PSYCHOLOGY

Departmental Notes
Subject Code: PSYC
World Wide Web Address: http://www.queensu.ca/psychology/

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Overview
In Psychology you will learn about basic processes of cognition and behavioural neuroscience, including the effects of brain damage or drug-induced changes on behaviour, how various neurotransmitters affect behaviour, mechanisms of memory, motor control, and how we solve problems. You will also learn about child development, personality differences, how people act in groups or organizations, health-related behaviours, and various aspects of typical and atypical behaviour. Three plans are available that will lead to a B.Sc. (Hons.) degree: the Major (Sciences) in Psychology (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-major-science-bs-honours/) and two interdisciplinary Plans, the Biology-Psychology Specialization (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/biology-psychology-specialization-science-bs-honours/) and the Cognitive Science Specialization (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/cognitive-science-specialization-computing-bc-honours/). Three plans are available that lead to a B.A. (Hons): the Major (Arts) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/courses/psychology/psychology-major-arts-bs-honours/), Medial (Arts) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-medial-arts-bs-honours/), and Minor (Arts) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-minor-arts/). Students in all Major, Medial, and Specialization Honours plans are required to complete courses in both the social and natural science branches for breadth, as well as core courses in statistics and research design.

Departmental Policies
PSYC 100 Requirement
PSYC 100 Principles of Psychology is a prerequisite for all other psychology courses. It can only be waived if a student has completed a similar advanced high school (AP, IB) or college level introductory psychology course. PSYC 100 Principles of Psychology must be taken at Queen's for admission into an Honours Psychology plan.

Online Course Examination Requirement
All online courses in Psychology shall have a proctored final examination; students cannot pass an online course without passing the final examination.

Examination Absence
If a student has received instructor permission to defer an examination, they must register with the Undergraduate Office and be available to write the examination on the Department's deferred examination day. Procedures for requesting a deferred examination and the deferred examination schedule can be found on the Psychology undergraduate website (https://www.queensu.ca/psychology/undergraduate/current-students/departmental-policies/).

Special Study Opportunities
Special Directed Courses
Directed lab and reading courses are a great opportunity for students to work with a faculty member in a research area of interest. For more information, please visit the Psychology undergraduate website (https://www.queensu.ca/psychology/undergraduate/current-students/course-information/special-directed-courses/).

Graduate Courses
Requests for permission to register in certain graduate courses from especially well-qualified fourth-year honours students will be considered where space permits. Students desiring such consideration or more information should consult with the Undergraduate office in Psychology.

Faculty
Jill Atkinson (https://www.queensu.ca/psychology/people/faculty/jill-atkinson/), Christopher Bowie (https://www.queensu.ca/psychology/people/faculty/christopher-bowie/), Monica Castelhano (https://www.queensu.ca/academic-calendar/Psychology)

Programs

- Biology and Psychology – Specialization (Science) – Bachelor of Science (Honours) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/biology-psychology-specialization-science-bs-honours/)
- Psychology – Major (Arts) – Bachelor of Arts (Honours) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-major-arts-ba-honours/)
- Psychology – Major (Science) – Bachelor of Science (Honours) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-major-science-bs-honours/)
- Psychology – Medial (Arts) – Bachelor of Arts (Honours) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-medial-arts-ba-honours/)
- Psychology – General (Arts) – Bachelor of Arts (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-general-arts-ba/)
- Psychology – Minor (Arts) (https://queensu-ca-public.courseleaf.com/arts-science/schools-departments-programs/psychology/psychology-minor-arts/)

queensu.ca/academic-calendar
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 abnormal 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 the Bader International Studies Centre, Herstmonceux. Learning Hours may vary.*

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

**Course Equivalencies:** PSYC100; PSYC100B

**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 A minimum grade of a B- in PSYC 100 and registration in a PSYC Major, Medial or Specialization Plan). Exclusion BIOL 243; CHEE 209; COMM 162; ECON 250; GPHY 247; KNPE 251; NURS 323; PHED 251; POLS 385; SOCY 211; STAT 200; STAT 263; STAT 267; STAT 367.

**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, Medial or Specialization Plan) and (PSYC 202 or BIOL 243 or CHEE 209 or COMM 162 or ECON 250 or GPHY 247 or KNPE 251 or NURS 323 or PHED 251 or POLS 385 or SOCY 211 or STAM 200 or STAT 263 or STAT 267 or STAT 367). Exclusion BMED 270; HSCI 270.

**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 (24L;12G;3O;72P).

**Requirements:** Prerequisite PSYC 100.

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

**PSYC 220  Cognitive Psychology  Units: 6.00**
Requirements:** PSYC100

**Offering Faculty:** Faculty of Arts and Science
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 Art and Science Online.
Learning Hours may vary.
NOTE Also offered at the Bader International Study Centre, Herstmonceux. Learning Hours may vary.
LEARNING HOURS 120 (36L;84P).
Requirements: Prerequisite PSYC 100. Exclusion A maximum of 6.0 units from COGS 200; COGS 201; PSYC 220; PSYC 221.
Offering Faculty: Faculty of Arts and Science

PSYC 231 The Study of Personality  Units: 3.00
An examination of the major theoretical approaches to the study of personality with attention to the utility of these theories as measured by empirical investigations.
Requirements: Prerequisite PSYC 100.
Offering Faculty: Faculty of Arts and Science

PSYC 235 Abnormal Psychology  Units: 6.00
The experimental approach to the understanding, description and modification of abnormal behaviour is emphasized in the analysis of disorders of cognition (e.g., learning, memory and thinking), disturbances of affect (e.g., anxiety and depression), and problem behaviours (e.g., addictions, sexual disorders and psychopathy).
NOTE Only offered online. Consult Arts and Science Online.
LEARNING HOURS 240 (72L;24O;144P)
EQUIVALENCY PSYC 236/3.0.
Requirements: Prerequisite PSYC 100. Equivalency PSYC 236.
Course Equivalencies: PSYC235; PSYC235B
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 (36L;12O;72P).
Requirements: Prerequisite PSYC 100. Equivalency PSYC 236.
Course Equivalencies: PSYC235;PSYC236
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.
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 (12L;18T;36O;48P).
Requirements: Prerequisite PSYC 100.
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 (36L;84P).
Requirements: Prerequisite PSYC 100. One-Way Exclusion May not be taken with or after NSCI 323; NSCI 324; PSYC 370.
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.
LEARNING HOURS 120 (72Lb;24G;24P).
Requirements: Prerequisite (PSYC 100 and registration in an Honours Plan in Psychology) or permission of the Undergraduate Chair of Psychology.
Offering Faculty: Faculty of Arts and Science
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.
NOTE Enrollment is limited. Restricted to students in a PSYC Major Plan.
LEARNING HOURS 120 (36L;36Lb;12G;12O;24P).
Requirements: Prerequisite Registration in a PSYC Major Plan and a (minimum GPA of 1.90 in [PSYC 202 or STAT_Options] and PSYC 203) and a (minimum GPA of 2.60 in PSYC at the 100 and 200-level). Exclusion A maximum of 6.0 units from PSYC 300; PSYC 301; PSYC 302.
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 Enrollment is limited. Restricted to students in a PSYC Major Plan. Required for admission to PSYC 501.
LEARNING HOURS 120 (36L;36Lb;12G;12O;24P).
Requirements: Prerequisite A minimum grade of a C in PSYC 301 and registration in a PSYC Major Plan. Exclusion A maximum of 6.0 units from PSYC 300; PSYC 301; PSYC 302.
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.
LEARNING HOURS 120 (18L;18T;120O;72P).
Requirements: Prerequisite PSYC 100 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.
Offering Faculty: Faculty of Arts and Science

PSYC 313  Human Information Processing  Units: 3.00
Requirements: (PSYC202 AND PSYC205) OR (PSYC202 AND PSYC215) OR (PSYC202 AND PSYC205) OR (PSYC202 AND PSYC220) OR (STAT263 AND PSYC205) OR (STAT263 AND PSYC220) OR (STAT263 AND PSYC205) OR (STAT263 AND PSYC215) OR (STAT264 AND PSYC205) OR (STAT264 AND PSYC215) OR (STAT264 AND PSYC220) OR (PSYC202 AND COGS200) OR (PSYC202 AND PSYC205) OR (STAT263 AND COGS200) OR (STAT263 AND PSYC205) OR (STAT264 AND COGS200) OR (STAT264 AND PSYC205)
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 (18L;36Lb;66P).
Requirements: Prerequisite PSYC 203. Exclusion PSYC 495 (Winter 2012; Winter 2013; Winter 2014; Fall 2016). 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.
LEARNING HOURS may vary
Requirements: Prerequisite PSYC 221.
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 (18L;18Lb;72P).
Requirements: Prerequisite (PSYC 221 and PSYC 203) or (Level 3 or above and registration in a LING Plan and PSYC 221 and a minimum grade of a B- in PSYC 100).
Offering Faculty: Faculty of Arts and Science
**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 and [PSYC 221 or PSYC 220]) or COGS 200.

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

**PSYC 330  Selected Topics in Clinical Psychology  Units: 3.00**
Upper year courses related to the discipline of clinical psychology. Offered periodically.

**LEARNING HOURS** may vary

**Requirements:** Prerequisite PSYC 236

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

**PSYC 332  Health Psychology  Units: 3.00**
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.

**Requirements:** Prerequisite (PSYC 235 or PSYC 236) and (PSYC 202 or 3.0 units from STAT_Options).

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

**PSYC 333  Human Sexuality  Units: 3.00**
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.

**NOTE** Also offered at the Bader International Studies Centre, Herstmonceux. Learning Hours may vary.

**LEARNING HOURS** 120 (36L;84P).

**Requirements:** Prerequisite PSYC 235 or PSYC 236 and PSYC 251 or PSYC 271 or PSYC 370.

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

**PSYC 334  Laboratory in Psychological Testing  Units: 3.00**
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** 120 (24L;24Lb;12G;60P).

**Requirements:** Prerequisite PSYC 301.

**Course Equivalencies:** PSYC331, PSYC334

**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 the Bader International Studies Centre, Herstmonceux. Learning Hours may vary.

**Requirements:** Prerequisite PSYC 203 and (PSYC 235 or PSYC 236).

**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 (36L;18G;36I;36P).

**Requirements:** Prerequisite PSYC 235 or PSYC 236. Exclusion PSYC 399 (Topic Title: Psychopathology).

**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** 130 (36L;10O;84P).

**Requirements:** Prerequisite PSYC 235 or PSYC 236. Exclusion PSYC 399 (Topic Title: Advanced Child Clinical Psychology).

**Offering Faculty:** Faculty of Arts and Science
PSYC 340 Selected Topics in Social Psychology Units: 3.00
Upper year courses related to the discipline of Social Psychology. Offered periodically.
LEARNING HOURS may vary.
Requirements: Prerequisite PSYC 241.
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 (18L;18Lb;12Oc;72P)
Requirements: Prerequisite PSYC 203 and PSYC 241.
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 Also offered at the Bader International Study Centre, Herstmonceux. Learning Hours may vary.
LEARNING HOURS 120 (36L;84P).
Requirements: Prerequisite PSYC 100.
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 (36L;84P).
Requirements: Prerequisite PSYC 241. Exclusion PSYC 399 (Topic Title: Judgement and Decision Making).
Offering Faculty: Faculty of Arts and Science

PSYC 350 Selected Topics in Developmental Psychology Units: 3.00
Lecture courses on selected topics in the area of developmental psychology offered periodically.
LEARNING HOURS 120 (36L;84P)
Requirements: pre PSYC203 and PSYC251
Offering Faculty: Faculty of Arts and Science

PSYC 351 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 (36L;84P).
Requirements: Prerequisite PSYC 251.
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 and PSYC 251) or (Level 3 or above and registration in a [COGS or LING Plan] and minimum grade of a B- in PSYC 100).
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 (36L;91P)
EQUIVALENCY PSYC 457/3.0.
Requirements: Prerequisites PSYC251 and one of (BMED270, HLTH252, PSYC203, SOCY210). Exclusion No more than 3.0 units from PSYC350; PSYC353.
Offering Faculty: Faculty of Arts and Science

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 (18L;18Lb;12O;72P)
Requirements: pre PSYC203 and PSYC205
Offering Faculty: Faculty of Arts and Science
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 (18L;36Lb;120:60P).
Requirements: Prerequisite PSYC 203 and PSYC 271.
Offering Faculty: Faculty of Arts and Science

PSYC 374  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 (18L;18Lb;120;78P)
Requirements: pre PSYC203 and PSYC205
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.
LEARNING HOURS may vary.
Requirements: Prerequisite PSYC 271.
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 (36L;84P).
Requirements: Prerequisite Level 3 or above and PSYC 100. Exclusion PSYC 365 (Topic Title: Gender/Sex, Hormones/Behaviour); PSYC 398 (Topic Title: Gender/Sex, Hormones, and Behaviour).
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(33L;15G;16/5O;15Oc;33P)
Requirements: PREREQUISITE Students must be in good-standing in the 3rd or 4th year of a Psychology or Life Sciences plan. EXCLUSION PSYC 398 Topic: Functional Neuroimaging
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 (36L;84P).
Requirements: Prerequisite Level 3 or above and PSYC 100. Exclusion PSYC 398 (Topic Title: Behavioural Neuroeconomics); ECON 443 (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 and PSYC 215.
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 the Bader International Study Centre, Herstmonceux.
Requirements: Prerequisite PSYC 100.
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.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
Requirements: lvl 3 and PSYC100
Offering Faculty: Faculty of Arts and Science

PSYC 399  Selected Topics in Psychology II  Units: 3.00
Lecture courses on selected topics in psychology offered periodically.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
Requirements: Prerequisite PSYC 100 and at least 6 units in PSYC at the 200 level or above.
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 (24S;24G;78Pc;20O;75P)
Requirements: Prerequisite Level 3 or above and registration in a (PSYC Major, Medial or Specialization Plan) and a minimum GPA of 3.30 in PSYC.
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.
Requirements: Prerequisite PSYC 220 or PSYC 221 or COGS 200.
Offering Faculty: Faculty of Arts and Science

PSYC 421  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 (36S;84P)
Requirements: Prerequisite PSYC 235 or PSYC 236
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 220 or PSYC 221 or COGS 200.
Offering Faculty: Faculty of Arts and Science

PSYC 423  Visual Cognition in the Real World  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 220 or PSYC 221 or COGS 200.
Offering Faculty: Faculty of Arts and Science

PSYC 424  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 123 (12L;18S;9G;84P)
Requirements: Prerequisite PSYC 203 and PSYC 271.
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 and PSYC 241.
Offering Faculty: Faculty of Arts and Science

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 and (PSYC 235 or PSYC 236 or PSYC 333).
Offering Faculty: Faculty of Arts and Science

PSYC 435  Advanced Topics in Clinical Psychology  Units: 3.00
Recent developments in the experimental investigation of such abnormal behaviours as anxiety, depression, thought and memory disorders, etc.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
Requirements: Prerequisite PSYC 203 and (PSYC 235 or PSYC 236)
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.
Requirements: Prerequisite PSYC 203 and (PSYC 235 or PSYC 236 or PSYC 333 or BIOL 369).
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 (18L;18S;84P).
Requirements: Prerequisite PSYC 203 and (PSYC 235 or PSYC 236).
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 (6L;18S;9G;60,60c;75P).
Requirements: Prerequisite PSYC 203 and PSYC 236. Exclusion PSYC 480 (Topic Title: Self-Injury and Suicide).
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 (36L;84P).
Requirements: Prerequisite PSYC 203 and (PSYC 235 or PSYC 236). Exclusion PSYC 480 (Topic Title: Interpersonal Factors in Depression); PSYC 435 (Topic Title: Interpersonal Factors in Depression).
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.
Requirements: (PSYC203 AND PSYC240) OR (PSYC203 AND PSYC241)
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 (24L;12S;84P)
**Requirements:** Prerequisite PSYC 203 and PSYC 241.
**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 (12L;245;78P)
**Requirements:** Prerequisite PSYC 203 and PSYC 241.
**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 (18L;18S;90P)
**Requirements:** Prerequisite PSYC 203 and PSYC 241.
**Course Equivalencies:** PSYC341, PSYC443
**Offering Faculty:** Faculty of Arts and Science

**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.

LEARNING HOURS 128 (18L;18S;25G;15O;52P)
**Requirements:** Pre PSYC 203 and PSYC 251
**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 (36S;84Oc)
**Requirements:** Prerequisite PSYC 251 and PSYC 271
**Offering Faculty:** Faculty of Arts and Science

**PSYC 452 Developmental Psycholinguistic 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 and 12.0 units in PSYC at the 200-level or above) or (level 3 and [registration in a LING or COGS Plan] and a minimum grade of a B- in PSYC 100).
**Offering Faculty:** Faculty of Arts and Science

**PSYC 453 Infantcy 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 and PSYC 251.
**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 (36S;12G;12O;60P)
**Requirements:** Prerequisite PSYC 203 and PSYC 251.
**Exclusion PSYC 480 (Topic Title: Child in Society).**
**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 and PSYC 251.
**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 and PSYC 251.
**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 (36S;84P).
Requirements: Prerequisite PSYC 203 and PSYC 251.
Exclusion PSYC 450 (Topic Title: Neurobiology: Socio-Emotional Development).
Offering Faculty: Faculty of Arts and Science

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 305 and PSYC 271 and PSYC 370.
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 (36S;84P)
Requirements: Prerequisite Level 3 or above and ([PSYC 205 or PSYC 305] or [PSYC 271 and PSYC 370]).
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 271 and PSYC 370. Recommended PSYC 205.
Offering Faculty: Faculty of Arts and Science

PSYC 480  Special Topics in Psychology I  Units: 3.00
Seminar courses on advanced topics in psychology offered periodically by visiting professors.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
LEARNING HOURS May vary.
Requirements: Prerequisite PSYC 203 and (PSYC 235 or PSYC 236)
Offering Faculty: Faculty of Arts and Science

PSYC 485  Special Topics in Psychology II  Units: 3.00
Seminar courses on advanced topics in psychology offered periodically by visiting professors.
NOTE Prerequisites vary depending on specific course content; consult instructor or Undergraduate Office in the Psychology Department.
LEARNING HOURS 120 (36S;84P)
Requirements: pre PSYC202 and PSYC221
Offering Faculty: Faculty of Arts and Science

PSYC 485  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.
LEARNING HOURS 120 (12L;24S;84P)
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 (9S;6T;350P)
Requirements: Prerequisite (A minimum grade of a C+ in PSYC 302 or PSYC 300) and (a minimum GPA of 2.60 in PSYC 202; PSYC 203; PSYC 301; PSYC 302) 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 550/3.0, PSYC 555/3.0, PSYC 560/3.0, or PSYC 575/3.0. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501/9.0 concurrently will not normally take one of these courses with their thesis supervisor.)  
LEARNING HOURS 117 (20G;13I;84P)  
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 550/3.0, PSYC 555/3.0, PSYC 560/3.0, or PSYC 575/3.0. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501/6.0 concurrently will not normally take one of these courses with their thesis supervisor.)  
LEARNING HOURS 117 (20G;13I;84P)  
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 550/3.0, PSYC 555/3.0, PSYC 560/3.0, or PSYC 575/3.0. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501/6.0 concurrently will not normally take one of these courses with their thesis supervisor.)  
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 550/3.0, PSYC 555/3.0, PSYC 560/3.0, PSYC 570/3.0, or PSYC 575/3.0. Students are also limited to a maximum of two 500-level courses supervised by the same faculty member. (Students registered in PSYC 501/6.0 concurrently will not normally take one of these courses with their thesis supervisor.)  
Offering Faculty: Faculty of Arts and Science  

PSYC 594  Independent Study  Units: 3.00  
Offering Faculty: Faculty of Arts and Science  

PSYC 595  Independent Study Program  Units: 6.00  
Offering Faculty: Faculty of Arts and Science  

PSYC 596  Independent Study  Units: 12.00  
Offering Faculty: Faculty of Arts and Science  

PSYC 597  Independent Study  Units: 18.00  
Offering Faculty: Faculty of Arts and Science