



UNIVERSITY OF
TORONTO

University of Toronto Mississauga

Sciences Curriculum Proposals Report
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Psychology (UTM), Department of

7 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

JLP481H5: Topics in Developmental Psycholinguistics

Prerequisites:**Previous:**

(LIN288H5 or PSY274H5) and 1.0 credit from the following list: LIN318H5 or LIN328H5 or LIN329H5 or LIN332H5 or LIN385H5 or LIN418H5 or LIN421H5 or PSY315H5 or PSY374H5 or PSY384H5 or any JLP course.

New:

JLP285H5/equivalent and 1.0 credit from the following list: LIN318H5 or LIN328H5 or LIN329H5 or LIN332H5 or LIN385H5 or LIN418H5 or LIN421H5 or any JLP course

Rationale:

This prerequisite update is to streamline the list for clarity and to update courses which now have different course codes.

NOTE: we want to be sure that JLP285 cannot be "double counted". We hope this wording is clear and unambiguous that it cannot be.

Proposal Status:

Under Review

JLP483H5: Topics in Adult Psycholinguistics

Prerequisites:**Previous:**

(LIN288H5 or PSY274H5 or JLP285H5) and 1.0 credit from the following list: (PSY315H5 or JLP315H5) or (PSY374H5 or JLP383H5) or (PSY384H5 or JFL388H5 or JLP388H5) or (LIN318H5 or LIN418H5) or JLP384H5 or JLP481H5.

New:

JLP285H5/equivalent and 1.0 credit from the following list: LIN318H5 or LIN328H5 or LIN329H5 or LIN332H5 or LIN385H5 or LIN418H5 or LIN421H5 or any JLP course

Rationale:

This prerequisite update is to streamline the list for clarity and to update courses which now have different course codes. We want to be sure that JLP285 cannot be "double counted". We hope this wording is clear and unambiguous that it cannot be.

Proposal Status:

Under Review

PSY210H5: Introduction to Developmental Psychology

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

Proposed change to 'Flexible-Delivery'

PSY210 is positioned as a core course in our Psychology program, required of our Psychology Major / Psychology Specialist / Exceptionality in Human Learning Specialist, and also a prerequisite for several 300/400-level PSY courses (PSY310, PSY311, PSY314, PSY316, PSY317, PSY318, PSY319, PSY321, PSY341, PSY345, PSY387, PSY410 PSY442

Offering the course online in the summer will offer flexibility and increase access to course/program requirements and will likely attract greater enrolment in the summer session.

Pedagogically, instructors that regularly teach PSY201H5 feel there is a greater opportunity for collaboration in teaching and the creation of content that taps into faculty expertise.

Proposal Status:

Under Review

PSY240H5: Introduction to Abnormal Psychology

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

Proposed change to 'Flexible-Delivery'

PSY240H5 (Abnormal Psychology) is a very popular course in our psychology program and always attracts significant interest in student enrolment. Flexible delivery may afford even greater access to participate in the course.

The course serves as a prerequisite for several 300-level PSY courses (PSY321, PSY328, PSY331, PSY333, PSY340, PSY341, PSY343, PSY344, PSY346).

Given the course is offered in all academic terms, the regular instructors recommend considering offering the course online in the summer, but also perhaps in one of the fall/winter academic semesters.

Proposal Status:

Under Review

PSY270H5: Cognition: The Machinery of the Mind

Delivery Method:

Track Changes: In Class; Online (Summer only)

Rationale:

Proposed change to 'Flexible-Delivery'

PSY270H5 is a core 2nd year course in our psychology program and is likely to attract significant interest in student enrollment over the summer term. The course serves as a prerequisite for several 300/400-level JLP/PSY courses (JLP315, JLP383, JLP384, PSY312, PSY314, PSY316, PSY321, PSY362, PSY371, PSY372, PSY379, PSY385, PSY387, PSY393, PSY471, PSY490).

Offering the course online in the summer will provide flexibility and access to course/program requirements for students who are not on campus during the summer months. We are confident that this approach will attract more students to this course while maintaining consistency in the course content and evaluative structure.

Proposal Status:

Under Review

PSY290H5: Introduction to Neuroscience

Delivery Method:

Track Changes: In Class; Online (Summer only)

Rationale:

PSY290 is a core (REQUIRED) course in our Psychology Major / Psychology Specialist / Neuroscience Specialist, and also a prerequisite for several 300/400-level PSY courses (PSY318, PSY346, PSY351, PSY352, PSY353, PSY354, PSY355, PSY362, PSY368, PSY369, PSY372, PSY385, PSY391, PSY392, PSY393, PSY395, PSY397, PSY490, PSY495).

Offering the course online in the summer will offer flexibility/access to course/program requirements for students not on campus in the summer months and likely to attract significant interest in student enrolment over the summer term.

Experienced faculty can maintain consistency in course content and assessments between in-person and online offerings.

Consultation:

Dean's office, Psychology faculty and Psychology undergraduate curriculum committee

Resources:

No additional resources required

Proposal Status:

Under Review

PSY320H5: Social Psychology: Attitudes

Delivery Method:

Track Changes: In Class; Online (Summer only)

Rationale:

Proposed change to 'Flexible-Delivery'

This is the leading 3rd year social psychology course that students take after the core 2nd year course (PSY220: Introduction to Social Psychology)

PSY320 has been taught online at UTSG and UTM by our regular course instructors while maintaining consistency in course content and evaluation structure. Based on the combination of recorded informational lectures and live (online) Companion Lectures to discuss the material, online delivery would work for this course.

Online delivery might attract new students/increase access for program students in the summer term.

Proposal Status:

Under Review

Mathematical and Computational Sciences (UTM), Department of

1 New Course - UTM Sciences Divisional Undergraduate Curriculum Committee

CSC388H5: Computer Scientists in Society

Contact Hours:

Lecture: 24 / **Tutorial:** 12 / **Practical:** / **Seminar:**

Description:

This course deals with the ethical, philosophical and social implications of a wide variety of technologies such as artificial intelligence, robotics, and software design. The course is centred on the responsibilities of practitioners of computer science in multiple social contexts.

Prerequisites:

A minimum of 7.5 credits and any of ISP100H5, CSC290H5, CCT110H5, ENG100H5, HSC200H5, HSC300H5, LIN204H5, WRI203H5, WRI173H5

Corequisites:

Exclusions:

CSC398H5 (Fall 2020, Fall 2022, Fall 2023)

Enrolment Limits:

Priority is given to students enrolled in Computer Science Specialist, Information Security Specialist, Bioinformatics Specialist or Computer Science Major.

Recommended Preparation:

Notes:

Delivery Method:

In Person

Distribution Requirements:

Science

Rationale:

Michael Pawliuk has been teaching CSC398H5, Ethics in CS for the past few years. We think it's time to add the course for real to the course timetable, with its own course code and description.

Consultation:

Resources:

Resource form submitted.

Instructor:

Michael Pawliuk

Proposal Status:

Under Review

CSC413H5: Neural Networks and Deep Learning

Prerequisites:

Previous:

CSC311H5 or CSC411H5

New:

CSC311H5

Rationale:

CSC411H5 was retired 5 years ago.

Proposal Status:

Under Review

CSC476H5: Introduction to Continuum Robotics

Recommended Preparation:

Previous:

CSC384H5 and CSC411H5

New:

CSC384H5 and CSC311H5

Rationale:

CSC411H5 was renumbered to CSC311H5.

Proposal Status:

Under Review

CSC478H5: Robotic Perception

Prerequisites:

Track Changes:

CSC373H5 and (CSC311H5 or CSC413H5) and CSC376H5

Rationale:

CSC321H5 was renumbered to CSC413H5.

Proposal Status:

Under Review

CSC492H5: Computer Science Implementation Project

Exclusions:

Track Changes:

~~CSC494H1 or CSC495H1 or CSCD94H3 or CSCD95H3~~

Rationale:

Remove the exclusion clause. The courses mentioned are implementation projects or reading courses. These courses are not exclusive to each other.

Proposal Status:

Under Review

MAT102H5: Introduction to Mathematical Proofs

Delivery Method:

Track Changes: In Class; Online

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity.

Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are

currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT132H5: Differential Calculus for Life Sciences

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT133Y5: Calculus and Linear Algebra for Commerce

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT134H5: Integral Calculus for Life Sciences

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:
Under Review

MAT135H5: Differential Calculus

Mode of Delivery:
Track Changes: In Class; [Online](#)

Rationale:
Rationale and Academic Relevance: The potential of offering "online" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The flexible delivery format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:
Under Review

MAT136H5: Integral Calculus

Mode of Delivery:
Track Changes: In Class; [Online](#)

Rationale:
The potential of offering "online" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The flexible delivery format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

There will be no change in course objectives.

Proposal Status:
Under Review

MAT137H5: Differential Calculus for Mathematical Sciences

Delivery Method:
Track Changes: In Class; [Online](#)

Rationale:
The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:
Under Review

MAT139H5: Integral Calculus for Mathematical Sciences

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT202H5: Introduction to Discrete Mathematics

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT224H5: Linear Algebra II

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT232H5: Calculus of Several Variables

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT236H5: Vector Calculus

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT244H5: Differential Equations I

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT264H5: Introduction to Numerical Analysis

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT301H5: Groups and Symmetries

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "online" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The flexible delivery format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Proposal Status:

Under Review

MAT309H5: Introduction to Mathematical Logic

Exclusions:

Previous:

CSC438H1 or MAT309H1 or MAT409H1 or MAT357Y1 or MATC09H3

New:

[CSC438H1](#) or [MAT309H1](#) or [MAT409H1](#) or [MATC09H3](#)

Enrolment Limits:

Previous:

Priority is given to students enrolled in the Mathematics and Computer Science Specialist or Major programs.

New:

[Priority is given to students enrolled in the Mathematical Sciences and Computer Science Specialist or Major programs.](#)

Rationale:

MAT357Y1 was broken up into MAT354H1 + MAT357H1 in 1999, according to Arts & Sci MAT department. Adjusting the MAT309H5 exclusions for accuracy, transparency for students. Also adjusting program name in Enrolment Limits for accuracy.

Proposal Status:

Under Review

MAT334H5: Complex Variables

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "hybrid" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The hybrid format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Breakdown of contact hours: no change

How accessibility and academic integrity will be maintained: Same as currently. Assessments will not change, so there is no impact on academic integrity. Accessibility regarding assessments will be managed as previously. Regarding in-class accommodations they will be managed on a case-by-case basis (as they are currently).

Active learning techniques will be applied: Same as currently.

Change in course objectives? No changes.

Proposal Status:

Under Review

MAT344H5: Introduction to Combinatorics

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "online" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The flexible delivery format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Proposal Status:

Under Review

STA107H5: An Introduction to Probability and Modelling

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The potential of offering "online" sections in addition to "in-person" sections would provide flexibility for students, for instructors and for scheduling. The flexible delivery format would offer pedagogical benefits to some students, while in-person is preferred by others, so the flexibility of offering multiple learning modes might be beneficial to a larger group of students.

Proposal Status:

Under Review

ERMAJ1540: Applied Statistics - Major (Science)

Completion Requirements:

Track Changes:

7.0-8.0 credits are required.

First Year:

- CSC108H5
- MAT102H5
- [(MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5) and (MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5)] or MAT137Y5 or MAT157Y5
- MAT223H5 or MAT240H5
- *For students entering the program in 2025-2026 (and beyond):* ISP100H5

Second Year:

- MAT232H5 or MAT233H5 or MAT257Y5
- STA256H5 and STA258H5 and STA260H5

Higher Years:

- STA302H5 and STA304H5 and STA305H5
- 1.0 credit from any 300/400 level STA course or CSC322H5 or ~~(CSC311H5 or CSC411H5)~~ or MAT302H5 or MAT311H5 or MAT332H5 or MAT334H5 or MAT344H5 or MAT337H5

NOTES:

- MAT133Y5 is included in the credit count only if the student also completes MAT233H5 (in which case MAT232H5 is not required).
- Students are strongly encouraged to familiarize themselves with the 100-level calculus pre-requisites to select the correct courses.
- ECO220Y5 cannot be substituted for STA256H5 or STA258H5 and/or STA260H5.
- ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
- STA107H5 is highly recommended in first year, but it is not required.
- MAT337H5 is highly recommended for students intending to pursue graduate level studies in statistics.
- Students in the Applied Statistics Major may take at most 0.5 credit of Statistics Research Project Course(s) from STA378H5, STA398H5, STA478H5 and STA498H5.
- STA246H5 will not be permitted as a pre-requisite for any other 200+ level STA courses. In addition, STA246H5 cannot be used towards any program(s) in Applied Statistics or Mathematics. The course is intended only for students in Computer Science programs who will not need STA256H5 for other program requirements.

Description of Proposed Changes:

CSC411H5 renumbered to CSC311H5 in 2020-21, so it has been 5 years since this renumbering change, therefore removing CSC411H5 from where listed in STA programs for accuracy and transparency for students.

Rationale:

To promote accuracy and transparency for students.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

4.0 - 4.5 credits are required.

First Year: MAT133Y5 or [(MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5) and (MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5)] or MAT137Y5 or MAT157Y5

Higher Years:

1. MAT232H5 or MAT233H5 or MAT257Y5
2. STA256H5 and STA258H5 and STA260H5
3. 1.0 additional credit of STA at the 300/400 level (except for STA378H5, STA398H5, STA478H5 or STA498H5)

NOTES:

- Students are strongly encouraged to familiarize themselves with the 100-level calculus pre-requisites to select the correct courses.
- ECO220Y5 cannot be substituted for STA256H5 and/or STA258H5 and/or STA260H5.
- ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
- STA246H5 will not be permitted as a pre-requisite for any other 200+ level STA courses. In addition, STA246H5 cannot be used towards any program(s) in Applied Statistics or Mathematics. The course is intended only for students in Computer Science programs who will not need STA256H5 for other program requirements.
- Note that Statistics Research Project courses (STA378H5, STA398H5, STA478H5 or STA498H5) may not count towards the Applied Statistics minor.

Description of Proposed Changes:

Add note which allows Degree Explorer enforcement of program NOTE #5.

Rationale:

This proposed modification aims to improve transparency for students and ensure accurate coding of this program requirement in Degree Explorer.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

12.0-13.0 credits are required.

First Year:

- CSC108H5
- MAT102H5
- [(MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5) and (MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5)] or MAT137Y5 or MAT157Y5
- MAT223H5 or MAT240H5
- *For students entering the program in 2025-2026 (and beyond):* ISP100H5

Second Year:

- MAT232H5 or MAT233H5 or MAT257Y5
- MAT244H5
- STA256H5 and STA258H5 and STA260H5

Higher Years:

- STA302H5 and STA304H5 and STA305H5 and STA348H5
- 2.0 credits of STA at the 300/400 level
- 2.0 credits from CSC322H5 or ~~(CSC311H5 or CSC411H5)~~ or MAT302H5 or MAT311H5 or MAT332H5 or MAT334H5 or MAT344H5 or MAT337H5
- 1.0 credit of STA

NOTES:

- MAT133Y5 is included in the credit count only if the student also completes MAT233H5 (in which case MAT232H5 is not required).
- Students are strongly encouraged to familiarize themselves with the 100-level calculus pre-requisites to select the correct courses.
- ECO220Y5 cannot be substituted for STA256H5 or STA258H5 or STA260H5.
- ECO227Y5 can be substituted for STA256H5 and STA258H5, but not for STA260H5.
- STA107H5 is highly recommended in first year, but it is not required.
- MAT337H5 is highly recommended for students intending to pursue graduate level studies in statistics.
- Students in the Applied Statistics Specialist may take at most 1.0 credit of Statistics Research Project Courses from STA378H5, STA398H5, STA478H5 and STA498H5.
- STA246H5 will not be permitted as a pre-requisite for any other 200+ level STA courses. In addition, STA246H5 cannot be used towards any program(s) in Applied Statistics or Mathematics. The course is intended only for students in Computer Science programs who will not need STA256H5 for other program requirements.

Description of Proposed Changes:

CSC411H5 renumbered to CSC311H5 in 2020-21, so it has been 5 years since this renumbering change, therefore removing CSC411H5 from where listed in STA programs for accuracy and transparency for students.

Rationale:

To promote accuracy and transparency for students.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

14.0 credits are required.

First Year:

- BIO152H5 and BIO153H5
- CHM110H5 and CHM120H5
- CSC108H5 and CSC148H5
- MAT102H5
- [(MAT132H5 or MAT135H5 or MAT137H5 or MAT157H5) and (MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5)] or MAT134Y5 or MAT135Y5 or MAT137Y5 or MAT157Y5
-

Second Year:

- BIO206H5 and BIO207H5
- CHM242H5
- CSC207H5 and CSC236H5 and CSC263H5
- MAT223H5 or MAT240H5

Third Year:

- MAT232H5 and MAT244H5
- STA246H5 or STA256H5 or ECO227Y5

Fourth Higher Years:

- BIO314H5 and BIO372H5 and BIO477H5
- CSC413H5 or ~~CSC321H5~~ or ~~CSC411H5~~ or CSC311H5
- CSC343H5 and CSC373H5
- MAT332H5
- At least 1.0 credit from the following list of recommended courses, of which at least 0.5 credit must be at the 400-level: BIO315H5 or BIO341H5 or BIO370Y5 or BIO371H5 or BIO380H5 or BIO443H5 or BIO481Y5 or CBJ481Y5 or CHM361H5 or CSC310H5 or CSC338H5 or CSC363H5 or JCP410H5 or STA302H5 or STA348H5

NOTES:

- If BIO477H5 is not offered in the fourth year of a student's studies, he or she must take an additional 0.5 credit from the recommended 400-level courses.
- Students intending to take CHM361H5 as one of their fourth year recommended courses must take CHM243H5 as a prerequisite course..

Description of Proposed Changes:

Rationale:

- Tidy up, move second year courses from "Third Year" to "Second Year".
- CSC321H5 and CSC411H5 were retired 5 years ago.

Proposal Status:

Under Review

Enrolment Requirements:

Track Changes:

Limited Enrolment — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

1. Submission of a supplemental application
2. CSC148H5 (see minimum grade note below)
3. MAT102H5 (see minimum grade note below)
4. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT137Y5 or MAT157Y5 or MAT233H5
5. ISP100H5
6. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
7. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

Special Requirement: Beginning in the 2025-2026 application cycle, students must complete a supplemental application to be considered for the program. Supplemental application deadlines are the same date as the POST application deadline on ACORN. More information, including information about the supplemental application form, is available on the Department of Mathematical and Computational Sciences website at <WEBSITE URL TBD>

NOTES:

1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 60%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/ or Major in Computer Science at U of T Mississauga.
3. Due to the limited enrolment nature of this program, students are strongly advised to develop alternate plans if they need to instead enroll in other programs.

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

Rationale:

The rationale for this change stems from our need to address gaps in preparation to achieve critical DLEs (Degree-Level Expectations) and PLOs (Program Level Outcomes) that are not currently assessed as part of the POST requirement. The essay questions used in the supplemental application will specifically target these DLEs and PLOs.

In particular, DLE6 is not assessed or developed in the current POST course requirements (CSC148, MAT102, ISP100). DLE6 describes the following Autonomy and Professional Capacity Goals: “Students will acquire the skills, knowledge, and critical problem solving they need to become informed, ethical, inclusive, independent, and creative thinkers and decision-makers; gain an awareness and appreciation that knowledge and its applications are influenced by and contribute to society as a whole; and lay the foundation for learning as a life-long endeavour.” This DLE is challenging to assess in CSC148 in a large course where undergraduate TAs perform the bulk of the grading and individual performance is, for reasons related to POST, emphasized.

Assessing this DLE during the POST process is particularly important to our program because the continued increase in our POST requirements hinders the development and progress of our students. Our POST structure fosters competitiveness (to achieve a high grade in CSC148) and defensive posturing that negatively affects the student community and therefore their learning. This is exacerbated by culture issues (e.g. “programmer” culture) that exist in our field more generally. Unfortunately, CS has long suffered with a culture of ‘defensive climate’ [1]. Such climate hinders the development of teamwork skills (PLO6.2, “Demonstrate accountability and responsibility to a team”) and the ability to provide and receive feedback (PLO6.4: “Provide, receive, and act on constructive feedback from peers and supervisors”). The assessment of supplemental materials should help reduce the grade requirements (or prevent further increases) that are contributing to the defensive climate in our computer science courses.

Through this supplemental application, we seek to admit students who can conceptualize and enact a kinder Computer Science consistent with our DLE’s and the values of the University.

(Note: We are working toward a kinder form of POST in the form of direct-entry streams from high school to bring us more consistent with UTSG and UTSC, but this effort is presently on hold.)

[1] Garvin-Doxas, K. and Barker, L. (2004). Communication in Computer Science Classrooms: Understanding Defensive Climates as a Means of Creating Supportive Behaviors. TOCE.

Impact:

This change impacts the application for the CS Major, CS Specialist, and Information Security Specialist programs, and provides us the opportunity to assess skills needed to meet the degree-level expectations that are not currently assessed. We hope that assessing these skills, particularly as they relate to DLE6, will help improve the community in these programs.

We anticipate that this will help lower the current CSC148 grade requirements for these programs, or prevent its continued growth. Thus, the lower grade may reduce student stress. However, there is increased workload for students and an alternative source of stress.

This change has workload impacts for MCS faculty/staff, since the supplemental applications need to be assessed.

Proposal Status:

Under Review

Enrolment Requirements:

Track Changes:

Limited Enrolment — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

1. Submission of a supplemental application
2. CSC148H5 (see minimum grade note below)
3. MAT102H5 (see minimum grade note below)
4. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT134Y5 or MAT157Y5 or MAT233H5
5. ISP100H5
6. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
7. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

Special Requirement: Beginning in the 2025-2026 application cycle, students must complete a supplementary application to be considered for the program. Supplemental application deadlines are the same date as the POST application deadline on ACORN. More information, including information about the supplemental application form, is available on the Department of Mathematical and Computational Sciences website at <WEBSITE URL TBD>

NOTES:

1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/ or Major in Computer Science at U of T Mississauga.
3. Due to the limited enrolment nature of this program, students are strongly advised to develop alternate plans if they need to instead enroll in other programs.

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

Rationale:

The rationale for this change stems from our need to address gaps in preparation to achieve critical DLEs (Degree-Level Expectations) and PLOs (Program Level Outcomes) that are not currently assessed as part of the POST requirement. The essay questions used in the supplemental application will specifically target these DLEs and PLOs.

In particular, DLE6 is not assessed or developed in the current POST course requirements (CSC148, MAT102, ISP100). DLE6 describes the following Autonomy and Professional Capacity Goals: “Students will acquire the skills, knowledge, and critical problem solving they need to become informed, ethical, inclusive, independent, and creative thinkers and decision-makers; gain an awareness and appreciation that knowledge and its applications are influenced by and contribute to society as a whole; and lay the foundation for learning as a life-long endeavour.” This DLE is challenging to assess in CSC148 in a large course where undergraduate TAs perform the bulk of the grading and individual performance is, for reasons related to POST, emphasized.

Assessing this DLE during the POST process is particularly important to our program because the continued increase in our POST requirements hinders the development and progress of our students. Our POST structure fosters competitiveness (to achieve a high grade in CSC148) and defensive posturing that negatively affects the student community and therefore their learning. This is exacerbated by culture issues (e.g. “brogrammer” culture) that exist in our field more generally. Unfortunately, CS has long suffered with a culture of ‘defensive climate’ [1]. Such climate hinders the development of teamwork skills (PLO6.2, “Demonstrate accountability and responsibility to a team”) and the ability to provide and receive feedback (PLO6.4: “Provide, receive, and act on constructive feedback from peers and supervisors”). The assessment of supplemental materials should help reduce the grade requirements (or prevent further increases) that are contributing to the defensive climate in our computer science courses.

Through this supplemental application, we seek to admit students who can conceptualize and enact a kinder Computer Science consistent with our DLE’s and the values of the University.

(Note: We are working toward a kinder form of POST in the form of direct-entry streams from high school to bring us more consistent with UTSG and UTSC, but this effort is presently on hold.)

[1] Garvin-Doxas, K. and Barker, L. (2004). Communication in Computer Science Classrooms: Understanding Defensive Climates as a Means of Creating Supportive Behaviors. TOCE.

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This change impacts the application for the CS Major, CS Specialist, and Information Security Specialist programs, and provides us the opportunity to assess skills needed to meet the degree-level expectations that are not currently assessed. We hope that assessing these skills, particularly as they relate to DLE6, will help improve the community in these programs.

We anticipate that this will help lower the current CSC148 grade requirements for these programs, or prevent its continued growth. Thus, the lower grade may reduce student stress. However, there is increased workload for students and an alternative source of stress.

This change has workload impacts for MCS faculty/staff, since the supplemental applications need to be assessed.

Proposal Status:

Under Review

Enrolment Requirements:

New:

Limited Enrolment — Enrolment in this program is limited to students with a minimum of 4.0 credits, including the following:

1. Submission of a supplemental application
2. CSC148H5 (see minimum grade note below);
3. MAT102H5 (see minimum grade note below);
4. MAT134H5 or MAT136H5 or MAT139H5 or MAT159H5 or MAT137Y5 or MAT157Y5 or MAT233H5;
5. ISP100H5; and
6. A cumulative grade point average (CGPA), determined annually. It is never lower than 2.5.
7. All students must complete 4.0 U of T credits before requesting this program. Courses with a grade of CR/NCR will not count as a part of the 4.0 credits required for program entry.

Special Requirement: Beginning in the 2025-2026 application cycle, students must complete a supplemental application to be considered for the program. Supplemental application deadlines are the same date as the POST application deadline on ACORN. More information, including information about the supplemental application form, is available on the Department of Mathematical and Computational Sciences website at <WEBSITE URL TBD>

NOTES:

1. The minimum grade required in CSC148H5 and MAT102H5 is determined annually. It is never lower than 65%. Only CSC148H5 and MAT102H5, taken at the UTM campus, will be accepted.
2. Transfer students who have completed any postsecondary studies outside of UTM (including studies at other divisions at the University of Toronto) are not eligible to pursue a Specialist and/ or Major in Computer Science at U of T Mississauga.
3. Due to the limited enrolment nature of this program, students are strongly advised to develop alternate plans if they need to instead enroll in other programs.

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

Rationale:

The rationale for this change stems from our need to address gaps in preparation to achieve critical DLEs (Degree-Level Expectations) and PLOs (Program Level Outcomes) that are not currently assessed as part of the POST requirement. The essay questions used in the supplemental application will specifically target these DLEs and PLOs.

In particular, DLE6 is not assessed or developed in the current POST course requirements (CSC148, MAT102, ISP100). DLE6 describes the following Autonomy and Professional Capacity Goals: “Students will acquire the skills, knowledge, and critical problem solving they need to become informed, ethical, inclusive, independent, and creative thinkers and decision-makers; gain an awareness and appreciation that knowledge and its applications are influenced by and contribute to society as a whole; and lay the foundation for learning as a life-long endeavour.” This DLE is challenging to assess in CSC148 in a large course where undergraduate TAs perform the bulk of the grading and individual performance is, for reasons related to POST, emphasized.

Assessing this DLE during the POST process is particularly important to our program because the continued increase in our POST requirements hinders the development and progress of our students. Our POST structure fosters competitiveness (to achieve a high grade in CSC148) and defensive posturing that negatively affects the student community and therefore their learning. This is exacerbated by culture issues (e.g. “brogammer” culture) that exist in our field more generally. Unfortunately, CS has long suffered with a culture of ‘defensive climate’ [1]. Such climate hinders the development of teamwork skills (PLO6.2, “Demonstrate accountability and responsibility to a team”) and the ability to provide and receive feedback (PLO6.4: “Provide, receive, and act on constructive feedback from peers and supervisors”). The assessment of supplemental materials should help reduce the grade requirements (or prevent further increases) that are contributing to the defensive climate in our computer science courses.

Through this supplemental application, we seek to admit students who can conceptualize and enact a kinder Computer Science consistent with our DLE’s and the values of the University.

(Note: We are working toward a kinder form of POST in the form of direct-entry streams from high school to bring us more consistent with UTSG and UTSC, but this effort is presently on hold.)

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Impact:

This change impacts the application for the CS Major, CS Specialist, and Information Security Specialist programs, and provides us the opportunity to assess skills needed to meet the degree-level expectations that are not currently assessed. We hope that assessing these skills, particularly as they relate to DLE6, will help improve the community in these programs.

We anticipate that this will help lower the current CSC148 grade requirements for these programs, or prevent its continued growth. Thus, the lower grade may reduce student stress. However, there is increased workload for students and an alternative source of stress.

This change has workload impacts for MCS faculty/staff, since the supplemental applications need to be assessed.

Proposal Status:

Under Review

Forensics (UTM), Department of

1 New Course - UTM Sciences Divisional Undergraduate Curriculum Committee

FSC310H5: Traces of the Past: Uncovering Historical and Archeological Clues through Non-Destructive Chemical Techniques

Contact Hours:

Lecture: 24 / Tutorial: / Practical: 24 / Seminar:

Description:

Embark on a captivating exploration of Chemical Forensics in Historical Investigations. This course equips students with the expertise to apply non-invasive, non-destructive analytical chemistry methods to investigate historical evidence, such as archaeological artifacts and historical documents. Students will engage in the meticulous practice of careful examination, where each artifact may reveal meaningful insights from the past or expose long-concealed forgeries. Topics covered include microscopic and spectroscopic techniques, mass spectrometry, and elemental analysis methods. Beyond technical mastery, students will refine collaborative skills with non-technical stakeholders and develop proficiency in interpreting, acknowledging limitations, and discerning the implications of analytical results vital for unraveling the tapestry of the past.

By the end of this course, students will not only possess a profound understanding of non-destructive chemical analysis but also exhibit the finesse required to apply this knowledge in real-world scenarios and communicate their findings with precision and authority.

Prerequisites:**Corequisites:****Exclusions:****Recommended Preparation:****Notes:****Delivery Method:**

In Person

Methods of Assessment:

Within the course, a comprehensive assessment strategy encompassing both summative and formative evaluations will be implemented to gauge students' knowledge, skills and mindset development. Roughly 40% of the assessment framework will emphasize evaluating knowledge acquisition through written tests and assignments, while an additional 40% will be dedicated to refining practical skills through careful monitoring and assessment within the laboratory environment. The remaining 20% will prioritize cultivating a collaborative, growth-oriented mindset, assessing students' ability to work effectively with peers both within and outside their discipline, towards achieving a common goal. These evaluations will be facilitated through a range of targeted metacognitive exercises.

Distribution Requirements:

Science

Rationale:

Encouraging interdisciplinary collaborations as a mechanism to enhance models for program and course design is a part of UTM's strategic plan in fostering student success. The rationale for encouraging interdisciplinary collaborations, particularly in the context of UTM's strategic plan, lies in the belief that synergistic integration of diverse academic disciplines enhances innovation, problem-solving abilities, and enriches the overall educational experience for students. Collaborations between the Forensic Science program and the English and Drama department at UTM offer a unique opportunity to combine scientific rigor with cultural and historical significance, facilitating a well-rounded and holistic approach to program and course design. This innovative collaboration will not only broaden students' perspectives but also prepare them to adapt and succeed in an increasingly interdisciplinary and interconnected professional world. Moreover, this collaboration between forensic chemistry and book science lays the foundation for potential interdisciplinary programs at UTM, further enhancing the academic landscape and enriching the educational prospects for students.

Resources:

Resource form submitted.

Overlap with Existing Courses:

This offering will be the first of its kind, focusing on non-invasive, non-destructive chemical techniques in the analysis of artifacts that potentially hold cultural and historical significance.

Estimated Enrolment:

24

Instructor:

Dr. Vivienne Luk

Proposal Status:

Under Review

1 Course Modification - UTM Sciences Divisional Undergraduate Curriculum Committee

FSC307H5: Missing Persons DVI and Unidentified Human Remains

Prerequisites:

New:

(ANT202H5 or BIO207H5).

Enrolment Limits:

Track Changes:

Priority given first to students enrolled in the Forensic Specialist Program and Forensic Science Majors.

Rationale:

Moving "Priority given first to students enrolled in the Forensic Specialist Program and Forensic Science Majors." to the Enrolment Limits section so that the priority can be enforced.

Proposal Status:

Under Review

Anthropology (UTM), Department of

1 New Course - UTM Sciences Divisional Undergraduate Curriculum Committee

ANT222H5: Engineering Eden: Human-Environment Interactions from Prehistory to Present

Contact Hours:

Lecture: 24 / **Tutorial:** / **Practical:** / **Seminar:**

Description:

Have you ever wondered what makes our species so different from other life on this planet? Have we always innovated and imagined our worlds? Why do we manipulate and transform our surroundings? How did we reach our current ecological predicament - termed the Anthropocene - where we now impact every ecological system on earth? Based on our past, what is the future of our species? Overpopulation and resource scarcity? Or, are we about to usher in an age of abundance? This course seeks to explore these questions through the lens of archaeology. Using a wide-range of scientific and social science datasets we will consider the development and intensification of human-environment interactions through time, using the metaphor of Eden (an idealized place of plenty) to frame the course modules.

Corequisites:**Exclusions:**

ANT380H5 (Fall 2023) and ANT432H5 (Summer 2023)

Recommended Preparation:**Notes:****Delivery Method:**

In Person; Online

Rationale:

Our newest faculty hire, Dr. Monica Ramsey (tenure-track), would like to teach this course to share her research findings. She is currently finalizing a book with the same title (contract with CUP). Her book will serve as one of the resources for this course.

Flexible Delivery Rationale:

In consultation with Dr. Monica Ramsey (permanent tenure-track faculty), we are proposing the mode of deliver for this new course as "Flexible Delivery". By doing this, it will allow the instructor the option to teach the course as "Online Synchronous" or "In-person". We see the potential for this 'service' course with no pre-reqs to be very popular among all students across UofT, so proposing this 200-level course as "flexible delivery" would be ideal. Similar to ANT211H5 (Sex, evolution & behavior) and ANT214H5 (Nutrition), which are also proposed as 'flexible delivery', it will allow students to manage other commitments with greater ease (e.g. work, family obligations, commuting time/expenses, geographic locations outside of Canada during the summer months if the course is offered in the summer, etc.)." We would like this option to be open for any of the three terms that it may be offered (fall, winter or summer)

Resources:

Resource form submitted.

Estimated Enrolment:

150 or higher depending on demand.

Instructor:

Dr. Monica Ramsey

Proposal Status:

Under Review

3 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

ANT101H5: Introduction to Biological Anthropology and Archaeology

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

We propose to offer it online because the current winter instructor will be on-leave in 2025 and this is the best way to provide pedagogical continuity of this foundational course in our discipline. By offering it online, the current instructor will be able to transfer her excellent teaching materials, including the virtual mysteries, to the Winter 2025 instructor. The current instructor offered the course online in 2020 and has therefore developed robust materials for teaching the course online.

Proposal Status:

Under Review

ANT211H5: Sex, Evolution and Behaviour

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

The online course is already developed and ran in 2020/21. The rationale is also the course material. Sex, behavior and evolution is a contentious topic and a controlled online environment creates a safer space for discourse in terms of personal safety for staff and students. It also opens up the course to more students. Offering online may increase student enrolment.

Proposal Status:

Under Review

ANT331H5: The Biology of Human Sexuality

Delivery Method:

Track Changes: In Class; [Online](#)

Rationale:

This course has already been approved by the Office of the Dean to be taught by a sessional instructor as "Online Synchronous" this summer 2024. As requested by the Vice-Dean of Teaching & Learning, we are submitting this proposal so the course is tagged as "Flexible Delivery". In consultation with Prof. Sherry Fukazawa (permanent Teaching-stem faculty), we are proposing to change the mode of delivery to "Flexible Delivery" to allow for future occasional offerings of this course as either "Online Synchronous" or "In Person", in any term that it may be offered. By doing this, it will allow students to manage other commitments with greater ease (e.g. work, family obligations, commuting time/expenses, geographic locations outside of Canada during the summer months, if the course is offered in the summer, etc.).

Proposal Status:

Under Review

ERSPE1338: Forensic Anthropology - Specialist (Science)

Completion Requirements:

Track Changes:

A minimum of 15.5 credits are required.

First Year:

- ANT101H5, ANT102H5
- BIO152H5, BIO153H5
- FSC239Y5

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Second Year:

- **Statistics Requirement (recommended completion prior to fourth year):** ANT407H5 / FSC341H5
*STA215H5 will no longer be accepted as an option to satisfy the Statistics requirement past September 2027.
- ANT200H5, ANT202H5, ANT203H5, ANT205H5
- FSC271H5

Third Year:

- **IDENT Requirement:** (FSC300H5, FSC302H5) / (FSC210H5, FSC303H5)
- ANT306H5, ANT312H5/ANT317H5, ANT334H5, ANT340H5
- FSC316H5, FSC330H5, FSC335H5, FSC340H5, FSC360H5

Fourth Year:

- **Capstone Requirement:** FSC481Y5 / (FSC482H5, FSC483H5) / (FSC482H5, FSC484H5) / (FSC482H5, FSC485H5) / (FSC482H5, FSC407H5)
- Note:** Students seeking an IDENT capstone placement must have FSC302H5 completed prior to their capstone year.
- ANT415H5, ANT436H5/FSC307H5/FSC314H5, ANT439H5, ANT441H5
 - FSC401H5, FSC439H5

Enrolment Requirements:

Track Changes:

Limited Enrolment — Admission into the Forensic Anthropology Specialist Program is by special application **only**. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online application in addition to their ACORN request, upon completing the minimum program entry requirements.

Note: Meeting the minimum requirements does not guarantee admission into the program.

[Application for admission into the program for ALL students can be found at: Program Application | Forensic Science \(utoronto.ca\)](#)

Forensic Anthropology is a Type 3 program, and applications are open for Round 1 **only**. There is no Round 2 admission period.

Forensic Science Applications Open: **March 1 of each year**

Forensic Science Application Deadline: **May 1 of each year**

-

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of FSC239Y5 with **70% or better** in their **first successful attempt**.
3. Completion of ANT101H5 with **75% or better** and ANT102H5 with **75% or better**
4. Completion of BIO152H5 with **65% or better** and BIO153H5 with **65% or better**
5. A minimum Cumulative Grade Point Average of at least **3.2**
The actual minimum CGPA varies from year to year but is never lower than 3.2

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Students applying to enroll **after second year** must have:

1. Admission category designation as 'FSC1'
2. Completed **8.0 credits**

3. Completed ANT200H5, ANT202H5, ANT203H5 and ANT205H5 with **75% or better in each**.
4. Completed FSC239Y5 with a **70% or better** in their **first** attempt.
5. A minimum cumulative Grade Point Average of at least **3.2**.

Students applying to this program in the 2024-2025 Academic Year (for program entry in the 2025-2026 Academic Year) will be required to have Grade 12(4U) Advanced Functions or equivalent.

Description of Proposed Changes:

ISP100H5 has been added as a consideration for students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond).

Rationale:

ISP100H5 must be added as soon as possible with meet the requirements of partner-programs Anthropology, Chemistry, Biology and Psychology. Students who are unsuccessful getting into a forensic POST are left ineligible for alternative programs- the secondary disciplines (Anthro, chem, psy, bio) will all require ISP as of this next cycle.

Impact:

ISP100H5 will see an increased enrolment of a range between 150-250 students per year based on FSC1 enrolments.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

A minimum of 15.5 - 16.0 credits are required.

First Year:

- BIO152H5, BIO153H5
- CHM110H5, CHM120H5
- FSC239Y5
- (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)
- PHY136H5

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Second Year:

- **Statistics Requirement:** BIO259H5 (strongly recommended) / FSC341H5
- BIO206H5, BIO207H5
- (BIO208H5, BIO209H5) / FSC316H5
- CHM242H5, CHM243H5
- FSC271H5

Third and Fourth Years:

- **IDENT Requirement:** (FSC300H5, FSC302H5) / (FSC210H5, FSC303H5)
 - BIO362H5; CHM361H5; FSC315H5, FSC330H5, FSC335H5, FSC340H5, FSC360H5
 - **Capstone Requirement:** FSC481Y5 / (FSC482H5, FSC483H5) / (FSC482H5, FSC484H5) / (FSC482H5, FSC485H5) / (FSC482H5, FSC407H5)
- Note:** Students seeking an IDENT capstone placement must have FSC302H5 completed prior to their capstone year.
- BIO458H5 / BIO372H5 / BIO341H5; FSC415H5, FSC416H5,
 - **0.5 additional credits from:** BIO341H5, BIO374H5, FSC307H5, FSC314H5, FSC350H5, FSC370H5, FSC371H5, FSC401H5, FSC402H5, FSC406H5, FSC407H5

Enrolment Requirements:

New:

Limited Enrolment — Admission into the Forensic Biology Specialist Program is by special application *only*. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online application in addition to their ACORN request, upon completing the minimum program entry requirements.

Note: Meeting the minimum requirements does not guarantee admission into the program.

[Application for admission into the program for ALL students can be found at: Program Application | Forensic Science \(utoronto.ca\)](#)

Forensic Biology is a Type 3 program, and applications are open for Round 1 *only*. There is no Round 2 admission period.

Forensic Science Applications Open: **March 1 of each year**

Forensic Science Application Deadline: **May 1 of each year**

-

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits
2. Completion of **FSC239Y5** with **70% or better** in their **first successful attempt**.
3. Completion of BIO152H5 with **75% or better** and BIO153H5 with **75% or better**
4. Completion of CHM110H5 with **65% or better** and CHM120H5 with **65% or better**
5. Completion of (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)
6. Completion of PHY136H5
7. A minimum Cumulative Grade Point Average of at least **3.2**.
The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Description of Proposed Changes:

ISP100H5 has been added as a consideration for students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond).

Rationale:

ISP100H5 must be added as soon as possible with meet the requirements of partner-programs Anthropology, Chemistry, Biology and Psychology.

Impact:

ISP100H5 will see an increased enrolment of a range between 150-250 students per year based on FSC1 enrolments. Students who are unsuccessful getting into a forensic POST are left ineligible for alternative programs- the secondary disciplines (Anthro, chem, psy, bio) will all require ISP as of this next cycle.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

A minimum of 16.5 credits are required.

First Year:

- CHM110H5, CHM120H5
- BIO152H5
- FSC239Y5
- (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)
- PHY136H5, PHY137H5

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Second Year:

- **Statistics Requirement:** BIO259H5/FSC341H5/STA220H5
- JCP221H5; CHM211H5, CHM231H5, CHM242H5, CHM243H5
- FSC271H5

Third and Fourth Year:

- **IDENT Requirement:** (FSC300H5, FSC302H5) / ((FSC210H5 or FSC370H5), FSC303H5)
 - CHM311H5, CHM331H5/CHM333H5, CHM361H5, CHM396H5, CHM397H5
 - FSC311H5, FSC330H5, FSC340H5, FSC360H5, FSC402H5, FSC403H5
 - CHM414H5, CHM416H5
 - **Capstone Requirement:** FSC481Y5 / (FSC482H5, FSC483H5) / (FSC482H5, FSC484H5) / (FSC482H5, FSC485H5) / (FSC482H5, FSC407H5)
- Note:** Students seeking an IDENT capstone placement must have FSC302H5 completed prior to their capstone year.

The following courses are highly recommended for students interested in *Forensic Toxicology*: BIO200H5, FSC370H5, FSC371H5

Enrolment Requirements:

Track Changes:

Limited Enrolment — Admission into the Forensic Chemistry Specialist Program is by special application *only*. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **must** submit a direct online application in addition to their ACORN request, upon completing the minimum program entry requirements.

Note: Meeting the minimum requirements does not guarantee admission into the program.

[Application for admission into the program for ALL students can be found at: Program Application | Forensic Science \(utoronto.ca\)](#)

Forensic Chemistry is a Type 3 program, and applications are open for Round 1 *only*. There is no Round 2 admission period.

Forensic Science Applications Open: **March 1 of each year**

Forensic Science Application Deadline: **May 1 of each year**

-

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of CHM110H5 with **65% or better** and CHM120H5 with **65% or better**.
3. Completion of FSC239Y5 with **70% or better** in their **first successful attempt**.
4. Completion of (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)
5. Completion of PHY136H5
6. A minimum Cumulative Grade Point Average of at least **3.2**.
The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Description of Proposed Changes:

ISP100H5 has been added as a consideration for students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond).

Rationale:

ISP100H5 must be added as soon as possible with meet the requirements of partner-programs Anthropology, Chemistry, Biology and Psychology.

Impact:

ISP100H5 will see an increased enrolment of a range between 150-250 students per year based on FSC1 enrolments. Students who are unsuccessful getting into a forensic POSst are left ineligible for alternative programs- the secondary disciplines (Anthro, chem, psy, bio) will all require ISP as of this next cycle.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

A minimum of 15.0 credits are required.

First Year:

- BIO152H5, BIO153H5
- FSC239Y5
- PSY100Y5

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Second Year:

- **Statistics Requirement:** PSY201H5, PSY202H5
- FSC271H5, FSC220H5
- PSY210H5, PSY220H5, PSY230H5, PSY240H5, PSY270H5/PSY280H5/PSY290H5/JLP285H5

Third and Fourth Year:

- **IDENT Requirement:** (FSC300H5, FSC302H5) / (FSC303H5, FSC316H5)
- FSC320H5, FSC330H5, FSC335H5, FSC360H5, FSC370H5; PSY309H5, PSY328H5/PSY340H5/PSY341H5/PSY393H5, PSY344H5/PSY346H5
- **Capstone Requirement:** FSC481Y5 / (FSC482H5, FSC483H5) / (FSC482H5, FSC484H5) / (FSC482H5, FSC485H5) / (FSC482H5, FSC407H5)

Note: Students seeking an IDENT capstone placement must have FSC302H5 completed prior to their capstone year.

- 0.5 credits from the following laboratory-based courses: PSY329H5, PSY369H5
- 0.5 credits from the following: FSC314H5, FSC350H5, FSC351H5, FSC361H5, FSC371H5, FSC401H5, FSC402H5, FSC403H5, FSC406H5, FSC407H5
- 0.5 credit from PSY 400 level series courses

Enrolment Requirements:

Track Changes:

Limited Enrolment — Admission into the Forensic Psychology Specialist Program is by special application *only*. To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online application in addition to their ACORN request, upon completing the minimum program entry requirements.

Note: Meeting the minimum requirements *does not* guarantee admission into the program.

[Application for admission into the program for ALL students can be found at: Program Application | Forensic Science \(utoronto.ca\)](#)

Forensic Psychology is a Type 3 program, and applications are open for Round 1 *only*. There is no Round 2 admission period.

Forensic Science Applications Open: **March 1 of each year**

Forensic Science Application Deadline: **May 1 of each year**

-

Minimum Requirements:

1. Completion of 4.0 credits, including 3.0 science credits
2. Completion of PSY100Y5 with a minimum average of **75%** or better
3. Completion of BIO152H5 with **65% or better** and BIO153H5 with **65% or better**
4. Completion of FSC239Y5 with **70% or better** in their **first attempt**.
5. A minimum cumulative Grade Point Average of at least **3.2**.
The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Students applying to enroll after second year must also have:

1. Admission category designation as 'FSC1'
2. Completed **8.0 credits**.
3. Completed PSY201H5, PSY202H5 (or equivalent), FSC220H5, and at least an additional 1.0 credit in 200 series PSY courses with a minimum average of **77%** for those five half courses
4. Completed FSC239Y5 with a **70% or better** in their **first attempt**.
5. A minimum cumulative Grade Point Average of at least **3.2**.

Description of Proposed Changes:

ISP100H5 has been added as a consideration for students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond).

Rationale:

ISP100H5 must be added as soon as possible with meet the requirements of partner-programs Anthropology, Chemistry, Biology and Psychology.

Impact:

ISP100H5 will see an increased enrolment of a range between 150-250 students per year based on FSC1 enrolments. Students who are unsuccessful getting into a forensic POST are left ineligible for alternative programs- the secondary disciplines (Anthro, chem, psy, bio) will all require ISP as of this next cycle.

Proposal Status:

Under Review

Completion Requirements:

Track Changes:

Note: This program must be taken concurrently with a second Major program (see notes below).

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

First Year:

- BIO152H5, BIO153H5
- CHM110H5, CHM120H5
- FSC239Y5
- (MAT132H5, MAT134H5) / (MAT135H5, MAT136H5)
- PHY136H5.

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Second Year:

- CHM242H5, CHM243H5
- FSC271H5
- **Statistics Requirement:** ANT407H5/BIO259H5/PSY201H5/FSC341H5*

Third Year:

- **IDENT Requirement:** FSC303H5/FSC300H5
- FSC330H5; FSC360H5

Fourth Year:

- 0.5 credit from the following: FSC302H5, FSC307H5, FSC311H5, FSC314H5, FSC315H5, FSC316H5, FSC320H5, FSC335H5, FSC340H5, FSC350H5, FSC351H5, FSC361H5, FSC370H5, FSC401H5, FSC402H5, FSC403H5, FSC406H5, FSC407H5, FSC416H5, FSC430H5, FSC489H5

**STA215H5 will no longer be accepted as an option to satisfy the Statistics requirement past September 2027.*

Enrolment Requirements:

Track Changes:

Limited Enrolment — Admission into the Forensic Science Major program is by special application ONLY and **MUST** be completed in conjunction with a second approved Science Major (see Notes 'Second Major' below). To be considered for admission into the program, ALL students, including students admitted into the 1st year Forensic Science category, **MUST** submit a direct online FSC Application, upon completing the Minimum Program Requirements listed below.

Note: Meeting the minimum requirements does not guarantee admission into the program.

[Application for admission into the program for ALL students can be found at: Program Application | Forensic Science \(utoronto.ca\)](#)

Forensic Science is a Type 3 program, and applications are open for Round 1 **only**. There is no Round 2 admission period.

Forensic Science Applications Open: **March 1 of each year**

Forensic Science Application Deadline: **May 1 of each year**

-

Minimum Requirements:

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of FSC239Y5 with **70%** or better in the **first successful attempt**.
3. Completion of CHM110H5, CHM120H5 with **65%** or better.
4. Completion of (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5)
5. Completion of PHY136H5
6. A minimum Cumulative Grade Point Average of at least **2.7**
The actual minimum CGPA requirement varies from year to year but is never lower than 2.7
7. Enrolment in an Approved Second Major (See Second Major Notes: 1).

Students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond) will also require completion of ISP100H5.

Description of Proposed Changes:

ISP100H5 has been added as a consideration for students applying in 2025-2026 (and beyond) for program entry in the 2026-2027 Academic Year (and beyond).

Rationale:

ISP100H5 must be added as soon as possible with meet the requirements of partner-programs Anthropology, Chemistry, Biology and Psychology.

Impact:

ISP100H5 will see an increased enrolment of a range between 150-250 students per year based on FSC1 enrolments. Students who are unsuccessful getting into a forensic POST are left ineligible for alternative programs- the secondary disciplines (Anthro, chem, psy, bio) will all require ISP as of this next cycle.

Proposal Status:

Under Review

Biology (UTM), Department of

7 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

BIO201H5: The Biology Behind the News

Delivery Method:

Track Changes: In Class; Online; Hybrid

Rationale:

We successfully ran this course as an online course during the pandemic as well as courses with similar lecture structures (BIO374, 36L) online in Summer 2023 semester. We would like to propose to also teach BIO201 as online in some semesters (either summer or fall/winter) to offer more flexibility for students when needed. By introducing an online option for this course, we will be able to introduce science topics to non-science students in a more flexible format, while also training students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 36L synchronous online

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures will be delivered through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

Resource Implications: There would be no change to resource needs for as we previously developed both online and in-person version of asynchronous and synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

BIO208H5: Fundamentals of Human Anatomy and Physiology I

Delivery Method:

Track Changes: In Class; Online; Hybrid

Rationale:

We successfully ran this course in an online format in Summer 2023 semester and would like to continue to teach this course online to offer more flexibility for summer students when needed. By introducing a flexible online course that is quick-paced and requires students to be autonomous learners and complete tasks independently, we will be able to train students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 24L (24 synchronous or asynchronous online); 12T (12 synchronous online)

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures and tutorials will be delivered synchronously through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

There would be no change to resource needs for as we previously developed both online and in-person version of tutorials, asynchronous or synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

BIO209H5: Fundamentals of Human Anatomy and Physiology II

Delivery Method:

Track Changes: In Class; [Online](#); [Hybrid](#)

Rationale:

We successfully ran this course in an online format in Summer 2023 semester and would like to continue to teach this course online to offer more flexibility for summer students when needed. By introducing a flexible online course that is quick-paced and requires students to be autonomous learners and complete tasks independently, we will be able to train students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 24L (24 synchronous or asynchronous online); 12T (12 synchronous online)

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures and tutorials will be delivered synchronously through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

Resource Implications: There would be no change to resource needs for as we previously developed both online and in-person version of tutorials, asynchronous or synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

BIO310H5: Physiology of Regulatory Systems

Delivery Method:

Track Changes: In Class; [Online](#); [Hybrid](#)

Rationale:

We successfully ran this course as an online course during the pandemic as well as a similar courses (BIO208/BIO209) online in Summer 2023 semester. We would like to propose to also teach BIO310 as online in the summer to offer more flexibility for summer students when needed. By introducing a flexible online course that is quick-paced and requires students to be autonomous learners and complete tasks independently, we will be able to train students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 36L synchronous online

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures will be delivered through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

Resource Implications: There would be no change to resource needs for as we previously developed both online and in-person version of asynchronous and synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

BIO374H5: Modern Biotechnology

Delivery Method:

Track Changes: In Class; [Online](#); [Hybrid](#)

Rationale:

Rationale

We successfully ran this course in an online format in Summer 2023 semester and would like to continue to teach this course online to offer more flexibility for

summer students when needed. By introducing a flexible online course that is quick-paced and requires students to be autonomous learners and complete tasks independently, we will be able to train students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 36L synchronous online

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures will be delivered synchronously through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

Resource Implications: There would be no change to resource needs for as we previously developed both online and in-person version of asynchronous and synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

BIO375H5: Introductory Medical Biotechnology

Delivery Method:

Track Changes: In Class; Online; Hybrid

Rationale:

We successfully ran this course as an online course during the pandemic as well as a similar course (BIO374) online in Summer 2023 semester. We would like to propose to also teach BIO375 as online in the summer to offer more flexibility for summer students when needed. By introducing a flexible online course that is quick-paced and requires students to be autonomous learners and complete tasks independently, we will be able to train students how to take initiative and personal responsibility for their own learning, which is a learning outcome important for biology (and listed in UDLEs).

Breakdown of contact hours:

Total hours of Instruction = 36L synchronous online

Learning outcomes and course content:

The online version of this course will be based on the same learning outcomes as in-person delivery format of the course and there will be no changes in course learning outcomes or content.

Accessibility and Academic Integrity:

The online format of the course will be delivered to students through Quercus, which has accessibility checks embedded in the format. Additionally, Quercus tools such as syllabus, announcements and discussion boards within Quercus will be used to communicate important deadlines and tasks with students. A statement about academic integrity in an online setting will be included in the syllabus and OurOriginal will be used for all submitted online assessments in the course.

Active learning: Online lectures will be delivered through Zoom, which has embedded polling, annotate tool, and breakout room functions, which can be used to engage students in anonymous feedback, formative assessments, and many other active learning activities (such as think-pair-share in small group/breakout room setting).

Resource Implications: There would be no change to resource needs as we previously developed both online and in-person version of asynchronous and synchronous online content as well as Quercus course shell.

Proposal Status:

Under Review

JBH471H5: Worlds Colliding: The History and Ecology of Exploration, Contact, and Exchange

Section

UTM – History

UTM - Biology

Rationale:

We removed the History of Religions section tag as the course was listed under the History of Religions program in error.

Proposal Status:

Under Review

ERSPE0482: Comparative Physiology - Specialist (Science)

Completion Requirements:

Track Changes:

14.5 credits are required, including at least 5.0 credits at the 300/400 level, of which 1.0 credit must be at the 400 level.

First Year:

- BIO152H5 and BIO153H5
- CHM110H5 and CHM120H5
- (MAT132H5 and MAT134H5) or (MAT135H5 and MAT136H5) or (MAT137H5 and MAT139H5) or MAT137Y5
- 1.0 credit from CLA201H5 or ENV100Y5 or ERS101H5 or PHY136H5 or PHY137H5 or PSY100Y5 or WRI173H5 or WRI307H5

Note: (MAT132H5 and MAT134H5) - Calculus for Life Sciences is highly recommended.

Second Year:

- BIO202H5 and BIO203H5 and BIO205H5 and BIO206H5 and BIO207H5 and BIO208H5 and BIO209H5 and BIO259H5

Third and Fourth Years:

- BIO304H5 and BIO310H5 and BIO312H5 and BIO360H5 and BIO409H5;
- CHM242H5 and CHM243H5
- At least 2.0 credits from: BIO320H5 or **BIO324H5** or BIO347H5 or BIO353H5 or BIO354H5 or BIO361H5 or BIO368H5 or BIO372H5 or BIO404H5 or BIO408H5 or BIO410H5 or BIO411H5 or BIO412H5 or BIO414H5 or BIO417H5 or BIO419H5 or BIO422H5 or BIO429H5 or BIO481Y5 or CHM361H5 or CHM362H5 or JCB487Y5 or PHY332H5 or PHY333H5 or PSY290H5 or PSY395H5
- 1.0 additional BIO credit taken at U of T Mississauga campus

No substitute statistics course will be allowed for BIO360H5. Students may take no more than 2.0 credits combined in ROP, Internship Program, or Individual Project / Thesis courses at the 300/400-level for credit toward their Biology program. Students must consult with the Undergraduate Advisor before enrolling in any St. George course that they wish to use for credit toward any Biology program.

Description of Proposed Changes:

Missed adding course previously as course option for program.

Rationale:

Instructor for BIO324 has pointed out that BIO324 should be a course option for this program. This was an oversight previously by the department..

Impact:

Will increase course options for students to complete program.

Proposal Status:

Under Review

Chemical and Physical Sciences (UTM), Department of

9 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

AST101H5: Exploring the Solar System

Delivery Method:

Track Changes: In Class; **Online**; **Hybrid**

Rationale:

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) maybe required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

AST115H5: Cultural Astronomy

Delivery Method:

Track Changes: In Class; **Online**; **Hybrid**

Rationale:

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) may be required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

AST201H5: Exploring the Universe

Delivery Method:

Track Changes: In Class; **Online**; **Hybrid**

Rationale:

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) may be required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

AST252H5: Life in the Universe

Delivery Method:

Track Changes: In Class; **Online**; **Hybrid**

Rationale:

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) may be required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

CHM101H5: The Science of Human Health

Delivery Method:**Track Changes:** In Class; Online; Hybrid**Rationale:**

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) may be required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

CHM110H5: Chemical Principles 1

Contact Hours:**Track Changes: Lecture: 36 / Tutorial: 12 / Practical: 10 / Seminar:****Rationale:**

CHM110H5 laboratories are currently divided into five 3-hour experiments on a bi-weekly schedule. Due to space and timetabling constraints, this necessitates that many (18 of 46) labs are run in the evenings from 6-9 pm. Students are rarely enrolled in such sections because of a preference for evening labs, but because there are no other options. 6-9 pm is not an appropriate time of day for first-year undergraduates to be expected to safely perform lab experiments while also gaining the intended learning outcomes. The existing CHM110 experiment either in their current format, or in slightly modified format rarely require the full 3-hour time to be completed. It is therefore suggested that CHM110 labs be reduced from 3 hours to 2 hours.

Resources:

Reducing CHM110 labs from 3-hour to 2-hour would permit a more compressed timetable during the day, with no need for evening lab sections. It will therefore dramatically reduce the technical support requirements. A timetable with the following time slots would be able to accommodate all enrolled CHM110 students:

M, W, F: 12-2pm, 3-5pm

T, R: 9-11am, 12-2pm, 3-5pm

Proposal Status:

Under Review

CHM120H5: Chemical Principles 2

Contact Hours:**Track Changes: Lecture: 36 / Tutorial: 12 / Practical: 10 / Seminar:****Rationale:**

CHM120H5 laboratories are currently divided into five 3-hour experiments on a bi-weekly schedule. Due to space and timetabling constraints, this necessitates that many (12 of 40) labs are run in the evenings from 6-9 pm. Students are rarely enrolled in such sections because of a preference for evening labs, but because there are no other options. 6-9 pm is not an appropriate time of day for first-year undergraduates to be expected to safely perform lab experiments while also gaining the intended learning outcomes. The existing CHM120 experiment either in their current format, or in slightly modified format rarely require the full 3-hour time to be completed. It is therefore suggested that CHM120 labs be reduced from 3 hours to 2 hours.

Resources:

Reducing CHM120 labs from 3-hour to 2-hour would permit a more compressed timetable during the day, with no need for evening lab sections. It will therefore dramatically reduce the technical support requirements. A timetable with the following time slots would be able to accommodate all enrolled CHM120 students:

M, W, F: 12-2pm, 3-5pm

T, R: 9-11am, 12-2pm, 3-5pm

Proposal Status:

Under Review

CHM395H5: Chemical Synthesis Laboratory II

Description:**Track Changes:**

The second in a sequence of two laboratory courses in synthetic chemistry that builds on the foundations established in CHM394H5. Students choose their own experiments in this course from offerings comprising the synthesis of organic, organometallic and inorganic compounds ~~and in computational chemistry~~. Techniques such as working at low temperatures and in inert atmospheres (e.g., glove box) are introduced. Depending on the experiments actually chosen, a mixed organic unknown is separated and identified, organic rearrangements and the synthetic chemistry of elements from across the Periodic Table including main group, transition

elements and lanthanides are explored. A highlight is an optional four week independent synthesis project in any area of synthetic chemistry adapting procedures from the published, including recent, research literature.

Rationale:

Computational Chemistry is now taught in CHM 323H5 Introduction to Computational Chemistry and is therefore no longer carried out in CHM 395H5 Chemical Synthesis Laboratory II.

Proposal Status:

Under Review

ERS111H5: Earth, Climate & Life

Mode of Delivery:

Track Changes: In Class; [Online](#); [Hybrid](#)

Rationale:

This course is conditionally approved for this coming summer 2024 to offer as Online Synchronous. Currently, this course does not have this delivery mode as an option in CM. Therefore for future offerings, CPS is putting forward a change for a flexible delivery default option which will give CPS the autonomy to decide what form of delivery we want to offer all year round. This change will allow CPS to be flexible in our delivery to students in order to meet them where they are and open up new pedagogical opportunities.

Resources:

TA Lecture Board Moderator (TA Support) may be required for large enrolments, when courses are offered online.

Proposal Status:

Under Review

Geography, Geomatics and Environment (UTM), Department of

5 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

GGR202H5: Geography of Canada

Delivery Method:

Track Changes: In Class; **Hybrid**

Rationale:

Course is suitable for Hybrid delivery. Dept would like to pilot in Summer 2024, then continue with hybrid delivery in 2024-25 and future years.

Proposal Status:

Under Review

GGR278H5: Introduction to GIScience

Title:

Previous: Geographical Information Systems

New: **Introduction to GIScience**

Rationale:

Updated course title

Proposal Status:

Under Review

GGR305H5: Biogeography

Delivery Method:

Track Changes: In Class; **Online (Summer only)**

Rationale:

Dept would like to pilot this course online in Summer 2024

Proposal Status:

Under Review

GGR321H5: Advanced GIScience

Title:

Previous: Geographic Information Processing

New: **Advanced GIScience**

Rationale:

Updated course title

Proposal Status:

Under Review

GGR337H5: Environmental Remote Sensing

Delivery Method:

Track Changes: In Class; **Online (Summer only)**

Rationale:

The Department of Geography would like to pilot the course GGR337H5 for online delivery in Summer 2024.

Proposal Status:

Under Review

2 Minor Program Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

ERMAJ0305: GeoSpatial Data Science - Major (Science)

Title:

Previous: Geographical Information Systems - Major (Science)

New: GeoSpatial Data Science - Major (Science)

Rationale:

Updated program title to reflect breadth of curriculum.

Proposal Status:

Under Review

ERMIN0305: GeoSpatial Data Science - Minor (Science)

Title:

Previous: Geographical Information Systems - Minor (Science)

New: GeoSpatial Data Science - Minor (Science)

Rationale:

Updated program title to reflect breadth of curriculum.

Proposal Status:

Under Review

Study of University Pedagogy (UTM), Institute for the

1 New Course - UTM Sciences Divisional Undergraduate Curriculum Committee

UTM114H5: STEM in Society

Contact Hours:

Lecture: 24 / **Tutorial:** 12 / **Practical:** / **Seminar:**

Description:

This interdisciplinary course offers a practical and conceptual introduction to the nature of science. We will examine how science, technology, engineering, and mathematics (STEM) intersect with culture, history, and politics, as related to issues like social justice, sustainability, and social well-being. Active learning opportunities will help students develop their critical thinking, collaborating, and problem-solving competencies.

Corequisites:

Exclusions:

UTM108H5 or UTM109H5 or UTM110H5 or UTM111H5 or UTM112H5 or UTM113H5 or UTM115H5 or UTM116H5 or UTM117H5 or UTM118H5 or UTM119H5 or UTM190H5 or UTM191H5 or UTM192H5 or UTM193H5 or UTM194H5 or UTM195H5 or UTM196H5 or UTM197H5

Recommended Preparation:

Notes:

Delivery Method:

In Person

Distribution Requirements:

Science, Social Science

Rationale:

This topic has successfully been offered as a special topics course under the code UTM108H5 multiple times and we would now like to make it a permanent offering. This course is also part of the SEE UTM outreach program that allows underrepresented students in the PDSB to complete a transferrable university-level credit while completing their high school studies.

Resources:

Resource form submitted.

Estimated Enrolment:

55 UTM students and approximately 24 SEE UTM students each year.

Instructor:

Sheliza Ibrahim

Proposal Status:

Under Review

6 Course Modifications - UTM Sciences Divisional Undergraduate Curriculum Committee

UTM251H5: Special Topics at the Intersection of Science and Humanities

New Course Code: [ISP211H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM250, UTM251, and UTM252 (because ISP250 and ISP251 already exist). UTM251 has never been offered.

Proposal Status:

Under Review

UTM252H5: Special Topics at the Intersection of Science and Social Science

New Course Code: [ISP212H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM250, UTM251, and UTM252 (because ISP250 and ISP251 already exist). UTM252 has never been offered.

Proposal Status:

Under Review

UTM351H5: Special Topics at the Intersection of Science and Humanities

New Course Code: [ISP311H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM350, UTM351, and UTM352 (because ISP350 and ISP351 already exist). UTM351 has never been offered.

Proposal Status:

Under Review

UTM352H5: Special Topics at the Intersection of Science and Social Science

New Course Code: [ISP312H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM350, UTM351, and UTM352 (because ISP350 and ISP351 already exist). UTM352 has never been offered.

Proposal Status:

Under Review

UTM451H5: Advanced Special Topics at the Intersection of Science and Humanities

New Course Code: [ISP411H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM450, UTM451, and UTM452 (because ISP450 and ISP451 already exist). UTM451 has never been offered.

Proposal Status:

Under Review

UTM452H5: Advanced Special Topics at the Intersection of Science and Social Science

New Course Code: [ISP412H5](#)

Rationale:

Eventually, all ISUP courses will carry the ISP label. In preparation of that change, we need to re-number UTM450, UTM451, and UTM452 (because ISP450 and ISP451 already exist). UTM452 has never been offered.

Proposal Status:

Under Review