

4th Year Seminar Descriptions (2023-24)

<u>Fall</u>

PSY 420F - Social Psychology Seminar: The Moralities of Everyday Life

This seminar dives into the modern science of moral thought and moral action, explored through the disciplines of cognitive science, social and developmental psychology, neuroscience, behavioural economics, and analytic philosophy. Topics include empathy and compassion in babies and young children; emotional reactions to family, friends, and strangers; the origins of prejudice and bigotry; sexuality, disgust, and purity; punishment, revenge, and forgiveness; dehumanization, and the relationship between morality and religion. No specific requirements, but participants should be prepared to read, and discuss, articles from a wide range of intellectual disciplines.

Dr. Paul Bloom Mondays 3-5 p.m.

PSY 420F - Social Psychology Seminar: Advanced Topics in Social Psychology

By drawing on theoretical frameworks, empirical research, and real-world applications, this seminar delves into advanced topics in social psychology. Content is divided into two sections. In the first section, through in depth-analysis, we introduce the basic principles of five major sub-areas of social psychology: social cognition, judgement and decision making, the self, culture and intergroup processing, and interpersonal relations. The second half of the course focuses on applications of social psychology by exploring how these basic principals inform applied and intervention research in social psychology. Both sections include investigation into traditional and contemporary work and cover methodological advances in measurement and design. Through a combination of lectures, discussions, readings, and learning exercises, students will gain a deep understanding of social psychology and develop the skills necessary to engage with and contribute to ongoing social psychological research.

<mark>Instructor TBA</mark> Thursdays 1-3 p.m.

PSY 430F - Personality Seminar: Cultivating Wisdom in Daily Life

This seminar will involve an in-depth exploration into the construct of Wisdom. We will start by looking at different definitions of wisdom including folk beliefs and cultural differences in our understanding of wisdom. We will move on to discuss the measurement of wisdom as a state and personality trait. Finally, we will explore evidence-based practices for cultivating wisdom in our daily lives and discuss outcomes related to this.

Dr. Amanda Sharples Fridays 1-3 p.m.

PSY 440F – Seminar in Psychopathology and Clinical Science: *The Influence of Stress and Trauma on Abnormal Psychological Functioning*

This seminar course will utilize active learning techniques to provide an evidence-based overview of the concepts of "stress" and "trauma", and their complex relationship with neurological functioning, mental health, and various psychological disorders. A critical review of prevalent theories and application of concepts will provide students with an understanding of how stress and trauma are operationalized from neurobiological, psychological, and integrative perspectives; and, how they increase the risk and severity of abnormal psychological disorders. Ultimately, students will come to understand the complexity of the individual stress response and explore the importance of adopting a biopsychosocial perspective of prevention and treatment in vulnerable children and adults.

Dr. Taryn Grieder Tuesdays 5-7 p.m.

PSY 471F - Seminar in Cognition: Addiction

Despite an enormous global effort to understand and treat addiction, the health and societal problems associated with substance use disorder persist. For example, drug overdoses have caused more deaths in the US than car accidents in recent years. Why do we continue to fail at treating the disease of addiction? Or are we thinking about this wrong, to begin with: is addiction actually a disease that can be treated medically? This seminar will explore questions such as these from behavioural, neuroscientific, and sociological perspectives, using evidence from non-human and human research. Prerequisites are PSY202H1/EC0220Y1/S0C252H1/STA221H1/PSY202H5/STA221H5/PSYC08H3/STAB27H3/STAC32H 2, *and* PSY260H1/PSYB38H3 *or* PSY270H1/PSY270H5/PSYB57H3 *or* PSY290H1/PSY290H5/PSYB64H3/HMB200H1/PSL300H1. **Dr. Suzanne Wood**

Fridays 1-3 p.m.

PSY 471F - Seminar in Cognition: Computational Psychology

Computational cognitive models explain psychological phenomena by simulating psychological mechanisms and processes. This seminar surveys the field of computational cognitive modeling (i.e., computational psychology). Topics include major cognitive modeling paradigms, the benefits and pitfalls of cognitive modeling, simulation experiments, model evaluation, and recent developments. **Dr. Can Serif Mekik**

Wednesdays 1-3 p.m.

PSY 480F - Seminar in Perception: The Neuroscience of Aesthetics

Why do we enjoy looking at certain objects, scenes, or paintings more than others? What kinds of perceptual, affective, and cognitive processes underlie our aesthetic experience? What are the neural processes underlying aesthetics? In this seminar, we will look for answers to these questions in research and review articles from neuroscience, psychology, and philosophy. Brief lectures will provide the background necessary for understanding the weekly assigned readings. Students should have a basic understanding of cognitive neuroscience and visual perception. *This course may also be of interest to students in Architecture, Art History, Philosophy, and Cognitive Science.*

Dr. Dirk Bernhardt-Walther Tuesdays 1-3 p.m.

PSY 490F - Seminar in Behavioural Neuroscience: Human Chronobiology

This course focuses on issues of biological timing that are important to human health, development, learning/memory, and performance. Timing systems in other organisms are introduced as appropriate for each topic. The course builds a base of understanding of timing mechanisms, how they are produced at different levels of biological organization, and how disorganization can contribute to chronic mental and physical health disorders.

Dr. Martin Ralph Tuesdays 3-5 p.m.

<u>Winter</u>

PSY 420S - Social Psychology Seminar: Stereotypes, Prejudice, and Stigma

This course will examine contemporary issues in stereotyping, prejudice, and stigma, both from the perceiver's and the target's perspective. The focus will be on understanding current trends in the field by focusing on what has been recently published over the past few years. Connections with classic issues and research will be made through weekly presentations and discussions led by discussion facilitators.

Dr. Alison Chasteen Tuesdays 5-7 p.m.

PSY 420S – Social Psychology Seminar: The Science of Social Well-Being

This seminar course draws together the pressing social well-being issues we face today: Are we experiencing an epidemic of loneliness and social isolation? Are people becoming less caring toward each other? What are the impacts of increased online interactions on human relationships? Through the lens of social and health psychology, we will explore the drivers and implications of these issues for individuals' and society's flourishing. This course will involve reading and discussing relevant research articles with the aim of developing practical solutions to these issues. By the end of the course, students will be able to use the evidence discussed in the class to propose interventions and policies that promote the population's social well-being.

<mark>Instructor TBA</mark> Wednesdays 1-3 p.m.

PSY 420S - Social Psychology Seminar: The Social Psychology of Language

Language is a social activity, and it permeates every dimension of one's social world. Although it has garnered much attention in cognitive psychology, it has been largely overlooked in mainstream social psychology. This course focuses on the social psychology of language and communication, and we will examine the role of language in social psychological processes. Topics will include identity, intergroup relations, person perception, bias, prejudice, and discrimination. The course will include a review of prevalent theories and current trends in the field. Students will learn how language intersects with social psychological variables and gain a greater understanding of the social psychological antecedents and

consequences of language as well as its contribution to social meaning and social construction in their daily lives.

Dr. Odilia Yim Thursdays 1-3 p.m.

PSY 460S – Seminar in Learning: Biopsychological Approaches to Study Cognition

Recent advances in tools and technology open the door to investigating the biological basis of various cognitive processes, such as memory, spatial navigation, decision making, and social interaction. In this course, we will read and discuss primary research articles on biopsychological experiments using non-human animals to gain insights into how cognitive processes are associated with genetic and physiological changes in the brain. The course will include brief lectures on methods and measures used in the assigned articles; however, a basic understanding of molecular biology, neurophysiology, and neuroanatomy is expected. Successful completion of *PSY202H1* and *PSY260H1* is required; *PSY290H1* is recommended.

Dr. Kaori Takehara-Nishiuchi Tuesdays 3-5 p.m.

PSY 471S – Seminar in Cognition: The Visual Brain: Attention, Working Memory, and Awareness

Visual processing is a fundamental function of the human brain, relying on a cascade of neural processes to transform low level inputs into semantic content. Despite significant advances in characterizing the locus and function of key visual cortical regions and a better understanding of the temporal and spatial dynamics of this processing stream, we still lack a comprehensive framework of how the brain creates our vivid awareness of coherent objects and scenes from simple photons of lights impinging on our retinae. This course delves into some of the most influential studies and theories across psychology subfields to gain insights into how the brain subserves visual attention, working memory, and awareness. Students will gain a firm understanding of the key debates in the field and will leave this course equipped to be both critical consumers and producers of scientific research. This course will combine lectures with student presentations.

Dr. Susanne Ferber Mondays 3-5 p.m.

PSY 471S – Seminar in Cognition: The Nature and Function of the Self

This seminar will explore how current psychology, cognitive science, and neuroscience are transforming our understanding of the nature and function of the self. We will confront claims that the self is an illusion, and we will look at the relations the self has to narrative, intelligence, consciousness, and agency. The course will consist of six lectures, followed by six session of student presentations and discussions.

Dr. John Vervaeke Tuesdays 1-3 p.m.

PSY 471S – Seminar in Cognition: Event Cognition and Memory

This course will take a deep dive into a re-emerging area of research – event cognition and memory. Events in our lives can be incredibly complex. In this course, we will survey the research examining, 1. how we comprehend/interpret events, 2. how we segment the continuous stream of occurrences into discrete events, 3. how our comprehension and segmentation affect our memory, and 4. the neural underpinnings of event comprehension, segmentation, and memory. In this course we will discuss the cutting-edge techniques that are now being applied to understand events (such as natural language processing and eye-tracking) and to image these underlying processes (using fMRI, and EEG). Students will generate their own hypotheses and critiques about the event cognition and memory and design experiments to test novel hypotheses.

Dr. Alexander Barnett Fridays 11 a.m.-1 p.m.

PSY490S – Seminar in Behavioural Neuroscience: Optogenetic Probing of Animal Behaviours

The course will survey a variety of genetic neuron manipulation methods being used in the systems neuroscience field, with a particular focus on light-induced neuron manipulation methods and applications.

Dr. Junchul Kim Fridays 1-3 p.m.