGS372H1

Prerequisite for JLP315H1 should read:

**Prerequisite:** One full course equivalent at the 200+ level in JAL/JUP/LIN/PSL/PSY/UNI Cognitive Science

Exclusion for **PSY332H1** should read:

**Exclusion:** MGT262H1, RSM260H1, WDW260H1

**Slavic Languages and Literatures**

Prerequisite removed for **SLA209Y1**.

**Sociology**
**Sociology Minor Program**, Entry Requirements, should read:

Option 1
1. a minimum grade of 65% in SOC101Y1
2. 3 full courses (3.0 FCEs) towards a degree (not only SOC courses).

OR

Option 2
1. a mark of 72% in each of two advanced sociology courses
2. a CGPA of 3.0 (73%-76%).

**Statistics**

Corequisite for STA257H1 should read:

*Co-requisite: MAT235Y1/MAT237Y1/MAT257Y1 (MAT237Y1/MAT257Y1 is strongly recommended), MAT223H1/MAT240H1*

**University College**

Distribution status for UNI307H1 should read:

This is a Humanities course.

**Victoria College**

Corequisites for VIC162H1 should read:

*Co-requisites: VIC163H1, VIC164H1, VIC165H1; ENG110Y1/ENG140Y1/PHL100Y1/(FAH101H1+ 102H1)*

Corequisites for VIC163H1 should read:

*Co-requisites: VIC162H1, VIC164H1, VIC165H1 & ENG110Y1/ENG140Y1/PHL100Y1/(FAH101H1+ 102H1)*

Corequisites for VIC164H1 should read:

*Co-requisites: VIC165H1, VIC162H1, VIC163H1 & ENG110Y1/ENG140Y1/PHL100Y1/(FAH101H1+ 102H1)*

Corequisites for VIC165H1 should read:

*Co-requisites: VIC164H1, VIC162H1, VIC163H1 & ENG110Y1/ENG140Y1/PHL100Y1/(FAH101H1+ 102H1)*

**Woodsworth College**

**WDW420H1 - course reinstated:**

**WDW420H1 - Current Issues in Criminal Law [26S]**

An advanced seminar exploring in detail current issues in criminal law. Topics vary from year to year, but the objective of the course is to discuss current policy and case law developments in the criminal law, and their social, political and ethical implications. The role of Parliament and the judiciary in the development of the criminal law is considered.

Prerequisite: An average of at least 75% in four full WDW Criminology credits, and a CGPA of at least 3.0.

**New Courses**

**Asia-Pacific Studies**
ASI430H1 - Nationalism, Revolution and Reform in Asia: China in Comparative Perspective [24L]

This course explores the far-reaching social, political, and cultural transformations in modern China. Focusing on China’s twentieth-century revolutionary history and its struggles to establish a modern nation-state, the course adopts a topical approach within a chronological and comparative framework to highlight major historical movements and theoretical issues significant to the Asian experience.

Exclusion: HIS328H1
This is a Humanities or Social Science course.

East Asian Studies

EAS393H1 Topics in Buddhism [24L]

Sub-title will be provided to indicate topic to be discussed for the academic session. Topics in Buddhism may vary according to the instructor’s interest.

History

HIS372H1 The Olympics [24L]

This course examines the aspirations, achievements, problems and prospects of the modern Olympic Movement and its implications for physical activity and health with specific reference to the Beijing and Vancouver Winter Olympic and Paralympic Games, and Toronto’s bid for the 2015 Pan American Games.

Prerequisite: one HIS or POL course
Exclusion: PHE302H1

History & Philosophy of Science & Technology

HPS320H1 - Medicine and Narrative [12L]

Personally and socially, we experience illness as a narrative. Narratives of health and illness have been constructed and interpreted from the early modern period to the present. The continuities and discontinuities that characterize the structure of these stories over time, and what narratives reveal about historical realities will be explored.

This is a Humanities course.

Mathematics

MAT271H1 - Insights from Mathematics [24L]

This breadth course is accessible to students with limited mathematical background. Various mathematical techniques will be illustrated with examples from humanities and social science disciplines. Some of the topics will incorporate user friendly computer explorations to give participants the feel of the subject without requiring skill at calculations.

MAT332H1 - Introduction to Graph Theory [24L]

This course will explore the following topics: Graphs, Subgraphs, Isomorphism, Trees, Connectivity, Euler and Hamiltonian Properties, Matchings, Vertex and Edge Colourings, Planarity, Network Flows and Strongly Regular Graphs. Participants will be encouraged to use these topics and execute applications to such problems as timetabling, tournament scheduling, experimental design and finite geometries. Students are invited to replace MAT344H1 with MAT332H1.

Prerequisite: MAT224H1/247H1
Recommended corequisite: MAT301H1/347Y1

MAT475H1 - Problem Solving Seminar [TBA]

This course addresses the question: “How do you attack a problem the likes of which you’ve never seen before?” Students will apply Polya’s principles of mathematical problem solving,
draw upon their previous mathematical knowledge, and explore the creative side of mathematics in solving a variety of interesting problems and explaining those solutions to others.
Prerequisite: Prerequisites: MAT224H1/247H1, MAT235Y1/237Y1/257Y1, and at least one 300-level MAT or APM course

Near & Middle Eastern Civilizations

NMC342H1 - History & Sources of Egyptian Monasticism [12L]

Presents an historical overview on the origins of Egyptian monasticism based on written sources. Comparison of written sources with archaeological artifacts reveals the relation between spiritual and material aspects of monastic life. Literary sources produced for different monastic orders -- such as sermons, canons and biographies -- will be studied. Recommended Preparation: NMC202H1, NMC368H1

NMC367H1 - Archaeology & Architecture of Egyptian Monasticism [12L]

Underlines the role of some Egyptian monasteries as active institutions carrying out numerous economic activities, and reveals the forces that enabled their survival and changing function. Exploration of these rich sites of cultural exchange, as manifested in their architecture and religious art and written material. Recommended Preparation: NMC202H1, NMC368H1, NMC342H

Political Science

POL381H1 Topics in Political Theory [24L]

POL381Y1 Topics in Political Theory [48L]

A detailed examination of particular authors or topics in political theory. Content in any given year depends on instructor. Prerequisite: POL200Y or permission of instructor