| TO: | UTSC Academic Affairs Committee |
| :--- | :--- |
| SPONSOR: | Prof. William Gough, Vice-Principal Academic and Dean |
| CONTACT INFO: | $416-208-7027$, vpdean@utsc.utoronto.ca |
| PRESENTER: | Prof. Mark Schmuckler, Vice-Dean Undergraduate |
| CONTACT INFO: | $416-208-2978$, vicedean@utsc.utoronto.ca |
| DATE: | Tuesday, February 28, 2017 |
| AGENDA ITEM: | 7 |
| ITEM IDENTIFICATION: |  |
| Minor Undergraduate Curricular Changes (for information) |  |
| JURISDICTIONAL INFORMATION: |  |
| University of Toronto Scarborough Academic Affairs Committee (AAC) "is concerned |  |
| with matters affecting the teaching, learning and research functions of the Campus (AAC |  |
| Terms of Reference, Section 4)." Under section 5.7 of its Terms of Reference, the |  |
| Committee "receives annually from its assessors, reports on matters within its areas of |  |
| responsibility." |  |

## GOVERNANCE PATH:

## 1. UTSC Academic Affairs Committee [For Information] (February 28, 2017)

## PREVIOUS ACTION TAKEN:

No previous action in governance has been taken on this item.

## HIGHLIGHTS:

The Office of the Vice-Principal Academic and Dean reports, for information, all curricular changes that do not impact program and course learning outcomes or mode of delivery. These include, but are not limited to:

- Adding, deleting or moving an optional course in a program;
- Adding, deleting or moving a required course in a program, as long the change does not alter the nature of the program;
- All course deletions; and
- Changes to course level and/or designator, requisites, enrolment limits and breadth requirement categories.

Undergraduate Minor Curriculum Modifications for Information, Report 3 includes changes submitted by:

- The Department of Arts, Culture and Media
o Course deletions
o Course changes
o Minor program modifications
- The Department of Biological Sciences
o Course change
- The Department of Computer and Mathematical Sciences
o Course changes
o Minor program modifications
- Health Studies
o Course deletions
o Course changes
o Minor program modifications
- The Department of Historical and Cultural Studies
o Course changes
o Minor program modifications
- The Department of Human Geography
o Minor program modifications
- The Department of Physical and Environmental Sciences
o Course changes
o Minor program modifications
- The Department of Sociology
o Course deletions
o Course changes


## FINANCIAL IMPLICATIONS:

There are no net financial implications to the campus operating budget.

## RECOMMENDATION:

Presented for information.

## DOCUMENTATION PROVIDED:

1. 2017-18 Curriculum Cycle: Undergraduate Minor Curriculum Modifications for Information Report 3, dated February 10, 2017.

# 2017-18 Curriculum Cycle Undergraduate Minor Curriculum Modifications for Information Report 3 

February 10, 2017

## Department of Arts, Culture and Media

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Deletions

Studio

## VPSB87H3 Documentary Photography

## Rationale:

VPSC76H3 The Documentary Image is a new course being introduced in 2017-18 that will combine both VPSB87H3 Documentary Photography and VPSC52H3 Documentary Video in order to provide a more accessible and interdisciplinary framework for documentary studies. As a result, VPSB87H3 will be made redundant.

## VPSC52H3 Documentary Video

## Rationale:

VPSC76H3 The Documentary Image is a new course being introduced in 2017-18 that will combine both VPSB87H3 Documentary Photography and VPSC52H3 Documentary Video in order to provide a more accessible and interdisciplinary framework for documentary studies. As a result, VPSC52H3 will be made redundant.

## VPSC58H3 Photo III

## Rationale:

A new course - VPSC77H3 Interdisciplinary Photo Concepts is being introduced in 2017-18 that will replace VPSC58H3.

## Course Changes

Arts, Culture and Media

## Calendar Copy Showing Changes:

## ACMB02H3 Methods of Inquiry and Investigation for ACM Programs

An introduction to investigative research methods where the humanities and social sciences meet including visual, documentary, ethnographic, interview and other qualitative tools for analyzing social and cultural practices. Students develop skills to identify research inquiries, formulate approaches to investigate, locate, collect and learn from data, analyze evidence, and communicate results.
Prerequisite: Co-requisite: ACMB01H3
Exclusion: (ACMA02H3)
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Students in the Specialist (Joint) program in Journalism, and in the Journalism Studies Stream of the Major in Media, Journalism and Digital Cultures are encouraged to take ACMB01H3 and ACMB02H3 in the same semester.

## Rationale:

The current prerequisite structure does not allow Journalism students to take ACMB02H3 until winter term of their second year. However, ACMB02H3 is foundational and should be taken as early in the program as possible. The proposed change allows Journalism students to take ACMB01H3 and ACMB02H3 together.

All ACM students will benefit from this change, as the content and structure of ACMB01H3 and ACMB 02 H 3 are complementary and all students can benefit from taking them together.

Art History and Visual Culture

## Calendar Copy Showing Changes:

## VPHB58H3 Modern Art and Culture

A study of nineteenth and twentieth century arts and visual media, across genres and cultures. What did modernity mean in different cultural contexts? How is 'modern' art or 'modernism' defined? How did the dynamic cultural, economic, and socio-political shifts of the globalizing and industrializing modern world affect the visual arts and their framing?
Prerequisite: VPHA46H3
Exclusion: FAH245H, FAH246H
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The content in FAH246H overlaps with that of VPHB58H3 sufficiently to warrant adding it as an exclusion.

## Calendar Copy Showing Changes:

## VPHB59H3 Current Art Practices

Shifts in theory and practice in art of the past fifty years. Studying selected artists' works from around the world, we explore how notions of modern art gave way to new ideas about media, patterns of practice, and the relations of art and artists to the public, to their institutional contexts, and to globalized cultures.
Prerequisite: VPHA46H3 or VPHB39H3
Exclusion: FAH245H, FAH246H
Breadth Requirement: Arts, Literature \& Language

## Rationale:

There is sufficient overlap between FAH245H and FAH246H with VPHB59H3 to warrant adding them as exclusions.

Journalism

## Calendar Copy Showing Changes:

## JOUB01H3 Covering Immigration and Transnational Issues

An examination of Canadian coverage of immigration and transnational issues. With the shift in Canada's demographics, media outlets are struggling to adapt to new realities. We will explore how media frame the public policy debate on immigration, multiculturalism, diaspora communities, and transnational issues which link Canada to the developing world. This course is open only to students in the Journalism Joint Program.
Prerequisite: (HUMA01H3) ACMB01H3 and \& (MDSA21H) or JOUA01H3 \& (MDSA22H3) or and JOUA02H3
Exclusion: (MDSB26H3)
Breadth Requirement: Arts, Literature \& Language

## JOUB02H3 Critical Journalism

The course examines the representation of race, gender, class and power in the media, traditional journalistic practices and newsroom culture. It will prepare students who wish to work in a mediarelated industry with a critical perspective towards understanding the marginalization of particular groups in the media. The course is open only to students in the Journalism Joint Program. Prerequisite: 4.0 credits including (HUMA01H3) ACMB01H3 and \& [(MDSA21H3) or and JOUA01H3] \& [(MDSA22H3) or JOUA02H3].
Exclusion: (MDSB27H3)
Breadth Requirement: Arts, Literature \& Language

## JOUB39H3 Fundamentals of Journalistic Writing

An overview of the standard rules and techniques of journalistic writing. The course examines the basics of good writing style including words and structures most likely to cause problems for writers. Students will develop their writing skills through assignments designed to help them conceive, develop, and produce works of journalism. This course is open only to students in the Journalism Joint Program.
Prerequisite: [(MDSA21H3) or JOUA01H3] \& [(MDSA22H3) or JOUA02H3] \& (HUMA01H3). Exclusion: (MDSB39H3)
Breadth Requirement: Arts, Literature \& Language

## Rationale:

All courses: restriction to students in the Journalism Joint Program removed so that students in the proposed Journalism Studies stream may take the course.

JOUB01H3 and JOUB02H3: ACMB01H3 will prepare students to be successful in B01 and B02; the remaining changes are housekeeping.

## Calendar Copy Showing Changes:

JOUB03H3 Magazine/Freelance Journalism-Personal Branding and Freelancing An introduction to developing and selling quality magazine stories for multiplatform publication. Students learn techniques for both successful freelancing and magazine staff work. Students learn the importance of finding market niches, winning assignments, and carrying them out professionally. Assignments include producing source materials, a query letter and a feature-length story. This course is taught at Centennial College and is open only to students in the Journalism Joint Program.
Prerequisite: 12 credits, including JOUA06H3 \& JOUB11H3 \& JOUB14H3 \& JOUB18H3
Corequisite: JOUB05H3 \& JOUB10H3 \& JOUB17H3 \& JOUB20H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Course title has been updated to better inform students of its scope.

## Calendar Copy Showing Changes:

JOUB18H3 Imaging: Photography for Journalists-Visual Storytelling: Photography and Video An introduction to the basic concepts of photography and a deeper examination of the principles of photojournalism. Students create photo stories using a range of equipment (portable, battery-operated flash equipment, digital cameras, etc.) and learn how to edit images for publication, either in print or in Web form. This course is taught at Centennial College and is open only to students in the Journalism Joint Program.
Prerequisite: 10 credits including [(MDSA21H3) or JOUA01H3], [(MDSA22H3) or JOUA02H3], [(MDSB26H3) or JOUB01H3], [(MDSB27H3) or JOUB02H3], (HUMB11H3).
Corequisite: JOUA06H3 \& JOUB11H3 \& JOUB14H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The course title has been revised to better inform students as to its content.

## Calendar Copy Showing Changes:

## JOUB24H3 Journalism in the Age of New Digital Media

Journalism is undergoing a revolutionary change. Old trusted formats are falling away and young people are consuming, producing, exchanging, and absorbing news in a different way. The course will help students critically analyze new media models and give them the road map they will need to negotiate and work in New Media. This course is open only to students in the Journalism Joint Program.
Exclusion: (MDSB24H3)
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The title has been revised to better inform students as to the course content. The restriction to the Specialist (Joint) program has been removed to open the course to students in the proposed stream in Journalism Studies in the Major in Media Studies.

## Calendar Copy Showing Changes:

## JOUC62H3 Media, Journalism and the World of Work

The course explores the relationships among media, journalism, and the labour movement in contemporary Canada. It examines how labour as an issue is framed through media representations and how journalism reports on labour-what is reported, how it is reported, what isn't reported, and why.

The course explores the relationships between journalism and the labour movement in Canada's present media environment. It examines how labour is perceived as a media issue and how labour stories are framed in mainstream media - what is reported, how it is reported, what isn't reported, and why. It also examines significant isstes in Canadian labour history within a media studies context. Same as MDSC62H3
Prerequisite: ACMB01H3 and [[MDSA01H3 and MDSB05H3] or [JOUA01H3 and JOUA02H3]] Exclusion: MDSC62H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Adjustment in title and description necessary to clarify for students in both media studies stream and journalism studies stream that the course has a duel focus on 1. Media representations of labour and 2. Journalistic coverage of labour.

## Calendar Copy Showing Changes:

## JOUD11H3 Senior Research Seminar in Media and Journalism

Focusing on independent research, this course requires students to demonstrate the necessary analysis, research and writing skills required for advanced study. This seminar course provides the essential research skills for graduate work and other research-intensive contexts. Students will design and undertake unique and independent research about the state of journalism.
Same as MDSD11H3
Prerequisite: [1.0 credit from the following: JOUB02H3, JOUC30H3, JOUC31H3]ACMB02H3 and [an additional 4.5 credits in MDS or JOU courses, 1.0 credit of which must be at the C-level] Exclusion: MDSD11H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

JOUD11H3 will become part a double-numbered pair with the new course MDSD11H3. The proposed changes are needed to ensure the two halves of the pair are appropriately aligned.

## Media Studies

## Calendar Copy Showing Changes:

## MDSB02H3 MDSC21H3 Anthropology of Language and Media: An Introduction

Anthropology studies language and media in ways that show the impact of cultural context. This course introduces this approach and also considers the role of language and media with respect to intersecting themes: ritual, religion, gender, race/ethnicity, power, nationalism, and globalization. Class assignments deal with lecturers, readings, and students' examples.
Same as ANTB21 ANTC59H3
Prerequisite: ANTA02H3 or MDSA01H3- [ANTB19H3 and ANTB20H3] or [MDSA01H3 and MDSB05H3 and ACMB01H3]
Exclusion: (MDSB02H3), (ANTB21H3), ANTC59H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The content of this course is more suited to the C-level course. A new B-level course - ANTB35H3 has been proposed to introduce this content at a foundational level.

## Calendar Copy Showing Changes:

## MDSC62H3 Media, Journalism and the World of Work

The course explores the relationships among media, journalism, and the labour movement in contemporary Canada. It examines how labour as an issue is framed through media representations and how journalism reports on labour-what is reported, how it is reported, what isn't reported, and why.
The course explores the relationships between jounnalism and the labour movement in Canada's present media environment. It examines how labour is perceived as a media issue and how labour stories are framed in mainstream media - what is reported, how it is reported, what isn't reported, and why. It also examines significant issues in Canadian labour history within a media studies context.
Same as JOUC62H3
Prerequisite: ACMB01H3 and [[MDSA01H3 and MDSB05H3] or [JOUA01H3 and JOUA02H3]]
Exclusion: JOUC62H3
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Adjustment in title and description necessary to clarify for students in both media studies stream and journalism studies stream that the course has a duel focus on 1 . Media representations of labour and 2. Journalistic coverage of labour. There are no changes to the course learning outcomes.

## Studio

## Calendar Copy Showing Changes:

VPSA61 B61H3 Painting I
An investigation of the basic elements and concepts of painting through experimentation in scale and content.
Corequisite Prerequisite: VPSA62H3 and VPSA63H3
Exclusion: (VPSB61H3 VPSA61H3), VIS201H, FAS145H
Enrolment Limits: 20 per section
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This course is being changed from the A - to the $\mathrm{B}-l e v e l$ to increase the number of B -level options so that students can complete program requirements in a reasonable timeframe. The course content and learning outcomes are appropriate for the B-level.

## Calendar Copy Showing Changes:

## VPSA70 B70H3 Drawing I

An investigation of the various approaches to drawing, including working from the figure and working with ideas.
Corequisite Prerequisite: VPSA62H3 and VPSA63H3
Exclusion: (VPSB70H3VPSA70H3), VIS205H, FAS143H
Enrolment Limits: 20 per section
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This course is being changed from the A - to the $\mathrm{B}-l e v e l$ to increase the number of B -level options so that students can complete program requirements in a reasonable timeframe. The course content and learning outcomes are appropriate for the B-level.

## Calendar Copy Showing Changes:

## VPSA71H3 Introduction to Sculpture VPSB59H3 Sculpture I

This course introduces students to the use of three-dimensional materials and processes for creating sculptural objects. Traditional and non-traditional sculptural methodologies and concepts will be explored.
Corequisite Prerequisite: VPSA62H3 and VPSA63H3
Exclusion: (VPSA71H3) FAS248H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This course is being changed from the A- to the B-level to increase the number of B-level options so that students can complete program requirements in a reasonable timeframe. The course content and learning outcomes are appropriate for the B-level.

## Calendar Copy Showing Changes:

VPSA73 B58H3 Video I
An introduction to the basic principles of video shooting and editing as well as an investigation into different conceptual strategies of video art. The course will also provide an introduction to the history of video art.
Corequisite Prerequisite: VPSA62H3 and VPSA63H3
Exclusion: (VPSA73H3) VIS202H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This course is being changed from the A- to the B-level to increase the number of B-level options so that students can complete program requirements in a reasonable timeframe. The course content and learning outcomes are appropriate for the B-level.

## Calendar Copy Showing Changes:

## VPSA74 B56H3 Digital Studio I

This hands-on, project-based class will investigate fundamental digital concepts common to photography, animation, and digital publishing practices. Students will learn general image processing, composing, colour management, chromakey, and typographic tools for both on-line and print-based projects. These will be taught through Abdobe Creative Suite software on Apple computers.
Corequisite: VPSA62H3 and VPSA63H3
Exclusion: (VPSA74H3) VIS218H, FAS147H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This course is being changed from the A - to the $\mathrm{B}-\mathrm{level}$ to increase the number of B -level options so that students can complete program requirements in a reasonable timeframe. The course content and learning outcomes are appropriate for the B-level.

## Calendar Copy Showing Changes:

VPSB62H3 Painting II
A continuation of Painting I with an emphasis on images and concepts developed by individual students.
Prerequisite: VPSA61H3 or (VPSB61H3) VPSB61H3
Exclusion: VIS220H, FAS245H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

VPSA61H3 is being changed to a B-level course. The new code is VPSB61H3.

## Calendar Copy Showing Changes:

## VPSB63H3 VPSC78H3 Sculpture and the Everyday

Sculpture and the Everyday introduces students to contemporary sculptural approaches that include the use of everyday found materials and sculptural interventions in public spaces. Students will learn new techniques for installing and presenting artworks inside and outside of the gallery. Previous experience in sculpture is not required for this course.
Prerequisite: VPHA46H3 [VPSA62H3 and VPSA63H3] and [0.5 2.0 credits at the A-B-level in Studie VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: (VPSB63H3), VIS204H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Change to C-level to increase the number of courses options at the C-level so that students may complete their programs more expeditiously while meeting University requirements for C- and D-level courses. No change in course learning outcomes.

Prerequisite: VPSA62H3 and VPSA63H3 are not appropriate prerequisites for a C-level course; VPHA46H3 ensures that students have the learning and skills needed to be successful in the course; adding ACMB01H3 brings the course in line with other C-level courses.

## Calendar Copy Showing Changes:

## VPSB67H3 Photo I

An introduction to fundamental photographic concepts including depth, focus, stopped time, lighting and photographic composition in contrast to similar fundamental concerns in drawing and painting. A practical and historical discourse on the primary conceptual streams in photography including various documentary traditions, staged photographs and aesthetic approaches from photographic modernism to postmodernism.
Prerequisite: VPSA74H43 VPSB56H3
Exclusion: (VPSA72H3), VIS218H, FAS147H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Prerequisite change required due to course designation and level change of Digital Studio I.

Calendar Copy Showing Changes:

## VPSB71H3 Artist Multiples

Artist multiples are small, limited edition artworks that include sculptures, artist books, mass-produced ephermera such as posters, postcards and small objects. Students will explore the production and history of 2D and 3D works using a variety of media and approaches. This course is about both making and concepts.
Prerequisite: $£$ VPSA 62 H 3 and VPSA 63 H 3$\}$ and $[0.5$ credit at the A -level
in Studio courses]
Exclusion: VIS321H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

All A-level courses, with the exception of VPSA62H3 and VPSA63H3, are being changed to the Blevel.

## Calendar Copy Showing Changes:

## VPSB72H3 VPSC80H3 Digital Publishing

A course for students interested in designing and publishing artworks using digital tools. The emphasis will be on short-run printed catalogues, along with some exploration of e-books and blogs. Lessons will identify common editorial and image preparation concerns while introducing software for assembling images, videos, sounds, graphics, and texts into coherent and intelligently-designed digital publications. Creative solutions are expected.
Prerequisite: VPHA46H3 [VPSA62H3 and VPSA63H3] and [VPSB56H3] and [1.0 an additional 1.5 credits at the A-B- or C-level in Studio VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: (VPSB72H3), VIS328H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Change to C-level to increase the number of courses options at the C-level so that students may complete their programs more expeditiously while meeting University requirements for C- and D-level courses. No change in course learning outcomes.

Prerequisite: VPSA62H3 and VPSA63H3 are not appropriate prerequisites for a C-level course; VPHA46H3 ensures that students have the learning and skills needed to be successful in the course; VPSB56H3 and an additional 1.5 credits at the B- or C-level, ensure that students enter the course with greater breadth and depth of knowledge necessary for C-level courses; adding ACMB01H3 brings the course in line with other C-level courses.

## Calendar Copy Showing Changes:

## VPSB73H3 Curatorial Perspectives I

This course is designed to offer students direct encounters with artists and curators through studio and gallery visits. Field encounters, written assignments, readings and research focus on contemporary art and curatorial practices. The course will provide skills in composing critical views, artist statements, and writing proposals for art projects.
Prerequisite: [VPSA62H3 and VPSA63H3] and [0.5 credit at the A-B-level
in Studio VPS courses] or [enrolment in the Minor in Curatorial Studies]

Exclusion: VIS320H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

All A-level courses, with the exception of VPSA62H3 and VPSA63H3, are being changed to the Blevel.

## Calendar Copy Showing Changes:

VPSB74H3 Drawing II
A continuation of VPSA70H3 VPSB70H3 with an increased emphasis on the student's ability to expand her/his personal understanding of the meaning of drawing.
Prerequisite: VPSA62H3 and VPSA63H3 and VPSA70H3-VPSB70H3
Exclusion: VIS211H, FAS243H
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

VPSA70H3 is being changed to VPSB70H3. It remains an appropriate prerequisite for VPSB74H3.

## Calendar Copy Showing Changes:

## VPSB76H3 Video II

Video II builds on skills developed in Video I and explores advanced video techniques ineluding chromakey, using grip and mounts, sound design for video and installation techniques involving projection and digital sereens. Students will examine current issues in moving image and media through screenings and projects.
This course explores advanced camera and editing techniques as well as presentation strategies using installation, projection, and multiple screens. Students will make projects using both linear and nonlinear narratives while exploring moving image influences from online culture, popular media, surveillance culture, cinema, photography, performance, and sculpture.
Prerequisite: VPSA73H3 VPSB58H3
Exclusion: VIS302H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Change in course description better conveys course content. No change in learning outcomes, topics covered, or methods of assessment.

Prerequisite change required due to change in course designation and level of VPSA73H3 Video I.

## Calendar Copy Showing Changes: <br> VPSB80H3 Digital Studio II

An in-depth investigation of digital imaging technologies for serious studio artists and new media designers. Emphasis is placed on advanced image manipulation, seamless collage, invisible retouching and quality control techniques for fine art production. Project themes will be drawn from a critical analysis of contemporary painting and photo-based art.
Prerequisite: VPSA74H3-VPSB56H3
Exclusion: FAS247H, VIS318H

Recommended Preparation: VPSB67H3
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

VPSA74H3 is being changed to VPSB56H3. It remains an appropriate prerequisite for B80H3.

## Calendar Copy Showing Changes:

## VPSB83H3 VPSC79H3 Art and Activism

This course will explore contemporary artistic practices that blur the boundary between art and activism. We will examine how artists address political issues and the techniques they use to reach different types of audiences. Students will do research and develop projects that address specific local issues and wider social concerns.
Prerequisite: VPHA46H3 [VPSA62H3 and VPSA63H3] and [0.5 2.0 credits at the A-B- or C-level in Studio VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: VIS307H, VIS310H
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

Change to C-level to increase the number of courses options at the C-level so that students may complete their programs more expeditiously while meeting University requirements for C- and D-level courses. No change in course learning outcomes.

Prerequisite: VPSA62H3 and VPSA63H3 are not appropriate prerequisites for a C-level course; VPHA46H3 ensures that students have the learning and skills needed to be successful in the course; an additional 2.0 credits at the B- or C-level, ensure that students enter the course with greater breadth and depth of knowledge necessary for C-level courses; adding ACMB01H3 brings the course in line with other C-level courses.

## Calendar Copy Showing Changes:

## VPSB85H3 Text as Image/Language as Art

An elementary study of the typographic arts will inform presentation strategies, but the investigation of eritical cultural discourse through language as vistal art will form the most important content of this course. How do visual artists employ words in their art?
This course looks at how visual artists employ words in their art. Students will be introduced to the experimental use of text in contemporary art: how typography has influenced artists and the role of language in conceptual art by completing projects in various media.
Prerequisite: £VPSA62H3 and VPSA63H3] and $[0.5$ credit at the 1 -Level
in Studio courses]
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The course description has been revised to better convey course content. No change in course learning outcomes, topics covered, or means of assessment.

All A-level courses, with the exception of VPSA62H3 and VPSA63H3, are being changed to the Blevel.

## Calendar Copy Showing Changes:

VPSB86H3 Seulpture and Technology-Sculpture II
This course introduces students to the time-based use of three-dimensional materials and processes for creating sculptural objects. Students will be introduced to the principles and practicalities of working with the concept of change as it relates to three dimentsional artwork. Students will use both traditional and non-traditional materials in combination with simple technologies. including motors, switches, LEDs, and introductory circuits.
Prerequisite: [VPSA62H3 and VPSA63H3] and [ 0.5 credit at the $\Lambda$-level
in Studio courses-VPSB59H3
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The title has been changed to conform with the naming convention of other B-level, medium-specific Studio courses. The course description has been revised to better convey course content. No change in learning outcomes, topics covered, or means of assessment.

All A-level courses, with the exception of VPSA62H3 and VPSA63H3, are being moved to the Blevel. VPSB59H3 provides foundational knowledge for VPSB86H3.

## Calendar Copy Showing Changes:

VPSB88H3 Sound Art
Students will be introduced to sound as a medium for art making. Listening, recording, mapping, editing, and contextualizing sounds will be the focus of this course. Sound investigations will be explored within both contemporary art and experimental sound/music contexts.
Prerequisite: fVPSA 62 H 3 and VPSA63H3 $\}$ and $[0.5$ credit at the A level
in VPS courses]
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language
Rationale:
All A-level courses, with the exception of VPSA62H3 and VPSA63H3, are being moved to the Blevel.

## Calendar Copy Showing Changes:

## VPSB89H3 Digital Animation I

A non-traditional course in the digital production of non-analog, two-dimensional animation through the use of computer-based drawing, painting, photography and collage. Students will learn design strategies, experimental story lines, sound mixing, and video transitions to add pace, rhythm, and movement to time based, digital art projects.
Prerequisite: VPSA62H3 and VPSA63H3 and VPSA74H3-VPSB56H3
Recommended Preparation: VPSA70H3 VPSB70H3
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Prerequisite: VPSA74H3 is being changed to VPSB56H3; it remains an appropriate prerequisite for VPSB89H3.

Recommended Preparation: VPSA70H3 is being changed to VPSB70H3. It remains an appropriate recommended preparation for VPSB89H3.

## Calendar Copy Showing Changes:

VPSC04H3 "Live!"
"Live!" investigates interdisciplinary modes of contemporary performance. Within a studio context, this course serves as an advanced exploration of 21st century Live Art. This interactive course reviews the
dynamics of time, space and existence, and asks fundamental questions about the body and performance.
Prerequisite: fVPHA 46 H 3 and [VPSB77H3 or VPDA11H3 or VPDA15H3] and [ 0.51 .5 additional credits at the B- or C-level in Studio VPS or TAPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: (VPDC06H3), (VPSC57H3), (VPAC04H3)
Enrolment Limits: 12
Breadth Requirement: Arts, Literature \& Language

## Rationale:

VPDA11H3 and VPDA15H3 have been added as optional prerequisites because they provide suitable preparation for VPSC04H3. The additional credits prerequisite has been changed to B- or C-level courses because this is more appropriate for a C-level course.

## Calendar Copy Showing Changes:

## VPSC53H3 Kinetic Sculpture

Students will produce time-based three-dimensional artworks. projects using mechanical principles to ereate seulptural forms that change over time. Students will be encouraged to use altered machines, simple electronic components, and a wide range of materials.
Prerequisite: [VPHA46H3 and VPSB59H3 and VPSB86H3] and [ 0.5 an additional 1.0 credit at the Bor C-level in VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: (VPSB64H3)
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Description: The revised course description better conveys course content. No change in course learning outcomes, topics covered, or means of assessment.

Additional prerequisites added to ensure that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC54H3 Painting III

An advanced course for students who are able to pursue individual projects in painting, with a focus on contemporary practice and theory.

Prerequisite: [VPHA46H3 and VPSB62H3] and [ 0.5 an additional 1.0 credit at the B-or C-level in VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete
ACMB01H3
Exclusion: VIS301H, FAS345Y
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Changes to the prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC55H3 Drawing III

An advanced course for students who are able to pursue individual projects dealing with the complex relationships between drawing and other art practices like installation, painting and mixed media. Prerequisite: [VPHA46H3 and VPSB74H3]; and [ 0.5 an additional 1.0 credit at the B-or C-level in VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: VIS305H, VIS308H, FAS343Y
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Changes to the prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC56H3 Studio Practice

A supervised course focused specifically on the development of the student's work from initial concept through to the final presentation. Students may work in their choice of media with the prior written permission of the instructor.
Prerequisite: VPHA46H3 and [3.0 credits in VPS courses ineluding at least 1.0 credit at the B- or Clevel]; students enrolled in the Specialist and Major programs in Studio must also complete
ACMB01H3
Exclusion: VIS311H, VIS326
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

The addition of a C-level choice among the 3.0 credits allows students to complete the program more expeditiously while meeting University requirements for C-level courses.

## Calendar Copy Showing Changes:

## VPSC59H3 Theory and Practice: Three-Dimensional Work

An exploration of ideas and practice with an emphasis on three-dimensional work.
Prerequisite: VPHA46H3 and [ 43.0 credits at the B or C-level in Studie VPS courses dealing with three dimensions-including 0.5 credit taken from: VPSB59H3, VPSB71H3, VPSB77H3, VPSB86H3, or VPSB88H3];-students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3

Exclusion: VPSC75H3, VIS306H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition and clarification of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

VPSC66H3 Theory and Practice: Two-Dimensional Work
An exploration of ideas and practice with an emphasis on two-dimensional work, including digital imaging.
Prerequisite: VPHA46H3 and [ 13.0 credits at the B- or C-level in VPS courses
dealing with two dimensions-including 1.0 credit taken from: VPSB56H3, VPSB61H3, VPSB62H3, VPSB67H3, VPSB70H3, VPSB74H3, VPSB75H3, VPSB80H3, or VPSB85H3]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: VIS211H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C -level courses.

## Calendar Copy Showing Changes:

VPSC68H3 Theory and Practice: Time-Based Work
An exploration of ideas and practice with an emphasis on time-based media: performance, video, audio, time-based sculpture and installation.
Prerequisite: VPHA46H3 and [ 13.0 credits at the B-or C-level in VPS courses
dealing with time-based media including 0.5 credit taken from: VPSB58H3, VPSB59H3, VPSB76H3, VPSB77H3, VPSB88H3, VPSB89H3, or VPSB90H3]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: VIS303H, FAS349H
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC69H3 Theory and Practice: Art in a Globalizing World

This course will focus on the influence of global visual culture on contemporary art practices; exploring how artists respond to orientalism, colonial histories, migration, media, tourism, and the international art world. The culturally diverse backgrounds of students and their understanding of global media will be starting points for studio projects.
Prerequisite: VPHA46H3 and [ 43.0 credits at the B-or C-level in Studio VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3 Exclusion: VIS325H

Enrolment Limits: 15
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

Addition of 2.0 credits in prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC70H3 Theory and Practice: New Media in Studio

Information technologies are radically and rapidly transforming our culture. Networking, robotics, GPS, ubiquitous computing, data mining, rfid, biotech, surveillance, sound installation, digital image processing and interactive display are all offering new opportunities for the artist as well as new critical issues to address. Students will create affordable projects that address these issues.
Prerequisite: VPHA46H3; and [1.0 3.0 credits at the B- or C-level in VPS courses including 0.5 credit taken from: VPSB56H3, VPSB58H3, VPSB76H3, or VPSB80H3, or-VPSB86H3, or VPSB88H3, or VPSB89H3, VPSB90H3, NMEB05H3, NMEB08H3, or NMEB09H3]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition and clarification of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses. NME electives allow students in Studio and the Joint Program in New Media Studies to complete their programs more expeditiously.

## Calendar Copy Showing Changes:

## VPSC71H3 Performing with Cameras

This course investigates the relationship of the body to the camera. Using both still and video cameras and live performance students will create works that unite the performative and the mediated image. The course will cover how the body is framed and represented in contemporary art, advertising and the media.
Prerequisite: VPHA46H3 and [ 42.0 credits at the B- or C-level in Studie VPS courses including 0.5 credit taken from: VPSB58H3, VPSB67H3, VPSB75H3, VPSB77H3, or VPSB76H3]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Recommended Preparation: VPSB77H3 or VPSB67H3
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition and clarification of prerequisites ensure that students enter the course with greater breadth and depth of knowledge necessary for C-level courses. The recommended preparation is now redundant.

## Calendar Copy Showing Changes:

## VPSC73H3 Interdisciplinary Drawing Concepts

Interdisciplinary Drawing Concepts will extend drawing into a range of other media, allowing students to explore the sculptural, temporal and performative potential of mark-making.
Prerequisite: fVPHA46H3 and VPSB70H3 and VPSB74H3\} and [ 0.5 an additional 1.0 credit at the Bor C-level in Studio VPS courses]; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3

Exclusion: VIS308H3
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition and clarification of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes: <br> VPSC75H3 Advanced Sculpture

Advanced Sculpture will provide students with an opportunity for a deeper investigation into various materials and fabrication techniques. This course will focus on the theory and practice of object making through studio assignments that develop a critical and technical literacy towards both traditional and non-traditional sculpture materials.
Prerequisite: VPHA46H3 and [VPSB63H3 or VPSB73H3 or VPSB86H3 VPSB59H3 or VPSB71H3 or VPSB86H3]; and [an additional 0.51 .5 credits at the B- or C-level in VPS courses Studie; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Enrolment Limits: 15
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Addition and clarification of prerequisites ensures that students enter the course with greater breadth and depth of knowledge necessary for C-level courses.

## Calendar Copy Showing Changes:

## VPSC89H3 VPSB90H3 Digital Animation II

A project based course, building upon concepts developed in VPSB89H3 Introduction to Digital Animation. Students will refine their control of sound, movement, and image quality. This course will also introduce three-dimensional wire frame and ray-tracing techniques for constructing convincing 3D animated objects and scenes as they apply to contemporary artistic practices.
Prerequisite: VPHA46H3 and VPSB89H3; students enrolled in the Specialist and Major programs in Studio must also complete ACMB01H3
Exclusion: (VPSC89H3)
Enrolment Limits: 20
Breadth Requirement: Arts, Literature \& Language

## Rationale:

This level change from C to B will bring VPSC89H3 into line with other medium-specific courses in Studio, which are at the B-level. Change increases number of Studio B-level courses.

## Calendar Copy Showing Changes:

## VPSD55H3 Advanced Special Topics in Studio

Selected topics for intensive and focused practical and theoretical study in one area of specialization in studio. Topies will change from session to session.
This advanced Master Class will be taught by a newly invited instructor each time it is offered to provide students with an opportunity to study with an established or emerging artist from the GTA who is engaged in research that is of significance to current art practice.
Prerequisite: 1.5 credits at the C-level in Studio courses

Exclusion: VIS401H, VIS402H, VIS403H, VIS404H, VIS410H, FAS450Y, FAS451H, FAS452H Enrolment Limits: 15

## Rationale:

Clarifies the course content. No changes in learning outcomes, topics covered, or methods of assessment.

## Calendar Copy Showing Changes:

## VPSD56H3 Advanced Studio Practice

An advanced course for students ready to work independently on their own projects. Students will be expected to work on their projects from conception to a final exhibition in the student-run gallery. Students may work in their choice of media. with the written permission of the instructor. Prerequisite: 1.5 full credits at the C-level in Studio.
Exclusion: VIS401H, VIS402H, VIS403H, VIS404H, FAS450Y, FAS451H, FAS452H
Enrolment Limits: 15

## Rationale:

There is no need for students to have written permission, and the change will reduce unnecessary paperwork.

## Calendar Copy Showing Changes:

VPSD57H3 Advanced Seminar: Interdisciplinary Practice
An opportunity for students in VPS to explore aspects of contemporary inter-media practice and theory. Students will make work in their choice of media. with the written permission of the instructor.
Prerequisite: 1.5 full credits at the C-level in Studio.
Exclusion: VIS401H, VIS402H, VIS403H, VIS404H, FAS450Y, FAS451H, FAS452H
Enrolment Limits: 15

## Rationale:

There is no need for students to have written permission, and the change will reduce unnecessary paperwork.

## Theatre and Performance Studies

## Calendar Copy Showing Changes:

VPDB10H3 Theatre History I: From Ritual to Renaissance Roots and Traditions
A study of theatre history in social and cultural context from its origins in early human ritual through to the European Renaissance the modern period. Through specific case-study, this course will trace how ancient traditions both evolved and persisted to create the dramatic forms more familiar to us today. Exclusion: DRM260H, DRM262H
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Changes to course title and description to better reflect course content. No change in course learning outcomes, topics covered, or methods of assessment.

Calendar Copy Showing Changes:
VPDB11H3 Theatre History II: Early Modern and Popular Theatre-Intercultural and Global Theatre
A study of theatre history in social and cultural context from the Early Modern period through to WWI. Through specific case-study, this course will focus on the development of bourgeois or domestic drama, as well as on popular theatre such as Melodrama and Pantomime. A study of theatre and performance as a forum for cultural representation past and present. With a focus on intercultural engagements across borders, particularly in the context of $21^{\text {st }}$-century globalized modernity, the course reveals the importance of performance to how culture is defined and challenged.
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Change course title and description to better reflect course content. No change in course learning outcomes, topics covered, or methods of assessment.

## Calendar Copy Showing Changes:

VPDB12 C13H3 Theatre History II: Modern Theatre in Global Context Theatre and Social Justice
A study of theatre history in social and cultural context from WWI through to the present. An examination of theatre and performance in relation to social justice. Building an understanding of power in relation to culture, the course looks at historical and contemporary examples to see the many ways performance may confront issues of social inequality and injustice.
Exclusion: DRM266H
Breadth Requirement: Arts, Literature \& Language

## Rationale:

Changes to course title and description to better reflect course content. Change course designator from B-level to C-level. This is necessary because we currently do not have a C-level lecture-based course, and introducing one will expedite students' readiness to graduate.

Learning outcomes are:

- Familiarize with important concepts in field of social justice and critical cultural theory;
- Incrementally build knowledge of important historical and contemporary theatre and performance dealing with issues of social justice;
- Application of knowledge in a research-based creative collaboration addressing the themes of the course.

No change in topics covered. Methods of assessment will remain the same; grading criteria will be based on C-level expectations rather than B-level.

## Program Changes

## Major in Theatre and Performance Studies (BA)

Minor in Theatre and Performance Studies (Arts)
Overview of Changes:

1. Update course titles for VPDB10H3 and VPDB11H3 as per course change proposals
2. Update course level and title for VPDB12H3 as per course change proposal

## Rationale:

The course titles for VPDB10H3 and VPDB11H3 have been updated to reflect proposals to change the course titles submitted for 2017-18. The course title and level for VPDb12h3 have been updated to reflect proposals to change the course title and level submitted for 2017-18.

Calendar Copy Showing Changes:

## MAJOR PROGRAM IN THEATRE AND PERFORMANCE STUDIES (ARTS)

Undergraduate Advisor: Email: taps-program-supervisor@utsc.utoronto.ca
Program Requirements: Students must complete 8.0 full credits as follows:

1. ACMB01H3 Critical Reading, Thinking and Writing for ACM Programs
2. VPDA10H3 Introduction to Theatre VPDA11H3 Introduction to Performance VPDB01H3 Intermediate Workshop in Performance I VPDB02H3 Intermediate Workshop in Performance II
3. VPDB04H3 Experiencing the Live Theatre VPDB15H3 The Actor and the Script
4. VPDB10H3 Theatre History I: From Ritual to Renaissance- Roots and Traditions

VPDB11H3 Theatre History H: Early Modern Popular Theatre Intercultural and Global Theatre VPDB12 H3C13 Theatre History III: Modern Theatre in Global Context Theatre and Social Justice
VPDB13H3 Theatre in Canada
5. VPDC20H3 Special Topics in Performance
6. VPDD50H3 Advanced Seminar in Theatre and Performance
7. 1.5 additional credits in VPD, one full credit of which must be at the C- or D-level.

In fulfilling requirement $\# 7$, students may substitute one full credit from another discipline with the Program Director's written permission. The following courses are particularly recommended:
VPSB77H3 Performance Art
VPMC85H3 Movies, Music and Meaning
VPMC89H3 Music and Identity
VPMC97H3 Music, Technologies, Media
ENGB14H3 Twentieth-Century Drama
ENGB32H3 Shakespeare in Context I
ENGB33H3 Shakespeare in Context II
ENGB70H3 Introduction to Cinema
ENGC07H3 Canadian Drama
ENGC26H3 Drama: Tragedy
ENGC27H3 Drama: Comedy
GASB15H3 The Arts of South Asia
GASC42H3 Film and Popular Culture in South Asia
GASC45H3 Film and Popular Cultures in East Asia

## MINOR PROGRAM IN THEATRE AND PERFORMANCE STUDIES (ARTS)

Undergraduate Advisor: Email: taps-program-supervisor@utsc.utoronto.ca
Program Requirements: Students must complete 4.0 full credits as follows:

1. ACMB01H3 Critical Reading, Thinking and Writing for ACM Programs
2. VPDA10H3 Introduction to Theatre
[VPDA11H3 Introduction to Performance or VPDA15H3 Introduction to the Fundamentals of Acting]
and at least two of the following courses: [VPDB10H3, VPDB11H3, VPDB12
C13H3,VPDB13H3]
Note: Students who do not qualify for either VPDA11H3 or VPDA15H3 should take all of the following courses: VPDB10H3, VPDB11H3, VPDB12 C13H3, VPDB13H3
3. 1.5 additional credits in VPD, one full credit of which must be at the C- or D-level.

## Department of Biological Sciences

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Changes

## Calendar Copy Showing Changes:

BIOD45H3 Animal Communication
Theoretical and biological aspects of communication in non-human animals; communication behaviour; decision-making and signal design; evolution of communication.
Prerequisite: $[(\mathrm{BIOB} 30 \mathrm{H} 3)$ or BIOB 34 H 3$] \& \mathrm{BIOB} 50 \mathrm{H} 3 \& \mathrm{BIOB} 51 \mathrm{H} 3 \& \mathrm{BIOC} 54 \mathrm{H} 3$ or NROC34H3 Breadth Requirement: Natural Sciences

## Rationale:

The prerequisite has been updated to remove redundancies - BIOB50H3 and B 51 H 3 are prerequisites for BIOC54H3; BIOB34H3, which is physiology prerequisite is not really required by the course content; adding NROC 34 H 3 as an alternate prerequisite will widen the accessibility of the course by creating an alternate pathway to allow interested neuroscience students to enrol. This will add to the flexibility of our fourth-year courses in the areas behaviour and neuroscience.

## Department of Computer and Mathematical Sciences

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Changes

Computer Science

## Calendar Copy Showing Changes:

CSCC63H3 Computability and Computational Complexity
Introduction to the theory of computability: Turing machines, Church's thesis, computable and noncomputable functions, recursive and recursively enumerable sets, reducibility. Introduction to complexity theory: models of computation, P, NP, polynomial time reducibility, NP-completeness, further topics in complexity theory.
Note: Although the courses CSCC63H3 \& CSCC73H3 may be taken in any order, it is recommended that CSCC73H3 be taken first.
Prerequisite: CSCB36H3 \& CSCB63H3 \& [CGPA 3.0 or enrolment in a CSC Subject
POSt]
Exclusion: CSC363H, CSC365H, CSC364H
Breadth Requirement: Quantitative Reasoning

## Rationale:

We have noticed that a significant number of students (nearly a third in the last offering of CSCC63) are taking CSCC63 without previously completing CSCB63. We also note that under the current prerequisites, it is possible for students to take CSC63 with CSCA48 as their only prior exposure to algorithms. Enforcing CSCB63 as a prerequisite to CSCC63 will ensure that students are better equipped to handle the CSCC63 course contents.

## Mathematics

## Calendar Copy Showing Changes:

## MATA23H3 Linear Algebra I

Systems of linear equations, matrices, Gaussian elimination; basis, dimension; dot products; geometry to Rn; linear transformations; determinants, Cramer's rule; eigenvalues and eigenvectors, diagonalization.
Prerequisite: Grade 12 Calculus and Vectors or [Grade 12 Advanced
Functions and Introductory Calculus \& Geometry and Discrete
Mathematics]
Exclusion: MATA22H3, MAT223H
Breadth Requirement: Quantitative Reasoning

## Rationale:

MATA22 is a new course that has significant overlap with MATA23. Making them exclusions ensures that students cannot receive double-credit. These courses differ in their treatment of mathematical theory and use of algebraic-logical reasoning and rigor.

## Calendar Copy Showing Changes:

## MATB24H3 Linear Algebra II

Fields, vector spaces over a field, linear transformations; inner product spaces, coordinatization and change of basis; diagonalizability, orthogonal transformations, invariant subspaces, Cayley-Hamilton theorem; hermitian inner product, normal, self-adjoint and unitary operations. Some applications such as the method of least squares and introduction to coding theory.

Prerequisite: MATA23H3MATA22H3 or MAT223H
Exclusion: MAT224H
Breadth Requirement: Quantitative Reasoning

## Rationale:

MATA22H3 is a new course that is being introduced to help ensure that students are better prepared to understand and demonstrate mathematical proofs and rigorous algebraic-logical reasoning in MATB24H3. MATA22H3 replaces MATA23H3 in the prerequisite because it will provide a stronger theoretical foundation in linear algebra than MATA23.

## Calendar Copy Showing Changes:

## MATB41H3 Techniques of the Calculus of Several Variables I

Partial derivatives, gradient, tangent plane, Jacobian matrix and chainrule, Taylor series; extremal problems, extremal problems with constraints and Lagrange multipliers, multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.
Prerequisite: [MATA22H3 or MATA23H3 or MAT223H] \& [[MATA36H3 or MATA37H3] or MAT137Y or MAT157Y]]
Exclusion: MAT232H, MAT235Y, MAT237Y, MAT257Y
Breadth Requirement: Quantitative Reasoning
MATB44H3 Differential Equations I
Ordinary differential equations of the first and second order, existence and uniqueness; solutions by series and integrals; linear systems of first order; non-linear equations; difference equations.
Prerequisite: [MATA36H3 or MATA37H3] \& [MATA22H3 or MATA23H3]
Corequisite: MATB41H3
Exclusion: MAT244H, MAT267H
Breadth Requirement: Quantitative Reasoning

## MATB61H3 Linear Programming and Optimization

Linear programming, simplex algorithm, duality theory, interior point method; quadratic and convex optimization, stochastic programming; applications to portfolio optimization and operations research.
Prerequisite: [MATA22H3 or MATA23H3] and MATB41H3
Exclusion: APM236H
Breadth Requirement: Quantitative Reasoning

## MATC82H3 Mathematics for Teachers

The course discusses the Mathematics curriculum (K-12) from the following aspects: the strands of the curriculum and their place in the world of Mathematics, the nature of proofs, the applications of Mathematics, and its connection to other subjects.
Prerequisite: [MATA67H3 or CSCA67H3 or (CSCA65H3)] and [MATA22H3 or MATA23H3] and [MATA37H3 or MATA36H3]
Exclusion: MAT382H
Breadth Requirement: Quantitative Reasoning
MATD02H3 Classical Plane Geometries and their Transformations
An introduction to geometry with a selection of topics from the following: symmetry and symmetry groups, finite geometries and applications, non-Euclidean geometry.
Prerequisite: [MATA22H3 or MATA23H3]
Corequisite: MATC01H3

Exclusion: MAT402H, (MAT365H), (MATC25H3)
Breadth Requirement: Quantitative Reasoning

## Rationale:

MATA22H3 is a new course that contains many of same fundamental topics in linear algebra as MATA 23 H . The courses listed above require a fundamental background in linear algebra that can be obtained through both MATA22H3 and MATA23H3 and MATA24H3.

## Calendar Copy Showing Changes:

## MATC90H3 Beginnings of Mathematics

Mathematical problems which have arisen repeatedly in different cultures, e.g. solution of quadratic equations, Pythagorean theorem; transmission of mathematics between civilizations; high points of ancient mathematics, e.g. study of incommensurability in Greece, Pell's equation in India.
Prerequisite: 10.0 credits and [an additional 1.0 credit at the A-level in MAT courses [excluding MATA02H3]] One Grade 12 Mathematies course \& 5.0 full university courses
Exclusion: MAT390H
Breadth Requirement: Quantitative Reasoning

## Rationale:

The proposed change is necessary to help ensure that students taking this C-level course have both at least an A-level exposure to mathematics and have attained at least third year standing at university. Students will have a more engaging experience in MATC90H3 and will be more successful if they are academically mature, able to understand logical mathematical reasoning, and have A-level mathematics requirements as a foundation.

## Statistics

## Calendar Copy Showing Changes:

## STAB57H3 An Introduction to Statistics

A mathematical treatment of the theory of statistics. The topics covered include: the statistical model, data collection, descriptive statistics, estimation, confidence intervals and P-values, likelihood inference
methods, distribution-free methods, bootstrappingbookstrapping, Bayesian methods, relationship among variables, contingency tables, regression, ANOVA, logistic regression, applications. A computer package will be used.
Prerequisite: STAB52H3
Exclusion: STA261H
Breadth Requirement: Quantitative Reasoning

## Rationale:

Editorial change to correct a typographical error in the course description: the term "bookstrapping" has no meaning in statistics. The correct statistical term is "bootstrapping".

## Calendar Copy Showing Changes:

STAC32H3 Applications of Statistical Methods
A case-study based course, aimed at developing students' applied statistical skills beyond the basic techniques. Students will be required to write statistical reports. Statistical software, such as SAS and $R$, will be taught and used for all statistical analyses.

Prerequisite: STAB27H3 or STAB57H3 or MGEB12H3/(ECMB12H3) or PSYC08H3 or STA221H1 or STA248H1 or STA261H1
Breadth Requirement: Quantitative Reasoning

## STAC50H3 Data Collection

The principles of proper collection of data for statistical analysis, and techniques to adjust statistical analyses when these principles cannot be implemented. Topics include: relationships among variables, causal relationships, confounding, random sampling, experimental designs, observational studies, experiments, causal inference, meta-analysis. Statistical analyses using SAS or R.
Prerequisite: STAB27H3 or STAB57H3 or MGEB12H3/(ECMB12H3) or PSYC08H3 or STA221H1 or STA248H1 or STA261H1
Exclusion: STA304H
Breadth Requirement: Quantitative Reasoning

## Rationale:

The proposed changes will show approved equivalent prerequisites from the St. George Campus. It will make the prerequisites more inclusive and flexible.

## Program Changes

## Specialist in Mathematics (BSc) <br> Specialist (Co-operative) in Mathematics (BSc) <br> Major in Mathematics (BSc) <br> Major (Co-operative) in Mathematics (BSc)

## Overview of Changes:

1. Replace MATA23H3 Linear Algebra I with MATA22H3 Linear Algebra I for Mathematical Sciences as a required course in all programs.

## Rationale:

MATA22H3 is a new course that has been designed to better prepare students for upper level courses in linear algebra. It treats linear algebra from a rigourous and algebraic-logical perspective. Students will benefit from early exposure to more rigorous thinking and mathematical proofs in linear algabra. It consequently replaces MATA23H3 as the required course in all Mathematics programs.

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN MATHEMATICS (SCIENCE)

Supervisor of Studies: E. Moore (416-287-7267) Email: emoore@utsc.utoronto.ca

## Program Objectives

This program provides the student with a sound foundation in the main areas of mathematics, and some exposure to computer programming and
statistics. It comprises three streams: Comprehensive, Statistics, and Teaching, each serving a more specific goal.

The Comprehensive Stream provides a broad and deep knowledge of mathematics at the undergraduate level. It is the recommended program for students who plan to pursue graduate study in mathematics, but it is also suitable for other career paths.

The Statistics Stream provides greater exposure to statistics, and the areas of mathematics most closely associated with it. This stream prepares
students for careers in industry, or for graduate study in certain mathematically-oriented subjects, including statistics and financial mathematics.

The Teaching Stream is intended for students with a serious interest in mathematics but whose career objectives lie in mathematics education at the
elementary or secondary level.

## Program Requirements

The Program requirements consist of a core 15 courses ( 7.5 credits), common to all streams, and additional requirements that depend on the stream, for
a total of 26-27 courses (13.0-13.5 credits).
The structure of the programs allows for easy switching between streams until relatively late. Consequently, these programs should not be viewed as rigidly separated channels feeding students to different career paths, but as a flexible structure that provides guidance to students in their course selection based on their broad (but possibly fluid) interests.

## Core ( 7.5 credits)

1. Writing Requirement ( 0.5 credit) (*)

One of:ANTA01H3, ANTA02H3, (CLAA02H3), (CTLA19H3), CTLA01H3, ENGA10H3, ENGA11H3, ENGB06H3, ENGB07H3, ENGB08H3, ENGB09H3, ENGB17H3, ENGB19H3, ENGB50H3, (ENGB51H3), GGRA02H3, GGRA03H3, GGRB05H3, (GGRB06H3), (HISA01H3), (HLTA01H3), ACMA01H3, (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), LINA01H3, PHLA10H3, WSTA01H3.
$\left(^{*}\right)$ It is recommended that this requirement be satisfied by the end of the second year.
2. A-level courses ( 2.5 credits)
[CSCA08H3 Introduction to Computer Science I or CSCA20H3 Introduction to Programming] MATA23H3 Linear Algebra I
MATA22H3 Linear Algebra I for Mathematical Sciences
MATA31H3 Calculus I for Mathematical Sciences
MATA37H3 Calculus II for Mathematical Sciences
[MATA67H3 or CSCA67H3 Discrete Mathematics]
3. B-level courses ( 3.5 credits)

MATB24H3 Linear Algebra II
MATB41H3 Techniques of the Calculus of Several Variables I
MATB42H3 Techniques of the Calculus of Several Variables II
MATB43H3 Introduction to Analysis
MATB44H3 Differential Equations I
STAB52H3 Introduction to Probablity (**)
STAB57H3 Introduction to Statistics (**)
$\left({ }^{* *}\right)$ This course may be taken after second year, except for the Statistics stream.
4. C-level courses (1 credit)

MATC01H3 Groups and Symmetry
MATC34H3 Complex Variables
A. Comprehensive Stream

This stream requires a total of 27 courses ( 13.5 credits)
In addition to the core requirements $1-4$ common to all streams, 12 other distinct courses must be chosen satisfying all of the following requirements:
5. Additional courses in analysis and algebra ( 1.5 credits):

MATC37H3 Introduction to Real Analysis
MATC46H3 Differential Equations II
MATD01H3 Fields and Groups
6. Courses in key areas of mathematics ( 1.0 credits):

Two of:
MATC15H3 Introduction to Number Theory
MATC27H3 Introduction to Topology
MATC63H3 Differential Geometry
MATD02H3 Classical Plane Geometries and their Transformations
MATD34H3 Complex Variables II
7. Mathematics of computation (1.0 credit):

Two of:
CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
CSCC63H3 Computability and Computational Complexity
CSCC73H3 Algorithm Design and Analysis
MATC09H3 Introduction to Mathematical Logic
MATC16H3 Coding Theory and Cryptography
MATC32H3 Graph Theory and Algorithms for its Applications
MATC44H3 Introduction to Combinatorics
8. Electives ( 2.5 credits):

Five courses from CSC/MAT/STA/PHY of which at least 3 must be C- or D-level MAT courses (excluding MATC90H3).

## B. Statistics Stream

This stream requires a total of 26 courses ( 13.0 credits).
In addition to the core requirements 1-4 common to all streams, 11 other distinct courses must be chosen, satisfying all of the following requirements (in choosing courses to satisfy requirements $7-9$, students must select at least one D-level course).
5. Algebra and Analysis (1.5 credits):

MATB61H3 Linear Programming and Optimization
MATC46H3 Differential Equations II
MATD01H3 Fields and Groups
6. Regression Analysis ( 0.5 credit):

STAC67H3 Regression Analysis
7. Discrete mathematics and geometry ( 0.5 credit):

One of:
MATC32H3 Graph Theory and Algorithms for its Applications
MATC44H3 Introduction to Combinatorics
MATD02H3 Classical Plane Geometries and their Transformations
8. Upper-level MAT electives (1 credit):

Two of:
Any C- or D-level MAT courses (*)
(*) For students wishing to pursue graduate studies in Mathematics or Statistics it is recommended that MATC37H3 be chosen as one of these two courses.
9. Upper-level STA electives (2 credits):

Four of:
(ACTB47H3) Introductory Life Contingencies
Any C- or D-level STA course, excluding STAD29H3
C. Teaching Stream

This stream requires a total of 26 courses ( 13.0 credits).
In addition to the core requirements 1-4 common to all streams, 11 other distinct courses must be chosen, satisfying all of the following requirements:
5. Algebra, analysis, and geometry ( 1.5 credits):

MATC15H3 Introduction to Number Theory
MATD01H3 Fields and Groups
MATD02H3 Classical Plane Geometries and their Transformations
6. Discrete mathematics ( 0.5 credit):

One of:
MATC32H3 Graph Theory and Algorithms for its Applications
MATC44H3 Introduction to Combinatorics
7. MAT electives ( 1.5 credits):

Three of:
C- or D-level MAT courses
8. MAT/STA/CSC electives ( 2.0 credits):

Four of:
C- or D-level MAT, STA, CSC courses, excluding STAD29H3
It is recommended that students obtain a TA-ship within the Department of Computer and
Mathematical Sciences.

## SPECIALIST (CO-OPERATIVE) PROGRAM IN MATHEMATICS (SCIENCE)

Supervisor of Studies: E. Moore (416-287-7267) Email: emoore@utsc.utoronto.ca
Co-op Contact: askcoop@utsc.utoronto.ca

## Program Objectives

This program combines the coursework of the Specialist Program in Mathematics described above with paid work terms in public and private enterprises. It shares the goals and structure of the Specialist Program in Mathematics, including its three streams (Comprehensive, Statistics, and Teaching), but complements study of the subject with considerable work experience.

Admission Requirements
Refer to the Program Admission requirements for the Specialist Program in Mathematics described above and section 6B. 5 (Co-operative Programs) in this Calendar. Students entering this program after first year must have a CGPA of at least 2.75 .

## Program Requirements

To remain in the program, a student must maintain a CGPA of 2.5 or higher throughout the program.
To complete the program, a student must meet the work term and course requirements described below.

## Work Term Requirements

Students must successfully complete three work terms, at most one of which can be during the summer. In addition, prior to their first work term, students must successfully complete the Arts \& Science Coop Work Term Preparation Activities. These include networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations.

## Course Requirements

The Co-operative Program can be taken in conjunction with any of the streams in the Specialist Program in Mathematics. The course requirements of the Co-operative Specialist Program in Mathematics are identical to those of the Specialist Program in Mathematics described above.

## MAJOR PROGRAM IN MATHEMATICS (SCIENCE)

Supervisor of Studies:
N. Breuss (416-287-7226) Email: n.breuss@utoronto.ca

## Program Objectives

This program provides a solid foundation in basic areas of mathematics, especially those with applications in other disciplines. This program is intended to be combined with other programs, typically a major program in another discipline.

## Program Requirements

This stream requires a total of 17 distinct courses or ( 8.5 credits), chosen so as to satisfy all of the following requirements:

1. Foundational courses -5.5 credits as follows:
[MATA67H3 or CSCA67H3 Discrete Mathematics]
MATA23H3 Linear Algebra I I
MATA22H3 Linear Algebra I for Mathematical Sciences
[MATA30H3 Calculus I for Physical Sciences OR MATA31H3 Calculus I for Mathematical Sciences]
[MATA36H3 Calculus II for Physical Sciences OR MATA37H3 Calculus II for Mathematical
Sciences (*)]
CSCA08H3 Introduction to Computer Science I
MATB24H3 Linear Algebra II

MATB41H3 Techniques of the Calculus of Several Variables I
MATB42H3 Techniques of the Calculus of Several Variables II
MATB44H3 Differential Equations I
STAB52H3 Introduction to Probability
[MATC01H3 Groups and Symmetry OR MATC15H3 Introduction to Number Theory]
(*) MATA31H3 is required for MATA37H3
2. Further analysis courses - 1.0 credit form the following:

MATB43H3 Introduction to Analysis
MATC27H3 Introduction to Topology
MATC34H3 Complex Variables
MATC37H3 Introduction to Real Analysis
MATC46H3 Differential Equations II
MATD34H3 Complex Variables II
3. Further algebra, geometry, and discrete mathematics courses - 1.0 credit from the following:

MATC01H3 Groups and Symmetry
MATC09H3 Introduction to Mathematical Logic
MATC15H3 Introduction to Number Theory
MATC32H3 Graph Theory and Algorithms for its Applications
MATC44H3 Introduction to Combinatorics
MATC63H3 Differential Geometry
MATD01H3 Fields and Groups
MATD02H3 Classical Plane Geometries and their Transformations
4. Elective courses - 1.0 credit from the following:

MATB61H3 Linear Programming and Optimization
STAB57H3 Introduction to Statistics
any C- or D-level MAT, STA, or CSC course, excluding STAD29H3
Recommended Writing Course: Students are urged to take a course from the following list of courses by the end of their second year.
ANTA01H3, ANTA02H3, (CLAA02H3), (CTLA19H3), CTLA01H3, ENGA10H3, ENGA11H3, ENGB06H3, ENGB07H3, ENGB08H3, ENGB09H3, ENGB17H3, ENGB19H3, ENGB50H3, (ENGB51H3), GGRA02H3, GGRA03H3, GGRB05H3, (GGRB06H3), (HISA01H3), (HLTA01H3), ACMA01H3, (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), LINA01H3, PHLA10H3, PHLA11H3, WSTA01H3.

## MAJOR (CO-OPERATIVE) PROGRAM IN MATHEMATICS (SCIENCE)

Supervisor of Studies: N. Breuss (416-287-7226) Email: n.breuss@utoronto.ca
Co-op Contact: askcoop@utsc.utoronto.ca
Program Objectives
This program combines the coursework of the Major Program in Mathematics described above with paid work terms in public and private enterprises. It shares the goals and structure of the Major Program in Mathematics, but complements study of the subject with considerable work experience.

Admission Requirements
Refer to the Program Admission requirements for the Major Program in Mathematics described above and section 6B. 5 (Co-operative Programs) in this Calendar. Students entering this program after first year must have a CGPA of at least 2.75.

Program Requirements
To remain in the program, a student must maintain a CGPA of 2.5 or higher throughout the program.
To complete the program, a student must meet the work term and course requirements described below.
Work Term Requirements
Students must successfully complete three work terms, at most one of which can be during the summer. In addition, prior to their first work term, students must successfully complete the Arts \& Science Coop Work Term Preparation Activities. These include networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations.

Course Requirements
The course requirements of the Co-operative Major Program in Mathematics are identical to those of the Major Program in Mathematics described above.

Specialist in Statistics (BSc)<br>Specialist (Co-operative) in Statistics (BSc)<br>Major in Statistics (BSc)<br>Major (Co-operative) in Statistics (BSc)

Overview of Changes:

1. Replace MATA23H3 Linear Algebra I with MATA22H3 Linear Algebra I for Mathematical Sciences as a required course in all programs.

## Rationale:

MATA22H3 is a new course that has been designed to better prepare students for upper level courses in linear algebra. It treats linear algebra from a rigourous and algebraic-logical perspective. Students will benefit from early exposure to more rigorous thinking and mathematical proofs in linear algabra. It consequently replaces MATA23H3 as the required course in all Statistics Specialist and Major programs.

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN STATISTICS (SCIENCE)

Supervisor of Studies: S. Damouras Email: sdamouras@utsc.utoronto.ca (416-208-4794)

## Program Objectives

This program provides training in the discipline of Statistics. Students are given a thorough grounding in the theory underlying statistical reasoning and learn the methodologies associated with current applications. A full set of courses on the theory and methodology of the discipline represent the core of the program. In addition students select one of two streams, each of which provides immediately useful, job-related skills. The program also prepares students for further study in Statistics and related fields.

The Quantitative Finance Stream focuses on teaching the computational, mathematical and statistical techniques associated with modern day finance. Students acquire a thorough understanding of the mathematical models that underlie financial modeling and the ability to implement these models in practical settings. This stream prepares students to work as quantitative analysts in the financial industry, and for further study in Quantitative Finance

The Statistical Machine Learning and Data Mining Stream focuses on applications of statistical theory and concepts to the discovery (or "learning") of patterns in massive data sets. This field is a recent development in statistics with wide applications in science and technology including computer vision, image understanding, natural language processing, medical diagnosis, and stock market analysis. This stream prepares students for direct employment in industry and government, and further study in Statistical Machine Learning.

## Program Requirements

To complete the program, a student must meet the course requirements described below. (One credit is equivalent to two courses.)

The first year requirements of the two streams are almost identical, except that the Quantitative Finance stream requires MGEA02H3/(ECMA04H3) while the Statistical Machine Learning and Data Mining stream requires CSCA67H; these courses need not be taken in the first year. In the second year the two streams have considerable overlap. This structure makes it relatively easy for students to switch between the two streams as their interests in Statistics become better defined.

Note: There are courses on the St. George campus that can be taken to satisfy some of the requirements of the program. STAB52H3, STAB57H3 and STAC67H3, however, must be taken at the University of Toronto Scarborough; no substitutes are permitted without permission of the program supervisor.

Core ( 7.5 credits)

1. Writing Requirement ( 0.5 credit) $\left(^{*}\right.$ )

One of: ANTA01H3, ANTA02H3, (CLAA02H3), (CTLA19H3), CTLA01H3, ENGA10H3, ENGA11H3, ENGB06H3, ENGB07H3, ENGB08H3, ENGB09H3, ENGB17H3, ENGB19H3, ENGB50H3, (ENGB51H3), GGRA02H3, GGRA03H3, GGRB05H3, (GGRB06H3), (HISA01H3), (HLTA01H3), ACMA01H3, (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), LINA01H3, PHLA10H3, PHLA11H3, WSTA01H3.
$\left(^{*}\right)$ It is recommended that this requirement be satisfied by the end of the second year.

[^0]3. B-level courses ( 2.5 credits)

MATB24H3 Linear Algebra II
MATB41H3 Techniques of the Calculus of Several Variables I
MATB61H3 Linear Programming and Optimization
STAB52H3 Introduction to Probability
STAB57H3 Introduction to Statistics
4. C-level courses ( 1.5 credits)

CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
STAC62H3 Stochastic Processes
STAC67H3 Regression Analysis
5. D-level courses ( 0.5 credit)

STAD37H3 Multivariate Analysis
A. Quantitative Finance Stream

This stream requires a total of 26 courses ( 13.0 credits). In addition to the core requirements, 11 other courses ( 5.5 credits) must be taken satisfying all of the following requirements:
6. Additional A-level courses ( 0.5 credit)

MGEA02H3/(ECMA04H3) Introduction to Microeconomics: A Mathematical Approach
7. Additional B-level courses ( 2.0 credits)

ACTB40H3 Fundamentals of Investment and Credit
MATB42H3 Techniques of Calculus of Several Variables II
MATB44H3 Differential Equations I
STAB41H3 Financial Derivatives
8. Additional Upper Level courses (3.0 credits)

MATC46H3 Differential Equations II
STAC70H3 Statistics and Finance I
STAD57H3 Time Series Analysis
STAD70H3 Statistics and Finance II
Two of:
APM462H1 Nonlinear Optimization
CSCC11H3 Introduction to Machine Learning and Data Mining
MATC37H3 Introduction to Real Analysis
STAC51H3 Categorical Data Analysis
STAC58H3 Statistical Inference
STAC63H3 Probability Models
STAD68H3 Advanced Machine Learning and Data Mining
STAD94H3 Statistics Project
Note: Students enrolled in this stream should also consider taking complementary courses in economics and finance (e.g. MGEA06H3/(ECMA06H3), MGEB02H3/(ECMB02H3), MGEB06H3/(ECMB06H3), MGEC72H3/(ECMC49H3)), or a Minor in Economics for Management Studies.
B. Statistical Machine Learning and Data Mining Stream

This stream requires a total of 26 courses ( 13.0 credits). In addition to the core requirements, 11 other courses ( 5.5 credits) must be taken satisfying all of the following requirements:
6. Additional A-level courses ( 0.5 credit)
[CSCA67H3 or MATA67H3 Discrete Mathematics]
7. Additional B-level courses (1.0 credit)

Two of:
CSCB07H3 Software Design
CSCB20H3 Introduction to Databases and Web Applications
CSCB36H3 Introduction to the Theory of Computation
CSCB63H3 Design and Analysis of Data Structures
8. Additional Upper Level courses (4.0 credits)

CSCC11H3 Introduction to Machine Learning and Data Mining
STAC58H3 Statistical Inference
STAD68H3 Advanced Machine Learning and Data Mining
Five of: *
Any C or D-level CSC, MAT or STA courses (excluding STAD29H3), three of which must be STA courses.
${ }^{*}$ ) Some of the courses on this list have prerequisites that are not included in this program; in choosing courses to satisfy this requirement, check the
prerequisites carefully and plan accordingly.

## SPECIALIST (CO-OPERATIVE) PROGRAM IN STATISTICS (SCIENCE)

Supervisor of Studies: S. Damouras (416-208-4794) Email: sdamouras@utsc.utoronto.ca
Co-op Contact: askcoop@utsc.utoronto.ca

## Program Objectives

This program combines the coursework of the Specialist Program in Statistics described above with paid work terms in public and private enterprises. It shares the goals and structure of the Specialist Program in Statistics, but complements study of the subject with considerable work experience.

## Admission Requirements

Refer to the Program Admission requirements for the Specialist Program in Statistics described above and section 6B. 5 (Co-operative Programs) in this Calendar. Students entering this program after first year must have a CGPA of at least 2.75.

## Program Requirements

To remain in the program, a student must maintain a CGPA of 2.5 or higher throughout the program.
To complete the program, a student must meet the work term and course requirements described below.

## Work Term Requirements

Students must successfully complete three work terms, at most one of which can be during the summer. In addition, prior to their first work term, students must successfully complete the Arts \& Science Coop Work Term Preparation Activities. These include networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations.

Course Requirements
The course requirements of the Co-operative Specialist Program in Statistics are identical to those of the Specialist Program in Statistics described above.

## MAJOR PROGRAM IN STATISTICS (SCIENCE)

Supervisor of Studies: M. Samarakoon Email: mahinda@utsc.utoronto.ca
Recommended Writing Course: Students are urged to take a course from the following list of courses by the end of their second year.
ANTA01H3, ANTA02H3, (CLAA02H3), (CTLA19H3), CTLA01H3, ENGA10H3, ENGA11H3, ENGB06H3, ENGB07H3, ENGB08H3, ENGB09H3, ENGB17H3, ENGB19H3, ENGB50H3, (ENGB51H3), GGRA02H3, GGRA03H3, GGRB05H3, (GGRB06H3), (HISA01H3), (HLTA01H3), ACMA01H3, (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), LINA01H3, PHLA10H3, PHLA11H3, WSTA01H3.

## Program Requirements

This program requires 8.0 full credits.

1. A-level courses

MATA23H3 Linear Algebra H
MATA22H3 Linear Algebra I for Mathematical Sciences
[CSCA08H3 Introduction to Computer Science I or CSCA20H3 Computer Science for the Sciences]
[MATA30H3 Calculus I for Physical Sciences or MATA31H3 Calculus I for Mathematical Sciences*]
[MATA36H3 Calculus II for Physical Sciences or MATA37H3 Calculus II for Mathematical
Sciences*]
*The sequence MATA31H3 and MATA37H3 is recommended. MATA31H3 is the pre-requisite for MATA37H3.
2. B-level courses

MATB24H3 Linear Algebra II
MATB41H3 Techniques of the Calculus of Several Variables I
MATB42H3 Techniques of the Calculus of Several Variables II
STAB52H3 An Introduction to Probability*
STAB57H3 An Introduction to Statistics*
Upper-level courses
STAC67H3 Regression Analysis*
Four of:
any C- or D-level (or 300-400 on St. George) STA courses, except STAD29H3
Two of:
ACTB40H3, or any C- or D-level (or 300-400 on St. George) CSC, MAT or STA courses

* STAB52H3, STAB57H3, STAC67H3 - These courses must be taken at UTSC. No substitutes are
permitted without permission of the program
supervisor.


## MAJOR (CO-OPERATIVE) PROGRAM IN STATISTICS (SCIENCE)

Supervisor of Studies: M. Samarakoon Email: mahinda@utsc.utoronto.ca

Co-op Contact: askcoop@utsc.utoronto.ca
Program Objectives
This program combines the coursework of the Major Program in Statistics described above with paid work terms in public and private enterprises. It shares the goals and structure of the Major Program in Statistics, but complements study of the subject with considerable work experience.

Admission Requirements
Refer to the Program Admission requirements for the Major Program in Statistics described above and section 6B. 5 (Co-operative Programs) in this Calendar. Students entering this program after first year must have a CGPA of at least 2.75.

## Program Requirements

To remain in the program, a student must maintain a CGPA of 2.5 or higher throughout the program.
To complete the program, a student must meet the work term and course requirements described below.

## Work Term Requirements

Students must successfully complete three work terms, at most one of which can be during the summer. In addition, prior to their first work term, students must successfully complete the Arts \& Science Coop Work Term Preparation Activities. These include networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations.

## Course Requirements

The course requirements of the Co-operative Major Program in Statistics are identical to those of the Major Program in Statistics described above.

## Minor in Applied Statistics (Science)

Overview of Changes:

1. Add CSC120H1 and CSC121H1 as optional courses to complete component 1
2. Add STA220H1 as an optional course to complete component 2.
3. Add STA221H1 as an optional course to complete component 3.

## Rationale:

These changes will increase flexibility and inclusiveness. Students can now easily use appropriate St. George courses as approved program requirements.

## Calendar Copy Showing Changes:

## MINOR PROGRAM IN APPLIED STATISTICS (SCIENCE)

Supervisor of Studies: K. Butler Email: butler@utsc.utoronto.ca

## Program Requirements

This program requires a total of 4.0 credits as follows:

1. One of ( 0.5 credit):

CSCA08H3 Introduction to Computer Science I
CSCA20H3 Introduction to Programming
CSC120H1 Computer Science for the Sciences
CSC121H1 Computer Science for Statistics
2. One of ( 0.5 credit):

STAB22H3 Statistics I
MGEB11H3/(ECMB11H3) Quantitative Methods in Economics I
PSYB07H3 Data Analysis in Psychology
STA220H1The Practice of Statistics I
3. One of ( 0.5 credit):

STAB27H3 Statistics II
MGEB12H3/(ECMB12H3) Quantitative Methods in Economics II
PSYC08H3 Advanced Data Analysis in Psychology
STA221H1 The Practice of Statistics II
4. All of the following ( 1.5 credits):

STAC32H3 Applications of Statistical Methods
STAC50H3 Data Collection
STAD29H3 Statistics for Life and Social Scientists
5. Two ( 1.0 credit) of the following courses:
[one of the following: any ACT, CSC, MAT, STA course]
[one of the following: MGEA02H3/(ECMA04H3), MGEA06H3/(ECMA06H3), MGEB02H3/(ECMB02H3), MGEB06H3/(ECMB06H3), MGEC11H3/(ECMC11H3), MGED11H3/(ECMD10H3), MGED70H3/(ECMD70H3)]
GGRB02H3
HLTB15H3
[one of the following: MGFB10H3/(MGTB09H3), MGFC30H3/(MGTC71H3), MGOC10H3/(MGTC74H3), MGMC01H3/(MGTD07H3), MGMD01H3/(MGTD30H3)]
POLC11H3

## Health Studies

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Deletions

## HLTB17H3 Conceptual Models of Health

## Rationale:

Health Studies is introducing HLTB41H3, which makes B17H3 redundant.

## HLTB21H3 Infectious Diseases

## Rationale:

HLTB21H3 is being replaced by HLTC25H3 which was introduced in 2016-17. B21 is now redundant.

## HLTC21H3 Patterns of Health, Disease and Injuries

## Rationale:

A new course is being introduced - HLTC19H3 Chronic Diseases - which makes C21 redundant.

## Course Changes

## Calendar Copy Showing Changes:

## HLTC02H3 Women and Health: Past and Present

This course uses historical, anthropological, philosophical approaches to further understand the relationships intertwining women, health and society. Women's interactions with the health sector will be examined. Particular attention will be devoted to the social and gender construction of disease and the politics of women's health.
Prerequisite: HLTB17H3-HLTB41H3
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

HLTB17H3 has been deleted and replaced by HLTB41H3.

## Calendar Copy Showing Changes:

## HLTC25H3 Infectious Diseases

Adopting ecological, epidemiological, and social approaches, this course examines the impact of infectious disease on human populations. Topics covered include disease ecology, zoonoses, and the role of humans in disease occurance. The aim is to understand why infectious diseases emerge and how their occurance is intimately linked to human behaviours.
Prerequisite: HLTB22H3
Exclusion: ANTC68H3-HLTB21H3
Enrolment Limits: Restricted to students in health studies and health science programs (e.g., Human Biology, Mental Health Studies, Computer Science - Health Informatics stream, Health Studies). Breadth Requirement: Natural Sciences

## Rationale:

HLTC25H3 is a new course that was introduced to replace HLTB21H3. There is sufficient overlap between the courses to warrant adding B21 as an exclusion.

## Calendar Copy Showing Changes:

## HLTD01H3 Directed Readings in Health Studies

This is an advanced reading course in special topics for upper level students who have completed the available basic courses in Health Studies and who wish to pursue further intensive study on a relevant topic. Topic selection and approval will depend on the supervising instructor.
Prerequisite: Completion of at least 6.0 credits from the requirements of one of the Major/Major Cooperative programs in Health Studies; and a minimum CGPA of 2.5 in HLT courses; and permission of the instructor.

## Recommended Preparation: Completion of at least 3 C-level HLT courses. <br> Enrolment Limits: 30

## Rationale:

Prerequisite: Calculating CGPA across all courses rather than just HLT will allow more students to take these courses.
Recommended Preparation: The recommended preparation is being removed because students will have completed C-level HLT courses as part of the 6.0 credits required in the prerequisite, so the recommended preparation is redundant.
Enrolment Limits: Directed Readings course is not an 'in-class' course. Enrolment limit is not needed.

## Calendar Copy Showing Changes:

## HLTD02H3 Health Research Seminar

Provides senior students with the opportunity to apply methodological skills to a health research problem. Students will give presentations of their research proposals, and there may be a guest seminar on health research projects.
Prerequisite: Completion of at least 6.0 credits from the requirements of one of the Major/Major Cooperative programs in Health Studies; and a minimum CGPA of 2.5 in HLT courses; and permission of the instructor.
Recommended Preparation: Completion of at least 3 C-level HLT courses.
Enrolment Limits: 30

## Rationale:

Calculating CGPA across all courses rather than just HLT will allow more students to take these courses.

## Calendar Copy Showing Changes:

## HLTD04H3 Special Topics in Health

The topics presented in this course will represent a range of contemporary issues in health research. Topics will vary by instructor and term.
Prerequisite: Completion of at least 6.0 credits from the requirements of the Major/Major Co-operative programs in Health Studies; \& and a minimum CGPA of 2.5 im HLT courses; and permission of the instructor.
Recommended Preparation: Completion of 3 C-level HLT courses.
Enrolment Limits: 30

## HLTD05H3 Directed Research on Health Services and Institutions

Provides students with the opportunity to analyze work of health institutions. Students taking this course will arrange, in consultation with the instructor, to work as a volunteer in a health institution. They will write a major research paper related to some aspect of their experience.
Prerequisite: Completion of HLTA02H3 and HLTA03H3 and at least 4.0 credits from the requirements of one of the Major/Major Co-operative programs in Health Studies; and a minimum CGPA of 2.5 in HLT courses; and permission of the instructor.
Exclusion: (HLTC01H3)
Recommended Preparation: Completion of 3 C-level HLT courses.
Enrolment Limits: 30

## HLTD12H3 Special Topics in Health

The topics presented in this course will represent a range of contemporary issues in health research.

Topics will vary by instructor and term.
Prerequisite: [Completion of at least 6.0 credits from the requirements of the Major/Major Co-op programs in Health Studies] and [a minimum CGPA of 2.7 in HLT courses] and [permission of the instructor]
Enrolment Limits: 30
Breadth Requirement: Social \& Behavioural Sciences

## HLTD21H3 Special Topics in Health

The topics presented in this course will represent a range of contemporary issues in health research. Topics will vary by instructor and term.
Prerequisite: Completion of at least 6.0 credits from the requirements of the Major/Major Co-operative programs in Health Studies; and a minimum CGPA of 2.7 in HLT courses; and permission of the instructor.
Enrolment Limits: 30
Breadth Requirement: Social \& Behavioural Sciences

## HLTD22H3 Special Topics in Health

The topics presented in this course will represent a range of contemporary issues in health research. Topics will vary by instructor and term.
Prerequisite: Completion of at least 6.0 credits from the requirements of the Major/Major Co-operative programs in Health Studies; and a minimum CGPA of 2.7 in HLT courses; and permission of the instructor.
Enrolment Limits: 30
Breadth Requirement: Social \& Behavioural Sciences

## HLTD23H3 Special Topics in Health

The topics presented in this course will represent a range of contemporary issues in health research.
Topics will vary by instructor and term.
Prerequisite: Completion of at least 6.0 credits from the requirements of the Major/Major Co-operative programs in Health Studies; and a minimum CGPA of 2.5 in HLT courses; and permission of the instructor
Enrolment Limits: 30
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

Calculating CGPA across all courses rather than just HLT will allow more students to take these courses.

## Program Changes

## Major in Health Studies - Population Health (BSc) <br> Major (Co-operative) in Health Studies - Population Health (BSc)

Overview of Changes:

1. Delete BIOA02H3 as an optional course to complete component 1 ; delete note associated with component 1
2. Add STAB23H3 as an optional course to complete 0.5 credit in statistics in component 2
3. Add HLTC27H3 as an optional course to complete 0.5 credit in epidemiology in component 3
4. Delete HLTB17H3 and HLTB21H3 as optional courses to complete component 6
5. Add HLTC16H3, HLTC17H3, HLTC19H3, HLTC25H3, HLTC28H3, HLTC29H3, HLTC48H3 as optional courses to complete component 7

## Rationale:

1. The A level Bio requirement is being changed so that students can take either BIOA11 or BIOA01, rather than either BIOA11 OR BIOA01 and BIOA02. The options that exist currently are not comparable, since the former is worth .5 credits and the latter is worth 1.0 (but students only receive .5 towards the Health Studies program for taking both). The change makes the two options comparable in terms of credit, and the Biology Dept. has encouraged and is in support of this change to our program. 2. STAB23H3 is added as an optional prerequisite because it is a suitable statistics course to complete component 2 of the program.
2. HLTC27H3 is a new course focused on epidemiology that is a suitable option to complete component 3 of the program requirements.
3. HLTB17H3 and HLTB21H3 are being removed from component 6 because they will no longer be offered.
4. Most of our proposed courses are at the C level and expand upon a previous somewhat meager offering or offer flexibility for students and provide greater breadth. One new C level proposed course (Chronic Diseases) replaces a C level course (Patterns of Health, Disease and Injury), which will be deleted, because of overlapping content. Another proposed C level course (Infectious Diseases) replaces a B level course with the same name because we realized that the content and difficulty of the course made it more appropriate for the C level. Morevoer, the two new C level courses (Infectious Diseases and Chronic Diseases) work well together as a pair.

## Calendar Copy Showing Changes: <br> MAJOR PROGRAM IN HEALTH STUDIES - Population Health (SCIENCE) <br> This program requires the completion of 8.0 credits, as described below.

CORE (5.5 credits)

1. 1.5 credit at A-level:

BIOA11H3 Introduction to the Biology of Humans or [BIOA01H3 Life on Earth: Unifying Principles and BIOA02H3]
HLTA02H3 Foundations of Health Studies I
HLTA03H3 Foundations of Health Studies II
Note: Students completing [BIOA01H3 and BIOA02H3] instead of BIOA11H3 will receive only 0.5 eredit towards the program.

1. 2.5 credits at B-level:

HLTB11H3 Basic Human Nutrition
HLTB16H3 Introduction to Public Health
HLTB22H3 Biological Determinants of Health
PHLB09H3 Biomedical Ethics
[STAB22H3 Statistics I or STAB23H3 Introduction to Statistics for the Social Sciences]
3. 1.0 credit:

HLTB15H3 Introduction to Health Research Methodology
[ANTC67H3 Foundations in Epidemiology or HLTC27H3 Community Health and Epidemiology]
4. 0.5 credit at the D-level in HLT courses

OPTIONS ( 2.5 credits)
5. 0.5 credit at the B-level from the following:

HLTB41H3 Introduction to the Social Determinants of Health
HLTB42H3 Perspectives of Culture, Illness and Healing
HLTB50H3 Introduction to Health Humanities
6. 0.5 credit at the B -level from the following:

GGRB28H3 Geographies of Disease
HLTB17H3 Concepttal Models of Health
HLTB20H3 Contemporary Human Evolution and Variation
HLTB21H3 Infectious Diseases
HLTB41H3 Introduction to the Social Determinants of Health (if not used towards requirement 5) HLTB50H3 Introduction to Health Humanities (if not used towards requirement 5)
STAB27H3 Statistics II
7. 1.5 credits at the C -level from the following:

ANTC68H3 Deconstructing Epidemics
HLTC04H3 Critical Qualitative Health Research Methods
HLTC16H3 Introduction to Health Information Systems
HLTC17H3 Introduction to Rehabilitation Sciences
HLTC18H3 Determinants of Health, and Health Disparities
HLTC19H3 Chronic Diseases
HLTC21H3 Patterns of Health, Disease and Injuries
HLTC22H3 Health, Aging and the LIfe Cycle
HLTC23H3 Issues in Child Health and Development
HLTC24H3 Environment and Health
HLTC25H3 Infectious Diseases
HLTC28H3 Special Topics in Health Studies
HLTC29H3 Special Topics in Health Studies
HLTC48H3 Special Topocs in Health Studies

## MAJOR (CO-OPERATIVE) PROGRAM IN HEALTH STUDIES - Population Health (SCIENCE)

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

## Program Admission

This is a limited enrolment program, which must be completed in conjunction with another Major as part of a 4 -year degree. For information on admissions, fees, work terms, and standing in the program, please see the Humanities and Social Sciences Co-operative Programs section of this Calendar.

Minimum qualifications for entry following first year: 4.0 credits including HLTA02H3 and HLTA03H3, registration in the Major program in Health Studies - Population Health, and a cumulative GPA of at least 2.5.

## Program Requirements

Work terms will be in the health and health-related sectors, and may be in public institutions, in research institutions, and in the private sector. There are two work terms, each of 4 months. In order to
be eligible for the first work term, students must complete at least 9 full credits, including the first 4.5 credits listed in one of the two streams in the Health Studies program. Students must also successfully complete Arts \& Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

Course Requirements
See requirements for Major Program in Health Studies - Population Health (BSc).

## Major in Health Studies - Health Policy (BA) <br> Major (Co-operative) in Health Studies - Health Policy (BA)

## Overview of Changes:

1. Add STAB23H3 as an optional course to complete 0.5 credit in statistics in component 2
2. Add HLTC27H3 as an optional course to complete 0.5 credit in epidemiology in component 3
3. Delete HLTB17H3 as an optional courses to complete component 6
4. Add HLTC16H3, HLTC17H3, HLTC19H3, HLTC46H3, HLTC47H3, HLTC48H3 as optional courses to complete component 7

## Rationale:

1. STAB23H3 is added as an optional prerequisite because it is a suitable statistics course to complete component 2 of the program.
2. HLTC27H3 is a new course focused on epidemiology that is a suitable option to complete component 3 of the program requirements.
3. HLTB17H3 is being removed from component 6 because it will no longer be offered.
4. Most of our proposed courses are at the C level and expand upon a previous somewhat meager offering or offer flexibility for students and provide greater breadth. One new C level proposed course (Chronic Diseases) replaces a C level course (Patterns of Health, Disease and Injury), which will be deleted, because of overlapping content. Another proposed C level course (Infectious Diseases) replaces a B level course with the same name because we realized that the content and difficulty of the course made it more appropriate for the C level. Morevoer, the two new C level courses (Infectious Diseases and Chronic Diseases) work well together as a pair.

## Calendar Copy Showing Changes:

MAJOR PROGRAM IN HEALTH STUDIES - Health Policy (ARTS)
This program requires the completion of 8.0 credits, as described below.

## CORE (5.5 Credits)

1. 1.0 credit at A-level:

HLTA02H3 Foundations of Health Studies I
HLTA03H3 Foundations of Health Studies II
2. 2.5 credits as follows:

HLTB16H3 Introduction to Public Health
HLTB41H3 Introduction to the Social Determinants of Health
HLTB50H3 Introduction to Health Humanities
PHLB09H3 Biomedical Ethics
[STAB22H3 Statistics I or STAB23H3 Introduction to Statistics for the Social Sciences]
3. 1.5 credits as follows:

HLTB15H3 Introduction to Health Research Methodology
HLTB40H3 Health Policy and Health Systems
[ANTC67H3 Foundations in Epidemiology or HLTC27H3 Community Health and Epidemiology]
4. 0.5 credit at the D-level in HLT courses

OPTIONS ( 2.5 credits)
5. 0.5 credit at the B-level from the following:

HLTB11H3 Basic Human Nutrition
HLTB20H3 Contemporary Human Evolution and Variation
6. 0.5 credit at the B-level from the following:

GGRB28H3 Geographies of Disease
HLTB11H3 Basic Human Nutrition (if not used towards requirement 5)
HLTB17H3 Conceptaal Models of Health
HLTB20H3 Contemporary Human Evolution and Variation (if not used towards requirement 5)
HLTB42H3 Perspectives of Culture, Illness and Healing
IDSB04H3 Introduction to International/Global Health*
*Note: IDSB04H3 has prerequisites that are not part of this program.
7. 1.5 credits at the C-level from the following:

ANTC24H3 Culture, Mental Illness, and Psychiatry
ANTC61H3 Medical Anthropology: Illness and Healing in Cultural Perspective
HLTC02H3 Women and Health: Past and Present
HLTC04H3 Critical Qualitative Health Research Methods
HLTC05H3 Society, Health and Illness
HLTC16H3 Introduction to Health Information Systems
HLTC17H3 Introduction to Rehabilitation Sciences
HLTC18H3 Determinants of Health, and Health Disparities
HLTC19H3 Chronic Diseases
HLTC22H3 Health, Aging and the LIfe Cycle
HLTC23H3 Issues in Child Health and Development
HLTC42H3 Emerging Health Issues and Policy Needs
HLTC43H3 Politics of Canadian Health Policy
HLTC46H3 Gender, Health and Society
HLTC47H3 Special Topics in Health Studies
HLTC44H3 Comparative Health Policy Systems
HLTC48H3 Special Topics in Health Studies
HLTC50H3 The Human-Animal Interface
IDSC11H3 Issues in Global and International Health*
*Note: IDSC11H3 has prerequisites that are not part of this program.
MAJOR (CO-OPERATIVE) PROGRAM IN HEALTH STUDIES - Health Policy (ARTS)
Co-op Contact: askcoop@utsc.utoronto.ca
Program Admission

This is a limited enrolment program, which must be completed in conjunction with another Major as part of a 4 -year degree. For information on admissions, fees, work terms, and standing in the program, please see the Humanities and Social Sciences Co-operative Programs section of this Calendar.

Minimum qualifications for entry following first year: 4.0 credits including HLTA02H3 and HLTA03H3, registration in the Major program in Health Studies - Health Policy, and a cumulative GPA of at least 2.5.

## Program Requirements

Work terms will be in the health and health-related sectors, and may be in public institutions, in research institutions, and in the private sector. There are two work terms, each of 4 months. In order to be eligible for the first work term, students must complete at least 9 full credits, including the first 4.5 credits listed in one of the two streams in the Health Studies program. Students must also successfully complete Arts \& Science Co-op Work Term Preparation Activities, which include multiple networking sessions, speaker panels and industry tours along with seminars covering resumes, cover letters, job interviews and work term expectations, prior to their first work term.

Course Requirements
See requirements for Major Program in Health Studies - Health Policy (BA).

## Department of Historical and Cultural Studies

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Changes

## Global Asia Studies

## Calendar Copy Showing Changes:

## GASC20H3 Gendering Global Asia

This course offers students a critical and analytical perspective on issues of gender history, equity, discrimination, resistance, and struggle facing societies in East and South Asia and their diasporas. Prerequisite: GASA01H3 or GASA02H3 8.0 credits, including 0.5 credit at the A-level and 1.0 credit at the B-level in AFS, CLA, FST, GAS, HCS, or WST courses
Recommended Preparation: GASA01H3 or GASA02H3
Enrolment Limits: 50
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

This change will open up the course to students from other programs and lessen the administrative task of approving registration. From experience, the course is of interest to students in History, Women's and Gender Studies, Media Studies, and Anthropology. Students from such programs have done well in the course. Furthermore, in requiring prior credits in b-level courses, the students will be better able to handle the content of a c-level course. The proposed change to add a recommended preparation would encourage students to have taken courses particular to the GAS programme and to consider the Global

Asia Studies approach of the course. There will be no impact on the content, learning outcomes, topics covered or methods of assessment.

## History

## Calendar Copy Showing Changes:

HISA10H3-HISC39H3 Hellhound on My Trail: Living the Blues in the Mississippi Delta, 18901945
This course examines black life and culture in the cotton South through the medium of the blues. Major topics include: land tenure patterns in southern agriculture, internal and external migration, mechanisms of state and private labour control, gender conventions in the black community, patterns of segregation and changing race relations.
Exclusion: HIS478H
Enrolment Limits: 18-50
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

The course was originally listed as an A level so that it could be offered, on a one off basis, in the summer term. It will now be offered as a regular course during the Fall/Winter and can accommodate additional students in using a lecture format. HISA10H3 has not been added as an exclusion because the course was never offered as HISA10H3.

## Calendar Copy Showing Changes:

## HISC30H3 The U.S. and the World

Collectively, immigrants, businesspeople, investors, missionaries, writers and musicians may have been as important as diplomats' geopolitical strategies in creating networks of connection and exchange between the United States and the world. This course focuses on the changing importance and interactions over time of key groups of state and non-state actors.
Prerequisite: HISB 30 H 3 and $\mathrm{HSB} 31 \mathrm{H3} 1.0$ credit at the A-level in AFS, GAS or HIS courses.
Enrolment Limits: 40
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

The existing prerequisite unnecessarily excludes non-majors who have a general interest in the United States. Since the focus of the course is the relationship of the US and the world, foundational work in A level classes on Africa, Global Asia or World History is appropriate.

## Calendar Copy Showing Changes:

## HISC32H3 The Emergence of Modern America, 1877-1933

Overview of the political and social developments that produced the modern United States in the halfcentury after 1877. Topics include urbanization, immigration, industrialization, the rise of big business and of mass culture, imperialism, the evolution of the American colour line, and how Americans used politics to grapple with these changes.
United States and Latin America Area
Prerequisite: HISB30H3 \& HISB31H3
Recommended Preparation: HISB30H3
Enrolment Limits: 40
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

The changes to the prerequisite and recommended preparaton open the course to upper-level students who have taken only HISB31H3, while signaling that the best-prepared students will also have taken HISB30H3. HISB31H3, which covers the period since 1865, provides sufficient background to learn in and contribute to HISC32H3, which covers the period from 1877 to 1933. HISC32H3 students would, however, benefit from familiarity with developments in the decades (and centuries) before 1865, especially the rise and destruction of racial slavery, the creation of the American republic and constitutional order, the American conquest of northern Mexico and the rest of the trans-Mississippi West, and the Civil War. These all influenced the course of American history in the six decades after 1877, and so preparation via HISB30H3 is recommended.

## Calendar Copy Showing Changes:

## HISC70H3 The Caribbean Diaspora

The migration of Caribbean peoples to the United States, Canada, and Europe from the late 19th century to the present. The course considers how shifting economic circumstances and labour demands, the World Wars, evolving imperial relationships, pan-Africanism and international unionism, decolonization, natural disasters, and globalization shaped this migration.
Same as AFSC70H3
Transnational Area
Prerequisite: Any 4.0 credits
Exclusion: NEW428H, AFSC70H3
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

Based on the course description of NEW428H1 - Caribbean Migrations and Diasporas, there looks to be significant overlap in content (about 85\%) with HISC70, which is why we need to make this course an exclusion.

HISC70H3 is being double-numbered with a new course - AFSC70H3. The changes to the description and the exclusion address this change.

## Calendar Copy Showing Changes:

## HISD16H3 Socialist Feminism in Global Context

A comparative exploration of socialist feminism, encompassing its diverse histories in different locations, particularly China, Russia, Germany and Canada. Primary documents, including literary texts, magazines, political pamphlets and group manifestos that constitute socialist feminist ideas, practices and imaginaries in different times and places will be central. We will also seek to understand socialist feminism and its legacies in relation to other contemporary stands of feminism.
Same as WSTD16H3
Transnational Area
Prerequisite: 8.0 credits, including [ 0.5 credit at the $A$ level in HIS or WST courses] and [ 0.5 credit at the C-level in HIS or WST courses] 1.0 credit at the B-level and 1.0 credit at the C-level in HIS, WST, or other Humanities and Social Sciences courses
Exclusion: WSTD16H3
Enrolment Limits: 15
Breadth Requirement: History, Philosophy \& Cultural Studies
NOTE: Priority will be given to students who have taken at least 0.5 credit at the $\Lambda$ - or B-level in HIS or WST courses.

## Rationale:

The proposed changes to the pre-requisites will open up the course to students from other programs and lessen the administrative task of approving registration. The course would benefit from students from a range of different disciplines in Humanities and Social Sciences who have taken a number of B- and Clevel courses.

## Calendar Copy Showing Changes:

## HISD36H3 From New Deal to New Right: American Politics since 1933

The most striking development in U.S. politics in the last half century has been the rebirth and rise to dominance of conservatism. This seminar examines the roots of today's conservative ascendancy, tracing the rise and fall of New Deal liberalism and the subsequent rise of the New Right.
United States and Latin America Area
Prerequisite: HISB30H3 \& HISB31H3
Recommended Preparation: HISB30H3
Enrolment Limits: 15
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

The changes to the prerequisite and recommended preparation will open the course to upper-level students who have taken only HISB31H3, while signaling that the best-prepared students will also have taken HISB30H3. HISB31H3, which covers the period since 1865, provides sufficient background to learn in and contribute to HISD36H3, which covers the period since 1933. HISD36H3 students would, however, benefit from familiarity with developments in the decades (and centuries) before 1865, especially the rise and destruction of racial slavery, the creation of the American republic and constitutional order, the American conquest of northern Mexico and the rest of the trans-Mississippi West, and the Civil War. These all influenced the later development of American politics (and continue to do so), and hence preparation via HISB30H3 is recommended.

## Calendar Copy Showing Changes:

## HISD52H3 East African Societies in Transition

A seminar study of East African peoples from late pre-colonial times to the 1990's, emphasizing their rapid although uneven adaptation to integration of the region into the wider world. Transitions associated with migrations, commercialization, religious change, colonial conquest, nationalism, economic development and conflict, will be investigated. Student presentations are required.
Africa and Asia Area
Same as AFSD52H3
Prerequisite: 8.0 credits including AFSB50H3/HISB50H3 or AFSB51H3/HISB51H3 or HISC55H3
Exclusion: AFSD52H3
Enrolment Limits: 15
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

HISD52H is being double-numbered with the new course AFSD52H. The changes to the course description and exclusions address this change.

## Women's and Gender Studies

Calendar Copy Showing Changes:
WSTB05H3 Approaches to Research in Women's and Gender Studies Power and Knowledge in Approaches to Research
Using an feminist intersectional lens, various methods and methodologies of research in the humanities will be explored. Concepts of paradigm, power, knowledge-creation, objectivity and ethics will be examined. Students will gain critical reading skills and learn the fundamentals of conducting research. There is an experiential learning component.
Prerequisite: WSTA01H3 or WSTA03H3 or (WSTA02H3)
Exclusion: WGS202H, WGS360H
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

The title has been changed from one which is vague and cumbersome, to one which is clear and more succinctly reflects the content of the course as it has been taught for the last 7 years. In the calendar text, "intersectional" has replaced "feminist" to more accurately reflect an analytical framework incorporating gender, race, sexuality etc. "Humanities" has been deleted as the course addresses epistemology, methods and methodologies from a range of disciplinary approaches. There are no changes in learning outcomes, topics covered or methods of assessment with the course title change or with the edits to the calendar text.

## Calendar Copy Showing Changes:

## WSTB10H3 Women, Power and Protest

An examination of local and global movements for change, past and current, which address issues concerning women.
This course will survey initiatives from the individual and community to the national and international levels to bring about change for women in a variety of spheres.
Prerequisite: WSTA01H3 or WSTA03H3 1.0 credit at the A-level in AFS, GAS, HIS, WST, or other Humanities and Social Sciences courses
Exclusion: (WSTA02H3)
Recommended Preparation: WSTA01H3 or WSTA03H3
Breadth Requirement: Social \& Behavioural Sciences History, Philosophy \& Cultural Studies

## Rationale:

The proposed change to the pre-requisites will open up the course to students from other programs and lessen the administrative task of approving registration. From experience, the course is of interest to students who do not have A-levels in WST courses. These students have not shown any disadvantage in taking the course. Recommending the WST A level courses, however, will encourage students to have preparation specifically in the methodologies and approaches of Women's and Gender Studies in particular.
The proposed change to the breadth requirement more appropriately reflects the expertise of the instructor and the approach taken to the content of the course.

## Calendar Copy Showing Changes:

## WSTC02H3 Research in the Community: Field Experience Feminist Qualitative Research in Action <br> Students will design and conduct a qualitative research project in the community on an issue of their ehoice related to women and/or gender. Field work is the basis of this course. It The course will also include an overview of the various phases of carrying out research: planning the research project, choosing appropriate methods for data collection, analyzing the data and reporting the results. Students

should expect to spend approximately 10 hours conducting their research in the community over the course of the semester.
Prerequisite: WSTA01H3 \& WSTA03H3 \& WSTB05H3 \& WSTB11H3 \& 1.0 credit taken from the courses listed in requirement 6 of the Major in Women's and Gender Studies
Exclusion: (WSTD02H3)
Enrolment Limits: 15
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

The revised course title and description more accurately reflects the specific content of the course as it has been taught for the past 10 years. The change is in response to student suggestions that it be less vague. The course content is a feminist approach to qualitative research. The name change does not impact the learning outcomes, the topics covered or methods of assessment.

## Calendar Copy Showing Changes:

## WSTC24H3 Gender in the Kitchen

Across cultures, women are the main preparers and servers of food in domestic settings; in commercial food production and in restaurants, and especially in elite dining establishments, males dominate. Using agricultural histories, recipes, cookbooks, memoirs, and restaurant reviews and through exploration of students' own domestic culinary knowledge, students will analyze the origins, practices, and consequences of such deeply gendered patterns of food labour and consumption.
Prerequisite: 1.0 credit in WST courses 8.0 credits, including 0.5 credit at the A or B-level in WST courses and 0.5 credit at the A or B-level in FST courses
Breadth Requirement: History, Philosophy \& Cultural Studies

## Rationale:

This course is an important course in the new Minor in Food Studies, where it will introduce students to gender analysis while continuing to provide WST students with an introduction to food and food preparation as gendered arenas of labour and achievement. Requiring prior study in WST will preclude many FST students from enrolling in the course. The change will also result in greater gender balance within WST courses, which are currently overwhelmingly female; FST students are a more gender balanced group.

## Calendar Copy Showing Changes:

## WSTD16H3 Socialist Feminism in Global Context

A comparative exploration of socialist feminism, encompassing its diverse histories in different locations, particularly China, Russia, Germany and Canada. Primary documents, including literary texts, magazines, political pamphlets and group manifestos that constitute socialist feminist ideas, practices and imaginaries in different times and places will be central. We will also seek to understand socialist feminism and its legacies in relation to other contemporary stands of feminism.
Same as HISD16H3
Transnational Area
Prerequisite: 8.0 credits, including [ 0.5 credit at the $A$-level in HIS or WST courses] and [ 0.5 credit at the C-level in HIS or WST courses 1.0 credit at the B-level and 1.0 credit at the C-level in HIS, WST, or other Humanities and Social Sciences courses
Exclusion: HISD16H3
Enrolment Limits: 15
Breadth Requirement: History, Philosophy \& Cultural Studies

NOTE: Priority will be given to students who have taken at least 0.5 credit at the $\Lambda$ - or B-level in HIS or WST courses.

## Rationale:

The proposed changes to the pre-requisites will open up the course to students from other programs and lessen the administrative task of approving registration. The course would benefit from students from a range of different disciplines in Humanities and Social Sciences who have taken a number of $b$ and $c$ level courses.

## Program Changes

## Minor in African Studies (Arts)

## Overview of Changes:

1. Add AFSC70H3 and AFSD52H3 as optional courses to complete component 2 of the program requirements
2. Add AFSB05H3 and AFSC70H3 as optional courses to complete component 3 of the program requirements
3. Add double-numbered partner courses where missing in all components.

## Rationale:

The addition of optional courses will make the offering more flexible for students. The addition of double-numbered partner courses will improve the clarity of the program description.

## Calendar Copy Showing Changes:

## MINOR PROGRAM IN AFRICAN STUDIES (ARTS)

Undergraduate Advisor: 416-287-7184 Email: afs-undergrad-advisor@utsc.utoronto.ca

## Program Requirements

Students must complete 4.0 credits, 1.0 credit of which must be at the C- or D-level.

1. AFSA01H3 Africa in the World: An Introduction AFSB01H3 African Worldviews
2. 1.0 credit from the following (students should check course descriptions for prerequisites):

AFSA03H3 Experiencing Development in Africa
AFSB05H3/ANTB05H3 Culture and Society in Africa
AFSB50H3 Africa in the Era of the Slave Trade
AFSB51H3 Twentieth Century Africa
AFSC30H3 Language and Society in the Arab World
AFSC52H3 Ethiopia: Seeing History
AFSC55H3 War and Society in Modern Africa
AFSC70H3/HISC70H3 The Caribbean Diaspora
AFSD51H3 Southern Africa: Colonial Rule, Apartheid and Liberation
AFSD52H3/HISD52H3 East African Societies in Transition
3. 2.0 credits from the list below (students should check course descriptions for prerequisites):

AFSA03H3/IDSA02H3 Experiencing Development in Africa
AFSB05H3/ANTB05H3 Culture and Society in Africa (if not used in Requirement 2)
AFSB50H3/HISB50H3 Africa in the Era of the Slave Trade (if not used in Requirement 2)
AFSB51H3/HISB51H3 Twentieth Century Africa (if not used in Requirement 2)
AFSC30H3/HISC96H3 Language and Society in the Arab World (if not used in Requirement 2)
AFSC52H3/HISC52H3 Ethiopia: Seeing History (if not used in Requirement 2)
AFSC55H3/HISC55H3 War and Society in Modern Africa (if not used in Requirement 2)
AFSC70H3/HISC70H3 The Caribbean Diaspora (if not used in Requirement 2)
AFSD51H3/HISD51H3 Southern Africa: Colonial Rule, Apartheid and Liberation (if not used in Requirement 2)
AFSD52H3/HISD52H3 East African Societies in Transition (if not used in Requirement 2)
AFSB05H3/ANTB05H3 Culture and Society in Africa (if not used in Requirement 2)
(ANTC06H3) African Cultures and Societies II: Case Studies
CLAC05H3 Environment, Society and Economy in Ptolemaic and Roman Egypt
ENGB17H3 Contemporary Literature from the Caribbean
ENGC51H3 Contemporary Arab Women Writers
ENGC72H3 Contemporary Literature from Africa
ENGD13H3 Rap Poetics
ENGD08H3 Topics in African Literature
(ENGD61H3) James Baldwin, the African American Experience, and the Liberal Imagination
FREA01H3 Language Practice I
FREA02H3 Language Practice II
FREB01H3 Language Practice III
FREB02H3 Language Practice IV
FREB35H3 Francophone Literature
FREC47H3 Pidgin and Creole Languages
FRED14H3 Advanced Topics in the Literature of Québec
GGRB28H3 Geographies of Disease
GGRC25H3 Land Reform and Development
HISD50H3 Southern Africa: Conquest and Resistance, 1652-1900
HISD52H3 East African Societies in Transition
(LGGA40H3) Introductory Modern Standard Arabic I
(LGGA41H3) Introductory Modern Standard Arabic II
(LGGB42H3) Intermediate Modern Standard Arabic I
(LGGB43H3) Intermediate Modern Standard Arabic II
(LGGB45H3) Modern Standard Arabic I for Students with Prior Background
POLC80H3 International Relations of Africa
VPHB50H3 Africa through the Photographic Lens
(VPHB65H3) Exhibiting Africa: Spectacle and the Politics of Representation WSTC13H3 Women, Gender and Islam
Note: Not all courses in Requirement \#2 and \#3 are offered every year.

## Major in Women's and Gender Studies (BA)

## Overview of Changes:

1. Revise component 6 to allow students to use any courses from the Concentrations table or any Dlevel Special Topics/Independent Senior Project courses to complete it.

## Rationale:

Revision to component 6 of the program requirements will give students more flexibility in completing their program. The updates to the Concentrations Table acknowledge changes in available courses.

## Calendar Copy Showing Changes:

MAJOR PROGRAM IN WOMEN'S AND GENDER STUDIES (ARTS)
Undergraduate Advisor: 416-287-7184 Email: wst-undergrad-advisor@utsc.utoronto.ca
Program Requirements
Students must complete seven full credits as follows:

1. WSTA01H3 Introduction to Women's and Gender Studies
and
WSTA03H3 Introduction to Theories of Feminism
2. WSTB05H3 Approaches to Research in Women's and Gender Studies
3. WSTB11H3 Intersections of Inequality
4. WSTC02H3 Research in the Community: Field Experience
5. 1.0 further credit in WST courses
6. 3.5 credits chosen from the courses identified in the Concentrations table shown in the introduction to the Women's and Gender Studies section of the Calendar below, or any WST Special Topics/Independent Senior Project courses, of which at least 1.0 credit must be at the Cor D-level, and a further 0.5 credit must be at the D-level (students are cautioned that these couses may have pre-requisites that are not included in the program, and advised to check course descriptions in advance):

Note: To complete requirement \#6, students must choose from the courses identified in the Concentrations below table (students are reminded they must have the pre-requisites). The concentrations are organized into themes to assist students in identifying their interests. There are no program requirements related to the concentrations. Students may also choose from the following special topics or independent senior project courses to fulfill this requirment: WSTC30H3, WSTC31H3, WSTC32H3, WSTD01H3, WSTD11H3, WSTD46H3. Not all courses are offered every year. Please check the Timetable for availability.

## Concentrations:

| Health, Sexualities, and the Gendered Body | Gender, Equity, and Human Rights |
| :---: | :---: |
| ANTC15H3 Genders and Sexualities | GASB20H3 Gender and Social Institutions in Asia |
| ANTD01H3 The Body in Culture and Society | MGHC23H3/(MGTC23H3) Diversity in the |
| ENGC76H3/(VPAC47H3) The Body in Literature and | Workplace |
| Film | POLC94H3 Globalization, Gender and Development |
| (ENGC77H3)/(VPAC48H3) The Body in Contemporary | SOCC09H3 Sociology of Gender and Work |
| Culture: Theories and Representations | SOCC38H3 Gender and Education |
| GGRD10H3 Health and Sexuality | WSTB10H3 Women, Power and Protest |
| HLTC02H3 Women and Health: Past and Present | WSTC14H3 Women, Community and Policy Change |


| PSYD18H3 Psychology of Gender <br> WSTB12H3 Women, Violence and Resistance | WSTC40H3 Gender and Disability <br> WSTD03H3 Senior Seminar in Sex, Gender and the <br> Body | AFSC97H3/HISC97H3 Women in Sub-Saharan <br> Africa <br> WSTD04H3 Senior Seminar in Gender, Equity and |
| :--- | :--- | :--- |
| Human Rights |  |  |

## Department of Human Geography

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Program Changes

## Specialist in City Studies (BA) <br> Major in City Studies (BA) <br> Major (Co-operative) in City Studies (BA)

Overview of Changes:
Remove SOCA01H3 and SOCA02H3 from component 1 of the program requirements; add SOCA03Y3 to component 1.

## Rationale:

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN CITY STUDIES (ARTS)

## Program Requirements:

This program requires the completion of 12.0 credits as follows:

1. Introduction to Social Science Thought ( 1.0 credit from among the following):

ANTA01H3 Introduction to Anthropology: Becoming Human
ANTA02H3 Introduction to Anthropology: Culture, Society and Language
GGRA02H3 The Geography of Global Processes
GGRA03H3 Cities and Environments
[MGEA01H3/(ECMA01H3) Introduction to Microeconomics or MGEA02H3/(ECMA04H3) Introduction to Microeconomics: A Mathematical Approach]
[MGEA05H3/(ECMA05H3) Introduction to Macroeconomics or MGEA06H3/(ECMA06H3)
Introduction to Macroeconomics: A Mathematical Approach]
POLA01H3 Critical Issues in Politics I
POLA02H3 Critical Issues in Politics II
SOCA01H3 Introduction to Sociology I
SOCA02H3 Introduction to Sociology II
SOCA03Y3 Introduction to Sociology

## 2. Core courses ( $\mathbf{2 . 0}$ credits as follows):

CITB02H3 Foundations of City Studies
and 1.5 credits from among the following:
CITB01H3 Canadian Cities and Planning
CITB03H3 Social Planning and Community Development
CITB04H3 City Politics
CITB08H3 Economy of Cities

## 3. Research Methods ( 2.0 credits):

STAB23H3 Introduction to Statistics for the Social Sciences (or equivalent)
GGRA30H3 Geographic Information Systems (GIS) and Empirical Reasoning
[GGRB30H3 Fundamentals of GIS I or GGRB03H3 Writing Geography]
[GGRC32H3 Essential Spatial Analysis or GGRC31H3 Qualitative Geographical Methods: Place and Ethnography]

4. City Studies Applications ( 3.5 credits from among the following):<br>CITC01H3 Urban Communities and Neighbourhoods Case Study<br>CITC02H3 Learning in Community Service<br>CITC03H3 Real Estate and the City<br>CITC04H3 Municipal and Planning Law in Ontario<br>CITC07H3 Urban Social Policy<br>CITC08H3 Cities and Community Development<br>CITC09H3 Introduction to Planning History: Toronto and Its Region<br>CITC12H3 City Structures and City Choices: Local Government, Management, and Policymaking<br>CITC14H3 Environmental Planning<br>CITC15H3 Taxing and Spending: Public Finance in Canadian Cities<br>CITC16H3 Planning and Governing the Metropolis<br>CITC17H3 Civic Engagement in Urban Politics<br>CITC18H3 Transportation Policy Analysis

5. Approaches to Cities ( 1.5 credits from among the following)*:

GGRB02H3 The Logic of Geographic Thought
GGRB05H3 Urban Geography
GGRB13H3 Social Geography
POLB50Y3 Canadian Government and Politics
SOCB44H3 Sociology of Cities and Urban Life
GGRC02H3 Population Geography
GGRC10H3 Urbanization and Development
GGRC11H3 Current Topics in Urban Geography
GGRC12H3 Transportation Geography
GGRC13H3 Urban Political Geography
GGRC27H3 Location and Spatial Development
GGRC33H3 The Toronto Region
GGRC40H3 Megacities and Global Urbanization
GGRC48H3 Geographies of Urban Poverty
POLC53H3 Canadian Environmental Policy
PPGC66H3/(POLC66H3) Public Policy Making
PPGC67H3/(POLC67H3) Public Policy in Canada
*Note: these courses may have prerequisites that are not included in this program

## 6. City Studies Workshop (1.0 credit):

CITD05H3 City Studies Workshop I
CITD06H3 City Studies Workshop II
7. Advanced Applications ( 1.0 credit):

CITD01H3 City Issues and Strategies
CITD10H3 Seminar in Selected Issues in City Studies
CITD30H3 Supervised Research Project
GGRD14H3 Social Justice and the City
MAJOR PROGRAM IN CITY STUDIES (ARTS)

## MAJOR (CO-OPERATIVE) PROGRAM IN CITY STUDIES (ARTS) Program Requirements

This program requires students to complete a total of 7.0 credits as follows:

1. Introduction to Social Science Thought (1.0 credit from among the following):

ANTA01H3 Introduction to Anthropology: Becoming Human
ANTA02H3 Introduction to Anthropology: Culture, Society and Language
POLA01H3 Critical Issues in Politics I
POLA02H3 Critical Issues in Politics II
SOCA01H3 Introduction to Sociology I
SOCA02H3 Introduction to Sociology II
SOCA03Y3 Introduction to Sociology
GGRA02H3 The Geography of Global Processes
GGRA03H3 Cities and Environments
[MGEA01H3/(ECMA01H3) Introduction to Microeconomics or MGEA02H3/(ECMA04H3)
Introduction to Microeconomics: A Mathematical Approach]
[MGEA05H3/(ECMA05H3) Introduction to Macroeconomics or MGEA06H3/(ECMA06H3) Introduction to Macroeconomics: A Mathematical Approach]

## 2. Core courses ( 1.5 credits as follows)

CITB02H3 Foundations of City Studies
and
1.0 credit from among the following:

CITB01H3 Canadian Cities and Planning
CITB03H3 Social Planning and Community Development
CITB04H3 City Politics
CITB08H3 Economy of Cities
3. Methods ( $\mathbf{1 . 0}$ credit as follows):

STAB23H3 Introduction to Statistics for the Social Sciences
0.5 credit from among the following:

- GGRA30H3 Geographic Information Systems (GIS) and Empirical Reasoning
- GGRB30H3 Fundamentals of GIS I
- GGRC31H3 Qualitative Geographical Methods: Place and Ethnography

[^1]CITD06H3 City Studies Workshop II
CITD10H3 Seminar in Selected Issues in City Studies
CITD30H3 Supervised Research Project
5. Approaches to Cities (at least $\mathbf{1 . 5}$ credits from among the following ):

ANTC18H3 Urban Anthropology
[EESA05H3 Environmental Hazards or EESA06H3 Introduction to Planet Earth]
EESD20H3 Urban Environmental Problems of the Greater Toronto Area
GGRB02H3 The Logic of Geographic Thought
GGRB05H3 Urban Geography
GGRB13H3 Social Geography
GGRB28H3 Geographies of Disease
GGRC02H3 Population Geography
GGRC10H3 Urbanization and Development
GGRC11H3 Current Topics in Urban Geography
GGRC12H3 Transportation Geography
GGRC13H3 Urban Political Geography
GGRC27H3 Location and Spatial Development
GGRC33H3 The Toronto Region
GGRC40H3 Megacities and Global Urbanization
GGRC48H3 Geographies of Urban Poverty
GGRD09H3 Feminist Geographies
GGRD14H3 Social Justice and the City
HISC58H3 Delhi and London: Imperial Cities, Mobile People
POLB50Y3 Canadian Government and Politics
POLC53H3 Canadian Environmental Policy
PPGC66H3/(POLC66H3) Public Policy Making
PPGC67H3/(POLC67H3) Public Policy in Canada
SOCB44H3 Sociology of Cities and Urban Life
SOCC26H3 Sociology of Urban Cultural Policies
SOCC27H3 Sociology of Suburbs and Suburbanization
WSTB12H3 Women, Violence and Resistance
WSTC14H3 Women, Community, and Policy Change
WSTC20H3 Women and Environments

## Department of Physical and Environmental Sciences

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Changes

## Environmental Science

## Calendar Copy Showing Changes:

## EESB15H3 Earth History

Planet Earth is at least 4,400 million years old and a geological record exists for at least the last 3,900 million years in the form of igneous, metamorphic and sedimentary rocks. The changing dynamics of
convection deep within the Earth's mantle and associated super-continent assembly and breakup along with meteorite impacts, are now recognized as the major controls on development of the planet's atmosphere, oceans, biology, climate and geo-chemical cycles. This course reviews this long history and the methods and techniques used by geologists to identify ancient environments.
Prerequisite: EESA01H3 and EESA06H3
Breadth Requirement: Natural Sciences
NOTE: Note: Priority will be given to students in Specialist programs in Environmental Geoscience and Environmental Chemistry.

## Rationale:

EESA 06 H 3 adequately prepares students with the prior knowledge that is required for success in EESB15H3. The removal of EESA01H3 will not impede the learning objectives of the course. Additionally the change in the prerequisite will make the course accessible to students in a new Minor program in Natural Sciences and Environmental Management.

## Calendar Copy Showing Changes:

## EESC03H3 Geographic Information Systems and Remote Sensing

This course focuses on the use of Geographic Information Systems (GIS) and Remote Sensing (RS) for solving a range of scientific problems in the environmental sciences and describing their relationship with - and applicability to - other fields of study (e.g. geography, computer science, engineering, geology, ecology and biology). Topics include (but are not limited to): spatial data types, formats and organization; geo-referencing and coordinate systems; remotely sensed image manipulation and analysis; map production.
Prerequisite: EESA06H3 \& 1.5 full credits in B- or C-level EES courses. and 0.5 credit at the B-level in EES courses
Corequisite: 0.5 credit at the B-level EES courses
Recommended Preparation: A prior introductory GIS course and some experience with the use of eomputers (Windows or Unix-based.) GGRB30H3
Breadth Requirement: Quantitative Reasoning

## Rationale:

In recent years there has been an increased demand among environmental science students for additional GIS training. The Minor in GIS offered by the Department of Geography provides our students with the additional GIS skills that they seek. The proposed change in the prerequisite is to give environmental science students the opportunity to complete EESC03 in their 2nd year and the "recommended preparation" guides students that may be interested in completing the GIS minor to take GGRB30 during the fall term of 2nd year followed by EESC03 during the winter term of the 2nd year.

## Calendar Copy Showing Changes:

## EESC13H3 Environmental Impact Assessment and Auditing

To familiarize students with the relevant legislation, qualitative and quantitative approaches and applications for environmental impact assessments and environmental auditing. The focus will be on the assessment of impacts to the natural environment, however, socio-economic impacts will also be discussed. Environmental auditing and environmental certification systems will be discussed in detail. Examples and case studies from forestry, wildlife biology and land use will be used to illustrate the principles and techniques presented in the course. Students will acquire "hands-on" experience in impact assessment and environmental auditing through case studies.
Prerequisite: 2.5-1.0 full credits of in EES courses

Corequisite: 0.5 credit in EES courses
Exclusion: GGR393H
Breadth Requirement: Natural Sciences

## Rationale:

Students who have not completed 2.5 FCEs in EES courses can still be considered to take this course as long as they have the ability to meet the reading and writing requirements of the course, most of which is focused on the provincial and federal Environmental Acts. Historically, 3rd or 4th year students permitted to take the course, without the prerequisite, have performed well and found the learning experience challenging but manageable. Additionally, DPES is proposing a new Minor in Natural Sciences and Environmental Management which will include EESC13H3 as an option. The change in the prerequisite will make the course accessible to these students.

## Calendar Copy Showing Changes: <br> EESC34H3 Sustainability in Practice

This course is intended for students who would like to apply theoretical principles of environmental sustainability learned in other courses to real world problems. Students will identify a problem of interest related either to campus sustainability, a local NGO, or municipal, provincial, or federal government. Class meetings will consist of group discussions investigating key issues, potential solutions, and logistical matters to be considered for implementation of proposed solutions. Students who choose campus issues will also have the potential to actually implement their solutions. Grades will be based on participation in class discussions, as well as a final report and presentation.
Same as ESTC34H3
Prerequisite: EESA06H3 Enrollment in the Environmental Studies major program and an additional 9.5 credits
Exclusion: ESTC34H3
Enrolment Limits: 20
Breadth Requirement: Natural Sciences

## Rationale:

DPES is proposing a new Minor program in Natural Sciences and Environmental Management which will include EESC34H3 as an option. The change in the prerequisite will make the course accessible to these students.

## Calendar Copy Showing Changes:

EESD11H3 Process Hydrology Advanced Watershed Hydrology
The motion of water at the hill slope and drainage basin scales. The relationship between surface and subsurface hydrological processes. Soil hydrologic processes emphasizing infiltration. Stream flow generation mechanisms, hydrometric and isotopic research methods. Problems of physically based and empirical modelling of hydrological processes. Snowmelt energetics and modelling.
Prerequisite: EESB04H3
Breadth Requirement: Natural Sciences

## Rationale:

Course title change in order to modernize the topic and bring it more in line with Professor Mitchell's teaching expertise.

Students will select a research problem in an area of special interest. Supervision will be provided by a faculty member with active research in geography, ecology, natural resource management, environmental biology, or geosciences as represented within the departments. Project implementation, project monitoring and evaluation will form the core elements for this course.
Same as ESTD16H3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits
Exclusion: ESTD16H3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program. Calendar Copy Showing Changes:

## EESD17Y3 Cohort Capstone Course in Environmental Studies

This course is designed to provide a strong interdisciplinary focus on specific environmental problems including the socioeconomic context in which environmental issues are resolved. The cohort capstone course is in 2 consecutive semesters, providing final year students the opportunity to work in a team, as environmental researchers and consultants, combining knowledge and skill-sets acquired in earlier courses. Group research to local environmental problems and exposure to critical environmental policy issues will be the focal point of the course. Students will attend preliminary meetings schedules in the Fall semester.
Same as ESTD17Y3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits Exclusion: ESTD17Y3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program.

## Calendar Copy Showing Changes:

## EESD18H3 Environmental Studies Seminar Series

This course will be organized around the DPES seminar series, presenting guest lecturers around interdisciplinary environmental themes. Students will analyze major environmental themes and prepare presentations for in-class debate.
Same as ESTD18H3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits
Exclusion: ESTD18H3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program.

## Environmental Studies

## Calendar Copy Showing Changes:

## ESTC34H3 Sustainability in Practice

This course is intended for students who would like to apply theoretical principles of environmental sustainability learned in other courses to real world problems. Students will identify a problem of interest related either to campus sustainability, a local NGO, or municipal, provincial, or federal government. Class meetings will consist of group discussions investigating key issues, potential
solutions, and logistical matters to be considered for implementation of proposed solutions. Students who choose campus issues will also have the potential to actually implement their solutions. Grades will be based on participation in class discussions, as well as a final report and presentation.
Same as EESC34H3
Prerequisite: EESA06H3 Enrollment in the Environmental Studies major program and an additional 9.5 credits
Exclusion: EESC34H3
Enrolment Limits: 20
Breadth Requirement: Natural Sciences

## Rationale:

ESTC 34 H 3 is a part of a doubled-numbered pairing with EESC34H3. The prerequisite for EESC34H3 has been updated to open up to students in the new Minor in Natural Sciences and Environmental Management. The changes to ESTC34H3 are to keep the double-numbered pair aligned.

## Calendar Copy Showing Changes:

ESTD16H3 Project Management in Environmental Studies
Students will select a research problem in an area of special interest. Supervision will be provided by a faculty member with active research in geography, ecology, natural resource management, environmental biology, or geosciences as represented within the departments. Project implementation, project monitoring and evaluation will form the core elements for this course.
Same as EESD16H3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits
Exclusion: ESTD16H3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program.

## Calendar Copy Showing Changes:

## ESTD17Y3 Cohort Capstone Course in Environmental Studies

This course is designed to provide a strong interdisciplinary focus on specific environmental problems including the socioeconomic context in which environmental issues are resolved. The cohort capstone course is in 2 consecutive semesters, providing final year students the opportunity to work in a team, as environmental researchers and consultants, combining knowledge and skill-sets acquired in earlier courses. Group research to local environmental problems and exposure to critical environmental policy issues will be the focal point of the course. Students will attend preliminary meetings schedules in the Fall semester.
Same as EESD17Y3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits
Exclusion: EESD17Y3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program.

## Calendar Copy Showing Changes:

## ESTD18H3 Environmental Studies Seminar Series

This course will be organized around the DPES seminar series, presenting guest lecturers around interdisciplinary environmental themes. Students will analyze major environmental themes and prepare presentations for in-class debate.
Same as EESD18H3
Prerequisite: Enrolment in the Environmental Studies major program and At least 14.5 credits Exclusion: ESSD18H3
Breadth Requirement: Natural Sciences

## Rationale:

We wish to open the course up to all UTSC students, not just those enrolled in the EST Major Program.

## Physics and Astrophysics

## Calendar Copy Showing Changes:

## PHYA10H3 Introduction to Physies IA Physics I for Physical Sciences

The course is intended for students in physical, environmental and mathematical sciences. The course introduces the basic concepts used to describe the physical world with mechanics as the working example. This includes mechanical systems (kinematics and dynamics), energy, momentum, conservation laws, waves, and oscillatory motion.
Prerequisite: Physics 12U - SPH4U (Grade 12 Physics) \& Calculus and Vectors (MCV4U) \& Advanced Functions (MHF4U)
Corequisite: MATA30H3 or MATA31H3
Exclusion: PHYA11H3, PHY131H, PHY135Y, PHY151H, (PHY110Y), (PHY138Y)
Breadth Requirement: Natural Sciences

## Rationale:

The current course title is not descriptive enough and is common cause for student confusion at the start of each term leading to students enrolling in the wrong course. The new and more descriptive title will help students and program supervisors identify quickly the correct course for each specific program.

## Calendar Copy Showing Changes:

## PHYA11H3 Introduction to Physies IB Physics I for the Life Sciences

This first course in Physics at the university level is intended for students enrolled in the Life sciences. It covers fundamental concepts of classical physics and its applications to macroscopic systems in one and three dimensions. It deals with two main themes; which are Particle and Fluid Mechanics and Waves and Oscillations. The approach will be phenomenological with applications related to life and biological sciences.
Prerequisite: Grade 12 Advanced Functions (MHF4U) and Grade 12 Calculus and Vectors (MCV4U) Corequisite: (MATA20H3) or MATA29H3 or MATA30H3 or MATA31H3
Exclusion: PHYA10H3, PHY131H, PHY135Y, PHY151H, (PHY110Y), (PHY138Y)
Recommended Preparation: Grade 12 Physics (SPH4U)
Breadth Requirement: Natural Sciences

## Rationale:

The current course title is not descriptive enough and is common cause for student confusion at the start of each term leading to students enrolling in the wrong course. The new and more descriptive title will help students and program supervisors identify quickly the correct course for each specific program.

## Calendar Copy Showing Changes:

## PHYA21H3 Introduction to Physies HA Physics II for Physical Sciences

This second physics course is intended for students in physical and mathematical sciences programs. Topics include electromagnetism and special relativity.
Prerequisite: PHYA10H3, [MATA30H3 or MATA31H3]
Corequisite: MATA35H3 or MATA36H3 or MATA37H3. Note: MATA35H3 does not allow for many future programs in science.
Exclusion: PHYA22H3, (PHY110Y), PHY132H, PHY135Y, (PHY138Y), PHY152H
Breadth Requirement: Natural Sciences

## Rationale:

The current course title is not descriptive enough and is common cause for student confusion at the start of each term leading to students enrolling in the wrong course. The new and more descriptive title will help students and program supervisors identify quickly the correct course for each specific program.

## Calendar Copy Showing Changes:

## PHYA22H3 Introduction to Physies IIB Physics II for the Life Sciences

The course covers the main concepts of Electricity and Magnetism, Optics, and Atomic and Nuclear Physics. It provides basic knowledge of these topics with particular emphasis on its applications in the life sciences. It also covers some of the applications of modern physics such as atomic physics and nuclear radiation.
Prerequisite: [PHYA10H3 or PHYA11H3 or (PHYA01H3)] and [MATA29H3 or MATA30H3 or MATA31H3]
Corequisite: (MATA21H3) or MATA35H3 or MATA36H3 or MATA37H3. Note: (MATA21H3) \& MATA35H3 do not allow for many future programs in science.
Exclusion: PHYA21H3, (PHY110Y), PHY132H, PHY135Y, (PHY138Y), PHY152H
Breadth Requirement: Natural Sciences

## Rationale:

The current course title is not descriptive enough and is common cause for student confusion at the start of each term leading to students enrolling in the wrong course. The new and more descriptive title will help students and program supervisors identify quickly the correct course for each specific program.

## Calendar Copy Showing Changes:

## PHYD37H3 Introduction to Fluid Mechanics

A course describing and analyzing the dynamics of fluids. Topics include: Continuum mechanics; conservation of mass, momentum and energy; constitutive equations; tensor calculus; dimensional analysis; Navier-Stokes fluid equations; Reynolds number; Inviscid and viscous flows; heat conduction and fluid convection; Bernoulli's equation; basic concepts on boundary layers, waves, turbulence.
Topics covered include the idea of continumm, total derivative, equations for mass and energy conservation, Navier-Stokes equations; introduces tensor notation; stream function, streamlines, trajectories, rate of strain, vorticity; viscous fluids, non-Newtonian rheologies;
Bernoulli's equation, channel flow, turbulence, Reynold's number.
Prerequisite:PHYC54H PHYB54H3 and MATC46H3
Exclusion: PHY454H1
Breadth Requirement: Natural Sciences

## Rationale:

The new course description is more informative with a list of topics that are broader and in line with the material.
Addition of MATC46H3: Fluid Mechanics is the subject that deals with motion of fluids as described by a set of partial differential equations (the Navier-Stokes equations). Knowledge of partial differential equations is thus, paramount to mastering the material for this course. Addition of PHYB54H3: the basic ideas of mechanics presented in PHYB54 are relevant to the content and form an important background for PHYD37 (energy conservation, Newtonian physics, etc). Removal of PHYC54H3: the content is not relevant to PHYD37 as the variational principles, Lagrangian/Hamiltonian formalisms are not used in PHYD37.

## Physical Sciences

## Calendar Copy Showing Changes:

PSCA01H3 PSCD11H3 Communicating Science: Film, Media, Journalism, and Society
Communicating complex science issues to a wider audience remains a major challenge. This course will use film, media, journalism and science experts to explore the role of science and scientists in society. Students will engage with media and academic experts to get an insight into the 'behind the scenes' world of filmmaking, media, journalism, and scientific reporting. The course will be of interest to all students of physical and environmental science, media, education, journalism and political science.
Prerequisite: Any 14.5 credits
Exclusion: (PSCA01H3)
Breadth Requirement: Natural Sciences-Arts and Literature and Language

## Rationale:

As previously, this course should be of interest both to physical and environmental science students and also to other students following media/film/journalism courses. As in past years, the course will encourage independent thinking and creativity, however, this course will also be of great interest to graduate students wanting to explore how to communicate information for a broader, and non-scientific audience. It will provide a forum where students from both disciplines can explore and discuss the impact and effectiveness of science communication. The forum of ideas will consist of an on-going discussion of the pros and cons, dangers and advantages of trying to translate scientific research and ideas into media that is accessible to a non-scientist audience. Where can it go wrong? What are the compromises? What are the seductions? What is at stake? Why does it matter? Can science be exploited, distorted, undermined in the process, and how do we guard against that?

This course has had an unusual development. In fall of 2012, EESC24 (Advanced Readings in Environmental Science) was temporarily modified to accommodate the offering of this course at the request of the Dean's office. Student feedback was quite positive and DPES offered the course again in winter 2014 as a new course PSCA01 (Communicating Science: Film, Media, Journalism, and Society) with iExplore funding provided by the Dean's office. The course however, is better suited to students in their final year of studies (BSc and BA) with deeper understanding of either the physical/natural sciences or journalistic and communication sciences. Having students with higher and deeper level of knowledge allows for more meaningful class discussions and in-depth analysis of issues. Last year when the course was offered at A-level we noticed that the first year students had great difficulty engaging with the course at a higher level due to their limited educational development as well as oral
and written communication skills. Furthermore, the comprehensive oral and written assessment methods for the course are more appropriate for senior students. Offering the course at D-level will allow us to improve the overall rigour of the course and provide students with a more fulfilling learning experience.

## Calendar Copy Showing Changes:

## PSCD02H3 Current Questions in Mathematics and Science

Topics of current prominence arising in chemistry, computer science, earth sciences, mathematics and physics will be discussed, usually by faculty or outside guests who are close to the areas of
prominence. Topics will vary from year to year as the subject areas evolve.
Prerequisite: Completion of at least 3.5 credits of a Physical Sciences program.
Corequisite: Continued participation in one of the Physical Sciences programs or enrolment in the Minor in Natural Sciences and Environmental Management
Exclusion: PHY342H
Breadth Requirement: Natural Sciences

## Rationale:

DPES is proposing a new Minor program in Natural Sciences and Environmental Management which will include PSCD02H3 as an option. The change in the prerequisite and corequisite will make the course accessible to the students in the minor program.

## Program Changes

## Specialist in Environmental Biology (BSc) <br> Specialist (Co-operative) in Environmental Biology (BSc)

## Overview of Changes:

Add PSCD11H3 as an optional course to complete the Third and Fourth Year component of the program requirements.

Note: changes also impact the Specialist Co-op in Environmental Biology

## Rationale:

Scientific literacy is becoming increasingly important to our civic and economic wellbeing as well as how we interact with our environment. The addition of PSCD11H3 to the program provides a learning opportunity that links science to other subject areas (i.e., media, journalism, film, history, philosophy), hence providing a rich context for integrating science and communication concepts and skills. The course will enable students to make connections with other disciplines and learn the impact that science and its effective communication can have on our world.

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN ENVIRONMENTAL BIOLOGY (SCIENCE)

Acting Supervisor of Studies: A. Martin(416-287-7326) Email: adam.martin@utoronto.ca

## Program Requirements

Total requirements: 14.0 full credits
First Year:
EESA01H3 Introduction to Environmental Science

EESA06H3 Introduction to Planet Earth
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms
MATA30H3 Calculus I for Physical Sciences
[MATA35H3 Calculus II for Biological Sciences or MATA36H3 Calculus II for Physical Sciences or MATA37H3 Calculus II for Mathematical Sciences]*
[PHYA10H3 Introduction to Physics IA or PHYA11H3 Introduction to Physics IB]
*Note: MATA35H3 cannot be used to fulfill the prerequisites for PSCB57H3
Second Year:
BIOB50H3 Ecology
BIOB51H3 Evolutionary Biology
BIOB52H3 Ecology and Evolutionary Biology Laboratory
EESB15H3 Earth History
EESB16H3 Feeding Humans - The Cost to the Planet
STAB22H3 Statistics I
[PSCB57H3 Introduction to Scientific Computing or CSCA08H3 Introduction to Computer Science I] and
1.0 full credit from the following:

EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
CHMB55H3 Environmental Chemistry
Third and Fourth Years:
2.0 credits as follows:

EESC03H3 Geographic Information Systems and Remote Sensing
EESC04H3 Biodiversity and Biogeography
EESC30H3 Environmental Microbiology
EESC13H3 Environmental Impact Assessment and Auditing
2.0 credits from:

BIOC51H3 Tropical Biodiversity Field Course
BIOC52H3 Ecology Field Course
BIOC58H3 Biological Consequences of Global Change
BIOC59H3 Advanced Population Ecology
BIOC61H3 Community Ecology and Environmental Biology
BIOC65H3 Environmental Toxicology
BIOC62H3 The Role of Zoos in Conservation
BIOC63H3 Conservation Biology
(BIOC67H3) Inter-University Biology Field Course
1.0 credit from:

EESD02H3 Contaminant Hydrogeology
EESD06H3 Climate Change Impact Assessment
EESD13H3 Environmental Law, Policy and Ethics

EESD15H3 Fundamentals of Site Remediation
EESC20H3 Geochemistry
EESD09H3 Research Project in Environmental Science
EESD10Y3 Research Project in Environmental Sciences
BIOD52H3 Special Topics in Biodiversity and Systematics
BIOD60H3 Spatial Ecology
BIOD66H3 Causes and Consequences of Biodiversity
BIOD95H3 Supervised Study in Biology
BIOD98Y3 Research Project in Biology
PSCD11H3 Communicating Science: Film, Media, Journalism, and Society

## NOTE: These changes also imact the Specialist (Co-operative) program in Environmental Biology

## Specialist in Environmental Chemistry (BSc) <br> Specialist (Co-operative) in Environmental Chemistry (BSc)

Overview of Changes:
Add PSCD11H3 as an optional course to complete the Fourth Year component of the program requirements.

Note: This change also impacts the Specialist Co-op in Environmental Chemistry

## Rationale:

Scientific literacy is becoming increasingly important to our civic and economic wellbeing as well as how we interact with our environment. The addition of PSCD11H3 to the program provides a learning opportunity that links science to other subject areas (i.e., media, journalism, film, history, philosophy), hence providing a rich context for integrating science and communication concepts and skills. The course will enable students to make connections with other disciplines and learn the impact that science and its effective communication can have on our world.

## Calendar Copy Showing Changes:

# SPECIALIST PROGRAM IN ENVIRONMENTAL CHEMISTRY (SCIENCE) 

Supervisor of Studies: Myrna Simpson (416) 287-7234 Email: myrna.simpson@utoronto.ca
Program Requirements
Total requirements: 15.0 full credits
First Year:
EESA01H3 Introduction to Environmental Science
EESA06H3 Introduction to Planet Earth
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms
MATA30H3 Calculus I for Physical Sciences
MATA36H3 Calculus II for Physical Sciences
PHYA10H3 Introduction to Physics IA

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Second Year:
CHMB16H3 Techniques in Analytical Chemistry
CHMB20H3 Chemical Thermodynamics and Elementary Kinetics
CHMB41H3 Organic Chemistry I
CHMB42H3 Organic Chemistry II
CHMB55H3 Environmental Chemistry
EESB15H3 Earth History
STAB22H3 Statistics I
and
1.0 credit from the following:
CHMB21H3 Chemical Structure and Spectroscopy
EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
Third Year:
EESC03H3 Geographic Information Systems and Remote Sensing
EESC07H3 Groundwater
EESC13H3 Environmental Impact Assessment and Auditing
EESC20H3 Geochemistry
CHMB31H3 Introduction to Inorganic Chemistry
CHMC11H3 Principles of Analytical Instrumentation
PSCB57H3 Introduction to Scientific Computing
Fourth Year:
CHMD16H3 Environmental and Analytical Chemistry
and
1.0 credit from the following:
    EESD02H3 Contaminant Hydrogeology
    EESD13H3 Environmental Law, Policy and Ethics
    EESD15H3 Fundamentals of Site Remediation
    PSCD11H3 Communicating Science: Film, Media, Journalism, and Society
and
1.0 credit from the following:
    CHMC21H3 Topics in Biophysical Chemistry
    CHMC31Y3 Intermediate Inorganic Chemistry
    CHMC41H3 Organic Reaction Mechanisms
    CHMC42H3 Organic Synthesis
    CHMC47H3 Bio-Organic Chemistry
    CHMD59H3 Topics in Environmental Chemistry
    CHMD89H3 Introduction to Green Chemistry
    CHMD90Y3 Directed Research in Chemistry
    CHMD91H3 Directed Research in Chemistry
    CHMD92H3 Advanced Chemistry Laboratory Course
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NOTE: This change also impacts the Specialist (Co-operative) program in Environmental Chemistry

## Specialist in Environmental Geoscience (BSc) <br> Specialist (Co-operative) in Environmental Geoscience (BSc)

## Overview of Changes:

Revises the 1.0 credit in additional EES courses in the Fourth year component of the program requirements to clarify that courses must be at the C- or D-level, and that students can use PSCD11H3 to complete the component.

Note: the changes also impact the Specialist Co-op in Environmental Geoscience

## Rationale:

The focus of the component is on upper-level courses. The revisions clarify that students should complete the component with upper-level courses. EESD33H3 has been added to the list of recommended courses because it will provide students in the program with additional field experience necessary to reinforce basic concepts in geology and hydrogeology. The course is also a requirement of the Association of Professional Geoscientists if Ontario (APGO) for obtaining Professional Geoscientist (P.Geo) certification.

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN ENVIRONMENTAL GEOSCIENCE (SCIENCE)

Supervisor of Studies: M. Meriano (416-208-2775) Email: mmeriano@utsc.utoronto.ca
This program has been designed to meet the expectations of the Association of Professional Geoscientists of Ontario (APGO) - the licensing and regulatory body responsible for ensuring that geoscientists have the appropriate qualifications to practice. Students are encouraged to make careful choice of optional/elective courses to meet APGO requirements.

Please visit the APGO website for further information on requirements to become a Professional Geoscientist (P.Geo) in Ontario.

## Program Requirements

Total requirements: 15.5 full credits of which 1.0 must be at the D-level as follows:
First Year:
EESA01H3 Introduction to Environmental Science
EESA06H3 Introduction to Planet Earth
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms
MATA30H3 Calculus I for Physical Sciences
[MATA36H3 Calculus II for Physical Sciences or MATA37H3 Calculus II for Mathematical Sciences]
[PHYA10H3 Introduction to Physics IA or PHYA11H3 Introduction to Physics IB]

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Second Year:
CHMB55H3 Environmental Chemistry
EESB02H3 Principles of Geomorphology
EESB03H3 Principles of Climatology
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EESB04H3 Principles of Hydrology<br>EESB05H3 Principles of Soil Science<br>EESB15H3 Earth History<br>EESB18H3 Natural Hazards<br>EESB19H3 Mineralogy<br>PSCB57H3 Introduction to Scientific Computing<br>STAB22H3 Statistics I

Third Year:
EESB20H3 Sedimentology and Stratigraphy
EESC03H3 Geographic Information Systems and Remote Sensing
EESC07H3 Groundwater
EESC13H3 Environmental Impact Assessment and Auditing
EESC20H3 Geochemistry
EESC31H3 Glacial Geology
EESC36H3 Petrology
and
0.5 credit from the following:

BIOB50H3 Ecology
EESC18H3 Limnology
EESC19H3 Oceanography

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Fourth Year:
EESC37H3 Structural Geology
and
0.5 credit from the following:
    EESD02H3 Contaminant Hydrogeology
    EESD06H3 Climate Change Impact Assessment
    EESD09H3 Research Project in Environmental Science
    EESD10Y3 Research Project in Environmental Science
    EESD11H3 Process Hydrology
    EESD13H3 Environmental Law, Policy and Ethics
    EESD15H3 Fundamentals of Site Remediation
    EESD19H3 Professional Development Seminars in Geoscience
    EESD20H3 Urban Environmental Problems of the Greater Toronto Area
and
[1.0 full credit from any other at the C- or D- level in EES courses] or [0.5 credit at the C- or D- level
in EES courses and PSCD11H3]
Strongly recommended: EESC16H3 Field Camp I or EESD07H3 Field Camp II or EESD33H3 Field
Techniques
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## Note: the changes also impact the Specialist (Co-operative) in Environmental Geoscience

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Specialist in Environmental Physics (BSc)
Specialist (Co-operative) in Environmental Physics (BSc)
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Overview of Changes:
Add EESD33H3H3 as an optional course to complete the Fourth Year component of the program requirements.

Note: the change also impacts the Specialist Co-op in Environmental Physics.

## Rationale:

EESD33H3 will provide the students in the program with additional field experience necessary to reinforce basic concepts in geology and hydrogeology. The course is also a requirement of the Association of Professional Geoscientists if Ontario (APGO) for obtaining Professional Geoscientist (P.Geo) certification.

## Calendar Copy Showing Changes:

## SPECIALIST PROGRAM IN ENVIRONMENTAL PHYSICS (SCIENCE)

The Specialist Program in Environmental Physics (B.Sc.) includes a co-operative option. For more information and details regarding the program, and its admission requirements, please see the Environmental Science section of the Calendar at: http://www.utsc.utoronto.ca/~registrar/calendars/calendar?Environmental_Science.html

Supervisors of Studies: J. Lowman (416 208-4880) Email: lowman@utsc.utoronto.ca and T. Mohsin (416 287-7245) Email: tanzina.mohsin@utoronto.ca

## Program Requirements

Total Requirements: 15.5 full credits
First Year (4.0 credits):
PHYA10H3 Introduction to Physics IA
PHYA21H3 Introduction to Physics IIA
MATA30H3 Calculus I for Physical Sciences
MATA36H3 Calculus II for Physical Sciences
CHMA10H3 Introductory Chemistry I: Structure and Bonding
CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms
EESA06H3 Introduction to Planet Earth
MATA23H3 Linear Algebra I
Second Year (4.5 credits):
PHYB10H3 Intermediate Physics Laboratory I
PHYB21H3 Electricity and Magnetism
PHYB52H3 Thermal Physics
PHYB54H3 Mechanics: From Oscillations to Chaos
MATB41H3 Techniques of Calculus of Several Variables I
MATB42H3 Techniques of Calculus of Several Variables II
MATB44H3 Differential Equations I
Two of:
EESB02H3 Principles of Geomorphology
EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
EESB15H3 Earth History

Third Year (4.0 credits):
PHYB56H3 Introduction to Quantum Physics
PHYC11H3 Intermediate Physics Laboratory II
PSCB57H3 Introduction to Scientific Computing
MATC46H3 Differential Equations II
STAB22H3 Statistics I
One of:
PHYC50H3 Electromagnetic Theory
PHYC54H3 Classical Mechanics
Two of:
CHMB55H3 Environmental Chemistry
EESC07H3 Groundwater
EESC18H3 Limnology
EESC19H3 Oceanography
EESC20H3 Geochemistry
EESC31H3 Glacial Geology
Fourth Year (3.0 credits):
PHYD37H3 Introduction to Fluid Mechanics
PHYD38H3 Nonlinear Systems and Chaos
Four of:
ASTC25H3 Astrophysics of Planetary Systems
EESC03H3 Geographic Information Systems and Remote Sensing
EESD02H3 Contaminant Hydrogeology
EESD06H3 Climate Change Impact Assessment
EESD09H3 Research Project in Environmental Science*
EESD13H3 Environmental Law, Policy and Ethics
EESD33H3 Field Techniques
PHYC50H3 Electromagnetic Theory
PHYC54H3 Classical Mechanics
PHYD01H3 Research Project in Physics and Astrophysics*
PHYD26H3 Planetary Geophysics
PHYD72H3 Supervised Reading in Physics and Astrophysics*
*no more than two of EESD10Y3, PHYD01H3, and PHYD72H3 may be counted as fulfilling the program requirements.

NOTE: Where any course appears on more than one option list, it may only be counted as fulfilling the requirements for one of those lists of options.

## Note: the change also impacts the Specialist (Co-operative) program in Environmental Physics

## Major in Environmental Science (BSc) <br> Major (Co-operative) in Environmental Science (BSC)

Overview of Changes:
Revises the 2.0 credit in additional EES courses in the Third and Fourth year component of the program requirements include PSCD11H3 as a course that can be used to complete the component.

Note: the change also impacts the Major Co-op in Environmental Science.

## Rationale:

Scientific literacy is becoming increasingly important to our civic and economic wellbeing as well as how we interact with our environment. The addition of PSCD11H3 to the program provides a learning opportunity that links science to other subject areas (i.e., media, journalism, film, history, philosophy), hence providing a rich context for integrating science and communication concepts and skills. The course will enable students to make connections with other disciplines and learn the impact that science and its effective communication can have on our world.

## Calendar Copy Showing Changes: <br> MAJOR PROGRAM IN ENVIRONMENTAL SCIENCE (SCIENCE)

Supervisor of Studies: T. Mohsin (416-287-7245) Email: tanzina.mohsin@utoronto.ca
Program Requirements
This program requires 8.5 full credits as follows:
First Year
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms
[(MATA20H3) Calculus A or MATA30H3 Calculus I for Physical Sciences]
[(MATA21H3) Calculus B or MATA35H3 or MATA36H3 Calculus II for Biological/Physical Sciences]*
[PHYA10H3 or PHYA11H3 Introduction to Physics IA or IB]
EESA06H3 Planet Earth
*Note: MATA35H3 cannot be used to fulfill the prerequisites for PSCB57H3
Second Year
STAB22H3 Statistics I
and
1.5 credits from:

EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
EESB15H3 Earth History
EESB16H3 Feeding Humans - The Cost to the Planet
and
0.5 credits from:

BIOB50H3 Ecology
EESB02H3 Principles of Geomorphology
EESB17H3 Hydro Politics and Transboundary Water Resource Management
PSCB57H3 Introduction to Scientific Computing
CHMB55H3 Environmental Chemistry

Third \& Fourth Years
[2.0 credits from at the C- \& or D-level in EES courses with at least 0.5 credit at the D-level] or [1.5 credits at the C- or D-level in EES courses and PSCD11H3]

## Note: the change also impacts the Major (Co-operative) program in Environmental Science <br> Minor in Environmental Science (Science)

## Overview of Changes:

Addition of a new course PSCD11H3 Communicating Science: Film, Media, Journalism, and Society to the list of third year of the program.

## Rationale:

Scientific literacy is becoming increasingly important to our civic and economic wellbeing as well as how we interact with our environment. The addition of PSCD11H3 to the program provides a learning opportunity that links science to other subject areas (i.e., media, journalism, film, history, philosophy), hence providing a rich context for integrating science and communication concepts and skills. The course will enable students to make connections with other disciplines and learn the impact that science and its effective communication can have on our world.

## Calendar Copy Showing Changes: <br> MINOR PROGRAM IN ENVIRONMENTAL SCIENCE (SCIENCE)

Supervisor of Studies/Advisor: M. Wells (416-208-4879) Email: wells@utsc.utoronto.ca
The Minor Program is designed to provide insights into the basic principles of Environmental Science and its application to current environmental issues. It is intended for students with an interest in environmental issues but who do not have the necessary background for specialization in the field. In addition to science students, it is appropriate for students pursuing a degree in the social sciences or in management and economics.

## Program Requirements

Total requirements: 4.0 full credits
First Year:
EESA01H3 Introduction to Environmental Science
EESA06H3 Introduction to Planet Earth
Second Year:
1.5 full credits from the following:

EESB02H3 Principles of Geomorphology
EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
EESB15H3 Earth History
Third Year:
[1.5 full-credits of any other in EES courses of which 1.0 full-credit must be at the C- or D-level] or [1.0 credit at the C- or D-level in EES courses and PSCD11H3]

## Major in Environmental Studies

Overview of Changes:
Add ESTD19H3 as an optional course to complete component 3 of the program; ESTD16H3 changes from a required to an optional course.

## Rationale:

ESTD19H3 is a new course that provides a broad overview of the concept of risk as it pertains to the environment. The focus is on application in the same manner as for ESTD16H3. The choice allows us to offer both courses without additional expense (i.e. in alternate years).

## Calendar Copy Showing Changes:

## MAJOR PROGRAM IN ENVIRONMENTAL STUDIES (ARTS)

Supervisor of Studies J, MacLellan (416-208-2661) Email: jim.maclellan@utoronto.ca
Companion majors include: Anthropology, Human Geography, Political Science, Public Policy, Sociology, Biology, Biodiversity, Ecology and Evolution, Chemistry, Biochemistry, and Environmental Science, Physics and Astrophysics, and Physical Sciences. Other majors are possible with permission of the Supervisor of Study.

Program Requirements
Completion of 8.5 credits as follows:

1. Core Courses ( 2.5 credits)

EESA01H3 Introduction to Environmental Science
[MGEA01H3/(ECMA01H3) Introduction to Microeconomics or MGEA05H3/(ECMA05H3)
Introduction to Macroeconomics]
ESTB01H3 Introduction to Environmental Studies
and 0.5 credit chosen from:
ANTB01H3 Political Ecology
GGRA03H3 Cities and Environments
POLA01H3 Critical Issues in Politics I
POLA02H3 Critical Issues in Politics II
POLB80H3 Introduction to International Relations I
and 0.5 credit chosen from:
EESA06H3 Introduction to Planet Earth
EESA07H3 Water
EESA09H3 Wind
EESA10H3 Human Health and the Environment
EESA11H3 Environmental Pollution
EESB18H3 Natural Hazards
2. Foundations \& Skills ( 4.0 credits)

ESTC35H3 Environmental Science and Technology in Society
ESTC36H3 Knowledge, Ethics and Environmental Decision-Making
IDSB02H3 Development and Environment
STAB22H3 Statistics I (or equivalent)
and 2.0 credits chosen from:

EESB03H3 Principles of Climatology
EESB04H3 Principles of Hydrology
EESB05H3 Principles of Soil Science
EESB17H3 Hydro Politics and Transboundary Water Resources Management
EESC13H3 Environmental Impact Assessment and Auditing
EESD13H3 Environmental Law, Policy and Ethics
ESTC34H3 Sustainability in Practice
GGRA30H3 Geographic Information Systems (GIS) and Empirical Reasoning
GGRB21H3 Environments and Environmentalisms
GGRC22H3 Political Ecology Theory and Applications
GGRC26H3 Geographies of Environmental Governance
GGRC44H3 Environmental Conservation and Sustainable Development
POLC53H3 Canadian Environmental Policy
POLD89H3 Global Environmental Politics
SOCC37H3 Environment and Society
3. Capstone \& Applications ( 2.0 credits)
[ESTD16H3 Project Management in Environmental Studies or ESTD19H3]
ESTD17Y3 Cohort Capstone Course in Environmental Studies
ESTD18H3 Environmental Studies Seminar Series

## Department of Sociology

## Note regarding consultation:

All changes have been approved by the Departmental Curriculum Committee, and reviewed by the Dean's Office. Where changes may have had an impact on outside academic units, appropriate consultation has taken place.

## Course Deletions

## SOCA01H3 Introduction to Sociology I

## Rationale:

SOCA03Y3 has been introduced as a 'full-year' course and will replace SOCA01H3 and SOCA02H3.

## SOCA02H3 Introduction to Sociology II

## Rationale:

SOCA03Y3 has been introduced as a 'full-year' course and will replace SOCA01H3 and SOCA02H3.

## Course Changes

## Calendar Copy Showing Changes:

## SOCB05H3 Logic of Social Inquiry

This course introduces the logic of sociological research and surveys the major quantitative and qualitative methodologies. Students learn to evaluate the validity of research findings, develop research questions and select appropriate research designs.

Prerequisite: [[(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] and enrolment in a Sociology
program] or [any 4.0 credits and enrolment in the Minor in Migration and Ethnic Diversity]
Exclusion: SOC200H, SOC200Y, (SOCB40H3), (SOCB41H3)
Enrolment Limits: 170
Breadth Requirement: Quantitative Reasoning

## SOCB22H3 Sociology of Gender

This course examines gender as a sociological category that organizes and, at the same time, is organized by, micro and macro forces. By examining how gender intersects with race, ethnicity, class, sexuality, age, and other dimensions, we analyze the constitution and evolution of gendered ideology and practice.
Prerequisite: [[(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [WSTA01H3 and WSTA03H3] Breadth Requirement: Social \& Behavioural Sciences

## SOCB26H3 Sociology of Education

This course offers a sociological perspective on a familiar experience: attending school. It examines the stated and hidden purposes of schooling; explores how learning in schools is organized; evaluates the drop-out problem; the determinants of educational success and failure; and, it looks at connections between school and work.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3]
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB30H3 Political Sociology

An examination of power in its social context. Specific attention is devoted to how and under what conditions power is exercised, reproduced and transformed, as well as the social relations of domination, oppression, resistance and solidarity. Selected topics may include: nations, states, parties, institutions, citizenship, and social movements.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3]
Exclusion: SOC260H
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB42H3 Classic Sociological Theory I

The development of classic sociological theory from its Enlightenment origins to the eve of the 20th century. Special emphasis is placed on the work of Adam Smith, Karl Marx, Alexis de Tocqueville, and Auguste Comte. Special tutorials are devoted to learning the craft of effective writing.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] and enrolment in a Sociology program Exclusion: SOC203Y
Enrolment Limits: 170
Breadth Requirement: History, Philosophy \& Cultural Studies

## SOCB43H3 Classic Sociological Theory II

The development of classic sociological theory from the end of the 19th century to the eve of World War II. Special emphasis is placed on the work of Emile Durkheim, Max Weber, Georg Simmel, and G.H. Mead. Special tutorials are devoted to learning the craft of effective writing.

Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] and SOCB42H3 and enrolment in a Sociology program
Exclusion: SOC203Y

Enrolment Limits: 170
Breadth Requirement: History, Philosophy \& Cultural Studies

## SOCB44H3 Sociology of Cities and Urban Life

A theoretical and empirical examination of the processes of urbanization and suburbanization. Considers classic and contemporary approaches to the ecology and social organization of the preindustrial, industrial, corporate and postmodern cities.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [any 4.0 credits and enrolment in the Minor in Culture, Creativity, and Cities, or the Major/Major Co-op in City Studies]
Exclusion: SOC205Y
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB47H3 Social Inequality

A sociological examination of the ways in which individuals and groups have been differentiated and ranked historically and cross-culturally. Systems of differentiation and devaluation examined may include gender, race, ethnicity, class, sexual orientation, citizenship/legal status, and ability/disability. Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [any 4.0 credits and enrolment in the Major/Major Co-op in Public Policy]
Exclusion: SOC301Y
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB49H3 Sociology of Family

This course explores the family as a social institution, which shapes and at the same time is shaped by, the society in North America. Specific attention will be paid to family patterns in relation to class, gender, and racial/ethnic stratifications. Selected focuses include: socialization; courtship; heterosexual, gay and lesbian relations; gender division of labour; immigrant families; childbearing and childrearing; divorce; domestic violence; elderly care.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [WSTA01H3 and WSTA03H3]
Exclusion: SOC214Y
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB50H3 Deviance and Normality I

This course explores how deviance and normality is constructed and contested in everyday life. The course revolves around the themes of sexuality, gender, poverty, race and intoxication. Particular attention will be paid to the role of official knowledge in policing social norms.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3]
Exclusion: SOC212Y
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB53H3 Race and Ethnicity

The course draws on a geographically varied set of case studies to consider both the historical development and contemporary state of the sociological field of race, racialization and ethnic relations. Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [any 4.0 credits and enrolment in the Minor in Migration and Ethnic Diversity]
Exclusion: SOC210Y

Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB54H3 Sociology of Work

Economic activity drives human society. This course explores the nature of work, how it is changing, and the impact of changes on the transition from youth to adult life. It also examines racism in the workplace, female labour force participation, and why we call some jobs 'professions', but not others.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3]
Exclusion: SOC207Y, SOC317Y, SOC370Y
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## SOCB58H3 Sociology of Culture

An introduction to various ways that sociologists think about and study culture. Topics will include the cultural aspects of a wide range of social phenomena - including inequality, gender, economics, religion, and organizations. We will also discuss sociological approaches to studying the production, content, and audiences of the arts and media.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] or [any 4.0 credits and enrolment in the Minor in Culture, Creativity, and Cities]
Exclusion: (SOCC18H3), SOC360Y
Enrolment Limits: 170
Breadth Requirement: History, Philosophy \& Cultural Studies

## SOCB59H3 Sociology of Law

This course examines the character, authority, and processes of law in contemporary liberal democracies.
Prerequisite: [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3]
Enrolment Limits: 170
Breadth Requirement: Social \& Behavioural Sciences

## Rationale:

SOCA01H3 and SOCA02H3 have been deleted and replaced by a year-long course, SOCA03Y3.

## Calendar Copy Showing Changes:

## SOCB60H3 Issues in Migration \& Ethnic Diversity Critical Migration Studies

The course examines the cultural, demographic, and political causes and consequences of migration; laws and government policies shaping migration and refugee flows; demographic, social, cultural, and legal dimensions of migration; and issues of integration and ethnic diversity from historical and contemporary perspectives.
Prerequisite: Completion of 1.0 credit from the following courses [[(SOCA01H3) and (SOCA02H3)] or SOCA03Y3], ANTA02H3, GGRA02H3, GASA01H3/HISA06H3, GASA02H3, HISA04H3, HISA05H3]
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Minor in-Migration \& Ethnic Diversity Critical Migration Studies. Additional students will be admitted as space permits.

SOCD15H3 Advanced Seminar in Migration and Ethnicity Critical Migration Studies This course offers an in-depth examination of selected topics in Migration and Ethnicity. Students will
be required to conduct independent research based on primary and/or secondary data sources. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: [10.0 credits and SOCB05H3 and [1.0 credit from the following: [SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] and [0.5 credit from the following: SOCC25H3, SOCC $34 \mathrm{H} 3, \mathrm{SOCC52H3}, \mathrm{SOCC55H3}$ ] and [an additional 0.5 credit at the $C$ level in Sociology] or [SOCB60H3 and an additional 15.0 credits-and enrolment in the Minor in Migration and Ethnic Diversity Critical Migration Studies]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given first to students enrolled in the Minor in Migration and Ethnic Diversity Critical Migration Studies, then to students in the Specialist and Major programs in Sociology.
Additional students will be admitted as space permits.

## SOCD21H3 Immigrant Scarborough

This course will teach students how to conduct in-depth, community-based research on the social, political, cultural and economic lives of immigrants. Students will learn how to conduct qualitative research including participant observation, semi-structured interviews and focus groups. Students will also gain valuable experience linking hands-on research to theoretical debates about migration, transnationalism and multicultural communities. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: [ 10.0 credits and SOCB05H3 and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] and [ 0.5 credit from the following: SOCC25H3, SOCC34H3, SOCC52H3, SOCC55H3] and [an additional 0.5 credit at the $C$ level in Sociology] or [SOCB60H3 and an additional 15.0 credits and enrolment in the Minor in Migration and Ethnic Diversity-Critical Migration Studies program]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: For a listing of the course topics for current and upcoming semesters check the Department's website at http://www.utsc.utoronto.ca/sociology/

## Rationale:

The course titles have been updated to reflect changes to the program title.
The prerequisites have been revised to (1) ensure that students have required methods training (SOCB05) OR content expertise (SOCB06) AND are far enough along in their program of study to benefit from an independent research experience in a small, seminar setting. (ie $4^{\text {th }}$ year course), and (2) to address the replace of SOCA01H3 and SOCA02H3 with SOCA03Y3.

## Calendar Copy Showing Changes:

## SOCC03H3 Collective Behaviour

The study of uninstitutionalized group behaviour - crowds, panics, crazes, riots and the genesis of social movements.
This course has been designated an Applied Writing Skills Course.
Prerequisite: $\{\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] and [1.0 credit from the following:
SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC04H3 Social Movements

The development of an approach to social movements which includes the following: the origin of social movements, mobilization processes, the career of the movement and its routinization. The course readings will be closely related to the lectures, and a major concern will be to link the theoretical discussion with the concrete readings of movements.
Prerequisite: [SOCB05H3 or $[(\mathrm{SOCB40H3})$ and $(\mathrm{SOCB41H3})]$ or STAB23H3] and $[0.5$ credit from
the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Recommended Preparation: SOCB22H3 or SOCB49H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC09H3 Sociology of Gender and Work

Explores the interaction of gender and work, both paid and unpaid work. Critically assesses some cases for central theoretical debates and recent research. Considers gender differences in occupational and income attainment, housework, the relation of work and family, gender and class solidarity, and the construction of gender identity through occupational roles.
Prerequisite: [SOCB05H3 or [(SOCB40H3) and (SOCB41H3)] or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] or [10.0 credits, including WSTB05H3 and enrolment in the Major in Women's and Gender Studies]
Exclusion: SOC366H
Recommended Preparation: SOCB22H3 or SOCB49H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC11H3 Policing and Security

This course examines the character of policing and security programs in advanced liberal democracies. Attention will be paid to the nature and enforcement of modern law by both state and private agents of order, as well as the dynamics of the institutions of the criminal justice system. This course has been designated an Applied Writing Skills Course.
Prerequisite: $\{\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] $]$ and [1.0 credit from the following:
SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Exclusion: SOC213Y, SOC306Y
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC15H3 Work, Employment and Society

An upper level course that examines a number of critical issues and important themes in the
sociological study of work. Topics covered will include: the changing nature and organization of work, precarious employment, different forms of worker organizing and mobilization, the professions, the transition from school to work.
Prerequisite: [SOCB05H3 or $[(\mathrm{SOCB40H3})$ and (SOCB41H3)] or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Recommended Preparation: SOCB54H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in Sociology programs.

SOCC24H3 Sociology of Gender and Families-Special Topics in Gender and Family
A theoretical and empirical examination of different forms of family and gender relations. Of special interest is the way in which the institution of the family produces and reflects gendered inequalities in society. Themes covered include changes and continuities in family and gender relations, micro-level dynamics and macro-level trends in family and gender, as well as the interplay of structure and agency. This course has been designated an Applied Writing Skills Course.
Prerequisite: $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3; (SOCC39H3)]
Recommended Preparation: SOCB22H3 or SOCB49H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC25H3 Ethnicity, Race and Migration

A theoretical and empirical examination of ethnic identity formation, race and racism, and their relationship to international migration.
Prerequisite: $[[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and $(\mathrm{SOCB} 41 \mathrm{H} 3)]$ or STAB23H3] and $[0.5$ credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] or [SOCB60H3 and an additional 8.0 credits and enrolment in the Minor in Migration and Ethnic Diversity]
Recommended Preparation: SOCB22H3 or SOCB49H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC26H3 Sociology of Urban Cultural Policies

A popular civic strategy in transforming post-industrial cities has been the deployment of culture and the arts as tools for urban regeneration. In this course, we analyze culture-led development both as political economy and as policy discourse. Topics include the creative city; spectacular consumption spaces; the re-use of historic buildings; cultural clustering and gentrification; eventful cities; and urban 'scenes'.
Prerequisite: [ $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] or STAB23H3] and $[0.5$ credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] or [SOCB58H3 and enrolment in the Minor in Culture, Creativity, and Cities] or [CITB02H3 and enrolment in the Major/Major Co-op in City Studies]
Exclusion: SOC386Y
Recommended Preparation: SOCB44H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC27H3 Sociology of Suburbs and Suburbanization

This course examines the political economy of suburban development, the myth and reality of suburbanism as a way of life, the working class suburb, the increasing diversity of suburban communities, suburbia and social exclusion, and the growth of contemporary suburban forms such as gated communities and lifestyle shopping malls.
Prerequisite: [ $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] or STAB23H3] and [ 0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] or [SOCB58H3 and enrolment in the Minor in Culture, Creativity, and Cities] or [CITB02H3 and enrolment in the Major/Major Co-op in City Studies]
Recommended Preparation: SOCB22H3 or SOCB49H3
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC29H3 Special Topies in Sociology of Family Family in the Middle East

Sociological analyses of diverse family patterns across historical time and geographic space are offered under this course. Topics covered may include family structure, socialization, marriage, divorce, the gender division of labor, inheritance, and alternative family forms. Special attention is given to sociological theories accounting for dynamics within and across families. Please see the Sociology Department website for a listing of the course topic for current and upcoming semesters. Prerequisite: [SOCB05H3 or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and $(\mathrm{SOCB} 41 \mathrm{H} 3)]$ or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] or [10.0 credits, including WSTB05H3 and enrolment in the Major in Women's and Gender Studies]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC30H3 Criminal Behaviour

The young figure prominently in people's views about, and fears of, crime. This course examines definitions of crime, how crime problems are constructed and measured. It looks at schools and the street as sites of criminal behaviour, and considers how we often react to crime in the form of moral panics.
This course has been designated an Applied Writing Skills Course.
Prerequisite: $\{\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] and [1.0 credit from the following:
SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Exclusion: SOC306Y
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC34H3 Migrations \& Transnationalisms

Examines the relationship between contemporary modes of international migration and the formation of transnational social relations and social formations. Considers the impact of trans-nationalisms on families, communities, nation-states, etc.
This course has been designated an Applied Writing Skills Course.
Prerequisite: $[[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)]] and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3), IDSB01H3]] or [SOCB60H3 and an additional 8.0 credits and enrolment in the Minor in Migration and Ethnic Diversity]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC37H3 Environment and Society

This course links studies in the classical sociology of resources and territory (as in the works of Harold Innis, S.D. Clark, and the Chicago School), with modern topics in ecology and environmentalism. The course will include empirical research, and theoretical issues, in the relationship of various social systems to their natural environments.
Prerequisite: $\mathrm{F}[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB40H3})$ and (SOCB41H3)] or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] or [any 8.0 credits and enrolment in the Major/Major Co-op in Public Policy]
Exclusion: SOC385H
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC38H3 Gender and Education

An examination of a number of key issues in the sociology of education, focusing particularly upon gender and higher education.
Prerequisite: [SOCB05H3 or $[(\mathrm{SOCB40H3})$ and $(\mathrm{SOCB41H3})]$ or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] or [10.0 credits, including WSTB05H3 and enrolment in the Major in Women's and Gender Studies]
Exclusion: SOC366H
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC40H3 Contemporary Sociological Theory

This course surveys key topics in contemporary sociological theory. The development of sociological theory from the end of World War II to the late 1960's. Special attention is devoted to the perspectives of Functionalism, Conflict Theory and Symbolic Interactionism.
This course has been designated an Applied Writing Skills Course.
Prerequisite: $\{\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] and [1.0 credit from the following:
SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Exclusion: (SOCC05Y3)
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC44H3 Media and Society

Provides an introduction to the emergence, organization and regulation of various media forms; social determinants and effects of media content; responses of media audiences; and other contemporary media issues.
Prerequisite: [ $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] or STAB23H3] and [ 0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] or SOCB58H3 and enrolment in the Minor in Culture, Creativity, and Cities]
Exclusion: (SOCB56H3), (SOCB57H3)
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC45H3 Youth and Society

This course examines youth as a social category, a critical stage in the life course. Topics to be covered include: Youth and music, health, work and politics.
Prerequisite: [SOCB05H3 or [(SOCB40H3) and (SOCB41H3)] or STAB23H3] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Sociology programs.

## SOCC46H3 Special Topics in Sociology of Law

The course covers various approaches to the study of law in society. Topics covered may include the interaction between law, legal, non-legal institutions and social factors, the social development of legal institutions, forms of social control, legal regulation, the interaction between legal cultures, the social construction of legal issues, legal profession, and the relation between law and social change.
Prerequisite: [SOCB05H3 or [SOCB40H3) and (SOCB41H3)] or STAB23H3]] and [ 0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3]
Enrolment Limits: 60

Breadth Requirement: Social \& Behavioural Sciences
NOTE: See the Sociology Department website for a listing of the course topic for current and upcoming semesters.

## SOCC47H3 Creative Industries

An introduction to organizational and economic sociology through the lens of creative industries. Students will be introduced to different theoretical paradigms in the study of organizations, industries, and fields. The course is divided into four major modules on creative industries: inequality and occupational careers; organizational structure and decision making under conditions of uncertainty; market and field-level effects; and distribution and promotion.
This course has been designated an Applied Writing Skills Course.
Prerequisite: $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] $]$ and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3-(SOCC39H3)]
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students in the Specialist and Major programs in Sociology and the Minor in Culture, Creativity, and Cities.

## SOCC52H3 International Migration and Immigrant Incorporation

The course provides an overview of competing theories and concepts in the field of international migration and immigrant incorporation. Discussion puts the Canadian case in comparative perspective. Topics include global migration flows, refugeeship, citizenship and non-citizenship, economic incorporation, children of immigrants, and social exclusion.
Prerequisite: [ ESOCB 05 H 3 or $[(\mathrm{SOCB4OH3})$ and $(\mathrm{SOCB} 41 \mathrm{H} 3)]$ or STAB23H3] and [ 0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] or [SOCB60H3 and an additional 8.0 credits and enrolment in the Minor in Migration and Ethnic Diversity] Exclusion: (SOCB52H3) and SOC210Y
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC54H3 Special Topics in Sociology of Culture

Sociological analysis of the role of culture in societies is offered under this course. Topics may include the study of material cultures such as works of art, religious symbols, or styles of clothing, or nonmaterial cultures such as the values, norms, rituals, and beliefs that orient action and social life. Prerequisite: $[\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and $(\mathrm{SOCB} 41 \mathrm{H} 3)]$ or STAB23H3] and $[0.5$ credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Please see the Sociology Department website at http://www.utsc.utoronto.ca/~socsci/ for a listing of the course topics for current and upcoming semesters.

## SOCC55H3 Special Topics in Race and Ethnicity

This course addresses key concepts and debates in the research on race and ethnicity. Topics covered may include historical and global approaches to: assimilation, ethnic relations, intersectionality, racialization, and scientific racism.
Prerequisite: [ ESOCB 05 H 3 or $[(\mathrm{SOCB40H3})$ and (SOCB41H3)] or STAB23H3] and [ 0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] or [SOCB60H3 and an additional 8.0 credits and enrolment in the Minor in Migration and Ethnic Diversity]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

NOTE: Please see the Sociology Department website at http://www.utsc.utoronto.ca/~socsci/ for a listing of the course topics for current and upcoming semesters.

## SOCC58H3 Global Transformations: Politics, Economy and Society

A sociological examination of contemporary global transformations including changing social, economic, and political conditions. Topics examined may include the shifting nature of state-society relations in a global context; the emergence of globally-integrated production, trade and financial systems; and the dynamics of local and transnational movements for global social change.
This course has been designated as a Writing Skills course.
Prerequisite: $\{\mathrm{SOCB} 05 \mathrm{H} 3$ or $[(\mathrm{SOCB} 40 \mathrm{H} 3)$ and (SOCB41H3)] and [1.0 credit from the following:
SOCB42H3, SOCB43H3, SOCB47H3,(SOCC39H3)]
Exclusion: SOC236H
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences

## SOCC59H3 Special Topics in Social Inequality

Sociological analyses of stratification processes and the production of social inequality with a focus on economy and politics. Topics covered may include work and labour markets, the state and political processes. Attention is given to grassroots mobilization, social movements, and contestatory politics. Prerequisite: [SOCB05H3 or [SOCB40H3) and (SOCB41H3)] or STAB23H3]] and [0.5 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3]
Enrolment Limits: 60
Breadth Requirement: Social \& Behavioural Sciences
NOTE: See the Sociology Department website for a listing of the course topic for current and upcoming semesters.

## Rationale:

Simplifying prerequisites by removing deleted courses. Also, added optional prerequisites to allow WGS students - who are interested in the course - to take it at an appropriate point in their program study in terms of depth of knowledge, and it encourages WGS to consider the course more explicitly.

Changes to course title to more accurately reflect the course content.

## Calendar Copy Showing Changes:

## SOCC23H3 Practicum in Qualitative Research Methods

This course provides students with hands-on experience conducting qualitative research. Each student will design and carry out a research project. Students will select their own research questions, review the relevant sociological literature, develop a research design, and conduct qualitative research, analyze, write up and present their findings.
This course has been designated an Applied Writing Skills Course.
Prerequisite: [10.0 credits including [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] and
SOCB05H3] and a cumulative GPA of at least 2.3
Exclusion: SOC302H, (SOCD23H3)
Enrolment Limits: 15
Breadth Requirement: Social \& Behavioural Sciences

## SOCC31H3 Practicum in Quantitative Research Methods

This course provides students with hands-on experience conducting quantitative research. Each student will design and carry out a research project using secondary data. Students will select their own
research questions, review the relevant sociological literature, develop a research design, conduct statistical analyses and write up and present their findings.
This course has been designated an Applied Writing Skills Course.
Prerequisite: [10.0 credits including [(SOCA01H3) and (SOCA02H3)] or SOCA03Y3] and
SOCB05H3 and [STAB23H3 or (SOCB06H3)] ] and [a cumulative GPA of at least 2.3]
Exclusion: SOC300H, (SOCD31H3)
Enrolment Limits: 15
Breadth Requirement: Quantitative Reasoning

## Rationale:

SOCA01H3 and SOCA02H3 have been deleted and will be replaced by a year-long course SOCA03Y3.

## Calendar Copy Showing Changes:

## SOCD01H3 Advanced Seminar in Culture and Cities

This course offers an in-depth examination of selected topics in Culture and Cities. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: [10.0 credits and SOCB05H3 and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, SOCB44H3, SOCB58H3, (SOCC39H3)] and [SOCC44H3 or SOCC54H3] and [an additional 0.5 credit at the $C$ level in Sociology] or [ 10.0 credits including SOCB58H3 and enrolment in the Minor in Culture, Creativity and Cities]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Specialist and Major programs in SociologyAdditional students will be admitted as space permits-and students in the Minor in Culture Creativity and Cities.

## SOCD51H3 Capstone Seminar in Culture, Creativity, and Cities

This course provides a hands-on learning experience with data collection, analysis, and dissemination on topics discussed in the Minor in Culture, Creativity, and Cities. It involves substantial group and individual-based learning, and may cover topics as diverse as the role of cultural fairs and festivals in the city of Toronto, the efficacy of arts organizations, current trends in local cultural labour markets, artistic markets inside and outside of the downtown core, food culture, and analysis of governmental datasets on arts participation in the city.
Prerequisite: 10.0 credits and SOCB05H3 and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, SOCB44H3, SOCB58H3] 15.0 credits completed, including [[SOCB58H3 and SOCC26H3] or [SOCA01H3 and SOCA02H3 and SOCB05H3]] and [ 1.0 eredit from the following: SOCB42H3, SOCB43H3, SOCB30H3, SOCB47H3]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Minor in Culture, Creativity, and Cities followed by Specialist and Major programs in Sociology. Additional students will be admitted as space permits.

## Rationale:

Providing concise and comprehensible prerequisites for students within the Sociology programs.

## Calendar Copy Showing Changes:

## SOCD05H3 Advanced Seminar in Criminology and Sociology of Law

This course offers an in-depth examination of selected topics in Criminology and Sociology of Law. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs. Prerequisite: 10.0 credits and [SOCB05H3 and [1.0 credit from the following: [SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, SOCB50H3, (SOCB51H3), (SOCC39H3)] and $[0.5$ credit from the following: $\mathrm{SOCC} 03 \mathrm{H} 3, \mathrm{SOCC} 11 \mathrm{H} 3, \mathrm{SOCC} 30 \mathrm{H} 3, \mathrm{SOCC} 45 \mathrm{H} 3$ ] and [an additional 0.5 credit at the C-level in Sociology]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Specialist and Major programs in Sociology. Additional students will be admitted as space permits.

## SOCD25H3 Advanced Seminar in Economy, Politics and Society

This course offers an in-depth examination of selected topics in Economy, Politics and Society. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: 10.0 credits and [SOCB05H3 and [1.0 credit from the following: [SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] and [0.5 credit from the following: SOCC04H3, SOCC15H3, SOCC58H3] and [an additional 0.5 credit at the C-level in Sociology] any 10.0 credits. Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Specialist and Major programs in Sociology. Additional students will be admitted as space permits.

## SOCD42H3 Advanced Seminar in Sociological Theory

This course offers an in depth exploration of significant topics in contemporary and/or sociological theory. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: 10.0 credits and [SOCB05H3 or $[(S O C B 40 H 3)$ and (SOCB41H3) $]]$ and $[1.0$ credit from the following: [SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] and $[0.5$ credit from the following: SOCC03H3, SOCC40H3, SOCC58H3] and [an additional 0.5 credit at the C -level in Sociology]
NOTE: For a listing of the course topics for current and upcoming semesters check the Department's website at http://www.utsc.utoronto.ca/sociology/

## SOCD44H3 Advanced Seminar on Issues in Contemporary Sociology

Exploration of current debates and controversies surrounding recent scholarly developments in Sociology. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs. Prerequisite: 10.0 credits and [SOCB05H3 or [(SOCB40H3) and (SOCB41H3)] and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)] and [an additional 1.0 eredit at the C-level in Sociology]

NOTE: For a listing of the course topics for current and upcoming semesters check the Department's website at http://www.utsc.utoronto.ca/sociology/

## Rationale:

Simplifying prerequisites allow students to better able to understand them and, it provide flexibility for students to take D-level courses without many restrictions.

## Calendar Copy Showing Changes:

## SOCD10H3 Advanced Seminar in Gender and Family

This course offers an in-depth examination of selected topics in Gender and Family. Check the department website for details at: www.utsc.utoronto.ca/sociology/programs.
Prerequisite: [10.0 credits and SOCB05H3 and [1.0 credit from the following: SOCB30H3, SOCB42H3, SOCB43H3, SOCB47H3, (SOCC39H3)]] and [0.5 credit from the following:
SOCC09H3, SOCC24H3, SOCC29H3, SOCC38H3] and [an additional 0.5 credit at the C-level in
Sociology] or [10.0 credits, including WSTB05H3 and enrolment in the Major in Women's and Gender Studies]
Enrolment Limits: 20
Breadth Requirement: Social \& Behavioural Sciences
NOTE: Priority will be given to students enrolled in the Specialist and Major programs in Sociology, and Major in Women's and Gender Studies. Additional students will be admitted as space permits.

## Rationale:

The Gender and Family C-level courses prerequisites have been changed to accommodate students completing a Major in Women's and Gender Studies program. Adding a D-level prerequisite change will allow these students the opportunity to take an advanced course.


[^0]:    2. A-level courses ( 2.5 credits)

    CSCA08H3 Introduction to Computer Science I
    CSCA48H3 Introduction to Computer Science II
    MATA23H3 Linear Algebra I
    MATA22H3 Linear Algebra I for Mathematical Sciences
    One of:
    MATA31H3* Calculus I for Mathematical Sciences
    MATA30H3 Calculus I for Physical Sciences
    One of:
    MATA37H3* Calculus II for Mathematical Sciences
    MATA36H3 Calculus II for Physical Sciences
    $\left(^{*}\right)$ MATA31H3 and MATA37H3 are recommended; the latter requires the former.

[^1]:    4. City Studies Applications (at least 2.0 credits from among the following):

    CITC01H3 Urban Communities and Neighbourhoods Case Study: East Scarborough
    CITC02H3 Learning In Community Service
    CITC03H3 Real Estate and the City
    CITC04H3 Municipal and Planning Law in Ontario
    CITC07H3 Urban Social Policy
    CITC08H3 Cities and Community Development
    CITC09H3 Introduction to Planning History: Toronto and Its Region
    CITC10H3 Selected Issues in City Studies
    CITC12H3 City Structures and City Choices: Local Government, Management, and Policy Making
    CITC14H3 Environmental Planning
    CITC15H3 Taxing and Spending: Public Finance in Canadian Cities
    CITC16H3 Planning and Governing the Metropolis
    CITC17H3 Civic Engagement in Municipal Politics
    CITC18H3 Urban Transportation Policy Analysis
    CITD01H3 City Issues and Strategies
    CITD05H3 City Studies Workshop I

