

Winter 2027 PSYCH Grad Class Offerings

Course	Sec	Faculty	Title	Instructor	Class Description
505	B01	Science	Topic: Computational Neuroscience	K. Mathewson	This course builds on the skills from computational methods (or equivalent experience students bring themselves): coding, simulation, and working with data and models. We connect modern computational modeling and questions around AI interpretability to classic ideas and models in computational neuroscience, with room to follow threads that fit the group's interests.
505	B02	Science	Topic: Social & Emotional Effects of Strokes	F. Colbourne	This course introduces you to the cognitive, social and emotional impact of stroke. Our focus is largely on current clinical research, including the effects of stroke and treatment approaches (e.g., impact of depression and treatment for it).
505	B03	Science	Topic: Neuroethology	C. Sturdy	This course is a seminar and discussion-based course that will cover topics related to the neurobiology of behaviour, also known as neuroethology. As such, we will cover material related to brain and behaviour (i.e., neurobiology and ethology), with course material coming both from the textbook and primary literature sources (i.e., peer-reviewed journal articles).
505	B04	Science	Topic: Brain Metabolism	C. Scavuzzo	Students will develop a working understanding of the physiological processes underlying basic brain metabolism in the context of development, sensation, movement, learning, psychiatric disease, and sleep and the experimental methods used to study these processes.
505	B05	Science	Topic: Affect & Emotion	C. Baereldt	A survey of affect and emotion, tracing the historical evolution of emotion research, theories of basic and complex emotions, and interdisciplinary connections in the study of affect. The course explores advances in cognitive and appraisal theories of emotion, affective neuroscience and discursive studies of affective practices, delves into the question of how culture shapes emotional experiences, and explores recent developments in affect studies. By the course's end, students will be able to distinguish between feeling, emotion, affect, and sentiment, while critically analyzing the personal and cultural dynamics of affect and emotion.
505	B06	Science	Topic: Advanced Qualitative Methods in Psychology	M. Sharp	Reviews the assumptions that inform the design and conduct of qualitative research in Psychology. Provides an in-depth examination of selected procedures for gathering meaningful qualitative data such as through interviews, conversation, observed interaction, and textual archives; and selected methods for the analysis and interpretation of these data.
505	B07	Science	Topic: Replication Controversies	J. Caplan	This seminar critically examines topics related to replication in research, such as selective reporting, publication bias, open science and how these interact with the culture of researchers. Statistical and mathematical methods for identifying publication bias will be discussed, with an emphasis on understanding both real and exaggerated research problems.
505	B08	Science	Topic: Group Processes	D. Rast	In-depth examination of research and theory related to the social psychological processes within and between groups. Topics covered may include the importance of groups and group membership(s), social influence, group polarization, leadership, teams and teamwork, discrimination, collective action, and intergroup conflict and cooperation.
505	B09	Science	Topic: Autobiographical Memory	P. St Jacques	This course will bring together current research and theory on the cognitive, neural, lifespan developmental, and social basis of autobiographical memory and related research on naturalistic and real-world memories.

505	B10	Science	Topic: Neurophysiology: Theory, Methods, & Analysis	C. Dickson	A survey of theory, methods, and analysis of various neurophysiological techniques utilized in brain-behaviour research. The dynamics of in vivo recordings will be extensively covered.
505	B11	Science	Topic: Minds and Machines	M. Dawson	Computational models are playing an increasingly important role in cognitive psychology. The purpose of this course is to provide students with the theoretical background for using such models, as well as some hands-on experience. Students will learn about the history of these models in cognitive psychology, how one might characterize good and bad models, and how cognitive psychologists attempt to experimentally validate their models.
505	B12	Science	Topic: Cognitive Neuroscience of Attention	D. Hayward	Examination of the history of attention research, contemporary theories of attention, aspects of attention, methods used to study attention, dysfunctions of attention, the development of attention, and links between attention and other cognitive processes, such as memory and consciousness.
523	B1	Science	Developmental Methods: Application	S. Wiebe	Examination of best practices in the analysis of longitudinal data. Developmental research often involves longitudinal and multivariate study designs that require analytic strategies to examine change over time (e.g., latent growth modeling) and relations among predictors and outcomes over time. This course typically includes the completion of analysis assignments using statistical software.
532	B1	Science	Design & Analysis in Psychological Research II	T. Spalding	Examination of advanced experimental design and data analysis methods commonly used in psychological research, including analysis of variance (ANOVA), multiple regression/correlation (MRC), and linear-mixed effects (LME) modeling. A major component involves examination of the statistical methodology and assumptions underlying each of the designs. Fixed, random and mixed-effects models are discussed as well as effect size, power and the investigation of differences among means.
542	X50	Arts	Advanced Social and Cultural Psychology II	T. Masuda	In-depth examination of selected topics or issues in social and cultural psychology, with an emphasis on cultural psychology.
543	A1	Arts	Advanced Cultural Psychology	C. Baerveldt	In-depth review of the theoretical and methodological bases of cultural psychology, with a focus on specific topics or issues in cultural psychology.
576	B1	Science	Cognitive Neuroscience	J. Caplan	Brain basis of human cognition studied using a diverse range of techniques, with a focus on measures of brain activity such as functional neuroimaging and electrophysiology recorded during behavioural tasks. Designed for graduate and senior undergraduate students who are conducting cognitive neuroscience research. We will read articles and discuss them, led by students. Students will write hypothetical editorial letters for the articles. Students will present their own research or proposals. We will do hands-on analyses of sample brain activity data.
600	B1	Arts	Individual Studies	Please contact psygrad@ualberta.ca to register with your supervisor's permission.	
622	B1	Arts	Topic: Developmental Psychopathology	P. Liu	This course provides an introduction to and overview of the field of Developmental Psychopathology and its contributions to understanding of adaptation and maladaptation in human development. Major theoretical and methodological concepts, key topics, and implications for applied developmental research are examined.