PSYCHOLOGY

Courses

**PSYC 100  Principles of Psychology  Units: 6.00**
An introductory survey of basic areas of psychology including perception, cognition, learning and motivation and their biological substrata. Also reviewed are child development, individual differences, social psychology and clinical psychology. Research participation experience is provided for students on an individual voluntary basis. Students are encouraged to participate in up to five hours of research experimentation. The course is based on a blended model where on-line learning is supplemented with a weekly lecture and small-group learning lab.

NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
NOTE Also offered at Bader College, UK (Learning Hours may vary).

**Learning Hours:** 221 (24 Lecture, 22 Laboratory, 100 Online Activity, 75 Private Study)

**Requirements:** Prerequisite None. Exclusion PSYC 101/3.0; PSYC 102/3.0; PSYC 103/3.0.

**Course Equivalencies:** PSYC 100A/B;PSYC100 (online)

**Offering Faculty:** Faculty of Arts and Science

**PSYC 101  Principles of Psychology I  Units: 3.00**
An introductory survey of basic areas of psychology including perception, cognition, learning and motivation and their biological substrata. Also reviewed are child development, individual differences, social psychology, health and clinical psychology.

NOTE Not offered at Queen's; only available as a transfer credit.

EXCLUSION PSYC 100; PSYC 102; PSYC 103.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 102  Principles of Psychology II  Units: 3.00**
An introductory survey of basic areas of psychology including history, methods, perception, cognition, learning and motivation and their biological substrata.

NOTE Not offered at Queen's; only available as a transfer credit.

EXCLUSION PSYC 100; PSYC 101.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 103  Principles of Psychology III  Units: 3.00**
An introductory survey of basic areas of psychology including child development, individual differences, social psychology, health and clinical psychology.

NOTE Not offered at Queen's; only available as a transfer credit.

EXCLUSION PSYC 100; PSYC 101.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 202  Statistics in Psychology  Units: 3.00**
An introduction to descriptive and inferential statistics in psychology. Topics will include descriptive statistics, probability, correlation and regression, experimental design and one-way ANOVA.

**Requirements:** Prerequisite Registration in a PSYC Major, Joint Honours, or Specialization Plan and a minimum grade of B- in PSYC 100/6.0. Exclusion BIOL 243/3.0; CHEE 209/3.5; COMM 162/3.0; ECON 250/3.0; GPHY 247/3.0; HSCI 190/3.0; KNPE 251/3.0; NURS 323/3.0; POLS 285/3.0; POLS 385/3.0*; SOCY 211/3.0; STAM 200/3.0; STAT 263/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 203  Research Methods in Psychology  Units: 3.00**
Lectures will focus on basic research methodologies. Labs will include the collection and statistical analysis of data, and the reporting of experimental findings. To introduce students to the breadth of psychological research, there will be a series of guest lectures in which professors present their own research.

**Requirements:** Prerequisite Registration in a PSYC Major, Joint Honours, or Specialization Plan and PSYC 202/3.0 or BIOL 243/3.0 or CHEE 209/3.5 or COMM 162/3.0 or ECON 250/3.0 or GPHY 247/3.0 or KNPE 251/3.0 or NURS 323/3.0 or POLS 285/3.0 or POLS 385/3.0* or SOCY 211/3.0 or STAM 200/3.0 or STAT 263/3.0. Exclusion BMED 270/3.0*; HSCI 270/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 204  Applications and Careers in the Psychological Sciences  Units: 3.00**
This course explores how the psychological sciences are applied in practice, and identifies education and training paths required for work in the psychological sciences. Students will gain significant exposure to career and education planning considerations within the psychological sciences.

**Learning Hours:** 111 (24 Lecture, 12 Group Learning, 3 Online Activity, 72 Private Study)

**Requirements:** Prerequisite PSYC 100/6.0.

**Offering Faculty:** Faculty of Arts and Science

queensu.ca/academic-calendar
PSYC 221 Cognitive Psychology Units: 3.00
An introduction to the empirical study of mental processes. Topics include perception and attention, working memory, long-term memory, visual imagery, problem-solving, language, and decision-making.
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
NOTE Also offered at Bader College, UK (Learning Hours may vary).
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 236 Introduction to Clinical Psychology Units: 3.00
The experimental approach to understanding the causes, symptoms, course, and treatment of mental illness is emphasized in the analysis of disorders of cognition (e.g., schizophrenia), and problem behaviours (e.g., addictions, sexual disorders).
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
Learning Hours: 120 (36 Lecture, 12 Online Activity, 72 Private Study)
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 241 Social Psychology Units: 3.00
The study of the individual in the social context: Self and identity, social cognition, interpersonal behaviour (affiliation, attraction, sex, aggression, altruism); social attitudes, prejudice and discrimination; social influence and group processes (conformity, leadership and intergroup relations); applied social psychology.
NOTE Also offered online, consult Arts and Science Online.
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 251 Developmental Psychology Units: 3.00
Introduction to the scientific study of human development, as well as the fundamental theories, methods and applications in the field of developmental psychology. A major focus of this course is the social, cognitive, and neurobiological processes that underlie perceptual, cognitive, and emotional development from conception to adolescence.
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
Learning Hours: 120 (12 Lecture, 18 Tutorial, 36 Online Activity, 48 Private Study)
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 271 Brain and Behaviour I Units: 3.00
An introduction to behavioural neuroscience. The course primarily focuses on the basics of neuronal operation, functional neuroanatomy, neuropharmacology, and behavioral neuroscience methods. This will be followed by an examination of input (sensory) and output (motor) systems of the brain. Finally, topics relevant to lateralization of function and language will be covered.
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 100/6.0. One-Way Exclusion May not be taken with or after NSCI 323/3.0; NSCI 324/3.0; PSYC 370/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 299 Introduction to Directed Research in Psychology Units: 3.00
Laboratory courses to be arranged in consultation with individual Faculty members of the Department.
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
Learning Hours: 120 (72 Laboratory, 24 Group Learning, 24 Private Study)
Requirements: Prerequisite (PSYC 100/6.0 and registration in an Honours Plan in Psychology) or permission of the Undergraduate Chair of Psychology.

PSYC 301 Advanced Statistical Inference Units: 3.00
Statistical inference (continuation of PSYC 202/PSYC 203) and laboratory projects. The course covers critical thinking about research and statistics and three types of statistical analyses: tests of categorization, comparisons of means, and association.
Learning Hours: 120 (36 Lecture, 36 Laboratory, 12 Group Learning, 12 Online Activity, 24 Private Study)
Requirements: Prerequisite Registration in a PSYC Major Plan and a (minimum GPA of 1.90 in [PSYC 202/3.0 or STAT_Options] and PSYC 203/3.0) and a (minimum GPA of 2.60 in PSYC at the 100 and 200-level).
Offering Faculty: Faculty of Arts and Science
**PSYC 302 Advanced Research Methods Units: 3.00**  
The application of previous statistical and methodological courses (continuation of PSYC 202/PSYC 203/PSYC 301) toward the design, execution, analysis, and communication of a research project. Lectures and laboratories cover data collection, data management, some advanced statistical analyses, and communication skills.  
NOTE PSYC 302 is required for admission to PSYC 501.  
**Learning Hours:** 120 (36 Lecture, 36 Laboratory, 12 Group Learning, 12 Online Activity, 24 Private Study)  
**Requirements:** Prerequisite Registration in a PSYC Major Plan and a minimum grade of C in PSYC 301/3.0.  
**Offering Faculty:** Faculty of Arts and Science

**PSYC 305 Introduction to Comparative Cognition Units: 3.00**  
An overview of the evolution and function of cognitive processes. Emphasis will be placed on understanding how natural selection shaped cognition across animal species. Topics such as memory, decision making, cooperation, and communication will be examined from a behavioural ecology and experimental psychology perspective.  
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).  
**Learning Hours:** 120 (18 Lecture, 18 Tutorial, 120 Online Activity, 72 Private Study)  
**Requirements:** Prerequisite PSYC 100/6.0 and a minimum of 6.0 units at the 200-level or above in (PSYC and/or BIOL and/or COGS and/or LING and/or LISC). Equivalency PSYC 205/3.0*.  
**Offering Faculty:** Faculty of Arts and Science

**PSYC 315 Introduction to the Analysis of Psychological Signals Units: 3.00**  
The objective of this course is to (1) introduce the student to basic techniques for the quantitative analysis of time-varying signals and (2) teach the student how to apply these techniques using MATLAB. Emphasis will be placed on methods appropriate to the psychological research environment.  
**Learning Hours:** 120 (18 Lecture, 36 Laboratory, 66 Private Study)  
**Requirements:** Prerequisite PSYC 203/3.0. Note Expertise in MATLAB or signal processing is not required.  
**Offering Faculty:** Faculty of Arts and Science

**PSYC 320 Selected Topics in Cognitive Neuroscience Units: 3.00**  
Upper year courses related to the discipline of cognitive neuroscience. Offered periodically.  
NOTE This course is repeatable for credit under different topic titles.  
**Learning Hours:** 120 (18 Lecture, 18 Laboratory, 72 Private Study)  
**Requirements:** Prerequisite PSYC 221/3.0.  
**Offering Faculty:** Faculty of Arts and Science

**PSYC 321 Psycholinguistics Units: 3.00**  
An introduction to psycholinguistic research and theory. Weekly lectures and laboratories will introduce topics including language perception, language production, conversation and linguistic representation. Applied issues in language research will be emphasized (e.g., speech pathology, language aids, and machine recognition of speech).  
**Learning Hours:** 120 (18 Lecture, 18 Laboratory, 72 Private Study)  
**Requirements:** Prerequisite (PSYC 203/3.0 and PSYC 221/3.0) or (Level 3 or above and registration in a LING Plan and PSYC 221/3.0 and a minimum grade of B- in PSYC 100/6.0).  
**Offering Faculty:** Faculty of Arts and Science

---

*queensu.ca/academic-calendar*  
*Psychology*  
*Page 3*
PSYC 322 Experience Sampling from Lab to Daily Life Units: 3.00
Experience Sampling from lab to daily life: how to map patterns of ongoing thought. In this class you will learn how the technique of experience sampling is used by scientists to study the nature different patterns of ongoing thought, and the methods and techniques that allow this information to be related to objective measures of cognition.

Learning Hours: 120 (18 Lecture, 36 Laboratory, 6 Online Activity, 60 Private Study)

Requirements: Prerequisite Level 3 or above and PSYC 100/6.0. Exclusion PSYC 398/3.0 (Topic Title: Experience Sampling from Lab to Daily Life - Winter 2023, Fall 2023).

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:
1. Describe how scientists use to experience sampling as a tool for understanding the human mind.
2. Describe the different features of human cognition that experience sampling are useful for understanding.
3. Critically evaluate the validity of claims that are made based on studies which use experience sampling studies of human cognition.
4. Develop skills for oral and written communication, and presentation skills.
5. Summarize and communicate research findings in this research domain.
6. Generate new research questions that can be addressed using experience sampling.

PSYC 323 Laboratory in Attention Units: 3.00
The laboratory in attention course provides students with both demonstrations and hands-on experience with the methodological design and data analysis techniques used in conducting classic studies of attention. Experimental techniques include attentional cueing, visual search, change blindness, inattentional blindness, eye-tracking, multi-object tracking, and functional imaging.

Requirements: Prerequisite PSYC 203/3.0 and PSYC 221/3.0.

Offering Faculty: Faculty of Arts and Science

PSYC 325 Cognitive Neuroscience Units: 3.00
How does the brain perceive, think, and feel? This course in cognitive neuroscience provides a window into contemporary views of how different features of cognition are implemented by the human brain. The course will cover advances in our understanding of the brain mechanism of human cognition.

Learning Hours: 120 (18 Lecture, 18 Online Activity, 84 Private Study)

Requirements: Prerequisite PSYC 221 or PSYC 271. Exclusion PSYC 320 (Topic Title: Cognitive Neuroscience - Winter 2021; Winter 2022).

Offering Faculty: Faculty of Arts and Science

PSYC 326 Principles of Memory Units: 3.00
In this course we will cover the foundational principles of what we know and understand about human memory. This survey of research in memory provides a big picture perspective, beginning with basic principles, methods, and biological bases, then progressing through different kinds of memory, forgetting and amnesia, and contemporary theoretical models of memory function. Throughout, you will gain a first-hand perspective on how memory research is done.

Learning Hours: 120 (36 Lecture, 84 Private Study)

Requirements: Prerequisite PSYC 221/3.0. Exclusion PSYC 320/3.0 (Topic Title: Principles of Memory - Winter 2023, Winter 2024).

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:
1. Understand the foundational concepts that drive how our memory functions.
2. Integrate knowledge from different methodologies and theoretical perspectives.
3. Discuss, communicate, and disseminate current (and future) research projects.
4. Connect theory with practice, learning how textbook concepts are derived in real life, and how data are presented.
How do we decide whom to help, trust, or cooperate with? This course examines experimental approaches to studying social and strategic decision-making. Topics include altruism, the impact of social identity, contextual factors people might not even be aware of, social norms (reciprocity, fairness), and norm enforcement. Students will also learn about factors to consider when designing experimental studies. The course adopts a mixture of lectures, collection of your own data, and hands-on laboratory sessions on how data from our class fit standard theories and results in the field.

**Learning Hours:** 114 (18 Lecture, 18 Laboratory, 18 Group Learning, 60 Private Study)

**Requirements:** Prerequisite Level 3 or above and PSYC 100/6.0. Exclusion PSYC 398/3.0 (Topic Title: Laboratory in Decision Making - Fall 2021, Winter 2021, Winter 2024).

**Offering Faculty:** Faculty of Arts and Science

**Course Learning Outcomes:**

1. Describe, execute, analyze, and interpret the results of standardized experimental measures used to study social decision-making.
2. Work in teams to achieve common goals.
3. Critically evaluate the strengths and potential pitfalls of experimental approaches to study social decision-making, apply this ability when designing their own experiment, and communicate perceived strengths and shortcomings of experiments in a constructive, respectful and effective manners to their peers.

**PSYC 330 Selected Topics in Clinical Psychology Units: 3.00**
Upper year courses related to the discipline of clinical psychology. Offered periodically.
NOTE This course is repeatable for credit under different topic titles.
LEARNING HOURS may vary.

**Requirements:** Prerequisite PSYC 236/3.0.

**Offering Faculty:** Faculty of Arts and Science

This course will introduce the leading theories and core research findings in personality psychology. It will review perspectives on personality research including dispositional, biological, intrapsychic, cognitive, social/cultural and adjustment domains. The class will also cover personality assessment methods and common personality disorders.

**Learning Hours:** 108 (36 Lecture, 72 Private Study)

**Requirements:** Prerequisite PSYC 100/6.0 and 6.0 units of PSYC at the 200-level. Exclusion PSYC 231/3.0*.

**Offering Faculty:** Faculty of Arts and Science

Key issues in health and health care require approaches embodying psychological, biological, and sociological factors. For every CT scan, injection, or doctor visit, there is a person to be considered. This course explores a variety of health-related topics where psychology has a significant role (e.g., health promotion, stress, psychoneuroimmunology, medical contacts, pain, illness, sport). Canadian statistics used in discussions.

**Learning Hours:**

**Learning Hours:**

**Requirements:** Prerequisite PSYC 236/3.0 and (PSYC 202/3.0 or 3.0 units from STAT_Options).

**Offering Faculty:** Faculty of Arts and Science

An overview of typical sexual behaviour and its variations. Topics include the history of sex research, the sexual response cycle, sexual dysfunction, gender identity, and sexual orientation. Particular attention will be paid to current issues in sex research and theory.

**NOTE** Also offered online, consult Arts and Science Online (Learning Hours may vary).

**Learning Hours:**

**Requirements:** Prerequisite PSYC 236/3.0 or PSYC 251/3.0 or PSYC 271/3.0 or PSYC 370/3.0.

**Offering Faculty:** Faculty of Arts and Science

A lecture and laboratory course on psychometrics. Test development and evaluation will be the focus of student projects. The course will introduce software packages used for analyzing psychological test data.

**Learning Hours:**

**Requirements:** Prerequisite PSYC 301/3.0.

**Offering Faculty:** Faculty of Arts and Science
PSYC 335 Positive Psychology Units: 3.00
Positive Psychology is the scientific study of optimal human functioning. Lectures review the history and empirical support in areas such as interpersonal relationships, and applying positive thinking. Homework assignments will include experiential exercises designed to foster an increased understanding of the role of positive psychology in everyday life.
NOTE Also offered at Bader College, UK (Learning Hours may vary).
Requirements: Prerequisite PSYC 203/3.0 and PSYC 236/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 336 Advanced Adult Clinical Psychology Units: 3.00
The purpose of this course is to provide students with an advanced understanding of theories of the etiology, pathology, and treatment of mental illness in adults. Theory and research will be emphasized that cut across traditional diagnostic categories and focus on domains of social, cognitive-affective, and biological functioning.
Learning Hours: 120 (36 Lecture, 18 Group Learning, 36 Individual Instruction, 36 Private Study)
Requirements: Prerequisite PSYC 236/3.0. Exclusion PSYC 399/3.0 (Topic Title: Psychopathology - Winter 2018).
Offering Faculty: Faculty of Arts and Science

PSYC 337 Advanced Child Clinical Psychology Units: 3.00
The purpose of this course to provide students with an advanced understanding of child and adolescent psychopathology with an emphasis on developmental considerations. Students will learn about different theoretical perspectives on the etiology, pathology, and treatment of a variety of child and adolescent mental disorders.
Learning Hours: 120 (18 Lecture, 18 Asynchronous Online Activity, 84 Private Study)
Requirements: Prerequisite PSYC 236/3.0. Exclusion PSYC 399/3.0 (Topic Title: Advanced Child Clinical Psychology - Fall 2018).
Offering Faculty: Faculty of Arts and Science

PSYC 338 Laboratory in Clinical Psychology Units: 3.00
This laboratory will provide students with an in-depth understanding of theory, skills, and practice of clinical psychology. Topics will include clinical psychology as a profession and science; ethical and professional issues; multicultural competency; and basic clinical skills in interviewing, assessment, and treatment.
Learning Hours: 120 (18 Lecture, 18 Laboratory, 6 Group Learning, 78 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 236/3.0. Exclusion PSYC 330/3.0 (Topic Title: Laboratory in Clinical Psychology - Winter 2022, Winter 2023).
Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:
1. Students will integrate clinical psychology within allied professions, recognizing overlapping and independent features.
2. Students will be able to demonstrate basic skills in interviewing people in a clinical context.
3. Students will be able to recognize proper psychological assessment techniques and critique how errors in assessment can influence interpretation and formulation.
4. Students will be able to debate critical topics in the field.
5. Students will be able to perform introductory skills in diagnostic and clinical case conceptualization.

PSYC 340 Selected Topics in Social Psychology Units: 3.00
Upper year courses related to the discipline of Social Psychology. Offered periodically. NOTE This course is repeatable for credit under different topic titles.
LEARNING HOURS may vary.
Requirements: Prerequisite PSYC 241/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 341 Laboratory in Social Psychology Units: 3.00
This course aims to provide students with hands-on experience in social psychology research. Students will learn principles of research methods in social psychology, involving literature review, research designs, data collection/management/analysis, and report.
Learning Hours: 120 (18 Lecture, 18 Laboratory, 12 Off-Campus Activity, 72 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 241/3.0.
Offering Faculty: Faculty of Arts and Science
PSYC 342  The Psychology of Social Influence  Units: 3.00
This course reviews theory and research on the processes by which people exert influence on one another's behaviours, beliefs, emotions, and attitudes. Topics of study include conformity, compliance, obedience, and persuasion. The course will focus on both the theoretical and applied implications of social influence research.
NOTE Top Hat (Student Engagement Platform/Software): estimated cost $30.
NOTE Also offered at Bader College, UK (Learning Hours may vary).
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 343  Judgement and Decision Making  Units: 3.00
This course is focused upon research in judgment and decision-making such as biases due to anchoring, relativity, intuition, and social norms. Assignments will apply topics to students’ everyday lives, help students be aware of common reasoning errors, and improve students’ ability to predict and influence the behavior of others.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 241/3.0. Exclusion PSYC 399/3.0 (Topic Title: Judgement and Decision Making - Winter 2019).
Offering Faculty: Faculty of Arts and Science

PSYC 344  Selected Topics in Developmental Psychology  Units: 3.00
Lecture courses on selected topics in the area of developmental psychology offered periodically.
NOTE This course is repeatable for credit under different topic titles.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 345  Social and Emotional Development  Units: 3.00
An overview of the development of emotions and their regulation. Topics range from basic emotions in infancy and interactions with caregivers that lay the foundations of socialized behaviour to the emotional upheaval and radical social changes of adolescence. Individual differences in social and emotional behaviour will be considered in light of both typical and atypical development.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 352  Cognitive and Language Development  Units: 3.00
An overview of the development of cognitive and language processes in children. Topics include a discussion of the biological and social foundations of cognitive and language development, perceptual development, early communication, development of concepts and scripts, and improvements in reasoning and problem-solving ability over the course of development.
Requirements: Prerequisite (PSYC 203/3.0 and PSYC 251/3.0) or (Level 3 or above and registration in a [COGS or LING Plan] and minimum grade of B- in PSYC 100/6.0).
Offering Faculty: Faculty of Arts and Science

PSYC 353  Atypical Development  Units: 3.00
This course will begin by defining atypical development and discuss how gaining better understanding of atypical development allows us to understand typical development, and vice versa. We will cover six disorders in greater detail: Language Disorders, Dyslexia, Down Syndrome, Williams Syndrome, Attention-Deficit/Hyperactivity Disorder and Autism.
Learning Hours: 127 (36 Lecture, 91 Private Study)
Requirements: Prerequisite PSYC 251/3.0 and one of (HLTH 252/3.0, HSCI 270/3.0 [formerly BMED 270/3.0], PSYC 203/3.0, SOCY 210/3.0).
Offering Faculty: Faculty of Arts and Science
PSYC 354 Language Units: 3.00
What is the role of language in how we think and interact? What does it take to comprehend and speak, and how do the skills to use language develop? What is the role of language in our communities and our culture? The course will provide an overview of the psychological study of language, sampling from topics such as language evolution, language development, communication, and social learning, among others.
Learning Hours: 120 (30 Lecture, 6 Group Learning, 3 Online Activity, 81 Private Study)
Requirements: Prerequisite PSYC 100/6.0 and a minimum of 6.0 units in PSYC at the 200-level or above. Exclusion PSYC 399/3.0 (Topic Title: Language - Winter 2021, Fall 2022).
Offering Faculty: Faculty of Arts and Science
Course Learning Outcomes:
1. Define, provide examples of, and apply concepts of language research
2. Compare and apply models of language learning, processing, and use
3. Apply knowledge to derive conclusions from sample data
4. Communicate orally and in writing with various audiences (peers, academics) about current language research
5. Develop and execute teamwork strategies for disseminating information

PSYC 355 Comparative Cognition: Cognitive Origins Laboratory Units: 3.00
Advanced study in comparative cognition with a focus on the evolution and function of cognitive processes across animal species. Through lectures, laboratory activities, and readings, theory and research methodology in the areas of number, timing, casual reasoning, social learning, tool use, social cognition, and communication will be discussed.
Learning Hours: 120 (18 Lecture, 18 Laboratory, 12 Online Activity, 72 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and (PSYC 205/3.0* or PSYC 305/3.0).
Offering Faculty: Faculty of Arts and Science

PSYC 358 Developmental Social Neuroscience Units: 3.00
How do children and adolescents learn to make sense of the social world around them? This course focuses on research that aims to answer this question, leveraging neuroimaging techniques to better understand how the developing brain parses, processes, and responds to social and emotional information.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0. Exclusion PSYC 350/3.0 (Topic Title: Developmental Social Neuroscience - Fall 2022).
Offering Faculty: Faculty of Arts and Science
Course Learning Outcomes:
1. Describe developmental trends in socio-emotional behaviour and interrelated changes in brain structure and function across infancy, childhood, and adolescence
2. Synthesize knowledge about developmental change across several functional domains
3. Critically appraise empirical research findings in developmental social neuroscience
4. Effectively communicate concepts, findings, and implications of empirical research in developmental social neuroscience to a layperson audience

PSYC 360 The Neurobiology and Psychology of Sleep Units: 3.00
The course will introduce students to: the physiology and neurobiology of sleep; methodology of sleep research; evolution and comparative aspects of sleep; discussion of potential functions of sleep; overview of sleep disorders. NOTE Students will spend two full nights in the Sleep Laboratory.
Learning Hours: 126 (18 Lecture, 36 Laboratory, 12 Online Activity, 60 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 271/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 365 Selected Topics in Behavioural Neuroscience Units: 3.00
Upper year courses related to the discipline of behavioral neuroscience. Offered periodically. NOTE This course is repeatable for credit under different topic titles. LEARNING HOURS may vary.
Requirements: Prerequisite PSYC 271/3.0.
Offering Faculty: Faculty of Arts and Science
PSYC 366  Gender/Sex, Hormones, and Behaviour  Units: 3.00
This course explores hormones as biochemical substances and cultural narratives. It is interdisciplinary, including neuroscience/psychology, as well as feminist/queer/trans studies. Topics may include: sex development, gender diversity, sport, health, sexuality. It is an interactive class, and evaluations include essays, assignments, and quizzes.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite Level 3 or above and PSYC 100/6.0. Exclusion PSYC 365/3.0 (Topic Title: Gender/Sex, Hormones, and Behaviour - Winter 2021); PSYC 398/3.0 (Topic Title: Gender Hormones and Behaviour - Winter 2019).
Offering Faculty: Faculty of Arts and Science

PSYC 370  Brain and Behaviour II  Units: 3.00
The relationship between brain and behaviour. The first part of the course examines topics relevant to brain plasticity, including neurodevelopment, brain damage and learning and memory; followed by a section on the biopsychology of motivation that covers the neural mechanisms of eating, sexual behaviour and sleep. The final section deals with disorders of cognition and emotion, including drug addiction, stress and psychiatric disorders.
NOTE Also offered online, consult Arts and Science Online (Learning Hours may vary).
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite PSYC 271/3.0 or (Level 3 or above and registration in a BIOL or LISC Plan). Recommended PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 375  Comparative Cognition: Animal Learning Laboratory  Units: 3.00
This course covers recent research in comparative cognition at an advanced level. Emphasis will be placed on critically evaluating scientific controversies in specific topics, such as episodic memory in animals, mechanisms of spatial navigation, and value-based decision-making. Laboratory sessions will explore the principles discussed in lectures.
Learning Hours: 126 (18 Lecture, 18 Laboratory, 12 Online Activity, 78 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and (PSYC 205/3.0* or PSYC 305/3.0).
Offering Faculty: Faculty of Arts and Science

PSYC 376  Functional Neuroimaging the Human Brain and Mind  Units: 3.00
Brain imaging, and functional magnetic resonance imaging (fMRI) in particular, has become a revolutionary tool in the study of human brain function and organization. This course will cover brain imaging technology, current tools and techniques for analysis, and highlight the key role that fMRI has played in the field of cognitive neuroscience.
Learning Hours: 112.5 (33 Lecture, 15 Group Learning, 16.5O, 15 Off-Campus Activity, 33 Private Study)
Requirements: Prerequisite Students must be in good-standing in the 3rd or 4th year of a Psychology or Life Sciences Plan. Exclusion PSYC 398/3.0 (Topic Title: Neuroimaging of Human Cognitive Brain Function - Winter 2017, Winter 2018, Fall 2018).
Offering Faculty: Faculty of Arts and Science

PSYC 377  Decision-Making and the Brain: Principles of Neuroeconomics  Units: 3.00
The course introduces basic principles governing the emerging field of neuroeconomics, drawing on insights from economics, psychology, and neuroscience to understand human decision-making. The course covers fundamental principles like risk and ambiguity, the basic architecture of the decision process in the brain and insights from psychology.
Learning Hours: 120 (36 Lecture, 84 Private Study)
Requirements: Prerequisite Level 3 or above and PSYC 100/6.0. Exclusion PSYC 398/3.0 (Topic Title: Behavioural Neuroeconomics); ECON 443/3.0 (Topic Title: Principles Neuroeconomics).
Offering Faculty: Faculty of Arts and Science

PSYC 380  Advanced Perception  Units: 3.00
This advanced course in visual and auditory perception will integrate findings from neuroanatomy and physiology with psychophysics, perception, and behaviour. Information processing will be traced from sensory structures through to motor output and communicative behaviour. The course will introduce you to psychophysical and neurophysiological methodology and will contain many demonstrations and hands-on experiments.
Requirements: Prerequisite PSYC 203/3.0 and PSYC 215/3.0*.
Offering Faculty: Faculty of Arts and Science
PSYC 397 History of Modern Psychology  Units: 3.00
A survey of the history of modern psychology, from the early 19th century to the close of the 20th. The more important empirical findings of psychology and related disciplines will be examined together with their theoretical explanations. The course will lead to an examination of the causes of differential scientific progress in the various subfields of psychology.
NOTE Also offered online, consult Arts and Science Online.
NOTE Also offered at Bader College, UK.
Requirements: Prerequisite PSYC 100/6.0.
Offering Faculty: Faculty of Arts and Science

PSYC 398 Selected Topics in Psychology I  Units: 3.00
Lecture courses on selected topics in psychology offered periodically. Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department. NOTE This course is repeatable for credit under different topic titles.
Requirements: Prerequisite Permission of the Department.
Offering Faculty: Faculty of Arts and Science

PSYC 400 Teaching and Learning in Psychology  Units: 6.00
An introduction to the scholarship and practice of teaching including what it means to be a scholarly teacher, how pedagogy research informs educational practice, and how people learn complex information. In addition to readings, critiques and facilitated discussions, a practicum component will include facilitating weekly tutorials.
NOTE Students must complete an application and be invited for an interview in the spring to be eligible for this fall term course. During the fall term, students will be responsible for facilitating 2-3 PSYC 100 tutorials per week as part of their teaching practicum.
Learning Hours: 221 (24 Seminar, 24 Group Learning, 78 Practicum, 20 Online Activity, 75 Private Study)
Requirements: Prerequisite Level 3 or above and registration in a PSYC Major, Joint Honours, or Specialization Plan and a minimum GPA of 3.30 in PSYC and permission of the Department.
Course Equivalencies: PSYC 400, PSYC 400B
Offering Faculty: Faculty of Arts and Science

PSYC 420 Advanced Topics in Cognitive Psychology  Units: 3.00
An examination of selected topics in cognitive psychology which may include: computational modelling; problem-solving; face recognition; gestalt influences on cognitive science; motor control processes; cognitive neuropsychology. Exact topics to vary by year.
NOTE This course is repeatable for credit under different topic titles.
Requirements: Prerequisite PSYC 221/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 421 Memory and the Brain  Units: 3.00
In this course you will gain an in-depth understanding of the literature studying memory from multiple methods and theoretical perspectives. You will learn about research exploring the mechanisms that allow us to learn, store, retrieve and update memories. Along the way, you will gain hands-on skills in experimental design.
Learning Hours: 120 (36 Seminar, 36 Online Activity, 48 Private Study)
Requirements: Prerequisite PSYC 221/3.0 or PSYC 271/3.0.
Exclusion PSYC 420/3.0 (Topic Title: Research in Memory - Winter 2021, Fall 2021).
Offering Faculty: Faculty of Arts and Science

PSYC 422 Advanced Topics in Attention  Units: 3.00
Addresses topics in attentional control including limits in attentional control, cortical mechanisms of attention, spatial and temporal attention, interaction of attention and memory, and influence of videogame playing on attentional control.
Requirements: Prerequisite PSYC 221/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 423 Driving, Deepfakes, and Disinformation: Applications of Visual Cognition  Units: 3.00
Visual cognition has been studied extensively in the lab, but it's not always clear how theoretical questions apply to the real world. In this course, we will examine both theoretical questions on perception, attention and memory as well as see how these apply to real world situations - examining x-rays, distracted driving and gaming.
Requirements: Prerequisite PSYC 221/3.0.
Offering Faculty: Faculty of Arts and Science
PSYC 424 Research Into Spontaneous Thought Units: 3.00
This class considers conceptual and empirical questions that arise in the study of spontaneous thought. Students will read discuss papers that cover a broad range of views on spontaneous thought, including philosophical, sociological, psychological and neuroscientific perspectives.
Learning Hours: 108 (36 Seminar, 24 Online Activity, 48 Private Study)
Requirements: Prerequisite PSYC 221/3.0 or PSYC 271/3.0. Exclusion PSYC 420/3.0 (Topic Title: Research Into Spontaneous Thought - Winter 2022, Fall 2022).
Offering Faculty: Faculty of Arts and Science
Course Learning Outcomes:
1. Describe and evaluate the methods used for understanding spontaneous thought
2. Critically evaluate different theories of spontaneous thought ability to account for observed data
3. Evaluate the different methods used to study spontaneous thought
4. Be able to communicate about theoretical and applied aspects of research into spontaneous thought

PSYC 428 Psychotic Disorders Units: 3.00
This seminar will provide students with an in-depth understanding of research in psychotic disorders such as schizophrenia and severe mood disorders. Topics will include neurocognitive dysfunction and its relationship to disability, pharmacological and psychological treatment, and assessment of symptoms across the lifespan.
Learning Hours: 120 (36 Seminar, 84 Private Study)
Offering Faculty: Faculty of Arts and Science

PSYC 429 Pain: Body and Mind Units: 3.00
Pain is easy to recognize, but enormously challenging to define, describe and treat. This interactive and interdisciplinary course approaches the challenge of pain from the perspectives of philosophy, neuroscience and clinical psychology. We will examine what pain is, how we measure and treat it, and how it is instantiated in the body and brain.
Learning Hours: 120 (18 Seminar, 18 Asynchronous Online Activity, 84 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 241/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 430 The Self Units: 3.00
This course reviews theory and research on the self, primarily from a social psychological perspective. Topics include: the nature of the self, search for self-knowledge, self-development, self-cognition, self-regulation of behaviour, self-presentation, self-esteem, and the role of the self in psychological health.
Requirements: Prerequisite PSYC 203/3.0 and PSYC 241/3.0.
Offering Faculty: Faculty of Arts and Science
PSYC 432  Affective Psychophysiology  Units: 3.00  
This course explores complexities in the study of psychophysiology to understand human experience. We consider questions like, how is the body involved in generating emotional experience? What can we learn about socially important processes by measuring activity in the body? How does measuring the body help us understand why some people thrive and others struggle with mental health? Students will learn about body systems involved in socio-emotional outcomes and how they are measured and will consider benefits and interpretive challenges inherent to this area of research.

Learning Hours: 128 (12 Lecture, 24 Seminar, 32 Group Learning, 12 Online Activity, 48 Private Study)

Requirements: Prerequisite PSYC 203/3.0 and PSYC 236/3.0 and 3.0 units of PSYC at the 200-level or above. Exclusion PSYC 435/3.0 (Topic Title: Affective Psychophysiology - Fall 2022, Winter 2024).

Offering Faculty: Faculty of Arts and Science

Course Learning Outcomes:

1. Describe the basic anatomy and function of the autonomic nervous system and other peripheral systems relevant to emotion; describe methodology commonly used to measure them; understand common psychological interpretations of these functions, including ambiguities.

2. Apply principles from affective psychophysiology to socially important outcomes, especially phenomena in clinical psychology and selected processes in developmental and social psychology.

3. Integrate principles across different aspects of the course, for instance, integrating principles from assigned readings to independent and group work, or from class discussions to weekly reading assignments.

4. Demonstrate improved reading, writing, and communication mechanics in psychology and related fields; read more carefully and with deeper comprehension, even of content outside one’s knowledge area; communicate more clearly orally and in writing.

5. Participate in learning as an active and self-motivated partner; evaluate one’s own progress in learning and scholarship.

6. Practice balancing autonomy and collaboration in academic endeavors; develop original ideas in response to coursework and develop ideas further in collaboration with peers.

PSYC 433  Human Sexual Function and Dysfunction  Units: 3.00  
This course will provide students with an overview of common sexual dysfunctions, including prevalence, clinical presentation, and comorbid diagnoses. Particular attention will be paid to assessment and treatment (both therapy and medical management) in sexual dysfunction; in addition, past and current research strategies will be presented and critiqued, with an emphasis on classification difficulties.

Requirements: Prerequisite PSYC 203/3.0 and (PSYC 236/3.0 or PSYC 333/3.0).

Offering Faculty: Faculty of Arts and Science

PSYC 435  Advanced Topics in Clinical Psychology  Units: 3.00  
Recent developments in the experimental investigation and conceptualization of aspects of mental health such as anxiety, depression, thought and memory disorders, etc. NOTE This course is repeatable for credit under different topic titles.

Requirements: Prerequisite PSYC 203/3.0 and PSYC 236/3.0 and 3.0 units of PSYC at the 200-level or above.

Offering Faculty: Faculty of Arts and Science

PSYC 436  Sexuality and Gender  Units: 3.00  
This course provides an overview of the main theoretical perspectives on gender differences and similarities in sexuality, and examines how differences and similarities manifest in multiple domains, including sexual attitudes and behaviours, sexual motivation, mating strategies, sexual orientation, sexual psychophysiology, atypical sexuality, and sexual functioning.

Learning Hours: 126 (12 Lecture, 24 Seminar, 90 Private Study)

Requirements: Prerequisite PSYC 203/3.0 and (PSYC 236/3.0 or PSYC 333/3.0 or BIOL 369/3.0).

Offering Faculty: Faculty of Arts and Science

PSYC 437  Mood Disorders  Units: 3.00  
An intensive study of the state of research and controversies in the area of mood disorders. Specific topics covered will include bio-genetic, cognitive, interpersonal, and stress theories of etiology, as well as state-of-the-art advances in treatment.

Learning Hours: 120 (18 Lecture, 18 Seminar, 84 Private Study)

Requirements: Prerequisite PSYC 203/3.0 and PSYC 236/3.0.

Offering Faculty: Faculty of Arts and Science

PSYC 438  Self-Injury and Suicide  Units: 3.00  
Why do people intentionally hurt themselves? In this course, students will develop an advanced scientific understanding of suicide and non-suicidal self-injury. We will focus on: (a) definition, phenomenology, assessment, and epidemiology;
(b) modern theories; (c) transdiagnostic risk factors; and (d) intervention, prevention, and postvention.

**Learning Hours:** 120 (18 Seminar, 30 Asynchronous Online Activity, 72 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 236/3.0. Exclusion PSYC 480/3.0 (Topic Title: Self-Injury and Suicide - Winter 2020).

**Offering Faculty:** Faculty of Arts and Science

**PSYC 439 Interpersonal Processes in Depression Units: 3.00**
In this course, students will learn about interpersonal theories of depression, empirical findings related to interpersonal factors of depression, and interpersonal approaches to the treatment of depression.

**Learning Hours:** 120 (36 Seminar, 84 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 236/3.0. Exclusion PSYC 435/3.0 (Topic Title: Interpersonal Factors in Depression - Winter 2021); PSYC 480/3.0 (Topic Title: Interpersonal Factors in Depression - Winter 2020).

**Offering Faculty:** Faculty of Arts and Science

**PSYC 440 Advanced Topics in Social Psychology Units: 3.00**
A discussion of some areas and issues in social psychology emphasizing techniques and methods of social psychological research. Substantive topics may include attitudes and attitude change, psychology of women, conformity and deviance, etc.

**NOTE** Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.

**NOTE** This course is repeatable for credit under different topic titles.

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 241/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 441 Attitudes and Persuasion Units: 3.00**
This course provides an overview of classic and contemporary theories of attitudes and persuasion. Topics include the structure of attitudes, the role of attitudes in information processing, the impact of attitudes on behaviour, and the psychological processes underlying attitude change. A particular emphasis is placed on reviewing and evaluating theories of persuasion.

**Learning Hours:** 120 (24 Lecture, 12 Seminar, 84 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 241/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 442 Culture and Cognition Units: 3.00**
This course will examine a wide range of social cognitive topics (e.g., reasoning, decision making, attribution, language, self-concept, cognitive styles, emotion, relationship and subjective well-being) from a cultural perspective by drawing on a wide range of cross-cultural studies.

**Learning Hours:** 114 (12 Lecture, 24 Seminar, 78 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 241/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 443 Intimate Relationships Units: 3.00**
Classic and contemporary research pertaining to adult romantic relationships. Topics include attachment styles, relationship development, communication, and conflict in relationships.

**Learning Hours:** 126 (18 Lecture, 18 Seminar, 90 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 241/3.0.

**Offering Faculty:** Faculty of Arts and Science

**PSYC 444 Language and Reasoning Units: 3.00**
This course explores the science behind how aspects of language impact how people think about social concepts. For instance, how do metaphorical frames impact how we think about diseases (such as cancer)? How do subtle variations in wording (such as talking about climate change vs global warming) influence whether we intend to live more "green" lives? How do grammatically-gendered languages (e.g., French, German) impact gender biases of its speakers? This course sheds light on how language structures shape the mental models we use to understand and reason about complex social phenomena.

**Learning Hours:** 120 (12 Lecture, 24 Seminar, 12 Online Activity, 72 Private Study)

**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 241/3.0. Exclusion PSYC 440/3.0 (Topic Title: Language and Reasoning - Fall 2021, Winter 2021, Winter 2023, Winter 2024).

**Offering Faculty:** Faculty of Arts and Science

**Course Learning Outcomes:**

1. Understand, evaluate, and discuss with classmates major constructs in language and reasoning, such as the Sapir-Whorf hypothesis, conceptual metaphors, and distributed semantics.
2. Facilitate active and productive classroom discussion of course-related concepts.
3. Develop and present an original research project proposal related to language and reasoning.
4. Write an APA-style proposal of the original research project.
PSYC 450  Advanced Topics in Developmental Psychology  Units: 3.00
Topics vary from year to year and may include prenatal factors in development, infancy, aging, adolescence, cultural deprivation and intervention programs in early childhood, and developmental psychopathology.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
NOTE This course is repeatable for credit under different topic titles.
Learning Hours: 128 (18 Lecture, 18 Seminar, 25 Group Learning, 15 Online Activity, 52 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 451  Brain Development  Units: 3.00
This course is designed to be a relatively broad discussion of brain development, with a particular focus on issues such as development course, measurement, brain functioning, plasticity, and atypicality.
Learning Hours: 120 (36 Seminar, 84 Off-Campus Activity)
Requirements: Prerequisite PSYC 251/3.0 and PSYC 271/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 452  Developmental Psycholinguistics  Units: 3.00
This seminar focuses on the human ability to produce and comprehend language and its development. Using original empirical articles the participants in the seminar will examine topics like syntactic and lexical disambiguation, structural priming, the development of reading, and cultural variability in language ability.
Requirements: Prerequisite (PSYC 203/3.0 and 12.0 units in PSYC at the 200-level or above) or (level 3 or above and registration in a LING or COGS Plan and a minimum grade of B- in PSYC 100/6.0).
Offering Faculty: Faculty of Arts and Science

PSYC 453  Infancy  Units: 3.00
This seminar examines social and cognitive development during the first two years of life. Topics include the early differentiation between animate and inanimate entities, goal attribution, imitation, and prosocial behaviour.
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 454  Child in Society  Units: 3.00
The seminar focuses on the development of children's ability to navigate the social world. How do children understand social structures and processes? What determines their place in these structures? Topics will vary, e.g., the cognitive representation of social structures, modeling of social dynamics, cultural learning, essentialism, cooperation.
Learning Hours: 120 (36 Seminar, 12 Group Learning, 12 Online Activity, 60 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 455  Adolescence  Units: 3.00
This seminar will explore psychological development from the transition out of childhood to the transition into adulthood. The content of the course will cover typical and atypical adolescent development within several domains: cognitive, social, emotional, neurological and physical. Readings will focus on both basic developmental theory and applied research.
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 456  Theory of Mind  Units: 3.00
Explores children's emerging understanding that others' observable behaviours are motivated by internal mental states such as intentions, desires and beliefs. The first section of the course will cover the development of this understanding from infancy through the preschool years. The second section of the course will cover how this emerging understanding affects children's social and communicative development.
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Offering Faculty: Faculty of Arts and Science

PSYC 458  Neurobiology of Socio-Emotional Development in Adolescence  Units: 3.00
Changes in adolescents' body, brain, and behaviour influence how teenagers perceive and interpret their social environment, navigate their emotional experiences, and behave in social contexts. This course examines how developmental neuroscience research has informed our knowledge of socio-emotional development in adolescence.
Learning Hours: 120 (36 Seminar, 84 Private Study)
Requirements: Prerequisite PSYC 203/3.0 and PSYC 251/3.0.
Exclusion PSYC 450 (Topic Title: Neurobiology: Socio-Emotional Development - Fall 2020).
Offering Faculty: Faculty of Arts and Science
PSYC 459  **Socioemotional Development in the Digital Age**  Units: 3.00
The purpose of this course is to consider how digital experiences reflect, shape, and interact with normative child and adolescent socioemotional development.
**Learning Hours:** 108 (36 Seminar, 36 Online Activity, 36 Private Study)
**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 251/3.0. Recommended PSYC 351/3.0. Exclusion PSYC 450/3.0 (Topic Title: Socioemotional Development in the Digital Age - Fall 2022).
**Offering Faculty:** Faculty of Arts and Science

**Course Learning Outcomes:**
1. Develop and hone high-level critical inquiry skills
2. Review and apply theories of normative social and emotional development
3. Critically evaluate research on digital phenomena in youth and families
4. Formulate a coherent application of social or emotional developmental theory to one aspect of digital experiences in youth or families

---

PSYC 470  **Advanced Topics in Behavioural Neuroscience**  Units: 3.00
Intensive coverage of selected topics in behavioural neuroscience to include, in different years, such topics as neurobiology of learning and memory, neuroendocrinology, biological bases of motivation, biological bases of brain disorders, etc.
**Requirements:** Prerequisite PSYC 271/3.0 and PSYC 305/3.0 and PSYC 370/3.0.
**Offering Faculty:** Faculty of Arts and Science

PSYC 471  **Behavioural Pharmacology**  Units: 3.00
The neuropharmacological basis of psychological processes. Topics to be covered include drug actions on neurochemical systems, psychoactive effects of drugs and the neuropharmacological basis of psychiatric disorders.
**Learning Hours:** 120 (36 Seminar, 84 Private Study)
**Requirements:** Prerequisite Level 3 or above and PSYC 271/3.0.
**Offering Faculty:** Faculty of Arts and Science

---

PSYC 473  **Neurobiology of Psychiatric Disorders**  Units: 3.00
An examination of current theories on the neurobiology of mental disorders (e.g. autism, schizophrenia, mood and anxiety disorders). Seminars will focus on the evaluation of animal models for investigating neurodevelopmental and pharmacological aspects of various psychopathologies.
**Requirements:** Prerequisite PSYC 370/3.0. Recommended PSYC 205/3.0* or PSYC 305/3.0.
**Offering Faculty:** Faculty of Arts and Science

PSYC 479  **Special Topics in Psychology I**  Units: 3.00
Seminar courses on advanced topics in psychology offered periodically by visiting professors. Learning Hours may vary.
**NOTE** This course is repeatable for credit under different topic titles.
**NOTE** Also offered at Bader College, UK.
**Requirements:** Prerequisite PSYC 203/3.0 and PSYC 236/3.0.
**Offering Faculty:** Faculty of Arts and Science

PSYC 495  **Advanced Topics in Psychology**  Units: 3.00
Seminar and lab course on an advanced topic in psychology offered periodically by visiting professors.
**NOTE** Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
**NOTE** This course is repeatable for credit under different topic titles.
**Learning Hours:** 120 (12 Lecture, 24 Seminar, 84 Private Study)
**Offering Faculty:** Faculty of Arts and Science

PSYC 501  **Honours Thesis**  Units: 9.00
Each student will, under supervision, formulate and present an original research proposal involving the collection and analysis of data, carry it out, and submit a thesis based on the results. Proposals must be approved by relevant Ethics Review committees. This course is optional for students completing a major in psychology but all students are advised that admission to a graduate program in psychology normally requires the completion of an honours thesis.
**NOTE** Students whose research involves the care and/or handling of animals must also complete the Introductory Animal Care Course and if required the appropriate Animal Use workshops through the Office of the University Veterinarian.
**Learning Hours:** 365 (9 Seminar, 6 Tutorial, 350 Private Study)
**Requirements:** Prerequisite ([A minimum grade of C+ in PSYC 302/3.0] and [a minimum GPA of 2.60 in PSYC 202/3.0; PSYC 203/3.0; PSYC 301/3.0; PSYC 302/3.0] and [a GPA of 3.30 in PSYC] and permission of Department).
**Offering Faculty:** Faculty of Arts and Science
PSYC 550 Directed Special Reading I Units: 3.00
Reading courses to be arranged in consultation with individual members of the Department.
NOTE Students are limited to a maximum of two of PSYC 550, PSYC 555, PSYC 570, or PSYC 575. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501 concurrently will not normally take one of these courses with their thesis supervisor.)
Learning Hours: 117 (20 Group Learning, 13 Individual Instruction, 84 Private Study)
Requirements: Prerequisite Permission of the instructor and of the Chair of Undergraduate Studies and Level 3 or above and registration in a PSYC Major, Joint Honours, or Specialization Plan.
Offering Faculty: Faculty of Arts and Science

PSYC 555 Directed Special Reading II Units: 3.00
Reading courses to be arranged in consultation with individual members of the Department.
NOTE Students are limited to a maximum of two of PSYC 550, PSYC 555, PSYC 570, or PSYC 575. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501 concurrently will not normally take one of these courses with their thesis supervisor.)
Learning Hours: 117 (20 Group Learning, 13 Individual Instruction, 84 Private Study)
Requirements: Prerequisite Permission of the instructor and of the Chair of Undergraduate Studies and Level 3 or above and registration in a PSYC Major, Joint Honours, or Specialization Plan.
Offering Faculty: Faculty of Arts and Science

PSYC 570 Directed Special Laboratory I Units: 3.00
Laboratory courses to be arranged in consultation with individual members of the Department. Courses must involve data collection; approximately 5-7 hours of lab work per week required.
NOTE Students whose research involves the care and/or handling of animals must also complete the Introductory Animal Care Course and if required the appropriate Animal Use workshops through the Office of the University Veterinarian.
NOTE Students are limited to a maximum of two of PSYC 550, PSYC 555, PSYC 570, or PSYC 575. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501 concurrently will not normally take one of these courses with their thesis supervisor.)
Learning Hours: 117 (78 Laboratory, 39 Private Study)
Requirements: Prerequisite Permission of the instructor and of the Chair of Undergraduate Studies and Level 3 or above and registration in a PSYC Major, Joint Honours, or Specialization Plan.
Offering Faculty: Faculty of Arts and Science

PSYC 575 Directed Special Laboratory II Units: 3.00
Laboratory courses to be arranged in consultation with individual members of the Department. Courses must involve data collection; approximately 5-7 hours of lab work per week required.
NOTE Students whose research involves the care and/or handling of animals must also complete the Introductory Animal Care Course and if required the appropriate Animal Use workshops through the Office of the University Veterinarian.
NOTE Students are limited to a maximum of two of PSYC 550, PSYC 555, PSYC 570, or PSYC 575. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501 concurrently will not normally take one of these courses with their thesis supervisor.)
Learning Hours: 117 (78 Laboratory, 39 Private Study)
Requirements: Prerequisite Permission of the instructor and of the Chair of Undergraduate Studies and Level 3 or above and registration in a PSYC Major, Joint Honours, or Specialization Plan.
Offering Faculty: Faculty of Arts and Science
PSYC 594  Independent Study  Units: 3.00
Exceptionally qualified students entering their third- or fourth-year may take a program of independent study provided it has been approved by the Department or Departments principally involved. The Department may approve an independent study program without permitting it to be counted toward a concentration in that Department. It is, consequently, the responsibility of students taking such programs to ensure that the concentration requirements for their degree will be met.
NOTE Requests for such a program must be received one month before the start of the first term in which the student intends to undertake the program.
NOTE Also offered at Bader College, UK.
Requirements: Prerequisite Permission of the Department or Departments principally involved.
Offering Faculty: Faculty of Arts and Science

PSYC 595  Independent Study  Units: 6.00
Exceptionally qualified students entering their third- or fourth-year may take a program of independent study provided it has been approved by the Department or Departments principally involved. The Department may approve an independent study program without permitting it to be counted toward a concentration in that Department. It is, consequently, the responsibility of students taking such programs to ensure that the concentration requirements for their degree will be met.
NOTE Requests for such a program must be received one month before the start of the first term in which the student intends to undertake the program.
Requirements: Prerequisite Permission of the Department or Departments principally involved.
Offering Faculty: Faculty of Arts and Science

PSYC 596  Independent Study  Units: 12.00
Exceptionally qualified students entering their third- or fourth-year may take a program of independent study provided it has been approved by the Department or Departments principally involved. The Department may approve an independent study program without permitting it to be counted toward a concentration in that Department. It is, consequently, the responsibility of students taking such programs to ensure that the concentration requirements for their degree will be met.
NOTE Requests for such a program must be received one month before the start of the first term in which the student intends to undertake the program.
Requirements: Prerequisite Permission of the Department or Departments principally involved.
Offering Faculty: Faculty of Arts and Science

PSYC 597  Independent Study  Units: 18.00
Exceptionally qualified students entering their third- or fourth-year may take a program of independent study provided it has been approved by the Department or Departments principally involved. The Department may approve an independent study program without permitting it to be counted toward a concentration in that Department. It is, consequently, the responsibility of students taking such programs to ensure that the concentration requirements for their degree will be met.
NOTE Requests for such a program must be received one month before the start of the first term in which the student intends to undertake the program.
Requirements: Prerequisite Permission of the Department or Departments principally involved.
Offering Faculty: Faculty of Arts and Science