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TO:	UTSC Academic Affairs Committee
SPONSOR: **CONTACT INFO:**	Prof. William A. Gough, Vice-Principal Academic and Dean 416-208-7027, vpdean.utsc@utoronto.ca
PRESENTER: **CONTACT INFO:**	Prof. Michael Souza: Acting Associate Dean, Undergraduate (416) 287-7191, adundergrad.utsc@utoronto.ca
DATE:	January 4, 2024 for January, 11, 2024
AGENDA ITEM:	3

ITEM IDENTIFICATION:

Minor Modifications: Undergraduate Curriculum Changes – Sciences, UTSC (for approval)*

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 5.6 of its terms of reference, the Committee is responsible for approval of "Major and minor modifications to existing degree programs." The AAC has responsibility for the approval of Major and Minor modifications to existing programs as defined by the University of Toronto Quality Assurance Process (UTQAP, Section 3.1).

GOVERNANCE PATH:

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

PREVIOUS ACTION TAKEN:

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

HIGHLIGHTS:

This package includes minor modifications to undergraduate curriculum, submitted by the UTSC **Sciences** academic units identified below, which require governance approval. Minor modifications to curriculum are understood as those that do not have a significant impact on program or course learning outcomes. They require governance approval when they modestly change the nature of a program or course.

- The Department of Computer & Mathematical Sciences (Report: Computer and Mathematical Sciences
    - 1 program change
        - STAC67H3: Regression Analysis

- The Department of Psychology (Report: Psychology)
    - 8 program modifications
        - SCMIN1160: Minor Program in Psychology
        - SCMAJ1160M: Major Program in Mental Health Studies
        - SCSPE1160M: Specialist Program in Mental Health Studies
        - SCSPE1160N: Specialist CO-OP Program in Mental Health Studies
        - SCSPE1272: Specialist Program in Neuroscience – Cellular/Molecular Stream
        - SCSPE1272C: Specialist CO-OP Program in Neuroscience – Cellular/Molecular Stream
        - SCSPE1372: Specialist Program in Neuroscience – Systems/Behavioural Stream
        - SCSPE1372C Specialist CO-OP Program in Neuroscience – Systems/Behavioural Stream
    - 5 new courses
        - PSYB80H3 Psychology in Context
        - PSYC17H3 Meeting Minds: The Psychology of Interpersonal Interactions
        - PSYC86H3 The Unconscious Mind
        - PSYC87H3 Psychology and Money
        - PSYD28H3 The Development of Affective Cognition

FINANCIAL IMPLICATIONS:

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

RECOMMENDATION:

Be It Resolved,

THAT the proposed Sciences undergraduate curriculum changes for the 2024-25 academic year, as detailed in the respective curriculum reports, be approved.

DOCUMENTATION PROVIDED:

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

UNIVERSITY OF TORONTO SCARBOROUGH

2024-25 Curriculum Cycle
Undergraduate Minor Curriculum Modifications for Approval
Report: Computer & Mathematical Sciences
January 11, 2024

1 Course Modification

STAC67H3: Regression Analysis

Description:

~~Orthogonal projections. Univariate normal distribution theory. The linear model and its statistical analysis, residual analysis, influence analysis, collinearity analysis, model selection procedures. Analysis of designs. Random effects. Models for categorical data. Nonlinear models. Instruction in the use of SAS.~~

A fundamental statistical technique widely used in various disciples. The topics include simple and multiple linear regression analysis, geometric representation of regression, inference on regression parameters, model assumptions and diagnostics, model selection, remedial measures including weighted least squares, instruction in the use of statistical software.

Learning Outcomes:

Upon completing the course, students will possess the skills to proficiently perform regression analysis using statistical software and compose insightful analysis reports based on real-world data. Specifically, they will be able to:
• Carry out and interpret statistical inference procedures for simple and multiple linear regression.
• Understand the multiple linear regression model in its matrix form, including all common variations of this model (e.g., continuous predictors, categorical predictors, squared and interaction terms).
• Comprehend the purposes of diagnostic methods and be able to conduct several common diagnostic procedures and interpret their results.
• Familiarize themselves with several measures of model performance, learning how to compute and interpret them for a multiple regression model.
• Write an analysis report using real data.

Rationale:
The course description has been updated to more accurately represent the subject matter and content covered in this course.

Consultation:
An internal consultation took place with course instructors and the associate chair on October 12, 2023.
Approved by DCC October 13, 2023.

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.

UNIVERSITY OF TORONTO SCARBOROUGH

2024-25 Curriculum Cycle
Undergraduate Minor Curriculum Modifications for Approval
Report: Psychology
January 11, 2024

Contents

8 Minor Program Mod Full Reviews

SCMIN1160: MINOR PROGRAM IN PSYCHOLOGY

Completion Requirements:

Program Requirements
The Program requires completion of 4.0 credits, of which 1.0 credit must be at the C-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: One course from each grouping (1.0 credit):
a. Social, Developmental, Personality and Clinical (courses listed in the 10-, 20- or 30-series);
b. Perception, Cognition and Physiology (courses listed in the 50- or 60-series);

5. Breadth in Psychology at the C-level (1.0 credit).

~~**Note:** Typically, Psychology Minors are not permitted to take more than 1.0 credit of PSY C-level courses, and are not permitted to take any PSY D-level courses.~~

Note: Students in the Psychology Minor Program are permitted to take 1.0 credits of PSY C-level courses. Additional enrollment beyond this limit may be permitted if space permits. Students in the Psychology Minor Program are not typically permitted to enroll in any PSY D-level courses.

Enrolment Requirements:

Enrolment Requirements
Enrolment in the Program is limited. Admission will require:
(a.) completion of a minimum of 4.0 credits, including 1.0 credit in Psychology, and
(b.) a final grade of 60% or higher in both PSYA01H3 and PSYA02H3.

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.

Description of Proposed Changes:
1. Adding enrolment requirements to the program
2. Updating "note" to accurate reflect limits on upper-year enrollment for Minors.

Rationale:
1. As an unlimited program, students are able to join the Psychology Minor program without meeting any particular admission criteria. This has had a negative impact on the academic quality of our programs and courses, causing instructors to lower the academic standards to accommodate less prepared students, particularly in C-level courses. As a result, instructors have needed to make compromises on their pedagogical approaches and innovation. This issue has become more apparent as enrolment in our Minor program has increased over the recent past.

Year - # students admitted to the Psychology Minor
2017 - 125
2018 - 143

2019 - 152
2020 - 148
2021 - 190
2022 - 180

By introducing a minimum standard of performance in our Introductory Psychology courses before admission to the Minor, we can ensure that students are adequately prepared for success in the program. We will model our requirements after those that exist for the Psychology Specialist and Major programs:
- For Specialist admission, we require grades of 75%+ in both PSYA01 and PSYA02.
- For Major admission, we require grades of 64%+ in both PSYA01 and PSYA02.
- For Minor admission, we propose requiring grades of 60%+ in both PSYA01 and PSYA02.

The 60% minimum is parsimonious with our “route 2” admission process for the Psychology Major program. (From the Major, enrolment requirement (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.") This allows students to join the Minor while continuing to work toward admission to the Major, if that is their goal. Enrollment data also supports a minimum 60% requirement. As recommended in our last external review, we are working to increase the number and quality of written assignments in our C-level courses. To accomplish this goal, we are limiting our C-level courses to 100 students per course, since these sorts of assignments call for increased TA and instructor resources. Due to the ballooning Minor program, we have been forced to keep some C-levels well above the 100-student capacity. We estimate we can reserve approximately 250-300 spots in our C-level courses each year for students in the Minor. Since Minors take two PSY C-levels as part of their program, this means we can admit approximately 125-150 students into the program per academic year. Data shows that the 60% cut-off aligns with this capacity:
https://hive.utsc.utoronto.ca/public/psych/DCC_docs/PSY_Minor_Admission_Data_2023.PNG

Our Undergraduate Program Administrator reports that Minors frequently have difficulty finding C-level courses to take for their program requirements. The Department must prioritize our Major and Specialist students, which means course availability for Minors is a challenge. Minors are often forced to take extra PSY B-levels beyond their program requirements in order to acquire prerequisites for whichever C-levels have available space. Having a smaller cohort of Minors would mean there are fewer students competing for C-level spots, allowing students better access to courses that are relevant to their future academic/career goals.

We also base our decision on the precedent set by several other departments, which have instituted specific enrolment requirements:
Computer Science – MINOR
Global Leadership – MINOR
Creative Writing – MINOR

2. Updated the "Note" to accurately reflect current processes. We *do* allow Minors to take more than 1.0 C-level if space permits (ex. in less popular courses.) We don't typically allow Minor enrollment in any D-level PSY courses, but in very rare cases exceptions are possible, so we wanted to clarify this by adding the word "typically" instead of indicating that D-level enrollment is a hard no.

Impact:

1. Impact of adding enrolment requirements:
- No impact on existing students in the Psychology Minor program.
- Future students intending to join the program will need to meet the minimum enrolment requirements to join the program.
- Decreased enrolment pressure resulting from a smaller Minor program will give students more course options. Future students who join the Minor will benefit from increased flexibility in their course options at the C-level, since they will not need to compete for spaces against an overly large cohort of their peers.
- Students who are not enrolled in a Psychology program will continue to have access to PSY A-level and B-level courses. PSY C- and D-level courses will continue to be restricted to students enrolled in Department of Psychology programs.
- This change has no direct impact on other programs; however, it may have the side-effect of increased enrolment in other disciplines. Students who are unsuccessful in meeting the admission criteria for the Psychology Minor will need to consider programs in other units, instead.

2. Students will have accurate information about course enrolment limits, and will be able to plan their programs/courses accordingly.

Consultations:

1.
- This change was initially brought forward by the Psychology Chair, Suzanne Erb, and Associate Chair, Undergraduate, Kyle Danielson in Spring of 2023 to address the ballooning size of our Psychology Minor program
- Shelby Verboden (Registrar and Director, Enrolment Management, Office of the Registrar) was consulted in Summer 2023. Although she indicated that she is "generally not a fan of limiting minors", she understands the resource concerns, and recommended that we use enrolment data to inform our decision-making process.
- Initial consultation with the Psychology Departmental Curriculum Committee occurred on Sept 14, 2023
- Widespread support at Dept of Psychology Faculty Meeting (Sept 21, 2023)
- DCC approved Oct 4, 2023

2. Approved by DCC Sept 14, 2023

Resource Implications:
No new resources will be required to implement this change. This change is necessary to bring program enrolment in line with existing departmental resources.

SCMAJ1160M: MAJOR PROGRAM IN MENTAL HEALTH STUDIES

Completion Requirements:

Program Requirements
The program requires 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 (1.0 credit):
[PSYB70H3 Methods in Psychological Science or (PSYB01H3) Psychological Research Laboratory *or* (PSYB04H3) Foundations in Psychological Research]
PSYC37H3 Psychological Assessment

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

4. Personality and Clinical Psychology (1.0 credit):
PSYB30H3 Introduction to Personality
PSYB32H3 Introduction to Clinical Psychology

5. Psychosocial and Psychobiological Breadth (1.5 credits):
Students are required to take 1.0 credit from one group and 0.5 credit from the other group:

Psycho-Social Grouping:
[PSYB38H3 *or* (PSYB45H3) Introduction to Behaviour Modification]
PSYC15H3 Foundations in Community Psychology
PSYC17H3 Meeting Minds: The Psychology of Interpersonal Interactions
PSYC18H3 The Psychology of Emotion
[PSYC30H3 or (PSYC35H3) Advanced Personality Psychology]
PSYC34H3 Happiness and Meaning
PSYC36H3 Psychotherapy
PSYC39H3 Psychology and the Law

Psycho-Biological Grouping:
[PSYB55H3 Introduction to Cognitive Neuroscience *or* (PSYB65H3) Human Brain and Behaviour]
PSYB64H3 Introduction to Behavioural Neuroscience

PSYC31H3 ~~Clinical Neuropsychology~~ Neuropsychological Assessment
(PSYC33H3 Neuropsychological Rehabilitation)
PSYC38H3 Adult Psychopathology
PSYC62H3 Drugs and the Brain

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

7. Additional credits in Psychology at the B-level or higher (1.5 credits)
Supervised study [PSYC90H3 or PSYC93H3] or thesis [PSYD98Y3] courses may be used to fulfill a maximum of 0.5 credit.

Description of Proposed Changes:
1. Included new course PSYC17 in Psycho-Social grouping
2. Updated title for PSYC31
3. Braces around PSYC33 to indicated retirement
4. Specified that "Additional Credits in PSY" must be at the B-level or higher

Rationale:
1. This was part of the PSYC17 new course proposal. The content of this course is suitable for inclusion in this grouping.
2. PSYC31 change submitted to modify its title, so this has been updated here as well.
3. PSYC33 is now retired.
4. 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 at the B-level of higher, we eliminate this issue.

Impact:
1. Students will have increased flexibility in choosing their Psycho-Social courses
2. No impact
3. No impact; course has not been offered in a number of years
4. Prevents students from double-counting intro psych courses toward their programs.

Consultations:
DCC approved Oct 4, 2023

Resource Implications:

SCSPE1160M: SPECIALIST PROGRAM IN MENTAL HEALTH STUDIES

Completion Requirements:

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

1. Introductory 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 credit)
[PSYB70H3 Methods in Psychological Science *or* (PSYB01H3) Psychological Research Laboratory]
PSYC37H3 Psychological Assessment
PSYC70H3 Advanced Research Methods 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. Personality and Clinical Psychology (1.0 credit):
PSYB30H3 Introduction to Personality
PSYB32H3 Introduction to Clinical Psychology

7. Psychosocial and Psychobiological Breadth (3.0 credits)
Students are required to take 2.0 credits from one group and 1.0 credit from the other group:

Psycho-Social Grouping
[PSYB38H3 or (PSYB45H3) Introduction to Behaviour Modification]
PSYC15H3 Foundations in Community Psychology
PSYC17H3 Meeting Minds: The Psychology of Interpersonal Interactions
PSYC18H3 The Psychology of Emotion
[PSYC30H3 or (PSYC35H3) Advanced Personality Psychology]
PSYC34H3 Happiness and Meaning
PSYC36H3 Psychotherapy
PSYC39H3 Psychology and the Law

Psycho-Biological Grouping
[PSYB55H3 Introduction to Cognitive Neuroscience *or* (PSYB65H3) Human Brain and Behaviour]
PSYB64H3 Introduction to Behavioural Neuroscience
PSYC31H3 ~~Clinical Neuropsychology~~ Neuropsychological Assessment
(PSYC33H3 Neuropsychological Rehabilitation)
PSYC38H3 Adult Psychopathology
PSYC62H3 Drugs and the Brain

8. 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 1.0 credit of seminars in Psychology at the D-level, of which 0.5 credit must come from the PSY D30-series:
PSYD30H3 Current topics in Personality Psychology
PSYD31H3 Cultural-Clinical Psychology
PSYD32H3 Personality Disorders
PSYD33H3 Current Topics in Clinical Psychology
PSYD35H3 Clinical Psychopharmacology
PSYD37H3 Social Context of Mental Health and Illness
PSYD39H3 Cognitive Behavioural Therapy

9. Additional credits in Psychology at the B-level or higher (1.0 credits)

10. 2.0 credits from the following courses:
BIOC70H3 An Introduction to Bias in the Sciences
HLTA91H3 A Healthy Campus for Students: Prioritizing Mental Health
HLTB40H3 Health Policy and Health Systems
HLTB41H3 Introduction to the Social Determinants of Health
HLTB42H3 Perspectives of Culture, Illness and Healing
HLTB50H3 Introduction to Health Humanities
HLTC22H3 Health, Aging, and the Life Cycle
HLTC23H3 Issues in Child Health and Development
HLTC42H3 Emerging Health Issues and Policy Needs
HLTC49H3 Indigenous Health
IDSB04H3 Introduction to International/Global Health
IDSC11H3 Issues in Global and International Health
LINB20H3 Sociolinguistics
PHLA11H3 Introduction to Ethics
PHLB07H3 Ethics
PHLB09H3 Biomedical Ethics
PHLB81H3 Theories of Mind
PHLC07H3 Death and Dying
PHLC10H3 Topics in Bioethics

SOCB22H3 Sociology of Gender
SOCB49H3 Sociology of Family
SOCB50H3 Deviance and Normality I
SOCC49H3 Indigenous Health

Description of Proposed Changes:

1. Included new course PSYC17 in Psycho-Social grouping
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3. Braces around PSYC33 to indicated retirement
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Rationale:

1. This was part of the PSYC17 new course proposal. The content of this course is suitable for inclusion in this grouping.
2. PSYC31 change submitted to modify its title, so this has been updated here as well.
3. PSYC33 is now retired.
4. 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 at the B-level of higher, we eliminate this issue.

Impact:

1. Students will have increased flexibility in choosing their Psycho-Social courses
2. No impact
3. No impact; course has not been offered in a number of years
4. Prevents students from double-counting intro psych courses toward their programs.

Consultations:

DCC approved Oct 4, 2023

Resource Implications:

SCSPE1160N: SPECIALIST (CO-OPERATIVE) PROGRAM IN MENTAL HEALTH STUDIES

Completion Requirements:

Academic Program Requirements

The program requires completion of 12.5 credits as follows, 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 (2.0 credits)
PSYB70H3 Methods in Psychological Science
PSYC37H3 Psychological Assessment
PSYC70H3 Advanced Research Methods Laboratory
PSYC73H3 Clinical Neuropsychology 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. Personality and Clinical Psychology (1.0 credit):
PSYB30H3 Introduction to Personality
PSYB32H3 Introduction to Clinical Psychology

7. PSYB55H3 Introduction to Cognitive Neuroscience (0.5 credit)

8. Psychosocial and Psychobiological Breadth (2.5 credits)
Students are required to take 1.5 credits from one group and 1.0 credit from the other group:

Psycho-Social Grouping
[PSYB38H3 or (PSYB45H3) Introduction to Behaviour Modification]
PSYC15H3 Foundations in Community Psychology
PSYC17H3 Meeting Minds: The Psychology of Interpersonal Interactions
PSYC18H3 The Psychology of Emotion
[PSYC30H3 or (PSYC35H3) Advanced Personality Psychology]
PSYC34H3 Happiness and Meaning
PSYC36H3 Psychotherapy
PSYC39H3 Psychology and the Law

Psycho-Biological Grouping
PSYB64H3 Introduction to Behavioural Neuroscience
PSYC31H3 ~~Clinical Neuropsychology~~ Neuropsychological Assessment
(PSYC33H3 Neuropsychological Rehabilitation)
PSYC38H3 Adult Psychopathology
PSYC62H3 Drugs and the Brain

9. Seminars in Psychology at the D-level (1.0 credit):
All PSY D-level courses are considered "seminars," with the exception of PSYD98Y3. Student must take 1.0 credit of seminars in Psychology at the D-level, of which 0.5 credit must come from the PSY D30-series:
PSYD30H3 Current topics in Personality Psychology
PSYD31H3 Cultural-Clinical Psychology
PSYD32H3 Personality Disorders
PSYD33H3 Current Topics in Clinical Psychology
PSYD35H3 Clinical Psychopharmacology
PSYD37H3 Social Context of Mental Health and Illness
PSYD39H3 Cognitive Behavioural Therapy

10. An additional credit in Psychology at the B-level or higher (0.5 credit)

11. 2.0 credits from the following courses:
BIOC70H3 An Introduction to Bias in the Sciences
HLTA91H3 A Health Campus for Students: Prioritizing Mental Health
HLTB40H3 Health Policy and Health Systems
HLTB41H3 Introduction to the Social Determinants of Mental Health
HLTB42H3 Perspectives of Culture, Illness and Healing
HLTB50H3 Introduction to Health Humanities
HLTC22H3 Health, Aging, and the Life Cycle
HLTC23H3 Issues in Child Health and Development
HLTC42H3 Emerging Health Issues and Policy Needs
HLTC49H3 Indigenous Health
IDSB04H3 Introduction to International/Global Health
IDSC11H3 Issues in Global and International Health
LINB20H3 Sociolinguistics
PHLA11H3 Introduction to Ethics
PHLB07H3 Ethics
PHLB09H3 Biomedical Ethics
PHLB81H3 Theories of Mind
PHLC07H3 Death and Dying
PHLC10H3 Topics in Bioethics
SOCB22H3 Sociology of Gender
SOCB49H3 Sociology of Family
SOCB50H3 Deviance and Normality I

SOCC49H3 Indigenous Health

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 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 strongly recommended that PSYB07H3, PSYB32H3, and PSYB70H3 be completed before the first work term, and PSYB55H3, PSYC02H3, [PSYC08H3 or PSYC09H3], and PSYC73H3 be completed before the second work term.~~ It is strongly recommended that PSYB07H3, PSYB32H3, PSYB55H3, and PSYB70H3 be completed before the first work term, and PSYC02H3, [PSYC08H3 or PSYC09H3], 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 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 (Co-op) Program 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.
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. Included new course PSYC17 in Psycho-Social grouping
2. Updated title for PSYC31
3. Braces around PSYC33 to indicated retirement
4. Specified that "Additional Credits in PSY" must be at the B-level or higher
5. Corrected an error under "Academic Program Requirements": should say "at least 4.0 credits at the **C- or D-level**, not just C-level
6. Updated co-op work term recommendations

7. Updated contact info
8. Removed references to specific numbered sections of the Calendar in advance of the Calendar website revamp.

* There are a number of places here in CM where the content does not match what is currently (correctly) published in the Calendar (ex. PSYC15 and PSYC31 were missing, PSYB38 had no title).. I've corrected this to match what is published in the Calendar, but these aren't actually new changes.

Rationale:

1. This was part of the PSYC17 new course proposal. The content of this course is suitable for inclusion in this grouping.
2. PSYC31 change submitted to modify its title, so this has been updated here as well.
3. PSYC33 is now retired.
4. 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.
5. This was a typo.
6.PSYB55 has been moved to a first-work-term recommendation, as this content is foundational in the field, and earlier exposure would be beneficial to students as they prepare for placement. This course is offered every summer and fall, so this should work well for students in terms of their work term sequencing.
PSYC70 has replaced PSYC73 in the second-work-term recommendations. The content of PSYC73 is quite niche and is applicable to fewer placements than the generic research methods that are taught in PSYC70. PSYC70 is also offered more frequently (every winter and summer) than PSYC73 (once a year, in the fall.)
7. Contact information out of date

Impact:

1. Students will have increased flexibility in choosing their Psycho-Social courses
2. No impact
3. No impact; course has not been offered in a number of years
4. Prevents students from double-counting intro psych courses toward their programs.
5. None
6. Students who follow these recommendations will be better prepared for placements in the area of Psychology/Mental Health Studies, and will have a competitive advantage when applying to positions.

Consultations:

DCC approved Oct 4, 2023

Resource Implications:

SCSPE1272: SPECIALIST PROGRAM IN NEUROSCIENCE - Cellular/Molecular 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 6.5 credits, specific to the Cellular/Molecular stream, for a total of 13.0 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

CELLULAR/MOLECULAR STREAM (6.5 credits)

3. Quantitative Logic and Reasoning (1.0 credit):
PSYC08H3 Advanced Data Analysis in Psychology
and one of the following:
CSCA20H3 Introduction to Programming
[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]

4. Advanced Foundations (2.0 credits)
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
CHMB41H3 Organic Chemistry I
NROC36H3 Molecular Neuroscience
NROC69H3 Synaptic Organization & Physiology of the Brain

5. Stream-specific electives (1.0 credit)
two of the following:
BIOC12H3 Biochemistry I: Proteins & Enzymes
BIOC13H3 Biochemistry II: Bioenergetics & Metabolism
BIOC14H3 Genes, Environment and Behaviour
CHMB42H3 Organic Chemistry II
NROC34H3 Neuroethology
NROC61H3 Learning and Motivation
NROC64H3 Sensorimotor Systems
PSYC62H3 Drugs and the Brain

6. Breadth in Neuroscience (1.0 credit):
two of the following:
NROC34H3* Neuroethology
NROC61H3* Learning and Motivation
NROC64H3* Sensorimotor Systems
PSYB51H3 Introduction to Perception
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
**only if not used to complete component ~~B~~5 of the requirements*

7. Laboratory Course (0.5 credit):
one of the following:
BIOB12H3 Cell and Molecular Biology Laboratory
NROC60H3 Cellular Neuroscience Laboratory (recommended)
NROC63H3 Behavioural Neuroscience Laboratory
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience

8. Capstone Courses (1.0 credit):
two of the following:
BIOD06H3 Advanced Topics in Neural Basis of Motor Control
BIOD07H3 Advanced Topics and Methods in Neural Circuit Analysis
BIOD19H3 Epigenetics in Health and Disease
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*
PSYD66H3 Current Topics in Human Brain & Behaviour
**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 **Cellular/Molecular** stream explores the nervous system at its most fundamental level, investigating the influence of genes, signaling molecules, and cellular morphology on the development and maintenance of brain function, predominantly through the use of *in vitro* techniques (e.g., immunohistochemistry, patch clamp).

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:

1. Adding BIOD06 option to capstone requirement.
2. Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.

Rationale:

1. BIOD06 was a new course as of the 2022 Calendar. The course content is relevant to the Systems/Behavioural and Cellular/Molecular neuroscience streams, and would be a suitable capstone option for these programs.
2. 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:

1. Students will have additional options for completing their capstone courses, allowing them further flexibility to align their courses with their interests.
2. Improved clarity and readability of the neuroscience streams.

Consultations:

1. Initiated by Biology department in 2022; DCC approved Oct 4, 2023
2. Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).

Resource Implications:

SCSPE1272C: SPECIALIST (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE - Cellular/Molecular 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 Cellular/Molecular 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

CELLULAR/MOLECULAR STREAM (7.0 credits)

3. Quantitative Logic and Reasoning (1.0 credit):

PSYC08H3 Advanced Data Analysis in Psychology
and one of the following:
CSCA20H3 Introduction to Programming

[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]

4. Advanced Foundations (2.5 credits):
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
BIOB12H3 Cell and Molecular Biology Laboratory
CHMB41H3 Organic Chemistry I
NROC36H3 Molecular Neuroscience
NROC69H3 Synaptic Organization & Physiology of the Brain

5. Stream-specific electives (1.0 credit):
BIOC12H3 Biochemistry I: Proteins & Enzymes
BIOC13H3 Biochemistry II: Bioenergetics & Metabolism
BIOC14H3 Genes, Environment and Behaviour
CHMB42H3 Organic Chemistry II
NROC34H3 Neuroethology
NROC61H3 Learning and Motivation
NROC64H3 Sensorimotor Systems
PSYC62H3 Drugs and the Brain

6. Breadth in Neuroscience (1.0 credit):
NROC34H3 Neuroethology*
NROC61H3 Learning and Motivation*
NROC64H3 Sensorimotor Systems*
PSYB51H3 Introduction to Perception
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
**only if not used to complete component ~~B~~5 of the requirements*

7. Laboratory Course (0.5 credit):
NROC60H3 Cellular Neuroscience Laboratory (recommended)
NROC63H3 Behavioural Neuroscience Laboratory
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience

8. Capstone Courses (1.0 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
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*
PSYD66H3 Current Topics in Human Brain & Behaviour
**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 Systems/Behavioural and Cellular/Molecular streams: BIOB10H3, BIOB11H3, BIOB12H3, CHMB41H3, NROB61H3, and PSYB55H3~~
- ~~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 Cellular/Molecular stream: BIOB12H3, CHMB41H3, and CHMB42H3.

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: psychundergrad.utsc@utoronto.ca
Co-op Program Coordinator: 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 **Cellular/Molecular** stream explores the nervous system at its most fundamental level, investigating the influence of genes, signaling molecules, and cellular morphology on the development and maintenance of brain function, predominantly through the use of *in vitro* techniques (e.g., immunohistochemistry, patch clamp).

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, 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 ~~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.

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. Adding BIOD06 option to capstone requirement.
2. Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.
3. Updating 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. BIOD06 was a new course as of the 2022 Calendar. The course content is relevant to the Systems/Behavioural and Cellular/Molecular neuroscience streams, and would be a suitable capstone option for these programs.
2. 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.
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, 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. Students will have additional options for completing their capstone courses, allowing them further flexibility to align their courses with their interests.
2. Improved clarity and readability of the neuroscience streams.
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:

1. Initiated by Biology department in 2022; DCC approved Oct 4, 2023
2. Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).
3. DCC approved Oct 4, 2023

Resource Implications:

SCSPE1372: SPECIALIST PROGRAM IN NEUROSCIENCE - Systems/Behavioural 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 6.5 credits, specific to the Systems/Behavioural stream, for a total of 13.0 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

SYSTEMS/BEHAVIOURAL STREAM (6.5 credits)

3. Quantitative Logic and Reasoning (1.0 credit):
PSYC08H3 Advanced Data Analysis in Psychology
and one of the following:
CSCA20H3 Introduction to Programming
[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]

4. Advanced Foundations (2.0 credits)
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
NROC61H3 Learning and Motivation
and two of the following:
NROC34H3 Neuroethology
NROC64H3 Sensorimotor Systems
NROC69H3 Synaptic Organization & Physiology of the Brain

5. Stream-specific electives (1.0 credit)
two of the following:
BIOC14H3 Genes, Environment and Behaviour
CHMB41H3 Organic Chemistry I
CHMB42H3 Organic Chemistry II
NROC36H3 Molecular Neuroscience
PSYC62H3 Drugs and the Brain

6. Breadth in Neuroscience (1.0 credit):
two of the following:
CHMB41H3* Organic Chemistry I
NROC36H3* Molecular Neuroscience
NROC69H3* Synaptic Organization & Physiology of the Brain
PSYB51H3 Introduction to Perception
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
**only if not used to complete components ~~A~~4 or ~~A~~5 of the requirements*

7. Laboratory Course (0.5 credit):
one of the following:
NROC60H3 Cellular Neuroscience Laboratory
NROC63H3 Behavioural Neuroscience Laboratory (recommended)
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience
PSYC74H3 Human Movement Laboratory

8. Capstone Courses (1.0 credit):
two of the following:
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*
PSYD66H3 Current Topics in Human Brain & Behaviour
**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 **Systems/Behavioural** stream examines the neural mechanisms underlying behaviour and how brain circuits work together to analyze external stimuli, internal biological states, and past experiences in order to coordinate appropriate responses, predominantly through the use of *in vivo* approaches in behaving subjects (e.g., optogenetics, chemogenetics).

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:

1. Adding BIOD06 option to capstone requirement.
2. Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.

Rationale:

1. BIOD06 was a new course as of the 2022 Calendar. The course content is relevant to the Systems/Behavioural and Cellular/Molecular neuroscience streams, and would be a suitable capstone option for these programs.
2. 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:

1. Students will have additional options for completing their capstone courses, allowing them further flexibility to align their courses with their interests.
2. Improved clarity and readability of the neuroscience streams.

Consultations:

1. Initiated by Biology department in 2022; PSY DCC approved Oct 4, 2023
2. Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).

Resource Implications:

SCSPE1372C: SPECIALIST (CO-OPERATIVE) PROGRAM IN NEUROSCIENCE - Systems/Behavioural 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 Systems/Behavioural 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

SYSTEMS/BEHAVIOURAL STREAM (7.0 credits)

3. Quantitative Logic and Reasoning (1.0 credit):

PSYC08H3 Advanced Data Analysis in Psychology
and one of the following:
CSCA20H3 Introduction to Programming
[PHYA10H3 Physics I for the Physical Sciences or PHYA11H3 Physics I for the Life Sciences]

4. Advanced Foundations (2.5 credits):
BIOB11H3 Molecular Aspects of Cellular and Genetic Processes
BIOB12H3 Cell and Molecular Biology Laboratory
NROC61H3 Learning and Motivation
and two of the following:
NROC34H3 Neuroethology
NROC64H3 Sensorimotor Systems
NROC69H3 Synaptic Organization & Physiology of the Brain

5. Stream-specific electives (1.0 credit):
CHMB41H3 Organic Chemistry I
and one of the following:
BIOC14H3 Genes, Environment and Behaviour
CHMB42H3 Organic Chemistry II
NROC36H3 Molecular Neuroscience
PSYC62H3 Drugs and the Brain

6. Breadth in Neuroscience (1.0 credit):
NROC36H3 Molecular Neuroscience*
NROC69H3 Synaptic Organization & Physiology of the Brain*
PSYB51H3 Introduction to Perception
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
**only if not used to complete components ~~A~~4 or ~~A~~5 of the requirements*

7. Laboratory Course (0.5 credit):
NROC60H3 Cellular Neuroscience Laboratory
NROC63H3 Behavioural Neuroscience Laboratory (recommended)
NROC90H3 Supervised Study in Neuroscience
NROC93H3 Supervised Study in Neuroscience
PSYC74H3 Human Movement Laboratory

8. Capstone Courses (1.0 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*
PSYD66H3 Current Topics in Human Brain & Behaviour
**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 Systems/Behavioural and Cellular/Molecular streams: BIOB10H3, BIOB11H3, BIOB12H3, CHMB41H3, NROB61H3, and PSYB55H3~~

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 Systems/Behavioural stream: BIOB12H3, CHMB41H3, and CHMB42H3.

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 **Systems/Behavioural** stream examines the neural mechanisms underlying behaviour and how brain circuits work together to analyze external stimuli, internal biological states, and past experiences in order to coordinate appropriate responses, predominantly through the use of *in vivo* approaches in behaving subjects (e.g., optogenetics, chemogenetics).

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. Adding BIOD06 option to capstone requirement.
2. Adjusting the description and completion requirements so that the three streams can be published under separate headers in the Calendar.
3. Updating 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. BIOD06 was a new course as of the 2022 Calendar. The course content is relevant to the Systems/Behavioural and Cellular/Molecular neuroscience streams, and would be a suitable capstone option for these programs.

2. 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.
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, 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. Students will have additional options for completing their capstone courses, allowing them further flexibility to align their courses with their interests.
2. Improved clarity and readability of the neuroscience streams.
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:

1. Initiated by Biology department in 2022; DCC approved Oct 4, 2023
2. Psychology Undergraduate Program Administrator (Ainsley Lawson), Academic Programs Officer (Martha Harris).
3. DCC approved Oct 4, 2023

Resource Implications:

5 New Courses

PSYB80H3: Psychology in Context

Description:

This course builds upon foundational concepts from Introduction to Psychology and examines the field of psychological science from a critical perspective. Students will explore the contextual underpinnings of the field and learn about current debates and challenges facing various subfields of psychology. Specific topics will vary by term according to the interests and expertise of the course instructor and guest lecturers. Examination of these topics will include considerations such as bias in the sciences, demographic representation in participant pools, methodological diversity, replicability, and ecological validity.

Prerequisites: PSYA01H3, PSYA02H3

Corequisites:

Exclusions:

Enrolment Limits: 500

Recommended Preparation: PSYB70H3

Notes:

Priority will be given to students in the Specialist/Specialist Co-op, Major and Minor programs in Psychology, Mental Health Studies, and Neuroscience.

Methods of Assessment:

Students will be asked to write brief reflection papers, which will support all of the learning outcomes listed above. They will also be asked to engage with their peers in online discussion boards (learning objective #1)

Weekly brief reflection papers, 10 out of 12 scored for completion (i.e., can miss 2)

In order to help promote metacognitive skills and agency, students will be asked to reflect upon the quality of their own work and select 3 of their weekly reflection papers to be further evaluated. These will be marked using a 3-point rubric for overall engagement, nuance, and critical thinking.

Infographic project (learning objectives #5 and #6): Students will be asked to select an issue or challenge currently facing the field and draw upon empirical literature and course content to propose an evidence-based approach for addressing the challenge, to be depicted in an infographic format. This will be a group-based project, to help cut down on TA marking time.

Final exam: A written synthesis of overall learning in the course. Emphasis will be on the process of learning, synthesis, and ability to critically analyze course content and articulate evidence-based arguments about challenges in the field (learning objectives #2, #3, #4, #5)

Breadth Requirements: Social & Behavioural Sciences

CNC Allowed: Y

Credit Value: fixed: 0.5

Learning Outcomes:

By the end of this course, students are expected to be able to… Engage in written and verbal discussions about complex and potentially difficult topics in psychological science in a critical, nuanced, and caring manner with members of the course community and the broader field Identify and reflect upon key assumptions, norms, and contextual factors underlying dominant approaches within the field of psychology, including those covered in introductory courses Identify and reflect upon current debates, challenges, and controversies in the field of psychology Develop and clearly articulate, both verbally and in writing, evidence-based arguments regarding current debates, challenges, and/or controversies in the field of psychology Analyze scholarship in psychology through a critical lens, identifying challenges and advances vis-à-vis dominant approaches and methods Develop and clearly articulate novel methodological and theoretical approaches and solutions for addressing current challenges within the field of psychology

Topics Covered:

Week 1: Introduction and contextualizing the course

e.g., What do Equity, Diversity, and Inclusion (EDI) look like in Psychology?; What does WEIRD (really) mean?; How are the movements of open science and EDI efforts intersecting to help shape the field today?

Time spent establishing group norms and expectations in line with learning outcome #1, with a focus on mutual care, understanding, and creating a safe space in which to discuss complex topics.

Current issues and controversies in:

Week 2: Behavioural neuroscience
Week 3: Cognitive neuroscience
Week 4: Developmental psychology
Week 5: Social Psychology
Week 6: Personality Psychology
Week 7: Mid-way synthesis and review – critical reflections and connections
e.g., How do the topics covered so far intersect with one another?; recurring themes and points for discussion across different subfields; reflections on learning so far
Week 8: Clinical Science
Week 9: Clinical Practice
Week 10: Psychological science in underrepresented communities
Week 11: Psychology outside of the academy
Week 12: End of term synthesis, review, and reflections
e.g., Reflecting on the course material as a whole; reflections on learning; looking ahead to future learning and critical engagement in the field – what lessons and skills will be carried forward? What are some exciting advances and solutions that may motivate and inspire students' own contributions to the field?

Rationale:

Rationale for prereqs
PSYA01 and PSYA02 have provided students with a broad introduction to concepts and issues in psychological science, across different subfields. This foundation represents the canonical views in the field and prepares students to explore these concepts more deeply. The proposed course will provide students the opportunity to think critically and proactively about the field, including current challenges to and advances in dominant ways of thinking, thereby better preparing them to engage deeply and in nuanced ways with more advanced materials in the subfields at the C- and D-level. The Campus Curriculum Working Circle, as described in the Rationale section of this proposal, specifically calls for this type of critical coursework early in students' studies.

Rationale for recommended preparation course
Familiarity with the dominant methods used in psychological science will assist students in thinking more deeply about how such methods may impact the dominant viewpoints, challenges, and controversies in the field. Although attention will be given to these methods as they pertain to material in this proposed course such that students without PSYB70 are adequately prepared, students who have completed PSYB70 may be prepared to optionally engage with the material at more advanced levels.

Rationale for Course
Currently, the Department of Psychology does not offer any breadth courses that are specifically designed to take a critical lens to the field of Psychology itself. Courses within the department that do take such an approach are currently limited to Specialists or offered at the D-level. The proposed course aims to offer students a way to enhance their critical thinking skills and apply these skills to their own engagement with our field. Crucially, this course is designed at the B-level, so as to provide students with a critical foundation early in their studies, which will serve them as they delve deeper into their studies in our department. This approach is directly informed by recommendations from the UTSC Campus Curriculum Review Working Circle, as laid out in their recent report. Specifically, this course is aligned with the call to "Prioritize students' engagement with diverse materials and epistemologies at earlier stages of their learning at UTSC (...)".

The overarching aims of this course include:

Helping undergraduate students to gain an understanding of and to engage in critical reflection and conversation about 1) key assumptions, norms, and contextual factors that have shaped/continue to shape the field of psychology in its present form, and 2) current debates, challenges, and controversies shaping the field of psychology

Building upon the foundation gained in introductory psychology courses, to give students the tools to pose nuanced and thought-provoking questions about the field, to help enrich their engagement with the content in subsequent courses, and

engage them in the larger ongoing project of improving and expanding the field of psychological science.

For both pedagogical and resource-based considerations, we believe that a CR/NCR grading scale is most appropriate for this course. From a pedagogical perspective, it will be crucial for students to feel safe and comfortable in sharing their opinions and perspectives on a range of complex and potentially fraught topics and areas of debate. An overarching aim for this course is to help students reflect upon their own learning and to promote metacognitive skills. The literature on ungrading and other alternative methods of assessment highlights the ways in which student engagement, creativity, and intellectual risk-taking can be fostered and strengthened when traditional grading structures are removed. The focus will be on the process of learning and students' growth, which is also aligned with principles of equity, inclusion, and diverse ways of knowing.

From a resource-perspective, having TAs grade student work on a less granular scale, such as a 3-point marking scheme for reflective writing, will ensure that they can spend time engaging in more conceptual discussions (e.g., with rotating weekly office hours) and dialogue with students (e.g., via online discussion boards), rather than devote all of their time to marking. This will also allow for greater provision of feedback and support of students' own reflections on their learning outcomes. This is particularly relevant given the expected enrolment size for this B-level course.

Consultation:

Consultation meeting with Katie Larson, including discussion of CR/NCR (May 15, 2023)
Overview presentation at Psychology Department retreat (June 14, 2023)
Discussions with David Chan, CTL (April 27, August 3, 2023)
Meeting with Nicola Dove, CTL (August 9, 2023)
Date on which new course code is approved: Aug 29, 2023
Departmental Curriculum Committee approval date: Oct 4, 2023

Resources:

This course will be taught by regular faculty.
We expect we will need 375 TA hours. The Department will fund within TA budget. Dean's office is committed to additional funding when applicable based on enrolment increases (approved by Dean's Office on Nov 20, 2023.)
Honoraria funding for guest speakers will come from departmental budget and/or departmental PIE funds and/or other internal or external grants. When appropriate, honoraria amounts will be consistent with recently developed UTSC guidelines for compensation when working with members of communities.

Overlap with Existing Courses:

Courses that have been identified that appear to have overlap with this course. Overlap not sufficient to warrant any exclusions. Brief note regarding area(s) of overlap noted in italics.

PSYC70H3: Advanced Research Methods (Discussion of replication crisis, limitations of dominant approaches and methods, current advances to address limitations in the field)

BIOC70H3: An Introduction to Bias in the Sciences (Discussion of EDI-related issues in a related field, Biological Sciences, and science more broadly)

PSY428H1: Critical Psychology (A critical perspective on the field of psychology itself as the focus for analysis and discussion)

WSTB05H3: Understanding Power and Knowledge in Research (Critical analysis of dominant and alternative paradigms of knowledge production including research, exploration of objectivity and bias)

PSYD16H3: Critical Analysis in Social Psychology (A critical perspective on the specific subfield of social psychology)

PSYD31H3: Cultural-Clinical Psychology (A critical examination of dominant approaches in clinical psychology with an emphasis on integrating cultural perspectives)

PSYD37HS: Social Context of Mental Health and Illness (Exploration of how social practices and ideas help to shape approaches to mental health and mental illness)

Programs of Study for Which This Course Might be Suitable: n/a

Estimated Enrolment: 500

Instructor: Dr. Jessica Dere

PSYC17H3: Meeting Minds: The Psychology of Interpersonal Interactions

Impact on Programs: This Proposal triggers modifications in the unit's programs(s)

Description:

What happens when two (or more) minds meet—how do they interact and interconnect? Specifically, how do people "get on the same page," and what are barriers that might stand in the way? Guided by these questions, this course will provide a broad overview of the psychological phenomena and processes that enable interpersonal connection. We will examine the various ways that people's inner states—thoughts, feelings, intentions, and identities—connect with one another. We will study perspectives from both perceivers (i.e., how to understand others) and targets (i.e., how to be understood), at levels of dyads (i.e., how two minds become interconnected) and groups (i.e., how minds coordinate and work collectively). Throughout the course, we will consider challenges to effective interpersonal interactions, and solutions and strategies that promote and strengthen interconnection. A range of perspectives, including those from social, cognitive, personality, developmental, and cultural psychology, as well as adjacent disciplines such as communication, will be considered.

Prerequisites: PSYB10H3 and [PSYB07H3 or STAB22H3 or STAB23H3] and PSYB70H3

Corequisites:

Exclusions:

Enrolment Limits: 100

Recommended Preparation:

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

Methods of Assessment:

Learning outcomes of this course will be supported via a variety of assignments:
Learning Outcome #1 (develop foundational knowledge) will be assessed via quizzes and a final exam.
Learning Outcomes #2 (critically consume and evaluate research) and #4 (engage in knowledge-translation) will be assessed via a group research project. In this project, students will work in groups to identify strategies that facilitate positive interpersonal interactions in the peer-reviewed literature that are not covered in the lectures, and design educational media that communicates the strategies to a general audience (e.g., podcast, slideshow, poster, videos). Students will also each submit a "white paper" on the identified strategies.
Learning Outcome #3 (apply evidence-based approach to everyday observations) will be supported via behavioral diary, in which students submit periodic observations of phenomena in their life experiences, including real-world examples of class content.
Learning Outcome #5 (develop thinking on inclusivity and generalizability) will be supported via discussion from class participation, as well as all other assessments.
• Quizzes 25% (seven quizzes, multiple-choice; lowest two scores are dropped)
• Behavioral diary 15% (four submissions; lowest score is dropped)
• Group research project 30% (educational media 15%; white paper 15%)
• Final exam 30% (multiple-choice and short open-ended questions)

Breadth Requirements: Social & Behavioural Sciences

CNC Allowed: Y

Credit Value: fixed: 0.5

Learning Outcomes:

1. Develop foundational knowledge: Students will learn core psychological phenomena and processes involved in the interconnection and interaction of minds, including thoughts, attitudes, intentions, and identities. They will be able to describe and identify main theoretical perspectives and empirical findings on the topic in fields of social, cognitive, and affective psychology. 2. Critically consume and evaluate research: Students will learn to consume and comprehend primary sources of literature (e.g., empirical journal articles). Students will also learn to critically evaluate claims in popular media and identify informative sources on the validity of such claims. 3. Apply evidence-based approach to everyday observations: Students will become familiar with scientific methods of studying everyday phenomena and apply methodological sophistication to observations about themselves and others (e.g., distinguish between general behavioral tendencies vs. individual idiosyncrasies). 4. Engage in knowledge-translation. Students will draw from psychological theory and research to develop and apply strategies to facilitate understanding other people and being understood, and to communicate such strategies to a general audience. 5. Develop thinking on inclusivity and generalizability: Students will practice applying principles of inclusivity and generalizability to psychological knowledge obtained in and out of the classroom. Students will reflect on the

scope and limitations of psychological findings, such as to whom and to which contexts the findings may or may not apply, and develop cultural consciousness and intellectual humility.

Topics Covered:

- Conversation science (e.g., Gricean norms, social monitoring, conversation dynamics, high-quality listening)
- Interpersonal interactions (e.g., social and person perception, social inferences, dyadic analysis)
- Communication in close relationships (e.g., models of intimacy and perceived responsiveness, validation and social support)
- Intergroup dialogue and intercultural communication

Rationale:

Prereq Rationale

This course requires introductory knowledge of psychology. Students will read primary, peer-reviewed empirical articles, which require that they have fundamental understanding of methods and statistics typical in psychology.

Overall Rationale

This course will be a new offering in social psychology at the C-level in the department. It will provide a broad knowledge base of psychological processes that support interpersonal understanding, which reflects an important set of phenomena and mental processes in social psychology, with a particular focus on the challenges to achieving interpersonal understanding and strategies that people use to do so.

This course reflects a natural progression from A- and B-level courses and offers more in-depth knowledge on new topics, preparing students for specialized D-level topics and coursework. This course fills a current gap course offering and complements existing department curriculum. Because of its distinct focus on interacting minds and interpersonal, dyadic understanding (rather than broader social processes), this course contains elements that are connected to but do not overlap with existing courses, including Social Cognition (PSYC13H3), The Psychology of Prejudice (PSYC12H3), Cross-Cultural Social Psychology (PSYC14H3), and The Psychology of Emotion (PSYC18H3).

This course could complement existing Psychology and Mental Health Studies programs offered through our department. It is expected to benefit specialist students, majors, and minors in Psychology as one of the breadth course offerings in Social and Developmental Psychology, and specialist students and majors in Mental Health Studies as one of the breadth course offerings in the Psycho-Social Grouping.

This course is not expected to retire any existing course.

The enrolment limit is set to 100, as this is standard for C-level courses in the Department of Psychology.

Consultation:

Course code approved by Office of the Registrar: Sept 8, 2023

Social Psych Faculty consulted throughout September 2023

Proposal approved by DCC: Oct 4, 2023

Resources:

This course will be taught by regular faculty.

Standard TA support for C-level courses (150 TA hours) will be needed. The Department will fund within TA budget. Dean's office is committed to additional funding when applicable based on enrolment increases (approved by Dean's Office on Nov 20, 2023.)

No specific equipment, infrastructure, or lab fees are required.

Overlap with Existing Courses:

This course contains minor overlap with the following course:

- Social Cognition (PSYC13H3): social cognitive processes of constructing knowledge about others (around 30% of one lecture on social perception, and around 50% of one lecture on accuracy and bias of person judgment)
- The Psychology of Prejudice (PSYC12H3): person perception (one lecture)
- Cross-Cultural Social Psychology (PSYC14H3): social identity (one lecture)
- The Psychology of Emotion (PSYC18H3): emotion recognition (one lecture)
- Psychology of Interpersonal Relationships (PSYD11) is no longer taught by a regular faculty member and is being retired this year

This course also contains minor overlap with the following courses offered at other campuses (the nature of the overlap is the same as listed above):

- Psychology of Emotions (PSY331H5, UTM): emotion recognition (one lecture)
- Social Psychology of Emotions (PSY331H1, UTSG): emotion recognition (one lecture)
- Social Cognition (PSY326H1, UTSG): accuracy and bias of person judgment (one lecture)

There is no sufficient overlap to warrant including the existing courses as exclusions for this course or adding this course as exclusion to existing courses.

Estimated Enrolment: 100

Instructor: Y. Andre Wang

PSYC86H3: The Unconscious Mind

Impact on Programs: This Proposal triggers modifications in the unit's programs(s)

Description:

The concept of the unconscious mind has been integral to our understanding of human behavior ever since Freud introduced the concept in 1915. In this course, we will survey the history of the concept of the unconscious and discuss contemporary theory and research into the nature of the unconscious. Topics such as implicit cognition, non-conscious learning, decision-making, and measurement of non-conscious processes will be discussed from social, cognitive, clinical, and neuroscience perspectives. We will explore the applications and implications of such current research on the unconscious mind for individuals, culture, and society.

Prerequisites: PSYB32H3 and [PSYB55H3 or PSYB57H3] and [PSYB07H3 or STAB22H3 or STAB23H3] and PSYB70H3

Corequisites:

Exclusions:

Enrolment Limits: 100

Recommended Preparation:

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

Methods of Assessment:

Assessment will include two term-tests and a final exam, which will support student learning by gauging students ability to understand and to critically evaluate the theories and methods of studying the unconscious mind and current controversies in the field. The term-tests will entail both multiple-choice and essay questions intended to gauge students level of understanding of – and critical thinking about – course content. Correct answers will be revealed following tests, which will help students to further their learning in areas of difficulty. Assessment will also include writing opinion papers on topics of interest. The weighting will be as follows:
- term-test 1: 23%
- term-test 2: 23%
- final exam: 34%
- Opinion papers: 20%

Test #1 will address learning outcomes #1, #3, & #4 by testing the extent to which students understand the history of the concept of the unconscious and controversies surrounding that history, as well as testing their ability to understand, synthesize, and analyse current controversies in the study of the unconscious, and consider the replicability of some of the most of the important studies in the field.

Test #2 will address learning outcome #2 #3, & #4 by testing the extent to which students understand and can critically evaluate the methods that are used in the scientific study of the unconscious, as well as testing their ability to understand, synthesize, and analyse current controversies in the study of the unconscious, and consider the replicability of some of the most of the important studies in the field.

The final exam will address learning outcomes #3 & #4 by testing students' ability to synthesize and analyse contemporary theories on the nature of the unconscious, understand current controversies in the study of the unconscious, and consider the replicability of some of the most of the important studies in the field.

The opinion papers will allow students the opportunity to develop their skills to critically analyze empirical work in the study of the unconscious, and to clearly communicate their understanding of – and ideas about – recent research relevant to the unconscious in writing (learning outcome #5). As well, these papers will lead students to synthesize and critically analyse contemporary theories on the nature of the unconscious and their applications and implications for mental health, psychotherapy, culture, and society (learning outcomes #3).

Breadth Requirements: Social & Behavioural Sciences

CNC Allowed: Y

Credit Value: fixed: 0.5

Learning Outcomes:

By the end of the course, students should be able to: 1. Understand the history of the concept of the unconscious and controversies surrounding that history. 2. Understand and be able to critically evaluate the methods that are used in the scientific study of the unconscious. 3. Synthesize and critically analyse contemporary theories on the nature of the unconscious and their applications and implications for mental health, psychotherapy, culture, and society. 4. Understand current controversies in the study of the unconscious and the replicability of some of the most of the important studies in the field. 5. Critically analyze empirical work in the study of the unconscious, and clearly communicate their understanding of – and ideas about – recent research relevant to the unconscious in writing, developing written communication skills.

Topics Covered:

Lecture topics are as follows:

1) The history of the study of the unconscious mind. Topics will include: Philosophers from multiple cultures, Freud, Jung, the "new look" movement, and the development of concepts of implicit memory and cognition. Controversies surrounding the study of the unconscious – particularly the psychoanalytic perspective such as lack of empirical evidence, over-simplification, and Eurocentricity & gender and sexuality biases will be discussed and cross-cultural understandings will be considered.

2) Unconscious perception & memory. Topics will include predictive processing and implicit cognition (from the classic cognitive perspective), change blindness, Stroop test, attentional blink, memory distortions, and semantic priming. We will cover aspects of the replication crisis for some of the more provocative topics such as direct behavioural priming (e.g., "social priming") to highlight the ways that some of these concepts were over-extended.

3) Unconscious learning. Topics will include discussion of conditioning (Classical and Instrumental), habit learning, as well as research concerning implicit memory and procedural memory. We will discuss which cognitive processes operate outside of conscious awareness that allow us to build semantic memory and world models.

4) The measurement and the neuroscience of the unconscious. This lecture will include discussion of the general ways in which cognitive neuroscience approaches like fMRI and ERP have shed light on unconscious processing at the neural level. We will also discuss limitations of neuroscience approaches – e.g., that it can show correlations but can't necessarily establish causation between unconscious processes and behavior. Specific techniques for measuring unconscious processes such as the IAT and priming measures will also be discussed.

5) Unconscious cues and decision-making. This lecture will include discussion of research on heuristics, biases, and intuition. Dual-process theories and their limitations will be discussed, as well as the mere exposure effect. Studies that have been found to lack replicability such as John Bargh's work on social priming will also be discussed in order to teach students about the importance of replication. Libet's free Will experiment and its controversies will also be covered.

6) The unconscious and the sense of self. Discussions will include theories of unconscious influences on self identity. For example, how core beliefs affect perception, memory, and learning, and how this can reinforce beliefs about the self over time. We will also discuss how social comparison and cultural messages can impact one's sense of self.

7) Working with the unconscious in psychodynamic therapy. Several prominent modalities of psychodynamic psychotherapy will be discussed as will their evidence-base.

8) Working with the unconscious in cognitive behavioural therapy. An intro to CBT will be provided and we will discuss theories of how CBT might alter unconscious processes by altering core beliefs and by altering habits through repeated actions.

9) Working with the unconscious in PTSD. We will delve into one specific mental health disorder, PTSD, and examine theories and findings that shed light on how trauma can alter non-conscious processes, affecting emotion, behaviour, and cognition. We will discuss CBT treatment for PTSD and how it is thought to potentially alter non-conscious processes alleviating symptoms of this disorder.

10) The unconscious and its implications for shaping culture. In the final lecture, we will explore several specific ways in which unconscious cognitions shape culture, and how culture, in turn, shapes unconscious cognition. In particular, we will focus on implicit social learning, cultural narratives, and cultural values.

Rationale:

Prereq Rationale

It is standard in the Department of Psychology that all PSY C-level courses require both foundational research methods (PSYB70) and statistics (PSYB07, STAB22, or STAB23) to ensure that they have adequate preparation to understand the ways and means of the research process as applied to a particular content area.

Additionally, given the topics that will be discussed in this course, students will be required to have taken an introduction to clinical psychology course (PSYB32H3) and an introduction to cognitive neuroscience class (PSYB55H3) or an introduction to cognitive psychology class (PSYB57H3).

Overall Rationale

This course will fit into the unit's psychology program by filling a gap in the current curriculum in that this will be the only course solely dedicated to the study of the unconscious, which is a fundamental concept in the field of psychology. The

unconscious mind will be of interest to Psychology Majors with interest in any area of psychology (social, clinical, neuroscience, cognitive, and developmental). The course will complement and add to the cognitive, neuroscience, and clinical introductory psychology classes by delving into more depth on specific processes related to unconscious processes than what is covered in those introductory classes. This course will also fit into the unit's psychology program by filling another gap in the current curriculum – exploring how psychodynamic theories have evolved with the scientific method to better understand our current conceptualizations and assumptions of the human mind.

Consultation:

Consulted with Chair Suzanne Erb and Assoc. Chair Kyle Danielson on initial course concept

Further consultations with Professors Michael Souza, Brett Ford, Olivia Lewandowska, Anthony Ruocco, Michael Best, and Kyle Danielson.

Professor Souza offered feedback and asked for more detailed descriptions about pre-requisites, learning outcomes, topics covered, and assessment methods. Dr. Ruocco provided feedback on the course description and approved the course proposal. Dr. Best read and approved of the course proposal.
Course code approved by Amber Aug 29, 2023
DCC approved: Oct 4, 2023

Resources:

The course will be taught by a continuing-status Assistant Professor (Teaching Stream).
TA hours: 200 hours, covered by the department's existing TA budget.

Overlap with Existing Courses:

Some existing courses may have some overlap with concepts taught in my proposed course: "the unconscious mind":

- In PSYA02, an introductory psychology class, students receive a short introduction to psychodynamic approaches.
- In PSYC36, a class on "Psychotherapy", students receive one lecture on the psychodynamic approach as it applies to psychotherapy.
- In PSYC85, the history of psychology, students learn a little bit about the psychodynamic approach as it relates to the history of psychology.
- In PSYB30, introduction to personality, students may receive one lecture on psychodynamic approaches to personality theory.
- In PSYB57, introduction to cognition, students learn about basic cognitive processes, and in so doing, learn about concepts related to unconscious perception, memory, and attention.
- In PSYB51, introduction to perception, students learn a brief module on unconscious perception.
- In PSYC13, social cognition, students learn about how cognitive processes (including unconscious ones) influence social processes.

Although there is some minor overall in these classes with what will be taught in "the unconscious mind", this course will be unique in that it will delve much more deeply into psychodynamic perspectives (historical and modern) of these areas, as well as going into more depth about cognitive, neuroscience, social, and clinical theories of the unconscious and research on its applications for individuals, society, and mental health.
The UTM & St. George campuses similarly offer intro psychology (PSY100), Introduction to cognitive psychology (PSY27), theories of psychotherapy (PSY343), history of psychology (PSY402 & PSY450), introduction to personality (PSY230), introduction to perception (PSY280), and social cognition (PSY326) classes.

In NEW303H1, students learn about the history of psychoanalysis and Jung. However, since this course is taught in the Humanities rather than the Psychology department, it does not address the empirical investigations that have assessed the validity of psychoanalytic theories, nor does it contextualize these theories within the framework of modern day cognitive, neuroscience, social, and clinical psychology research on the topic of the unconscious.

Instructor:

Shona Tritt, PhD. C. Psych. Assistant Professor (Teaching Stream) Dr. Tritt has a continuing appointment and will be happy to teach the course as needed by the department.

PSYC87H3: Psychology and Money

Description:

This course is designed for students interested in understanding the psychological influences on financial decision making, as well as the interplay between macroeconomic forces and psychological processes. Starting with a psychological and historical exploration of money's evolution, the course covers a wide range of topics. These include the impact of economic conditions like inflation and inequality on well-being, the psychology of household financial behaviours, including financial literacy and debt management, and the motivations affecting investment choices. The course also examines marketing psychology, the influence of money on interpersonal relationships, and the psychology of charitable giving. Finally, it investigates the psychological implications of emerging financial technologies.

Prerequisites: [PSYB10H3 or PSYB30H3] and [PSYB07H3 or STAB22H3 or STAB23H3] and PSYB70H3

Corequisites:

Exclusions:

Enrolment Limits: 100

Recommended Preparation:

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

Methods of Assessment:

Midterm Tests and Final Exam (75% of the Final Grade): The course includes two midterm tests and a final exam, which collectively account for 75% of the final grade. Both multiple-choice and essay questions will be employed to evaluate students' comprehension of peer-reviewed research studies related to specific course topics. Each midterm test is weighted at 20% of the final grade, while the final exam carries a weight of 35%.

Written Assignment (20% of the Final Grade): Students are required to choose an article of original research from a provided list. They must then critically evaluate this work and propose a study that either addresses a limitation or further elaborates on some aspect of the research described in the article they have chosen.

Reflection Assignments (5% of the Final Grade): Comprising 5% of the final grade, students are required to submit five brief reflection assignments, each ranging from 250 to 300 words. These assignments may serve to encapsulate the students' critical reflections or to pose questions about specific readings or lecture topics. Students are also encouraged to reflect on related topics currently making headlines in the news. In addition, optional financial-literacy exercises will be provided, which can count towards fulfilling the reflection assignment requirements. These exercises offer guided practice in essential financial skills, such as budgeting, calculating personal inflation rates, and financial goal setting.

Breadth Requirements: Social & Behavioural Sciences

CNC Allowed: Y

Credit Value: fixed: 0.5

Learning Outcomes:

Understand the Psychological Underpinnings of Financial Behaviour: Identify and describe the direct and indirect influences of emotions, cognitive biases, personality traits, and societal pressures on financial behaviours. Explain key psychological theories as they relate to financial behaviour and how applied fields such as financial advising, financial education, and financial therapy benefit from basic psychological research. Psychology and Pervasive Influences: Appreciate how financial and economic systems act as pervasive contexts that influence various psychological phenomena. Take these systemic influences into account when evaluating the generalizability of specific findings, especially as they concern individuals from diverse socioeconomic and marginalized communities. Critical Analysis and Research Application: Through written assignments, develop literature search, reading, and writing skills for consuming and communicating about primary literature in financial psychology. Produce informed critiques and offer thoughtful suggestions to address key limitations. Apply methodological knowledge to create rigorous research designs for testing novel hypotheses related to the psychology of financial behaviour. Critical Evaluation and Application: Critically evaluate scientific and non-scientific information as to be a better consumer of information presented in financial and economic news media, social media, and financial service and product advertisements. Practical Skills: Through optional financial literacy exercises and reflection assignments, students will have the opportunity to apply theoretical knowledge to practical tasks such as budgeting, calculating personal inflation rates, and financial goal setting.

Topics Covered:

The Evolution of Money: A Psychological and Historical Perspective: Examining the historical progression of monetary systems in relation to cultural paradigms and neurobiological adaptations. The question “What is Money?” will be introduced and explored through a psychological lens.
Inflation, Inequality, and Well-Being: An examination of how economic conditions impact mental health and overall well-being and how psychological factors influence decision-making in inflationary economic environments.
The Psychology of Household Financial Behaviour: Delves into the psychology of household financial behaviours. Topics include financial literacy, attitudes, beliefs, goal setting, and debt management. Financial education, advising, and therapy are introduced as applied disciplines that benefit from insights provided by psychological science.
Investor Psychology and Behavioural Finance Fundamentals: This course covers psychological influences on investing, including not only cognitive biases but also the roles of personality traits, cultural norms, and social-psychological factors. It explores the psychological motives that contribute to manias, panics, and investing in socially responsible (i.e., Environmental, Social, and Governance compliant) companies. Additionally, the course examines how social networking platforms shape stock market participation and investor behaviour.
Consumer Psychology and Marketing Strategies: Understanding how psychological principles are used in consumer behaviour and targeted marketing.
Interpersonal Dynamics and Financial Factors: Investigating the impact of financial matters on relationships and social interactions.
Altruism and Financial Contributions: A study of the motivations and social factors that influence charitable giving.
The Future of Money: An examination of emerging financial technologies and systems, such as Bitcoin and central bank digital currencies, and their various psychological implications.

Rationale:

Prereq Rationale

PSYB10H3: Introduction to Social Psychology. This prerequisite course in social psychology provides valuable insights into how social factors, group dynamics, and societal norms influence individual behaviour and decision-making, themes directly relevant to understanding financial choices and behaviours in "Psychology and Money."
PSYB30H3: Introduction to Personality. This prerequisite course in personality psychology equips students with a foundational understanding of the scientific study of individual differences across biological, social, and cultural contexts. Personality and other individual differences are recurring themes in “Psychology and Money.”
PSYB70H3: Methods in Psychological Science. This prerequisite course ensures that students are equipped to search for, identify, and acquire primary research articles, evaluate research designs for validity and reliability, and articulate new ideas while identifying key variables and essential features of appropriate research designs. These skills are crucial for critically evaluating research studies in "Psychology and Money."
Statistics [PSYB07H3 or STAB22H3 or STAB23H3]. This prerequisite ensures that students grasp fundamental statistical concepts. Such understanding is vital for comprehending and critically evaluating the covered in “Psychology and Money.”

Overall Rationale

The proposed course is novel. It does not aim to replace any existing courses.
The inclusion of a course on "Psychology and Money" in the Department of Psychology curriculum offers several compelling benefits that align with the department's educational mission:
Filling a Curriculum Gap: Surprisingly, despite the significant role that money plays in everyday life and its considerable impact on psychological well-being, the current curriculum lacks a specialized course dedicated to examining financial behaviour in its own right. This absence becomes even more noticeable given the economic changes brought on by the global pandemic and the rise of emerging financial technologies that sometimes encourage risky financial behaviours, such as discount brokerage investing apps. Therefore, this course aims to fill an important gap in the curriculum by offering timely insights into a subject that has become increasingly relevant and pressing in our current post-pandemic economic landscape.
Relevance: In today's digital, “democratized,” and complex financial landscape, the relevance of psychological research for understanding money management and financial decision-making has become increasingly vital. Highlighting this importance, Gary Gensler, the Chair of the Securities and Exchange Commission in the United States, testified before the House Committee on Financial Services on May 6, 2021. Amid the backdrop of the "meme stock saga," he underscored the influence of social media and gamified trading platforms as contributing factors to the market volatility experienced in January 2021. This course serves to illuminate the profound impact that psychological factors have on financial behaviours and decisions, affording students a distinctive chance to delve into an essential area of psychological research not covered in other courses.
Student Demand: As previously outlined, a preliminary "soft pilot" of this course was executed during the Winter semester of 2023 under the title PSYD30: Current Topics in Personality. The course received favorable reviews, scoring 4.7 for intellectual stimulation as compared to scores of 4.1 and 4.0 for PSYSC and SCAR courses, respectively. The seminar was also highly effective in inspiring students to think beyond the classroom, garnering a score of 5.0 versus 3.9 for PSYSC and 3.8 for SCAR courses. Furthermore, the course received strong recommendations from the participating students, with a score of 4.8 as compared to 3.9 for PSYSC and 3.8 for SCAR. The overall experience quality was rated at 4.7, outperforming the 3.8 and 3.7 scores of PSYSC and SCAR courses, respectively.

Additionally, during the Winter and Summer semesters of 2023, I invited students enrolled in my PSYB64: Introduction to Behavioural Neuroscience, PSYC39: Psychology and the Law, and PSYD66: Current Topics in Brain and Behaviour courses to complete a brief survey about the potential offering of a Psychology and Money course. Upon reviewing a description of the course topics, students were asked: "How interested would you be in taking a course on Psychology and Money?" A total of 94 students responded, with an overwhelming majority expressing a high level of interest—68 chose "Very Interested," and 24 selected "Interested." Only 2 students were unsure, and notably, no students chose "Not Interested" or "Not at all Interested."
Verbal feedback provided by the students was overwhelmingly positive. A selection of comments includes: "This is a much-needed course for students"; "I would definitely enroll in such a course!"; and "I love the concept of this course and would be extremely interested in taking it."

Complementary and Contextualizing Coursework: Psychology and Money is designed to complement and enrich the material covered in other undergraduate courses by providing real-world context for theoretical principles and research methodologies. While basic psychology courses may explore the cognitive, emotional, and social dimensions of human behaviour, this course will bring those sometimes laboratory-focused, abstract topics to life by applying them to the concrete and pressing topic of financial decision-making. Students will have the opportunity to see how theories from personality psychology, cognitive psychology, and social psychology, play out in everyday financial decisions, an important area of study that merits a dedicated course.
Showcasing Applied Research in Psychology: Psychology and Money will deepen students' appreciation of psychology as an applied discipline, with tangible impacts on both individual and societal well-being. This course will illuminate the application of psychological theories and research within real-world contexts, facilitating students' understanding of psychology's pervasive relevance in daily life. The course will also elucidate the discipline's relevance in enhancing both personal and societal effectiveness.
Fostering Intersectional Understanding: Psychology and Money will offer students an intersectional perspective on psychology by taking into account economic and cultural influences. By doing so, it will broaden the lens through which students can understand and appreciate psychology, allowing them to see how multiple systems intersect to shape individual experiences and outcomes. This intersectional approach provides a more comprehensive and nuanced understanding of the complexities involved in financial well-being, enriching students' academic and practical knowledge.
Advancing Equity, Diversity, and Inclusion: Psychology and Money strongly aligns with the department's mission to promote equity, diversity, and inclusivity. By critically examining the impacts of socioeconomic status, culture, and systemic inequalities—including systems of oppression—on financial decision-making and psychological well-being, the course provides an intersectional framework for understanding the complexities of financial behaviours. By explicitly addressing the ways in which inequality and oppression intersect with financial decision making and money management, the course will enrich students' understanding of how macro social structures influence individual behaviours and tendencies. Understanding the psychology of financial behaviour is crucial in a globalized world where economic disparities and financial stress are increasingly significant issues. This course provides a framework for understanding these complexities in the context of psychological research.
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To the best of my knowledge, Psychology and Money would be one-of-a-kind. There are no course offerings at UTSC or elsewhere at the University of Toronto that are dedicated to the multifaceted intersection between psychology and money. I believe this course will meet emerging societal needs and student interests.
Psychology and Money may be used for any of the programs in the Psychology and Mental Health Studies programs.

Consultation:

I initially consulted with the Department Chair, Dr. Suzanne Erb, about this proposal in the summer of 2021. At that time, faculty with contractually limited appointments were not eligible to propose new courses.
In May 2023, I sought feedback on this course proposal from Dr. Kyle Danielson, after learning that faculty members like me were now eligible to make proposals. Dr. Danielson, Dr. Erb, and Undergraduate Program Administrator Ainsley Lawson all encouraged me to develop the proposal.
In August 2023, I met with Ainsley to discuss the proposal in greater detail. Ainsley informed me that this course might be suitable for inclusion in the "C8 series." I inquired further about this course series and agreed that it would be a good fit. However, I did not tailor this proposal specifically for that series, as my understanding is that the series is still in the process of being developed and finalized. I remain amenable to fitting this course within the C8 series and look forward to receiving additional feedback on the proposal.
Course code approved by Amber Aug 29, 2023
Dept of Management consulted in September 2023
DCC approved on Oct 4, 2023

Resources:

- The course aligns with the standard resource expectations of regular course offerings in the Department of Psychology.
- Instructor: The proposed course will be taught by Dr. Stefano Di Domenico, an Assistant Professor in the Teaching Stream within the Department of Psychology at UTSC, as part of the normal teaching load.
- Teaching Load: The proposed course will be included in Dr. Di Domenico's standard teaching responsibilities.
- Teaching Assistant Support: A total of 150 hours of TA support is requested for the course. This will be covered by the department's existing TA budget.
- Facilities and Infrastructure: Classroom space and access to Quercus.
- Additional Requirements: No additional equipment or infrastructure is necessary. No ancillary or laboratory fees will be incurred.

Overlap with Existing Courses:

The courses listed and described below share some topics with those covered in Psychology and Money. However, I believe these overlaps are not significant enough to warrant listing these courses as exclusions to Psychology and Money, or vice versa.

PSYC10H3: Judgment and Decision Making - This course delves into the psychology of judgment and decision making, incorporating perspectives from behavioural economics and exploring systemic biases. Although it shares some general content with Psychology and Money, specifically in the proposed section on Investor Psychology and Behavioural Finance Fundamentals, the overlap is minimal. This is because Psychology and Money focuses specifically on decision making within the financial domain.

PSYC57: Cognitive Neuroscience of Decision Making - This course broadly examines neural and computational models of decision making. While the topic of decision making permeates Psychology and Money, the focus is not limited to neural accounts and is specifically targeted towards financial decision making.

PSYD59H3: Psychology of Gambling – This D-level course adopts a cognitive approach to understand the initiation and perpetuation of gambling behaviours, linking relevant work in neuroscience, social psychology, and clinical psychology. Given the existence of this specialized D-level course,

Psychology and Money will exclude gambling behaviour and will instead concentrate on risk tolerance and impulsivity as individual differences relevant to consuming, saving, spending, and investing.

MGFC20H3: Personal Financial Management—This C-level course is offered within the Management Program at the University of Toronto Scarborough. It explores the domain of personal finance, focusing on topics like creating personal financial statements, managing credit, assessing risks, real estate appraisal, mortgage financing, tax-saving strategies, and planning for retirement and estate.

Some of the topics in this course would also be covered in Psychology and Money. However, Psychology and Money would approach these topics from a psychological perspective. Furthermore, Psychology and Money would cover a broader range of financial topics and their intricate connections with psychology. It would also delve into how macroeconomic variables can affect individual psychological states and traits.

MGMC03H3: Consumer Behaviour—This C-level course is offered within the Management Program at the University of Toronto Scarborough. Using theories from psychology, sociology, and economics, this course aims to give students an interdisciplinary understanding of why people buy certain products and how this understanding can be applied to marketing decisions. The course includes work-integrated learning components and fulfills the Management Program requirement for a Bachelor of Business Administration degree.

Among many other topics, Psychology and Money proposes to cover in consumer behaviour and marketing but will do so from the perspective of psychological research. Unlike MGMC0, Psychology and Money will not include a work-integrated learning component.

MGT430H5: Behavioural Finance – This specialized course is part of the Management Program at the University of Toronto Mississauga. This course is focused on investor behaviour and challenges traditional finance theories that assume market participants are rational actors (e.g., Efficient Market Hypothesis). It focuses on the impact of cognitive biases on investor behaviour and explores the use of “nudge” interventions to address irrational decision-making.

Although Psychology and Money includes a proposed section on Investor Psychology and Behavioural Finance Fundamentals, it will differ from MGT430H5 in two key ways:

Subject Focus: While both courses examine investor behaviour and cognitive biases, Psychology and Money, being a psychology course, will examine a wider range of psychological factors affecting investment decisions, such as personality traits, cultural norms, social-psychological factors, and various psychological motives.

Scope: Psychology and Money would extend beyond investment behaviour to cover a broad spectrum of financial topics. These include financial literacy, financial planning, consumer behaviour, interpersonal relationships, culture, and well-being. It will also delve into the influence of macroeconomic variables on psychological states and traits.

Still, Psychology and Money will aim to provide students with a foundational introduction to behavioural finance. For those who develop a specialized interest in this area, taking more specialized courses like MGT430H5 would be a natural next step.

MGFD40H3: Investor Psychology and Behavioural Finance – Similar to MGT430H5, this course is offered within the Management Program at the University of Toronto Scarborough and also focuses on investor behaviour. Unlike MGT430H5, this course places heavy emphasis on collecting data from financial databases and analyzing it using Python. Learning how to

code in Python is a core feature of this course.
Psychology and Money differs from MGFD40H3 in the same ways it differs from MGT430H5. Additionally, a stark difference is that Psychology and Money will not require coding or hands-on data analysis.

Estimated Enrolment: 100

Instructor: Dr. Stefano Di Domenico

PSYD28H3: The Development of Affective Cognition

Impact on Programs: This Proposal triggers modifications in the unit's programs(s)

Description:

Humans' abilities to reason and think about emotion (i.e., affective cognition) is highly sophisticated. Even with limited information, humans can predict whether someone will feel amused, excited, or moved, or whether they will feel embarrassed, disappointed, or furious. How do humans acquire these abilities? This course will delve into the development of affective cognition in infancy and childhood. Topics include infants' and children's abilities to infer, predict, and explain emotions, the influence of family and culture in these developmental processes, and atypical development of affective cognition. Through reading classic and contemporary papers, presenting and discussing current topics, and proposing novel ideas in this research domain, students will gain an in-depth understanding of the fundamental aspects of affective cognition over the course of development.

Prerequisites:

PSYB20H3 and [PSYB07H3 or STAB22H3 or STAB23H3] and PSYB70H3 and [0.5 credit at the C-level in PSY courses]

Corequisites:

Exclusions:

Enrolment Limits: 24

Recommended Preparation: PSYC18H3 or PSYC28H3

Notes: Priority will be given to fourth-year students in the Specialist/Specialist Co-op and Major/Major Co-op programs in Psychology and Mental Health Studies. Third-year students in these programs will be admitted as space permits.

Methods of Assessment:

Student evaluation will consist of:
1) Discussion Questions (collectively worth 18%): Before each content class, students will be asked to read the assigned readings, and each submit two discussion questions related to the readings. This assesses students' understanding of course materials and ensures their preparedness for in-class discussions.
2) Class Participation (collectively worth 12%): In class, students will be expected to engage in discussions, listen to and respect their peers' opinions, and be open to giving and receiving constructive comments. This supports and enhances active learning, critical thinking, and oral communication skills.
3) Reading Presentation (worth 20%): In each content class, a team of two to three students will present and lead discussions on two assigned readings. This approach enhances students' comprehension of course materials and provides them with valuable opportunities to practice both oral presentation skills and art of leading discussions.
4) Research Proposal (worth 50% total):
• Idea (worth 5%): Students will submit a half-page description of their proposed research idea in the domain of affective cognition in infancy and childhood. A detailed rubric will be used to give students feedback.
• Draft (worth 10%): Students will draft their research proposal, which includes an abstract, an introduction, method, predicted results, discussion, and references. A detailed rubric will be used to give students feedback.
• Peer Review (worth 5%): Students will find a peer and provide feedback on the peer's draft. The feedback itself will be evaluated and graded based on a detailed rubric.
• Presentation (worth 10%): During the final two weeks of class, each student will present their proposal to the class.
• Final Proposal (worth 20%): Students will revise their proposal based on the feedback they receive from Dr. Wu, peer review, and in-class presentation and then re-submit their proposal.
This assignment gives students opportunities to generate their own hypotheses, design their own experiments, and practice both oral and written communication skills.

Breadth Requirements: Social & Behavioural Sciences

CNC Allowed: Y

Credit Value: fixed: 0.5

Learning Outcomes:

In this course, students will learn: • Fundamental knowledge in the domain of affective cognition in infancy and childhood • How to read and comprehend theoretical and empirical journal articles • How to critically examine theoretical perspectives and empirical findings • How to generate novel research hypotheses • How to conduct systematic literature reviews centered around research hypotheses • How to design experiments to test research hypotheses • Oral communication skills, including

presenting research papers, expressing opinions effectively, and pitching research proposals • Written communication skills, including composing literature reviews, conducting peer reviews, and crafting research proposals

Topics Covered:

• Infants' perception and categorization of emotion
• Infants' learning from emotional expressions
• Children's reasoning about beliefs, desires, and emotions
• Children's inferences of emotion in moral contexts
• Children's understanding and production of emotion words
• Children's interpretation of emotion in relation to social biases
• The role of family in the development of affective cognition
• The role of culture in the development of affective cognition
• Atypical development of affective cognition

Rationale:

Prereq Rationale

The proposed course draws upon theories and findings from developmental psychology. Thus, prior completion of introductory classes in developmental psychology (PSYB20) would be helpful for students.

Students will also be expected to read primary research articles and understand the research methodology, basic statistical procedures and findings reported therein. Thus, completion of a course in psychological research methods (PSYB70) and statistics (PSYB07H3 or STAB22H3 or STAB23H3) would be conducive to students' learning in this course.

Students with any of our C-level content courses will be adequately prepared for this D-level course.

Recommended Prep rationale

As a basic understanding of emotion research and theories is essential for this course, having completed a C-level course in emotion (PSYC18H3 or PSYC28H3) would be beneficial.

Overall Rationale

The proposed D-level course—The Development of Affective Cognition—is an important addition to the existing curriculum, especially in the developmental program. The course delves into the intricate process by which infants and children develop the ability to reason and think about emotion, which is a relatively novel and specialized area. It builds on important concepts that are introduced in other developmental courses, including Introduction to Developmental Psychology (PSYB20), Infancy (PSYC22), Childhood and Adolescence (PSYC24), and Social Development (PSYC27). It also severs as a progressive extension of my own C-level course, Emotional Development (PSYC28). That course provides students with a basic understanding of emotion research and theories in early childhood, covering a wider range of topics than the proposed course, including not only the development of affective cognition, but also the development of emotional expressions, emotion recognition, and emotion regulation in early childhood.

Additionally, courses in the developmental area, especially at the D level are currently underrepresented in our curriculum. For example, during the 2022-2023 academic year, there were only two D-level courses in the developmental area (PSYD22, Socialization Processes; PSYD23, Dyadic Processes in Psychological Development) and two D20 courses in the area, with one being an earlier iteration of the proposed course.

Moreover, the course intersects with other areas of the program, including social, cognitive, and clinical psychology. The course will help students integrate ideas encountered in a range of other classes in our curriculum, including courses in emotion, emotion regulation, social cognition, personality, and social development, all of which focus on the adult population, rather than the developmental processes in infancy and childhood.

Consultation:

Psychology Chair Suzanne Erb, Associate Chair Brett Ford, Assistant Chair Olivia Lewandowska, Undergrad Program Administrator Ainsley Lawson, and the Developmental Psychology faculty members were consulted in development of this proposal.

Course code approved by Amber Lantsman (RO) Aug 29, 2023

Proposal approved by DCC: Oct 4, 2023

Resources:

This course will be taught by faculty member Dr. Yang Wu as part of her normal teaching load. The course will not require TA support, nor will it require additional equipment or fees.

Overlap with Existing Courses:

The development of affective cognition is a relatively recent and specialized area. It builds on fundamental concepts that are introduced in developmental psychology (e.g., PSYB20, PSYC22, PSYC24, PSYC27, PSYC28, PSY312, PSY410, PSY410), emotion (e.g., PSY494, PSYC18, PSY331), and social cognition (e.g., PSYC13, PSY417H1), but goes into extensive depth in the specific domain at the intersection of these areas.

There is also no overlap between this course and other D-level courses in the curriculum. The existing D-level courses either focus on the adult population (e.g., PSYD10, PSYD13, PSYD14, PSYD15, PSYD17, PSYD19), or focus on the developmental processes in domains other than affective cognition (e.g., PSYD22, PSYD23).
Estimated Enrolment: 24
Instructor: Dr. Yang Wu