UNIVERSITY OF
TORONTO
SCARBOROUGH

OFFICE OF THE CAMPUS COUNCIL

FOR INFORMATION   **PUBLIC**   **OPEN SESSION**

TO: UTSC Academic Affairs Committee

SPONSOR: Prof. William A. Gough, Vice-Principal Academic and Dean
CONTACT INFO: 416-208-7027, vpdean.utsc@utoronto.ca

PRESENTER: Prof. Michael Souza: Acting Associate Dean, Undergraduate Programs
                     and Curriculum, OVPD
CONTACT INFO: (416) 287-7191, adundergrad.utsc@utoronto.ca

DATE: January 4, 2024 for January 11, 2024

AGENDA ITEM: 6

ITEM IDENTIFICATION:

Minor Modifications: Undergraduate Curriculum Changes – Humanities, Social Sciences, Sciences, UTSC

JURISDICTIONAL INFORMATION:

The University of Toronto Scarborough Academic Affairs Committee (AAC) "is concerned with matters affecting the teaching, learning and research functions of the Campus (*AAC Terms of Reference, 2021, Section 4*)." Under section 5.7 of its *Terms of Reference*, the Committee "receives annually from its assessors, reports on matters within its areas of responsibility."

GOVERNANCE PATH:

1. **UTSC Academic Affairs Committee [For Information] (January 11, 2024)**

PREVIOUS ACTION TAKEN:

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

HIGHLIGHTS:

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

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

This package includes minor modifications to the undergraduate curriculum, submitted by the academic units identified below. The changes are in effect as of Fall 2024, for the 2024-25 academic year.

- The Department of Computer & Mathematical Sciences (Report: Undergraduate Minor Curriculum Modifications for Information)
    - 1 program change
        - SCSPECSPARENT: SPECIALIST PROGRAM IN COMPUTER SCIENCE (SCIENCE)
    - 13 course changes
        - CSCA08H3: Introduction to Computer Science I
        - CSCA20H3: Introduction to Programming
        - CSCA48H3: Introduction to Computer Science II
        - CSCC09H3: Programming on the Web
        - CSCD25H3: Advanced Data Science
        - MATA29H3: Calculus I for the Life Sciences
        - MATA30H3: Calculus I for Physical Sciences
        - MATA31H3: Calculus I for Mathematical Sciences
        - MATA34H3: Calculus for Management
        - MATA35H3: Calculus II for Biological Sciences
        - MATA36H3: Calculus II for Physical Sciences
        - MATA37H3: Calculus II for Mathematical Sciences
        - STAC51H3: Categorical Data Analysis

- The Department of Psychology (Report: Undergraduate Minor Curriculum Modifications for Information)
    - 11 program changes
        - SCMAJ1160: Major Program in Psychology (SCIENCE)
        - SCMAJ1160C: Major (CO-OPERATIVE) Program in Psychology (SCIENCE)
        - SCSPE1160: Specialist Program in Psychology (SCIENCE)
        - SCSPE1160A: Specialist (CO-OPERATIVE) Program in Psychology
        - SCMAJ1160N: Major (CO-OPERATIVE) Program in Mental Health Studies
        - SCMAJ1472: Major Program in Neuroscience
        - SCMAJ1472C: Major (CO-OPERATIVE) Program in Neuroscience
        - SCSPE1172: Specialist Program in Neuroscience – Cognitive Stream
        - SCSPE1172C: Specialist (CO-OPERATIVE) Program in Neuroscience – Cognitive Stream
        - SCSPENROPARENT: Specialist Program in Neuroscience
        - SCSPECoopNROPARENT: Specialist (CO-OPERATIVE) Program in Neuroscience
    - 6 course changes
        - PSYC08H3: Advanced Data Analysis in Psychology
        - PSYC09H3: Applied Multiple Regression in Psychology
        - PSYC31H3: Neuropsychological Assessment
        - PSYC34H3: The Psychology of Happiness and Meaning
        - PSYC81H3: Psychology for Sustainability
        - PSYC62H3: Drugs and the Brain
    - 2 retired courses
        - PSYC33H3: Neuropsychological Rehabilitation
        - PSYD11H3: Psychology of Interpersonal Relationships

FINANCIAL IMPLICATIONS:

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

RECOMMENDATION:

This item is presented for information only.

DOCUMENTATION PROVIDED:

1. 2024-25 Curriculum Cycle Undergraduate Minor Curriculum Modifications for Information Report: Minor Modifications for Information, dated January 11, 2024

2024-25 Curriculum Cycle
Undergraduate Minor Curriculum Modifications for Information
January 11, 2024

Table of Contents

Computer & Mathematical Sciences (UTSC), Department of

1 Minor Program Modification Full Review

SCSPECSPARENT: SPECIALIST PROGRAM IN COMPUTER SCIENCE (SCIENCE)

Completion Requirements:

Program Requirements
The program requirements comprise a core of 18 courses (9.0 credits), common to all streams and additional requirements which depend on the stream, for a total of 27 courses (13.5 credits) for the Comprehensive, Software Engineering, and Entrepreneurship streams, and 29 courses (14.5 credits) for the Information Systems stream.

Note: Many Computer Science courses are offered both at U of T Scarborough and at the St. George campus. When a course is offered at both campuses in a given session, U of T Scarborough students are expected to take that course at U of T Scarborough. The Department of Computer Science at the St. George campus cannot guarantee space for U of T Scarborough students in their courses, especially those offered at both campuses.

Core (9.0 credits)

1. Writing Requirement (0.5 credit)*
0.5 credit from the following: ANTA01H3, ANTA02H3, CLAA06H3, (CTLA19H3), CTLA01H3, ENGA10H3, ENGA11H3, ENGB06H3, ENGB07H3, ENGB08H3, ENGB09H3, ENGB17H3, ENGB19H3, ENGB50H3, (ENGB51H3), GGRA02H3, GGRA03H3, GGRB05H3, (GGRB06H3), (HISA01H3), (HLTA01H3), ACMA01H3, (HUMA01H3), (HUMA11H3), (HUMA17H3), (LGGA99H3), LINA01H3, PHLA10H3, PHLA11H3, WSTA01H3.
*Note: It is recommended that this requirement be satisfied by the end of the second year.

2. A-level courses (3.0 credits)
CSCA08H3 Introduction to Computer Science I
CSCA48H3 Introduction to Computer Science II
CSCA67H3 Discrete Mathematics
MATA22H3 Linear Algebra I for Mathematical Sciences
MATA31H3 Calculus I for Mathematical Sciences
MATA37H3 Calculus II for Mathematical Sciences

3. B-level courses (3.5 credits)
CSCB07H3 Software Design
CSCB09H3 Software Tools and Systems Programming
CSCB36H3 Introduction to the Theory of Computation
CSCB58H3 Computer Organization
CSCB63H3 Design and Analysis of Data Structures
MATB24H3 Linear Algebra II
STAB52H3 Introduction to Probability

4. C-level courses (1.5 credits)
CSCC43H3 Introduction to Databases
CSCC69H3 Operating Systems
CSCC73H3 Algorithm Design and Analysis

5. D-level courses (0.5 credit)
CSCD03H3 Social Impact of Information Technology

A. Comprehensive Stream
This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-5 common to all streams, 9 other distinct courses (4.5 credits) must be chosen to satisfy all of the following requirements:

6. Additional required courses (2.5 credits)
CSCC24H3 Principles of Programming Languages
CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
CSCC63H3 Computability and Computational Complexity
CSCD37H3 Analysis of Numerical Algorithms for Computational Mathematics
MATB41H3 Techniques of the Calculus of Several Variables I

7. Electives from courses on computer systems and applications (1.0 credit)
Choose from:
CSCC01H3 Introduction to Software Engineering
CSCC09H3 Programming on the Web
CSCC10H3 Human-Computer Interaction
CSCC11H3 Introduction to Machine Learning and Data Mining
CSCC46H3 Social and Information Networks
CSCC85H3 Fundamentals of Robotics and Automated Systems
CSCD01H3 Engineering Large Software Systems
CSCD18H3 Computer Graphics
CSCD25H3 Advanced Data Science~~Analysis~~
CSCD27H3 Computer and Network Security
CSCD43H3 Database System Technology
CSCD58H3 Computer Networks
CSCD70H3 Compiler Optimization
CSCD84H3 Artificial Intelligence
CSC320H Visual Computing
CSC321H Introduction to Neural Networks and Machine Learning
CSC401H Natural Language Computing
CSC469H Operating Systems Design and Implementation
CSC485H Computational Linguistics
CSC488H Compilers and Interpreters

8. Electives from courses related to the theory of computing (0.5 credit)
Choose from:
MATC09H3 Introduction to Mathematical Logic
MATC32H3 Graph Theory and Algorithms for its Applications
MATC44H3 Introduction to Combinatorics
MATD16H3 Coding Theory and Cryptography
CSC438H Computability and Logic
CSC448H Formal Languages and Automata
CSC465H Formal Methods in Software Design

9. CSC, MAT, or STA elective (0.5 credit)
Any C- or D-level CSC, MAT, or STA course, excluding MATC82H3, MATC90H3, STAC32H3, STAC53H3 and STAD29H3.

B. Software Engineering Stream
This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-5 common to all streams, 9 other distinct courses (4.5 credits) must be chosen to satisfy all of the following requirements:

6. Additional required courses (3.0 credits)
CSCC01H3 Introduction to Software Engineering
CSCC24H3 Principles of Programming Languages
CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
CSCC63H3 Computability and Computational Complexity
CSCD01H3 Engineering Large Software Systems
MATB41H3 Techniques of the Calculus of Several Variables I

7. Electives from courses on computer systems and applications (1.5 credits)
Choose from:
CSCC09H3 Programming on the Web
CSCC10H3 Human-Computer Interaction
CSCC11H3 Introduction to Machine Learning and Data Mining
CSCC46H3 Social and Information Networks
CSCC85H3 Fundamentals of Robotics and Automated Systems
CSCD18H3 Computer Graphics
CSCD25H3 Advanced Data Science~~Analysis~~
CSCD27H3 Computer and Network Security
CSCD43H3 Database System Technology
CSCD58H3 Computer Networks
CSCD70H3 Compiler Optimization
CSCD84H3 Artificial Intelligence
CSC320H Visual Computing
CSC321H Introduction to Neural Networks and Machine Learning
CSC401H Natural Language Computing
CSC469H Operating Systems Design and Implementation
CSC485H Computational Linguistics
CSC488H Compilers and Interpreters

C. Information Systems Stream
This stream requires a total of 29 courses (14.5 credits). In addition to the core requirements 1-5 common to all streams, 11 other distinct courses (5.5 credits) must be chosen to satisfy all of the following requirements:

6. Required management courses (1.5 credits)
MGTA01H3 Introduction to Business
MGTA02H3 Managing the Business Organization
MGHB02H3 Managing People and Groups in Organizations

7. Additional required mathematics and computer science courses (3.0 credits)
CSCC01H3 Introduction to Software Engineering
CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
CSCC63H3 Computability and Computational Complexity
CSCD01H3 Engineering Large Software Systems
CSCD43H3 Database System Technology
MATB41H3 Techniques of the Calculus of Several Variables I

8. Electives from courses on computer systems and applications (1.0 credit)
Choose from:
CSCC09H3 Programming on the Web
CSCC10H3 Human-Computer Interaction
CSCC11H3 Introduction to Machine Learning and Data Mining
CSCC46H3 Social and Information Networks
CSCC85H3 Fundamentals of Robotics and Automated Systems
CSCD18H3 Computer Graphics
CSCD25H3 Advanced Data Science~~Analysis~~
CSCD27H3 Computer and Network Security
CSCD58H3 Computer Networks
CSCD70H3 Compiler Optimization
CSCD84H3 Artificial Intelligence
CSC320H Visual Computing
CSC321H Introduction to Neural Networks and Machine Learning
CSC401H Natural Language Computing
CSC469H Operating Systems Design and Implementation
CSC485H Computational Linguistics
CSC488H Compilers and Interpreters

D. Entrepreneurship Stream
This stream requires a total of 27 courses (13.5 credits). In addition to the core requirements 1-5 common to all streams, 9 other distinct courses (4.5 credits) must be chosen to satisfy all of the following requirements:

6. Additional required courses (3.0 credits)
CSCC01H3 Introduction to Software Engineering
CSCC37H3 Introduction to Numerical Algorithms for Computational Mathematics
CSCC63H3 Computability and Computational Complexity
CSCD01H3 Engineering Large Software Systems
CSCD54H3 Technology Innovation and Entrepreneurship
CSCD90H3 The Startup Sandbox

7. Electives from courses in computer science, mathematics, and statistics (1.5 credits)
Choose from:
CSCC09H3 Programming on the Web
CSCC10H3 Human-Computer Interaction
CSCC11H3 Introduction to Machine Learning and Data Mining
CSCC24H3 Principles of Programming Languages
CSCC46H3 Social and Information Networks
CSCC85H3 Fundamentals of Robotics and Automated Systems
CSCD18H3 Computer Graphics
CSCD25H3 Advanced Data Science~~Analysis~~
CSCD27H3 Computer and Network Security
CSCD43H3 Database System Technology
CSCD58H3 Computer Networks
CSCD70H3 Compiler Optimization
CSCD84H3 Artificial Intelligence
MATB41H3 Techniques of the Calculus of Several Variables I
STAB57H3 Introduction to Statistics
CSC320H Visual Computing
CSC321H Introduction to Neural Networks and Machine Learning
CSC401H Natural Language Computing
CSC469H Operating Systems Design and Implementation
CSC485H Computational Linguistics
CSC488H Compilers and Interpreters

Description of Proposed Changes:
Update CSCD25H3 course title change in program listing.

Rationale:
CSCD25H3 title change has been submitted for approval. The new course title is a better description of the existing focus/content of the course.

Consultations:
Approved by DCC Oct 4, 2023.

13 Course Modifications

CSCA08H3: Introduction to Computer Science I

Description:

Programming in an object-oriented language such as Python. Program structure: elementary data types, statements, control flow, functions, classes, objects, methods. Lists; searching, sorting and complexity. This course is intended for students having a serious interest in higher level computer science courses or planning to complete a computer science program.

Prerequisites:

Grade 12 Calculus and Vectors and [one other Grade 12 mathematics course~~.~~ or CTL Math Preparedness course with additional resources for CMS students]

Exclusions:
CSCA20H3, CSC108H, CSC110H, CSC120H. CSCA08H3 may not be taken after or concurrently with CSCA48H3~~.~~. CSC110H cannot be taken after or concurrently with CSC111H.

Rationale:
The course prerequisites have been revised to ensure students are able to meet the demands of the course. The course exclusions have been revised to identify courses with similar or overlapping content.

Consultation:
CTL: They teach the CTL Math preparedness course for CMS students. CS Department at StG campus: for the CSC110/111 new courses. Approved by DCC Oct 4, 2023.

CSCA20H3: Introduction to Programming

Exclusions:
CSCA08H3, CSC108H, ~~CSC120H~~ CSC110H, CSC120H. CSC110H cannot be taken after or at the same time as CSC111H.

Rationale:
The course exclusions have been revised to identify courses with similar or overlapping content.

Consultation:
CS Department at StG campus: for the CSC110/111 new courses. Approved by DCC Oct 4, 2023.

CSCA48H3: Introduction to Computer Science II

Exclusions:
CSC148H, CSC111H

Rationale:
The course exclusions have been revised to identify courses with similar or overlapping content.

Consultation:
CS Department at StG campus. Approved by DCC Oct 4, 2023.

CSCC09H3: Programming on the Web

Prerequisites:
CSCB09H3 and ~~CSCC43H3 and~~ [CGPA 3.5 or enrolment in a CSC Subject POSt]

Corequisites:
CSCC43H3

Rationale:
The course was originally taught in the Winter but was recently moved to the Fall. The problem is that one of its prerequisites CSCC43 is also taught in the Fall. We want to make it possible for students to take this course in their 3rd year. Therefore, the idea is to make CSCC43 a corequisite instead of a prerequisite.

Consultation:
Approved by DCC Oct 4, 2023.

CSCD25H3: Advanced Data Science

Title:
Advanced Data ~~Analysis~~ Science

Rationale:
The course title/description has been revised to better reflect the topics and content covered in this course.

Consultation:
Course instructor consulted.
Approved by DCC Oct 4, 2023.

MATA29H3: Calculus I for the Life Sciences

Exclusions:
(MATA20H3), (MATA27H3), MATA30H3, MATA31H3, (MATA32H3), MATA34H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y

Rationale:
Remove all reference to MAT134 & MAT135 in the UTSC math calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

MATA30H3: Calculus I for Physical Sciences

Exclusions:
(MATA20H3), (MATA27H3), MATA29H3, MATA31H3, (MATA32H3), MATA34H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y

Rationale:
Remove all reference to MAT134 & MAT135 in the calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

MATA31H3: Calculus I for Mathematical Sciences

Exclusions:
(MATA20H3), (MATA27H3), MATA29H3, MATA30H3, (MATA32H), MATA34H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y

Rationale:
Remove all reference to MAT134 & MAT135 in the calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

MATA34H3: Calculus for Management

Exclusions:
MATA30H3, MATA31H3, MATA33H3, MAT133Y

Rationale:
Management students (not Double Degree) who have already taken MATA32H3 only, should take MATA34H3. MATA32H3 will become an elective for credit. Adding MATA33H3 as exclusion to MATA34H3 solves this problem.

Consultation:
Approved by DCC Oct 4, 2023.
Syed Ahmed (MGT) & Iris Au (MGT) agreed to this change on Oct. 2, 2023.

MATA35H3: Calculus II for Biological Sciences

Exclusions:

(MATA21H3), (MATA33H3), MATA34H3, MATA36H3, MATA37H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y, (MATA27H3)

Rationale:
Remove all reference to MAT134 & MAT135 in the calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

MATA36H3: Calculus II for Physical Sciences

Exclusions:
(MATA21H3), MATA35H3, MATA37H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y

Rationale:
Remove all reference to MAT134 & MAT135 in the calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

MATA37H3: Calculus II for Mathematical Sciences

Exclusions:
(MATA21H3), (MATA33H3), MATA34H3, MATA35H3, MATA36H3, MAT123H, MAT124H, MAT125H, MAT126H, MAT133Y, ~~MAT135Y,~~ MAT137H5 and MAT139H5, MAT157H5 and MAT159H5, JMB170Y

Rationale:
Remove all reference to MAT134 & MAT135 in the calendar entries. These courses were removed by UTM over 5 years ago so they can be removed from the UTSC academic calendar now.

Consultation:
UTM contacted us to let us know the courses can be removed from our academic calendar.
Approved by DCC Oct 4, 2023.

STAC51H3: Categorical Data Analysis

Prerequisites:
STAC67H3 ~~STAB27H3 or STAB57H3 or MGEB12H3 or PSYC08H3~~

Rationale:
The course prerequisites have been revised to better prepare students for meeting the course requirements. STAC51 primarily focuses on generalized linear models, and possessing a background in STAC67 is crucial for students to grasp the course material effectively.
STAB57 is a prerequisite for STAC67. As such, we have streamlined the prerequisites by including only STAC67, eliminating the need to list STAB57 separately.
The prerequisites for this course have been updated to exclude MGEB12 and PSYC08. This adjustment reflects the fact that these courses do not emphasize the same level of mathematical rigor as STAB57 or STAC67. In addition, the course will be tailored to meet the needs of students either majoring in or specializing in Statistics.

Consultation:
On October 12, 2023, an internal consultation occurred involving course instructors, the supervisor of the Applied Statistics minor program, and the associate chair.
Approved by DCC October 13, 2023.

Psychology, Department of

11 Minor Program Mod Expedited Reviews

SCMAJ1160: MAJOR PROGRAM IN PSYCHOLOGY

Completion Requirements:

Program Requirements
The Program requires completion of 7.0 credits, of which at least 2.0 credits must be at the C- or D-level:

1. Introduction to Psychology (1.0 credit):
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Laboratory Methods (0.5 credit):
[PSYB70H3 Methods in Psychological Science or (PSYB01H3) Psychological Research Laboratory or (PSYB04H3) Foundations in Psychological Research]

3. Statistical Methods (0.5 credit):
[PSYB07H3 Data Analysis in Psychology or STAB22H3 Statistics I or STAB23H3 Introduction to Statistics for the Social Sciences]

4. Breadth in Psychology at the B-level and C-level (2.5 credits)
Students are required to take 1.5 credits from one of the groups and 1.0 credit from the other group:
a. Social and Developmental (courses listed in the 10- and 20-series)
b. Perception, Cognition and Physiology (courses listed in the 50- and 60-series)

5. Seminar in Psychology at the D-level (0.5 credit)
All PSY D-level courses are considered "seminars", with the exception of PSYD98Y3.

6. Additional credits in Psychology at the B-level or higher (2.0 credits)
Of the 2.0 credits, at least 1.0 credit must be at the C-level. Supervised study [PSYC90H3 or PSYC93H3] or thesis [PSYD98Y3] courses may be used to fulfill a maximum of 0.5 credit.

Description of Proposed Changes:
Specified that "Additional Credits in PSY" must be at the B-level or higher

Rationale:
Students with AP/IB high school transfer credits receive generic A-level PSY transfer credits, but can still complete PSYA01 and PSYA02 at UTSC. If students take PSYA01/A02 at UTSC, then their extra PSY transfer credits are being picked up toward the "additional credits in PSY" requirement, essentially allowing intro psych courses to count twice in their program. By specifying that the courses for this requirement must be be at the B-level of higher, we eliminate this issue.

Impact:
Prevents students from double-counting intro psych courses toward their programs.

Consultations:
DCC approved Oct 4, 2023

Resource Implications:
None

SCMAJ1160C: MAJOR (CO-OPERATIVE) PROGRAM IN PSYCHOLOGY

Completion Requirements:

Academic Program Requirements
Students must complete the program requirements as described in the Major in Psychology.

Co-op Program Requirements
Students must satisfactorily complete Co-op work term(s) as follows: three 4-month work terms, one 4-month work term and one 8-month work term, or one 12-month work term.

To be eligible for their first work term, students must be enrolled in the Major (Co-op) in Psychology and have completed at least 7.0 credits, achieve a cumulative GPA of 2.5 or higher, and complete COPB50H3 and COPB51H3. It is recommended that PSYB07H3, PSYB70H3, and an additional 1.0 PSY B-level credits be completed before the first work term.

Students must be available for work terms in each of the Fall, Winter, and Summer semesters and must complete at least one of their required work terms in either a Fall or Winter semester. This requires that students take courses during at least one Summer semester.

Co-op Course Requirements
In addition to their academic program requirements, Co-op students complete the following Co-op specific courses as part of their degree:
- Co-op Preparation courses: COPB50H3 and COPB51H3 (completed in first year)
- Work Term Search courses: COPB52H3 (semester prior to first work term), COPC98H3 (semester prior to second work term), and COPC99H3 (semester prior to third work term)
- Co-op Work Term courses: COPC40H3 (each semester a student is on work term)

These courses are designed to prepare students for their job search and work term experience, and to maximize the benefits of their Co-op work terms. They must be completed in sequence, and fall into three categories: Co-op Preparation courses (COPB50H3 & COPB51H3) are completed in first year, and cover a variety of topics intended to assist students in developing the skills and tools required to secure a work term; Work Term Search Courses (COPB52H3, COPC98H3, & COPC99H3) are completed in the semester prior to each work term, and support students while competing for work terms that are appropriate to their program of study, as well as preparing students for the transition into and how to succeed the workplace; Co-op Work Term courses (COPC40H3) are completed during each semester that a student is on work term, and support students' success while on work term, as well as connecting their academics and the workplace experience.

Co-op courses are taken in addition to a full course load. They are recorded on transcripts as credit/no credit (CR/NCR) and are considered to be additive credit to the 20.0 required degree credits. No additional course fee is assessed as registration is included in the Co-op Program fee.

For information on fees, status in Co-op programs, and certification of completion of Co-op programs, see ~~the 6B.5 Co-operative Programs section or~~ the Arts and Science Co-op section in the UTSC *Calendar*.

Description:

Academic Program Advisor: ~~A. Lawson Email: psychology-coop@utsc.utoronto.ca~~ psychundergrad.utsc@utoronto.ca
Co-op Program Co-ordinator: ~~C. Dixon Email:~~ coopsuccess.utsc@utoronto.ca

The Major (Co-op) in Psychology is a Work Integrated Learning (WIL) program that combines academic studies with paid work terms in the public, private, and/or non-profit sectors. The program provides students with the opportunity to develop the academic and professional skills required to pursue employment in these areas, or to continue on to graduate training in an academic field related to Psychology upon graduation.

Enrolment Requirements:

Enrolment in the Program is limited. Admission will require:
(a.) completion of any Grade 12 U/M high school math course or equivalent (or successful completion of the UTSC Online Mathematics Preparedness Course or equivalent), and

(b.) completion of Grade 12 U/M high school biology or equivalent (or BIOA11H3 or equivalent), and
(c.) completion of a minimum of 4.0 UTSC credits, including 1.0 credit in Psychology, and
(d.) a cumulative GPA of at least 2.5, and
(e.) either (1) a final grade of 67% or higher in both PSYA01H3 and PSYA02H3, or (2) a final grade of 60% or higher in both PSYA01H3 and PSYA02H3, and a final grade of 72% or higher in two B-level psychology courses, and

Current Co-op Students:
Students admitted to a Co-op Degree POSt in their first year of study must request a Co-op Subject POSt on ACORN upon completion of 4.0 credits and must meet the minimum qualifications for entry as noted above for this program.

Prospective Co-op Students:
Prospective Co-op students (i.e., those not yet admitted to a Co-op Degree POSt) must submit a program request on ACORN, and meet the minimum qualifications noted above. Deadlines follow the Limited Enrolment Program Application Deadlines set by the Office of the Registrar each year. Failure to submit the program request on ACORN will result in that student's application not being considered.

Description of Proposed Changes:
1. Adding cGPA of 2.5 as enrolment requirement.
2. Adding [PSYB07, PSYB70, and 1.0 additional PSY B-level credits] as recommendations before first work term.
3. Updating contact email
4. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

Rationale:
1. The 2.5 cGPA requirement is standard for co-op programs. This was left out in error when the proposal was submitted last Spring.

2. In order for students to enter their work terms with sought-after data analysis and research skills that are considered assets by many employers, we recommend that students complete PSYB07 (Data Analysis in Psychology) and PSYB70 (Methods in Psychological Science) prior to their first work term. To ensure students have been exposed to breadth in discipline before placements, we also recommend they complete 1.0 additional B-level courses in Psychology before first work term. This mirrors the recommendations given to students in our Co-op Specialist program.

PSYB07 (or equivalent) and PSYB70 are prerequisites for all C- and D-level psychology courses, so it is generally helpful for students to complete these courses as earlier in their degree as possible. These recommendations encourage students to take these courses early, and thus will allow them more flexibility in course selection and work term sequencing as they progress through the program.

Note that although [STAB22 or STAB23] are alternatives to PSYB07 in the program requirements, we are only including PSYB07 in our recommendations, since this is the preferred course that will best prepare students for work in Psychology.

3. Contact information was out of date

Impact:
1. None - this is a new program, and the cPGA requirement was left out in error. This is the standard minimum GPA across all Co-op programs
2. Students who follow these recommendations will be better prepared for placements in the area of Psychology, and will have a competitive advantage when applying to positions. Previous information communicated to us by the Co-op Office indicates that these courses are valued by employers.

Consultations:
Consulted with Cynthia Jairam in the Co-op office regarding the cGPA.
Psychology Departmental Curriculum Committee: Sept 14, 2023
Approved by DCC on Oct 4, 2023

Resource Implications:
None. These courses are already part of the program requirements, we are just providing recommendations on *when* these students should take them.

SCSPE1160: SPECIALIST PROGRAM IN PSYCHOLOGY

Completion Requirements:

Program Requirements

The Program requires completion of 12.5 credits, including at least 4.0 credits at the C- or D-level, of which at least 1.0 credit must be at the D-level:

1. Introduction to Psychology (1.0 credit)
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Laboratory Methods (1.5 credits)
[PSYB70H3 Methods in Psychological Science *or* (PSYB01H3) Psychological Research Laboratory]
PSYC70H3 Advanced Research Methods Laboratory
and
0.5 credit from among the following:
(PSYC06H3 Psychophysiology Laboratory)
[PSYC71H3 *or* (PSYC11H3) Social Psychology Laboratory]
[PSYC72H3 *or* (PSYC26H3) Developmental Psychology Laboratory]
[PSYC74H3 *or* (PSYC05H3) Human Movement Laboratory]
PSYC75H3 Cognitive Psychology Laboratory
[PSYC76H3 *or* (PSYC04H3) Brain Imaging Laboratory]

3. Statistical Methods (1.0 credit)
PSYB07H3 Data Analysis in Psychology
[PSYC08H3 Advanced Data Analysis in Psychology *or* PSYC09H3 Applied Multiple Regression in Psychology]

4. PSYC02H3 Scientific Communication in Psychology (0.5 credit)

5. PSYC85H3 History of Psychology (0.5 credit)

6. Breadth in Psychology at the B-level and C-level (5.0 credits)
Students are required to take 3.0 credits at the B-level or C-level from one of the two content groups listed below and 2.0 credits from the other group:
(a) Social and Developmental (courses listed in the 10- and 20-series)
(b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)

7. Seminars in Psychology at the D-level (1.0 credit)
All PSY D-level courses are considered "seminars", with the exception of PSYD98Y3. Students must take 0.5 credit from each grouping below:
(a) Social and Developmental (courses listed in the 10- and 20-series)
(b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)

8. Additional credits in Psychology at the B-level or higher (2.0 credits)
Of the 2.0 credits, at least 1.0 credit must be at the C-level. Supervised study [PSYC90H3 or PSYC93H3] *or* thesis [PSYD98Y3] courses may be used to fulfill a maximum of 0.5 credit.

Description of Proposed Changes:
Specified that "Additional Credits in PSY" must be at the B-level or higher

Rationale:
Students with AP/IB high school transfer credits receive generic A-level PSY transfer credits, but can still complete PSYA01 and PSYA02 at UTSC. If students take PSYA01/A02 at UTSC, then their extra PSY transfer credits are being picked up toward the "additional credits in PSY" requirement, essentially allowing intro psych courses to count twice in their program. By specifying that the courses for this requirement must be be at the B-level of higher, we eliminate this issue.

Impact:
Prevents students from double-counting intro psych courses toward their programs.

Consultations: DCC approved Oct 4, 2023	
Resource Implications: None	

SCSPE1160A: SPECIALIST (CO-OPERATIVE) PROGRAM IN PSYCHOLOGY

Completion Requirements:

Academic Program Requirements

The program requires students to complete a total of 12.5 credits, including at least 4.0 credits at the C- or D-level, of which at 1.0 credit must be at the D-level:

1. Introduction to Psychology (1.0 credit)
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Laboratory Methods (1.5 credits)
PSYB70H3 Methods in Psychological Science
PSYC70H3 Advanced Research Methods Laboratory
and 0.5 credit from among the following:
PSYC71H3 Social Psychology Laboratory
PSYC72H3 Developmental Psychology Laboratory
PSYC74H3 Human Movement Laboratory
PSYC75H3 Cognitive Psychology Laboratory
PSYC76H3 Brain Imaging Laboratory

3. Statistical Methods (1.0 credit)
PSYB07H3 Data Analysis in Psychology
[PSYC08H3 Advanced Data Analysis in Psychology *or* PSYC09H3 Applied Multiple Regression in Psychology]

4. PSYC02H3 Scientific Communication in Psychology (0.5 credit)

5. PSYC85H3 History of Psychology (0.5 credit)

6. Breadth in Psychology at the B-level and C-level (5.0 credits)
Students are required to take 3.0 credits at the B-level or C-level from one of the two content groups listed below and 2.0 credits from the other group:
(a) Social and Developmental (courses listed in the 10- and 20-series)
(b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)

7. Seminars in Psychology at the D-level (1.0 credit)
All PSY D-level courses are considered "seminars", with the exception of PSYD98Y3. Students must take 0.5 credit from each grouping below:
(a) Social and Developmental (courses listed in the 10- and 20-series)
(b) Perception, Cognition and Physiology (courses listed in the 50- and 60-series)

8. Additional credits in Psychology at the B-level or higher (2.0 credits)
Of the 2.0 credits, at least 1.0 credit must be at the C-level. Supervised study [PSYC90H3 or PSYC93H3] *or* thesis [PSYD98Y3] courses may be used to fulfill a maximum of 0.5 credit.

Co-op Program Requirements
Students must satisfactorily complete Co-op work term(s) as follows: three 4-month work terms, one 4-month work term and one 8-month work term, or one 12-month work term.

To be eligible for their first work term, students must be enrolled in the Specialist Co-op Program in Psychology and have completed at least 7.0 credits, achieve a cumulative GPA of 2.5 or higher, and complete COPB50H3 and COPB51H3. It is recommended that PSYB07H3 and PSYB70H3 be completed before the first work term, and PSYC02H3 and [PSYC08H3 or

~~PSYC09H3] be completed before the second work term.~~ It is recommended that PSYB07H3, <u>PSYB70H3, and 1.0 additional PSY B-level credits</u> be completed before the first work term, and <u>PSYC02H3,</u>[PSYC08H3 or <u>PSYC09H3]</u>, and PSYC70H3 be completed before the second work term.

Students must be available for work terms in each of the Fall, Winter, and Summer semesters and must complete at least one of their required work terms in either a Fall or Winter semester. This requires that students take courses during at least one Summer semester.

Co-op Course Requirements
In addition to their academic program requirements, Co-op students complete the following Co-op specific courses as part of their degree:
- Co-op Preparation courses: COPB50H3 and COPB51H3 (completed in first year)
- Work Term Search courses: COPB52H3 (semester prior to first work term), COPC98H3 (semester prior to second work term), and COPC99H3 (semester prior to third work term)
- Co-op Work Term courses: COPC40H3 (each semester a student is on work term)

These courses are designed to prepare students for their job search and work term experience, and to maximize the benefits of their Co-op work terms. They must be completed in sequence, and fall into three categories: Co-op Preparation courses (COPB50H3 & COPB51H3) are completed in first year, and cover a variety of topics intended to assist students in developing the skills and tools required to secure a work term; Work Term Search Courses (COPB52H3, COPC98H3, & COPC99H3) are completed in the semester prior to each work term, and support students while competing for work terms that are appropriate to their program of study, as well as preparing students for the transition into and how to succeed the workplace; Co-op Work Term courses (COPC40H3) are completed during each semester that a student is on work term, and support students' success while on work term, as well as connecting their academics and the workplace experience.

Co-op courses are taken in addition to a full course load. They are recorded on transcripts as credit/no credit (CR/NCR) and are considered to be additive credit to the 20.0 required degree credits. No additional course fee is assessed as registration is included in the Co-op Program fee.

For information on fees, status in Co-op programs, and certification of completion of Co-op programs, see ~~the 6B.5 Co-operative Programs section or~~ the <u>Arts and Science Co-op</u> section in the UTSC *Calendar*.

Description:
Academic Program Advisor: ~~A. Lawson~~ psychundergrad.utsc@utoronto.ca
Co-op Program Coordinator: ~~C. Dixon~~ coopsuccess.utsc@utoronto.ca
The Specialist (Co-op) Program in Psychology is a Work Integrated Learning (WIL) program that combines academic studies with paid work terms in the public, private, and/or non-profit sectors. The program provides students with the opportunity to develop the academic and professional skills required to pursue employment in these areas, or to continue on to graduate training in an academic field related to Psychology upon graduation.
In addition to their academic course requirements, students must successfully complete the additive Arts & Science Co-op Work Term and Course requirements.

Description of Proposed Changes:
1. Specified that "Additional Credits in PSY" must be at the B-level or higher
2. Updated work term prerequisite recommendations
3. Updating to generic contact information
4. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

Rationale:
1. Students with AP/IB high school transfer credits receive generic A-level PSY transfer credits, but can still complete PSYA01 and PSYA02 at UTSC. If students take PSYA01/A02 at UTSC, then their extra PSY transfer credits are being picked up toward the "additional credits in PSY" requirement, essentially allowing intro psych courses to count twice in their program. By specifying that the courses for this requirement must be be at the B-level of higher, we eliminate this issue.
2. To ensure students have been exposed to breadth in discipline before placements, we are adding a recommendation to complete 1.0 additional B-level courses in Psychology before first work term. We are adding PSYC70 (Advanced Research Methods Laboratory) as a recommendation before second work term so that students will have a more advanced research foundation when applying to placements. This pairing of PSYB70 before first work term and PSYC70 before second work

term is parsimonious with our statistics recommendations (PSYB07 before first work term and PSYC08/C09 before second work term.) These courses provide sought-after data analysis and research skills that are considered assets by many employers.
3. Generic contact information without specific names will mean fewer updates are needed to the Calendar during staff transitions.

Impact:
1.Prevents students from double-counting intro psych courses toward their programs.
2. Students who follow these recommendations will be better prepared for placements in the area of Psychology, and will have a competitive advantage when applying to positions.

Consultations:
1. DCC approved Oct 4, 2023
2. DCC approved Sept 14, 2023

Resource Implications:
None

SCMAJ1160N: MAJOR (CO-OPERATIVE) PROGRAM IN MENTAL HEALTH STUDIES

Completion Requirements:

Academic Program Requirements
Students must complete the program requirements as described in the Major in Mental Health Studies.

Co-op Work Program Requirements
Students must satisfactorily complete Co-op work term(s) as follows: three 4-month work terms, one 4-month work term and one 8-month work term, or one 12-month work term.

To be eligible for their first work term, students must be enrolled in the Major (Co-op) in Mental Health Studies and have completed at least 7.0 credits, achieve a cumulative GPA of 2.5 or higher, and complete COPB50H3 and COPB51H3. It is recommended that PSYB07H3, PSYB32H3, PSYB55H3, and PSYB70H3 be completed before the first work term.

Students must be available for work terms in each of the Fall, Winter, and Summer semesters and must complete at least one of their required work terms in either a Fall or Winter semester. This requires that students take courses during at least one Summer semester.

Co-op Course Requirements
In addition to their academic program requirements, Co-op students complete the following Co-op specific courses as part of their degree:
- Co-op Preparation courses: COPB50H3 and COPB51H3 (completed in first year)
- Work Term Search courses: COPB52H3 (semester prior to first work term), COPC98H3 (semester prior to second work term), and COPC99H3 (semester prior to third work term)
- Co-op Work Term courses: COPC40H3 (each semester a student is on work term)

These courses are designed to prepare students for their job search and work term experience, and to maximize the benefits of their Co-op work terms. They must be completed in sequence, and fall into three categories: Co-op Preparation courses (COPB50H3 & COPB51H3) are completed in first year, and cover a variety of topics intended to assist students in developing the skills and tools required to secure a work term; Work Term Search Courses (COPB52H3, COPC98H3, & COPC99H3) are completed in the semester prior to each work term, and support students while competing for work terms that are appropriate to their program of study, as well as preparing students for the transition into and how to succeed the workplace; Co-op Work Term courses (COPC40H3) are completed during each semester that a student is on work term, and support students' success while on work term, as well as connecting their academics and the workplace experience.

Co-op courses are taken in addition to a full course load. They are recorded on transcripts as credit/no credit (CR/NCR) and are considered to be additive credit to the 20.0 required degree credits. No additional course fee is assessed as registration is included in the Co-op Program fee.

For information on fees, status in Co-op programs, and certification of completion of Co-op programs, see ~~the 6B.5 Co-operative Programs section or~~ the Arts and Science Co-op section in the UTSC *Calendar*.

Description:

Academic Program Advisor: ~~A. Lawson Email: psychology-coop@utsc.utoronto.ca~~ psychundergrad.utsc@utoronto.ca
Co-op Program Co-ordinator: ~~C. Dixon Email:~~ coopsuccess.utsc@utoronto.ca

The Major (Co-op) in Mental Health Studies is a Work Integrated Learning (WIL) program that combines academic studies with paid work terms in the public, private, and/or non-profit sectors. The program provides students with the opportunity to develop the academic and professional skills required to pursue employment in these areas, or to continue on to graduate training in an academic field related to Mental Health upon graduation.

Enrolment Requirements:

Enrolment in the Program is limited. Admission will require:
(a.) completion of any Grade 12 U/M high school math course or equivalent (or successful completion of the UTSC Online Mathematics Preparedness Course or equivalent), and
(b.) completion of Grade 12 U/M high school biology or equivalent (or BIOA11H3 or equivalent), and
(c.) completion of a minimum of 4.0 credits, including 1.0 credit in Psychology, and
(d.) a cumulative GPA of at least 2.5, and
(e.) either (1) a final grade of 67% or higher in both of PSYA01H3 and PSYA02H3, or (2) a final grade of 60% or higher in both of PSYA01H3 and PSYA02H3, and a final grade of 72% or higher in two B-level psychology courses.

Current Co-op Students:
Students admitted to a Co-op Degree POSt in their first year of study must request a Co-op Subject POSt on ACORN upon completion of 4.0 credits and must meet the minimum qualifications for entry as noted above for this program.

Prospective Co-op Students:
Prospective Co-op students (i.e., those not yet admitted to a Co-op Degree POSt) must submit a program request on ACORN, and meet the minimum qualifications noted above. Deadlines follow the Limited Enrolment Program Application Deadlines set by the Office of the Registrar each year. Failure to submit the program request on ACORN will result in that student's application not being considered.

Description of Proposed Changes:
1. Adding cGPA of 2.5 as enrolment requirement.
2. Adding [PSYB07, PSYB32, PSYB55, and PSYB70] as recommendations before first work term.
3. Updating contact email
4. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

Rationale:
1. The 2.5 cGPA requirement is standard for co-op programs. This was left out in error when the proposal was submitted last Spring.

2. In order for students to enter their work terms with sought-after data analysis and research skills that are considered assets by many employers, we recommend that students complete PSYB07 (Data Analysis in Psychology) and PSYB70 (Methods in Psychological Science) prior to their first work term. To ensure students have been exposed to specific content areas relevant to Mental Health positions , we also recommend they complete PSYB32 (Intro to Clinical Psychology) and PSYB55 (Intro to Cognitive Neuroscience) before first work term. This mirrors the recommendations given to students in our Co-op Specialist program.

PSYB07 (or equivalent) and PSYB70 are prerequisites for all C- and D-level psychology courses, so it is generally helpful for students to complete these courses as earlier in their degree as possible. These recommendations encourage students to take these courses early, and thus will allow them more flexibility in course selection and work term sequencing as they progress through the program.

Note that although [STAB22 or STAB23] are alternatives to PSYB07 in the program requirements, we are only including PSYB07 in our recommendations, since this is the preferred course that will best prepare students for work in Psychology.

Impact:
1. None - this is a new program, and the cPGA requirement was left out in error. This is the standard minimum GPA across all Co-op programs
2. Students who follow these recommendations will be better prepared for placements in the area of Psychology, and will have

a competitive advantage when applying to positions. Previous information communicated to us by the Co-op Office indicates that these courses are valued by employers.

Consultations:
Consulted with Cynthia Jairam in the Co-op office regarding the cGPA.
Psychology Departmental Curriculum Committee: Sept 14, 2023
DCC approved Oct 4, 2023

Resource Implications:
None. These courses are already part of the program, we are just providing recommendations on *when* these students should take them.

SCMAJ1472: MAJOR PROGRAM IN NEUROSCIENCE

Completion Requirements:

Program Requirements
Students must complete a total of 8.5 credits.

1. Scientific Foundations (3.0 credits)
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
[CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms or CHMA12H3 Advanced General Chemistry]
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Neuroscience Foundations (3.5 credits)
BIOB10H3 Cell Biology
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
NROB60H3 Neuroanatomy Laboratory
NROB61H3 Neurophysiology
[PSYB55H3 Introduction to Cognitive Neuroscience or (PSYB65H3) Human Brain and Behaviour]
PSYB70H3 Methods in Psychological Science
[PSYB07H3 Data Analysis in Psychology or STAB22H3 Statistics I]

3. Advanced Foundations (1.5 credits)
at least 1.0 credit must be taken from:
NROC34H3 Neuroethology
NROC36H3 Molecular Neuroscience
NROC61H3 Learning and Motivation
NROC64H3 Sensorimotor Systems
NROC69H3 Synaptic Organization and Physiology of the Brain

the remaining 0.5 credit should be taken from the following:
BIOC14H3 Genes, Environment and Behaviour
NROC60H3 Cellular Neuroscience Laboratory
NROC63H3 Behavioural Neuroscience Laboratory
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience
PSYC62H3 Drugs and the Brain

4. Capstone Course (0.5 credit)
BIOD06H3 Advanced Topics in Neural Basis of Motor Control
BIOD07H3 Advanced Topics and Methods in Neural Circuit Analysis

BIOD19H3 Epigenetics in Health and Disease
BIOD45H3 Animal Communication
BIOD65H3 Pathologies of the Nervous System
NROD08H3/BIOD08H3 Theoretical Neuroscience*
NROD60H3 Current Topics in Neuroscience
NROD61H3 Emotional Learning Circuits
NROD66H3 Drug Addiction
NROD67H3 Neuroscience of Aging
NROD98Y3 Thesis in Neuroscience
PSYD62H3 Neuroscience of Pleasure and Reward
PSYD66H3 Current Topics in Human Brain and Behaviour
*Note: NROD08H3 has a calculus prerequisite that is not part of this program. Students interested in this course should plan accordingly.

Description of Proposed Changes:
Added BIOD06 as capstone option.

Rationale:
BIOD06 was a new course added by the Biology department last year, and they suggested that we add it to the Neuroscience Major and Specialist (Systems/Behavioural and Cellular/Molecular streams) as a capstone option. The content is relevant to Neuroscience students.

Impact:
Increased options for Neuroscience students in their capstone course options.

Consultations:
Change initiated by Biology department; Neuroscience faculty were consulted; Psychology DCC approved Oct 4, 2023.

Resource Implications:
None

SCMAJ1472C: MAJOR (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE

Completion Requirements:

Academic Program Requirements
Students must complete the program requirements as described in the Major in Neuroscience.

Co-op Program Requirements
Students must satisfactorily complete Co-op work term(s) as follows: three 4-month work terms, one 4-month work term and one 8-month work term, or one 12-month work term.

To be eligible for their first work term, students must be enrolled in the Major (Co-op) in Neuroscience and have completed at least 7.0 credits, achieve a cumulative GPA of 2.5 or higher, and complete COPB50H3 and COPB51H3. It is recommended that PSYB07H3, PSYB70H3, at least one of [BIOB10H3, BIOB11] and at least two of [NROB60H3, NROB61H3, PSYB55H3] be completed before the first work term. Any of these courses that are not completed prior to the first work term are recommended to be completed before the second work term.

Students must be available for work terms in each of the Fall, Winter, and Summer semesters and must complete at least one of their required work terms in either a Fall or Winter semester. This requires that students take courses during at least one Summer semester.

Co-op Course Requirements
In addition to their academic program requirements, Co-op students complete the following Co-op specific courses as part of their degree:
- Co-op Preparation courses: COPB50H3 and COPB51H3 (completed in first year)
- Work Term Search courses: COPB52H3 (semester prior to first work term), COPC98H3 (semester prior to second work term), and COPC99H3 (semester prior to third work term)
- Co-op Work Term courses: COPC40H3 (each semester a student is on work term)

These courses are designed to prepare students for their job search and work term experience, and to maximize the benefits of their Co-op work terms. They must be completed in sequence, and fall into three categories: Co-op Preparation courses (COPB50H3 & COPB51H3) are completed in first year, and cover a variety of topics intended to assist students in developing the skills and tools required to secure a work term; Work Term Search Courses (COPB52H3, COPC98H3, & COPC99H3) are completed in the semester prior to each work term, and support students while competing for work terms that are appropriate to their program of study, as well as preparing students for the transition into and how to succeed the workplace; Co-op Work Term courses (COPC40H3) are completed during each semester that a student is on work term, and support students' success while on work term, as well as connecting their academics and the workplace experience.

Co-op courses are taken in addition to a full course load. They are recorded on transcripts as credit/no credit (CR/NCR) and are considered to be additive credit to the 20.0 required degree credits. No additional course fee is assessed as registration is included in the Co-op Program fee.

For information on fees, status in Co-op programs, and certification of completion of Co-op programs, see ~~the 6B.5 Co-operative Programs section or~~ the Arts and Science Co-op section in the UTSC *Calendar*.

Description:

Previous:
Academic Program Advisor: ~~A. Lawson Email: psychology-coop@utsc.utoronto.ca~~ psychundergrad.utsc@utoronto.ca
Co-op Program Co-ordinator: ~~C. Dixon Email:~~ coopsuccess.utsc@utoronto.ca

The Major in Neuroscience focuses on both Cellular/Molecular and Systems/Behavioural Neuroscience and requires less research-intensive coursework than the Specialist programs. The Major focuses more on how to be a skilled consumer of neuroscience research, providing a valuable foundation for a variety of career paths.

Students who wish to combine the Major in Neuroscience with a Major in any one of Biology, Human Biology, Mental Health Studies, or Psychology are advised that they must complete 12.0 distinct credits to receive a certification of the completion of both programs. For more information, see section 6A.2 Degree Requirements in the UTSC Academic Calendar. Consultation with the respective Program Supervisors in the selection of credits is recommended.

Enrolment Requirements:

Enrolment in the program is limited. Students may apply after completing a minimum of 4.0 credits including: BIOA01H3, BIOA02H3, CHMA10H3, [CHMA11H3 or CHMA12H3], PSYA01H3, and PSYA02H3. Admission to this program requires a CGPA of 2.5 or higher.

Current Co-op Students:
Students admitted to a Co-op Degree POSt in their first year of study must request a Co-op Subject POSt on ACORN upon completion of 4.0 credits and must meet the minimum qualifications for entry as noted above for this program.

Prospective Co-op Students:
Prospective Co-op students (i.e., those not yet admitted to a Co-op Degree POSt) must submit a program request on ACORN, and meet the minimum qualifications noted above. Deadlines follow the Limited Enrolment Program Application Deadlines set by the Office of the Registrar each year. Failure to submit the program request on ACORN will result in that student's application not being considered.

Description of Proposed Changes:
1. Updated contact info
2. Added CHMA12 as an alternative to CHMA11 in the enrollment requirements
3. Added recommended courses to take before work terms.
4. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

Rationale:
1. Email address out of date
2. This was left out in error. CHMA12 is a more advanced version of CHMA11, and it can be used in place of CHMA11 for enrolment requirements.
3. In order for students to enter their work terms with sought-after data analysis and research skills that are considered assets

by many employers, we recommend that students complete PSYB07 (Data Analysis in Psychology) and PSYB70 (Methods in Psychological Science) prior to their first work term. To ensure students have been exposed to breadth in discipline before placements, we also recommend they complete at least one of [BIOB10H3, BIOB11] and at least two of [NROB60H3, NROB61H3, PSYB55H3] before first work term. Any of these courses that are not completed prior to the first work term are recommended to be completed before the second work term. This mirrors the recommendations given to students in our Co-op Specialist program.

PSYB07 (or equivalent) and PSYB70 are prerequisites for all C- and D-level psychology courses, so it is generally helpful for students to complete these courses as earlier in their degree as possible. These recommendations encourage students to take these courses early, and thus will allow them more flexibility in course selection and work term sequencing as they progress through the program.

Note that although STAB22 is an alternative to PSYB07 in the program requirements, we are only including PSYB07 in our recommendations, since this is the preferred course that will best prepare students for placements.

Impact:
1. None
2. None - CHMA12 was left out in error.
3. Students who follow these recommendations will be better prepared for placements in the area of Neuroscience, and will have a competitive advantage when applying to positions. Previous information communicated to us by the Co-op Office indicates that these courses are valued by employers.

Consultations:
Neuroscience faculty were consulted.
DCC approved on Oct 4, 2023.

Resource Implications:
None. These courses are already part of the program, we are just providing recommendations on *when* these students should take them.

SCSPE1172: SPECIALIST PROGRAM IN NEUROSCIENCE - Cognitive Stream

Completion Requirements:

Program Requirements
This program requires students to complete 6.5 credits in core courses that are common to all streams. Students will complete a further 7.0 credits, specific to the Cognitive stream, for a total of 13.5 credits.

CORE (6.5 credits)

1. Scientific Foundations (3.5 credits):
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
[CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms or CHMA12H3 Advanced General Chemistry]
[MATA29H3 Calculus I for the Life Sciences *or* MATA30H3 Calculus I for Physical Sciences]
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Neuroscience Foundations (3.0 credits):
BIOB10H3 Cell Biology
NROB60H3 Neuroanatomy Laboratory
NROB61H3 Neurophysiology
PSYB55H3 Introduction to Cognitive Neuroscience
[PSYB07H3 Data Analysis in Psychology or STAB22H3 Statistics I]
PSYB70H3 Methods in Psychological Science

COGNITIVE STREAM (7.0 credits)

3. Quantitative and Methodological Skills (1.5 credits):
PSYC02H3 Scientific Communication in Psychology
PSYC70H3 Advanced Research Methods Laboratory
[PSYC08H3 Advanced Data Analysis in Psychology or PSYC09H3 Applied Multiple Regression in Psychology]

4. Advanced Programming (1.5 credits)
MATA23H3 Linear Algebra
[[CSCA08H3 Introduction to Computer Science I and CSCA48H3 Introduction to Computer Science II]* *or* [PSYB03H3 Introduction to Computers in Psychological Research and PSYC03H3 Introduction to Computers in Psychological Research: Advanced Topics]]
*Note: students are strongly advised to choose the [PSYB03H3 and PSYC03H3] pairing.

5. Advanced Foundations (1.5 credits)
PSYB51H3 Introduction to Perception
and two of the following:
PSYC51H3 Cognitive Neuroscience of Vision
PSYC52H3 Cognitive Neuroscience of Attention
PSYC54H3 Auditory Cognitive Neuroscience
PSYC57H3 Cognitive Neuroscience of Decision Making
PSYC59H3 Cognitive Neuroscience of Language

6. Breadth in Neuroscience (1.0 credit):
two of the following (at least 0.5 credit must be a C-level NRO course):
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
CHMB41H3 Organic Chemistry I
NROC34H3 Neuroethology
NROC36H3 Molecular Neuroscience
NROC61H3 Learning and Motivation
NROC64H3 Sensorimotor Systems
NROC69H3 Synaptic Organization & Physiology of the Brain

7. Laboratory Course (0.5 credit):
one of the following:
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience
PSYC75H3 Cognitive Psychology Laboratory
PSYC76H3 Brain Imaging Laboratory

8. Capstone Courses (1.0 credit):
two of the following:
PSYD17H3 Social Neuroscience
PSYD50H3 Current Topics in Memory and Cognition
PSYD51H3 Current Topics in Perception
PSYD54H3 Current Topics in Visual Recognition
PSYD55H3 Functional Magnetic Resonance Imaging Laboratory
PSYD62H3 Neuroscience of Pleasure and Reward
PSYD66H3 Current Topics in Human Brain & Behaviour
NROD98Y3 Thesis in Neuroscience*
*Note: only 0.5 credit of NROD98Y3 can be counted towards the Capstone course requirement

Description:

The Specialist program in Neuroscience is a research-intensive program designed to provide students with strong breadth in the major domains of neuroscience. The **Cognitive** stream focuses on understanding the neural basis of human cognition (e.g., language, memory, attention, decision-making) predominantly through the use of patient neuropsychology and neuroimaging

techniques (e.g., magnetic resonance imaging (MRI), electroencephalography (EEG)).

Enrolment Requirements:

Enrolment Requirements
Enrolment in the Program is limited, and takes place in two stages.

Stage 1:
Students may apply to Stage 1 after successfully completing a minimum of 4.0 credits, including the Scientific Foundations courses: BIOA01H3, BIOA02H3, CHMA10H3, [CHMA11H3 or CHMA12H3], [MATA29H3 or MATA30H3], PSYA01H3, and PSYA02H3. Students must have a CGPA of 2.75 or higher to be admitted to the program. Application for admission will be made to the Office of the Registrar through ACORN, during the Limited Program application periods. For more information on applying to limited enrolment programs, please visit the Office of the Registrar website.

Stage 2:
To complete the program, students must choose one of the three available streams. Students who have successfully met the enrolment requirements of their chosen stream will be admitted to the Specialist Neuroscience Stage 2 category. Applications for admission to a Stage 2 stream will be made to the Office of the Registrar through ACORN in March/April and June/July, during the Limited Program application periods.

Before applying to their chosen stream, students must:

1. Complete a minimum of 10.0 credits including all Stage 1 Scientific Foundations course requirements, as well as the Neuroscience Foundations courses which include BIOB10H3, NROB60H3, NROB61H3, [PSYB07H3 or STAB22H3], PSYB55H3, PSYB70H3;

2. Complete 1.0 credit in Stream Foundations courses from the following list*:
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
CSCA20H3 Introduction to Programming
CHMB41H3 Organic Chemistry I
CHMB42H3 Organic Chemistry II
MATA23H3 Linear Algebra
[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]
PSYB51H3 Introduction to Perception
PSYC08H3 Advanced Data Analysis in Psychology
PSYC09H3 Applied Multiple Regression in Psychology

***Notes:**
(i) students are advised to exercise caution when selecting these courses since some can be applied to all three streams (BIOB11H3, CHMB41H3, PSYB51H3, PSYC08H3), but others can be applied to only one or two streams;
(ii) the Cognitive stream does not include a component called "Stream-specific electives"; students interested in this stream should select from the following: MATA23H3, BIOB11H3, CHMB41H3, PSYB51H3, [PSYC08H3 or PSYC09H3].

3. Have achieved a CGPA of 2.5 or higher.

Students who do not meet the Stage 1 enrolment requirements can still apply to the Specialist program at Stage 2. This pathway requires students to complete a minimum of 10.0 credits, including all of the core courses of the program (Scientific Foundations, Neuroscience Foundations, and Stream Foundations). In addition to completing the course requirements, students must also have achieved a CGPA of 2.5 or higher across all courses, and a CGPA of 2.75 or higher across the Neuroscience Foundations and Stream Foundations courses. Application for admission to a Stage 2 stream will be made to the Office of the Registrar through ACORN, in March/April and June/July, during the Limited Program application periods. Admission through this route is dependent upon the availability of space in the program.

Description of Proposed Changes:
Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.

Rationale:

To improve clarity and readability of the neuroscience specialist programs in the Calendar, we are publishing each "child" program with its individual requirements, instead of the single "parent" program, which is long and difficult to navigate.
Impact: Improved clarity and readability of the neuroscience streams.
Consultations: Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).
Resource Implications: None

SCSPE1172C: SPECIALIST (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE - Cognitive Stream

Completion Requirements:

Academic Program Requirements

This program requires students to complete 6.5 credits in core courses that are common to all streams. Students will complete a further 7.0 credits, specific to the Cognitive stream, for a total of 13.5 credits.

CORE (6.5 credits)

1. Scientific Foundations (3.5 credits):
BIOA01H3 Life on Earth: Unifying Principles
BIOA02H3 Life on Earth: Form, Function and Interactions
CHMA10H3 Introductory Chemistry I: Structure and Bonding
[CHMA11H3 Introductory Chemistry II: Reactions and Mechanisms or CHMA12H3 Advanced General Chemistry]
[MATA29H3 Calculus I for the Life Sciences or MATA30H3 Calculus I for Physical Sciences]
PSYA01H3 Introduction to Biological and Cognitive Psychology
PSYA02H3 Introduction to Clinical, Developmental, Personality and Social Psychology

2. Neuroscience Foundations (3.0 credits):
BIOB10H3 Cell Biology
NROB60H3 Neuroanatomy Laboratory
NROB61H3 Neurophysiology
PSYB55H3 Introduction to Cognitive Neuroscience
[PSYB07H3 Data Analysis in Psychology or STAB22H3 Statistics I]
PSYB70H3 Methods in Psychological Science

COGNITIVE STREAM (7.0 credits)

3. Quantitative and Methodological Skills (1.5 credits):
PSYC02H3 Scientific Communication in Psychology
PSYC70H3 Advanced Research Methods Laboratory
[PSYC08H3 Advanced Data Analysis in Psychology or PSYC09H3 Applied Multiple Regression in Psychology]

4. Advanced Programming (1.5 credits):
MATA23H3 Linear Algebra
[[CSCA08H3 Introduction to Computer Science I and CSCA48H3 Introduction to Computer Science II]* or [PSYB03H3 Introduction to Computers in Psychological Research and PSYC03H3 Introduction to Computers in Psychological Research: Advanced Topics]]
Note: students are strongly advised to choose the [PSYB03H3 and PSYC03H3] pairing.

5. Advanced Foundations (1.5 credits):
PSYB51H3 Introduction to Perception
and two of the following:
PSYC51H3 Cognitive Neuroscience of Vision
PSYC52H3 Cognitive Neuroscience of Attention
PSYC54H3 Auditory Cognitive Neuroscience
PSYC57H3 Cognitive Neuroscience of Decision Making
PSYC59H3 Cognitive Neuroscience of Language

6. Breadth in Neuroscience (1.0 credit):
(at least 0.5 credit must be a C-level NRO course)
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
CHMB41H3 Organic Chemistry I
NROC34H3 Neuroethology
NROC36H3 Molecular Neuroscience

NROC61H3 Learning and Motivation
NROC64H3 Sensorimotor Systems
NROC69H3 Synaptic Organization & Physiology of the Brain

7. Laboratory Course (0.5 credit):
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience
PSYC75H3 Cognitive Psychology Laboratory
PSYC76H3 Brain Imaging Laboratory

8. Capstone Courses (1.0 credit):
PSYD17H3 Social Neuroscience
PSYD50H3 Current Topics in Memory and Cognition
PSYD51H3 Current Topics in Perception
PSYD54H3 Current Topics in Visual Recognition
PSYD55H3 Functional Magnetic Resonance Imaging Laboratory
PSYD62H3 Neuroscience of Pleasure and Reward
PSYD66H3 Current Topics in Human Brain & Behaviour
NROD98Y3 Thesis in Neuroscience*
Note: only 0.5 credit of NROD98Y3 can be counted towards the Capstone course requirement

Co-op Program Requirements
Students must satisfactorily complete Co-op work term(s) as follows: three 4-month work terms, one 4-month work term and one 8-month work term, or one 12-month work term.

To be eligible for their first work term, students must be enrolled in the Specialist Co-op Program in Neuroscience, and have completed at least 7.0 credits, achieve a cumulative GPA of 2.5 or higher, and complete COPB50H3 and COPB51H3. ~~It is recommended that~~ ~~NROB60H3, [PSYB07H3 or STAB22H3], and~~ ~~PSYB70H3~~ ~~be completed before the first work term. The following additional courses are recommended to be completed before the second work term:~~
- ~~For the Cognitive stream: BIOB11H3, NROB61H3, PSYB55H3,~~ ~~PSYC02H3, and [PSYC08H3 or~~ ~~PSYC09H3], and~~ ~~PSYC70H3~~

It is recommended that PSYB07H3, PSYB70H3, at least one of [BIOB10, BIOB11], and at least two of [NROB60H3, NROB61H3, PSYB55H3] be completed before the first work term. Any of these courses that are not completed prior to the first work term are recommended to be completed before the second work term. The following additional courses are recommended to be completed before the second work term for the Cognitive stream: PSYC02H3, [PSYC08H3 or PSYC09H3], and PSYC70H3.

Students must be available for work terms in each of the Fall, Winter, and Summer semesters and must complete at least one of their required work terms in either a Fall or Winter semester. This requires that students take courses during at least one Summer semester.

Co-op Course Requirements
In addition to their academic program requirements, Co-op students complete the following Co-op specific courses as part of their degree:
- Co-op Preparation courses: COPB50H3 and COPB51H3 (completed in first year)
- Work Term Search courses: COPB52H3 (semester prior to first work term), COPC98H3 (semester prior to second work term), and COPC99H3 (semester prior to third work term)
- Co-op Work Term courses: COPC40H3 (each semester a student is on work term)

These courses are designed to prepare students for their job search and work term experience, and to maximize the benefits of their Co-op work terms. They must be completed in sequence, and fall into three categories: Co-op Preparation courses (COPB50H3 & COPB51H3) are completed in first year, and cover a variety of topics intended to assist students in developing the skills and tools required to secure a work term; Work Term Search Courses (COPB52H3, COPC98H3, & COPC99H3) are completed in the semester prior to each work term, and support students while competing for work terms that are appropriate to their program of study, as well as preparing students for the transition into and how to succeed the workplace; Co-op Work Term courses (COPC40H3) are completed during each semester that a student is on work term, and support students' success while on work term, as well as connecting their academics and the workplace experience.

Co-op courses are taken in addition to a full course load. They are recorded on transcripts as credit/no credit (CR/NCR) and are considered to be additive credit to the 20.0 required degree credits. No additional course fee is assessed as registration is included in the Co-op Program fee.

For information on fees, status in Co-op programs, and certification of completion of Co-op programs, see ~~the 6B.5 Co-operative Programs section or~~ the Arts and Science Co-op section in the UTSC *Calendar*.

Description:

Academic Program Advisor: ~~A. Lawson Email: psychology-coop@utsc.utoronto.ca~~ psychundergrad.utsc@utoronto.ca
Co-op Program Co-ordinator: ~~C. Dixon Email:~~ coopsuccess.utsc@utoronto.ca

The Specialist program in Neuroscience is a research-intensive program designed to provide students with strong breadth in the major domains of neuroscience, as well as an opportunity to intensively focus on one of three streams. The **Cognitive** stream focuses on understanding the neural basis of human cognition (e.g., language, memory, attention, decision-making) predominantly through the use of patient neuropsychology and neuroimaging techniques (e.g., magnetic resonance imaging (MRI), electroencephalography (EEG)).

This is a Work Integrated Learning (WIL) program that combines academic studies with paid work terms in the public, private, and/or non-profit sectors. The program provides students with the opportunity to develop the academic and professional skills required to pursue employment in these areas, or to continue on to graduate training in an academic field related to Neuroscience upon graduation.

In addition to their academic course requirements, students must successfully complete the additive Arts & Science Co-op Work Term Preparation courses and a minimum of ~~two~~ three Co-op work terms.

Enrolment Requirements:

Enrolment Requirements
Enrolment in the Program is limited, and takes place in two stages.

Stage 1:
Students may apply to Stage 1 after successfully completing a minimum of 4.0 credits, including the Scientific Foundations courses: BIOA01H3, BIOA02H3, CHMA10H3, [CHMA11H3 or CHMA12H3], [MATA29H3 or MATA30H3], PSYA01H3, and PSYA02H3. Students must have a CGPA of 2.75 or higher to be admitted to the program. Application for admission will be made to the Office of the Registrar through ACORN, ~~in March/April and June/July,~~ during the Limited Program application periods. For more information on applying to limited enrolment programs, please visit the Office of the Registrar website.

Stage 2:
To complete the program, students must choose one of the three available streams. Students who have successfully met the enrolment requirements of their chosen stream will be admitted to the Specialist Neuroscience Stage 2 category. Application for admission to a Stage 2 stream will be made to the Office of the Registrar through ACORN, during the Limited Program application periods.

Before applying to their chosen stream, students must:

1. Complete a minimum of 10.0 credits including all Stage 1 Scientific Foundations course requirements, as well as the Neuroscience Foundations courses which include BIOB10H3, NROB60H3, NROB61H3, [PSYB07H3 or STAB22H3], PSYB55H3, PSYB70H3;

2. Complete 1.0 credit in Stream Foundations courses from the following list*:
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
CSCA20H3 Introduction to Programming
CHMB41H3 Organic Chemistry I
CHMB42H3 Organic Chemistry II
MATA23H3 Linear Algebra

[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]
PSYB51H3 Introduction to Perception
PSYC08H3 Advanced Data Analysis in Psychology
PSYC09H3 Applied Multiple Regression in Psychology

*Notes:
(i) students are advised to exercise caution when selecting these courses since some can be applied to all three streams (BIOB11H3, CHMB41H3, PSYB51H3, PSYC08H3), but others can be applied to only one or two streams;
(ii) the Cognitive stream does not include a component called "Stream-specific electives"; students interested in this stream should select from the following: MATA23H3, BIOB11H3, CHMB41H3, PSYB51H3, [PSYC08H3 or PSYC09H3].

3. Have achieved a CGPA of 2.5 or higher.

Current Co-op Students:
Students admitted to a Co-op Degree POSt in their first year of study must request a Co-op Subject POSt on ACORN upon completion of 4.0 credits and must meet the minimum qualifications for entry as noted above.

Prospective Co-op Students:
Prospective Co-op students (i.e., those not yet admitted to a Co-op Degree POSt) must submit a program request on ACORN, and meet the minimum qualifications noted above. Deadlines follow the Limited Enrolment Program Application Deadlines set by the Office of the Registrar each year. Failure to submit the program request on ACORN will result in that student's application not being considered.

Description of Proposed Changes:
1. Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.
2. Updating recommended courses to take before work terms
3. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

Rationale:
1. To improve clarity and readability of the neuroscience specialist programs in the Calendar, we are publishing each "child" program with its individual requirements, instead of the single "parent" program, which is long and difficult to navigate.
2. In order for students to enter their work terms with sought-after data analysis and research skills that are considered assets by many employers, we recommend that students complete PSYB07 (Data Analysis in Psychology) and PSYB70 (Methods in Psychological Science) prior to their first work term. To ensure students have been exposed to breadth in discipline before placements, we also recommend they complete at least one of [BIOB10H3, BIOB11] and at least two of [NROB60H3, NROB61H3, PSYB55H3] before first work term. Any of these courses that are not completed prior to the first work term are recommended to be completed before the second work term, along with a few additional courses that provide more advanced knowledge in the discipline (BIOB12H3, CHMB41H3, and CHMB42H3.)

PSYB07 (or equivalent) and PSYB70 are prerequisites for all C- and D-level psychology courses, so it is generally helpful for students to complete these courses as earlier in their degree as possible. These recommendations encourage students to take these courses early, and thus will allow them more flexibility in course selection and work term sequencing as they progress through the program.

Note that although STAB22 is an alternative to PSYB07 in the program requirements, we are only including PSYB07 in our recommendations, since this is the preferred course that will best prepare students for placements.

Impact:
1. Improved clarity and readability of the neuroscience streams.
2. Students who follow these recommendations will be better prepared for placements in the area of Neuroscience, and will have a competitive advantage when applying to positions. Previous information communicated to us by the Co-op Office indicates that these courses are valued by employers.

Consultations:
1. Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).
2. DCC approved Oct 4, 2023

Resource Implications:

None

SCSPENROPARENT: SPECIALIST PROGRAM IN NEUROSCIENCE

Description of Proposed Changes:	
Excluding the parent program from the calendar	
Rationale:	
We are excluding the parent Neuroscience specialist from the program and publishing the separate "child" streams instead, to improve clarity and readability of the requirements.	
Impact:	
Improved clarity and readability of program requirements.	
Consultations:	
Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).	
Resource Implications:	
None	

SCSPECoopNROPARENT: SPECIALIST (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE

Description of Proposed Changes:	
Excluding the parent program from the calendar	
Rationale:	
We are excluding the parent Neuroscience specialist from the program and publishing the separate "child" streams instead, to improve clarity and readability of the requirements.	
Impact:	
Improved clarity and readability of program requirements.	
Consultations:	
Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).	
Resource Implications:	
None	

6 Course Modifications

PSYC08H3: Advanced Data Analysis in Psychology

Prerequisites:

Previous: [PSYB07H3 or STAB23H3 or STAB22H3] and [(PSYB01H3) or (PSYB04H3) or PSYB70H3]

New: [PSYB07H3 or STAB23H3 or STAB22H3] and PSYB70H3

Enrolment Limits:

Previous:
Priority will be given to students in the Specialist/Specialist Co-op and Major programs in Psychology, Mental Health Studies, Neuroscience, and Paramedicine. Students in the Minor program in Psychology will be admitted as space permits.

New (*moved to Notes section*):

Restricted to students in the Specialist/Specialist Co-op ~~and Major~~ programs in Psychology, Mental Health Studies, and Neuroscience, and Paramedicine. Students in the ~~Minor~~ Major/Major Co-op program s in Psychology, Mental Health Studies, and Neuroscience will be permitted if space permits.

Rationale:

This Psychology Minor has been removed from the list of eligible programs that may enroll in this course. Due to resource limitations, this course does not have the capacity to accommodate students outside of the Specialist/Specialist Co-op and Major/Major Co-op programs in Psychology, Mental Health Studies, and Neuroscience, and the Specialist program in Paramedicine.

While making this update, we also took the opportunity to update the prerequisites to remove long-retired courses that no longer need to be included here.

Consultation:

This change was initiated by Chair Suzanne Erb, with consultation from the Associate Chair, Undergraduate (Brett Ford) and Undergraduate Program Administrator (Ainsley Lawson.)
DCC approved Oct 4, 2023

Resources:

N/A

PSYC09H3: Applied Multiple Regression in Psychology

Prerequisites:

Previous: [PSYB07H3 or STAB22H3 or STAB23H3] and ~~[(PSYB01H3) or (PSYB04H3)~~ or PSYB70H3~~]~~

New: [PSYB07H3 or STAB22H3 or STAB23H3] and PSYB70H3

Exclusions:

Previous: MGEC11H3

New: LINC29H3, MGEC11H3

Enrolment Limits:

Previous:

Priority will be given to students in the Specialist/Specialist Co-op ~~and Major~~ programs in Psychology ~~and~~ Mental Health Studies, and ~~the Specialist/Specialist Co-op program in~~ Neuroscience Cognitive stream. ~~Students in the Minor program in Psychology will be admitted as space permits.~~

New (*moved to Notes section*):

Restricted to students in the Specialist/Specialist Co-op programs in Psychology, Mental Health Studies, and Neuroscience (Cognitive stream). Students in the Major/Major Co-op programs in Psychology, Mental Health Studies, and Neuroscience will be permitted if space permits.

Recommended Preparation:

Rationale:

1. The Psychology Minor has been removed from the list of eligible programs that may enroll in this course. Due to resource limitations, this course does not have the capacity to accommodate students outside of the Specialist/Specialist Co-op and Major/Major Co-op programs in Psychology, Mental Health Studies, and Neuroscience.
2. Added LINC29H3 exclusion, as this course has significant overlap with PSYC09 content. LINC29 was intentionally designed to resemble PSYC09, and offers the same theoretical training in multiple regression, only with an emphasis on applied examples from linguistics and psycholinguistics.
3. While making this update, we also took the opportunity to update the prerequisites to remove long-retired courses that no longer need to be included here.

Consultation:

1. This change was initiated by Chair Suzanne Erb, with consultation from the Associate Chair, Undergraduate (Brett Ford) and Undergraduate Program Administrator (Ainsley Lawson.)
DCC approved Oct 4, 2023

2. This change was initiated by the Linguistics department. The exclusion supported by instructor Olivia Lewandowska. DCC approved Oct 4, 2023
3. DCC approved Oct 4, 2023

Resources:
  N/A

PSYC31H3: Neuropsychological Assessment

Title:

Previous: ~~Clinical Neuropsychology~~

New: Neuropsychological Assessment

Description:

Previous:
~~Clinical neuropsychology is an applied science concerned with the behavioural expression of brain dysfunction. In this course, we will first examine the brain and localization of neuropsychological function. We will then explore the science and practice of clinical neuro-psychology where tests measuring different neuropsychological domains (e.g., memory, attention and so on) are employed in patient populations to infer brain dysfunction~~.

New:
The clinical practice of neuropsychological assessment is an *applied science* that is concerned with the behavioural expression of personality, emotional, somatic and, or brain dysfunction with an emphasis on how diversity (e.g., cultural, racial, gender, sexuality, class, religion, other aspects of identity and the intersections among these), can further mediate this relationship. The clinical neuropsychologist uses standardized tests to objectively describe the breadth, severity and veracity of emotional, cognitive, behavioral and intellectual functioning. Inferences are made on the basis of accumulated research. The clinical neuropsychologist interprets every aspect of the examination (both quantitative and qualitative components) to ascertain the relative emotional, cognitive, behavioural and intellectual strengths and weaknesses of a patient with suspected or known (neuro)psychopathology. Findings from a neuropsychological examination can be used to make diagnoses, inform rehabilitation strategies, and direct various aspects of patient care. In this course, we will comprehensively explore the science and applied practice of neuropsychological assessment.

Rationale:
Update to course title and description: Over the years, the content of this course has narrowed in scope, such that the title and description are no longer accurate. Clinical neuropsychology is a broad field that cannot be covered in the time frame allotted. While the course does cover basic clinical neuropsychology topics such as functional neuroanatomy, principles of cognition and so on, we don't spend much time at all at a physiological level of of analysis nor do we spend much time (if any actually) covering cognitive rehabilitation and so on. Rather, the course has been largely taught around the principles of assessment and ensuring one is introduced to these more broader aspects of clinical neuropsychology. The field of clinical neuropsychology has grown SO MUCH since first taught that the existing title and description now longer accurately represent the entirety of the field that was initially, and predominantly, that of neuropsychological assessment.

Update to prerequisites: Since we are updating the title/description, I also updated the prereqs to remove long-retired courses that no longer need to be listed.

Learning Outcomes:

Learning objectives: In this course we will comprehensively explore the science and practice of neuropsychological assessment:
1. To understand the history, theory and practice of neuropsychological assessment as it pertains to adults throughout the age spectrum (ie. Young adulthood to seniors)
2. To become familiar with various neuropsychological assessment procedural matters.
3. To become familiar with the behavioural geography of the brain and its functional relationship to various neuropsychological constructs including orientation, attention, perception, memory, verbal functions and language skills, construction, concept formation and reasoning, executive formation and reasoning, executive functions and motor performance.

4. To develop familiarity with the clinical presentation of various neurological and psychiatric disorders
5. To be mindful of individual differences, various behavioural variables, and diagnostic issues as it pertains to the neuropsychological assessment process (e.g., age, cultural, racial, gender, sexuality, class, religion, other aspects of identity and the intersections among these, medication side effects, personality etc).
6. To interpret assessment findings (e.g., normative comparison, standardization, test score interpretation) and to be mindful of misinterpretive errors.
7. To develop familiarity with test administration, and case conceptualization by way of experiential learning with a faux patient.

Consultation:

Change was initiated by the course instructor, Konstantine Zakzanis, in consultation with the Associate Chair, Undergraduate (Brett Ford) and Undergraduate Program Administrator (Ainsley Lawson.)
DCC approved on Sept 14, 2023.

Resources:

N/A

PSYC34H3: The Psychology of Happiness and Meaning

Prerequisites:

PSYB10H3 ~~and PSYB30H3~~ and [PSYB07H3 or STAB22H3 or STAB23H3] and ~~[(PSYB01H3) or (PSYB04H3) or~~ PSYB70H3~~]~~

Rationale:

The course prerequisites have been modified to better reflect the evolving content of the course, and to make it less restrictive for interested students to enroll. While making this change, we also took the opportunity to remove long-retired PSYB01/PSYB04 courses from the prerequisites, as well.

Consultation:

Associate Chair (Undergraduate), Dr. Brett Ford, and the Undergraduate Program Coordinator, Ainsley Lawson, were consulted about the proposed change.
DCC approved Oct 4, 2023

Resources:

N/A

PSYC81H3: Psychology for Sustainability

Course Code:

~~PSYC58H3~~ PSYC81H3

Title:

Psychology ~~and Climate Change~~ for Sustainability

Description:

This course will introduce students to a variety of topics in psychology as they relate to climate change and the psychological study of sustainable human behaviour. Topics covered will include the threats of a changing environment to mental health and wellbeing; the development of coping mechanisms and resilience for individuals and communities affected negatively by climate change and a changing environment; perceptions of risk, and how beliefs and attitudes are developed, maintained, and updated; effective principles for communicating about climate change and sustainable behaviour; how social identity affects experiences and perceptions of ~~climate change~~ a changing environment; empirically validated methods for promoting pro-environmental behaviour; and how, when required, we can best motivate people to action. ~~Special focus will be placed on the cognitive mechanisms underlying risk perception, beliefs, and attitudes, and the roles they play in shaping behaviour.~~

Prerequisites:
Previous:

[PSYB07H3 or STAB22H3 or STAB23H3] and ~~[(PSYB01H3) or (PSYB04H3) or~~ PSYB70H3~~]~~ and [0.5 additional credits at the B-level in PSY courses]

Corequisites:
Exclusions:
Recommended Preparation:
Notes:

Learning Outcomes:

Previous:
Upon the completion of this course, students will be able to:
1. Recall and describe important psychological principles and mechanisms as they relate to climate change (e.g., perceptual principles related to interpreting data visualizations; formal and cognitive mechanisms of belief formation and updating)
2. Demonstrate an understanding of psychological principles related to climate change by applying those principles to novel situations
3. Describe how psychology can contribute to mental health initiatives designed to mitigate the negative effects of climate change on individuals and communities
4. Identify psychological motivators and de-motivators to pro-environmental actions and describe how they can be overcome when required
5. Evaluate real world examples of climate change communication and develop arguments that outline their strengths and weaknesses
6. Critique data visualizations and recommend methods of improving them based on psychological principles 7. Critically evaluate research articles related to psychology and climate change Consistent with the department's goals of developing writing and research methods skills at the c-level, special emphasis will be placed on: 1. Developing effective written communication skills. 2. Developing data visualization and interpretation skills. 3. Developing the ability to read and critique primary source articles.

New:
8. Recognize the myriad ways in which humans live both sustainably and unsustainably, and how and why this varies across cultures. [1] [SEP]
9. Appreciate the cultural context in which unsustainable lifestyles have developed.
10. Describe psychological theory and research illuminating situational, social, cognitive, and individual difference factors underlying unsustainable behaviours, and how these factors can be recruited to promote alternatives.

Rationale:
The goal of the proposed changes is to take a course that focused singularly on the topic of "psychology and climate change," and to alter the course such that it now focuses on sustainable and unsustainable human behaviour as related to the environment, with climate change related behaviour as one prominent example. The reason for doing this is that after teaching the course for the first time in Winter 2023 it became clear to the instructor that psychology students would benefit from a deeper understanding of the broader context of the social, political, and psychological forces that shape human lifestyle choices, and how those lifestyle choices in turn effect the environment in which those humans behave. With this broader context in hand, students will be better prepared to understand the complex relationship between climate change (and other environmental problems) and the maladaptive human behaviours that cause them (e.g., over-consumption).

The course title has been changed to reflect the new focus on the larger umbrella topic of sustainable behaviour (in contrast to the more limited single example of behaviour related to climate change).

This same change in focus, and breadth of coverage, is reflected in the revised course description, the addition of three new learning outcomes related to sustainability, and the addition of the new topics covered related to sustainability and (mal)adaptive human behaviour.

Human behaviour related to climate change will continue to be the major example of unsustainable human behaviour used throughout the course, but the addition of the new focus on sustainability will provide a broader context within which to discuss, and help students understand, the importance of the topic, and its relevance to other aspects of their lives.

Consultation:
Consultation with Department Chair, Suzanne Erb, Undergrad Associate Chair, Kyle Danielson, and Program Administrator, Ainsley Lawson, in June 2023.

Course code approved by RO on Aug 29, 2023
DCC approved on Oct 4, 2023

Resources:

PSYC62H3: Drugs and the Brain

Exclusions:	
Previous: PSY396H, PCL475Y	
New: PSY396H, PCL475Y, PCL200H1	
Rationale: Add PCL200H1 exclusion PCL200H1 and PSYC62H3 similarly discuss principles of neuropharmacology. Throughout the term, the content of both courses emphasizes mechanisms of action for drugs of abuse and therapeutics. The overlap is substantial, and warrants and exclusion.	
Consultation: Change was initiated by Pharmacy department at St. George campus. The current PSYC62 instructor was consulted and approved of this change. DCC approved Oct 4, 2023	
Resources:	

2 Retired Courses

PSYC33H3: Neuropsychological Rehabilitation

Rationale: PSYC33 is being retired. The course has been cancelled the last two years due to low enrollment, and there is no regular faculty member associated with this course.
Consultation: Clinical Psychology faculty members were consulted, and support this change. DCC approved Sept 14, 2023.
Resources: N/A **Budget Implications:**
Overlap with Existing Courses: N/A

PSYD11H3: Psychology of Interpersonal Relationships

Rationale: We are retiring PSYD11 because the course was last offered in 2015, and the faculty member associated with the course is no longer at the university.
Consultation: DCC approved Sept 14, 2023
Resources: N/A **Budget Implications:**
Overlap with Existing Courses: N/A