Topics in Cognition

Department of Psychology and Neuroscience

PSYO/NESC 4130 Fall 2026

Dalhousie University operates in the unceded territories of the Mi'kmaw, Wolastoqey, and Peskotomuhkati Peoples. These sovereign nations hold inherent rights as the original peoples of these lands, and we each carry collective obligations under the Peace and Friendship Treaties. Section 35 of the Constitution Act, 1982, recognizes and affirms Aboriginal and Treaty rights in Canada.

We recognize that African Nova Scotians are a distinct people whose histories, legacies, and contributions have enriched the part of Mi'kma'ki known as Nova Scotia for over 400 years.

Course Instructor

Name	Email	Office Hours
John Christie	john.christie@dal.ca	M: 10:00-11:30 AM P2519

Course Description

SIGNATURE REQUIRED

Tuesdays 10:05-11:55 LSC-PSYCHOLOGY P4207

Student Resources

Resources will usually be gathered by the students with support form the instructor.

Course Structure

This is a fully synchronous seminar course presented in person primarily by the students themselves. Each class is a presentation and discussion session.

Learning Objectives

Increased understanding of various topics in cognition over and above what is found in PSYO 2130 and the 313x lab courses; demonstrate the ability to gather information on a topic, present it to a group, and guide discussion on that topic; participate in said discussions demonstrating prior preparation and understanding of the topic.

Assessment

The course has two primary assessment components. You will give a presentation and lead discussion for one class period. That is 40% of your grade. The other 60% is based on how well you participate in, and are prepared for, discussion in other classes that are mostly presented by fellow classmates.

The presentation alone should be about 40 minutes and not more than 50 and can be one of the topics suggested and discussed in the first class or another you propose and have approved by your instructor. You are not only graded on presentation but how well you guide discussion. Therefore, it behooves you to assist your fellow classmates in getting prepared.

The order of presentations will be done according to a draw on the first day. The first doesn't have to be done until the second week in the class. The first presentation will get some initial help to get off the ground. Students are permitted to volunteer for the first session. If there are multiple volunteers there will be a draw. If there are fewer than 12 students then student presentations will not begin until the third class.

On the weekend prior to your presentation you must distribute to your instructor and colleagues a list of readings for the upcoming class. You also need to submit a draft of your presentation at that point with a final due 24 hours prior to your presentation. This will include slides and notes or other materials that can be copied. If you use physical materials photos need to be submitted.

Conversion of numerical grades to final letter grades follows the Dalhousie Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

Course Policies on Missed or Late Academic Requirements

If you miss your presentation day without sufficient notice it will result in a 0 for that component. It may be possible to make it up but it would require less than the full complement of students to be enrolled. A written assignment may be substituted for partial grade for the

presentation and you can still get grades for participating on days that you do not present. Missing days you don't present result in 0 for that day without getting excused by your instructor.

Course Policies related to Academic Integrity

All presentations are individual assignments. However, students are encouraged to cooperate. This primarily arises as all students study primary readings they can feel free to communicate with the student of that topic with ideas and suggestions. The student preparing the topic can also ask for input in advance on their presentation and discussion from their peers.

Course Content

Below are examples of some class topics. They are only examples because you are free to select whatever topics you wish. Any readings listed are only readings to help get started on the topic. They are not an exhaustive list of what will be needed. More details will be provided in class. Feel free to contact me as soon as you settle on a topic so that you can have first pick. You may even have something that you've been interested in prior to class you wish to focus on. Let me know! The only issue is that you cannot self plagiarize and it cannot directly overlap your honours thesis or other projects. Nevertheless, it can be highly related. For example, if you're doing an honours project that assesses the phonological loop in working memory it would be OK to do a 4130 project that's deeper into the history and development of the working memory model or discuss competitive models. All topics need to be approved by your instructor.

Besides your lottery selected presentation date there will also be one other due date. You must have your topic in to me by **Jan. 24** if you are selected second presenter or higher. You'll need to submit at least on reference and a topic statement. I need to know what you want to present in order to prepare the remaining presentations. Feel free to contact me for presentation ideas and especially discussion on how to narrow down a presentation topic.

Example Topics That Were Covered in a Recent Version of the Course

The cognitions in SATs and CAFs - Lappin & Disch (1972) and Wickelgren (1977).

Working memory fundamentals - History, development, are the modules complete?

Cell Phones and Memory - working or long term

False Memory - and repressed memories

Video games and cognition enhancement.

Mental Imagery - Aphantasia (Akane)

The Inner Monologue - research and discussion

Stress and Memory

Gigerenzer v. Irrationalists (i.e. Kahneman)

Cognitive control? (What ways do we really test it?)

Orienting training with points rewards and awareness (no awareness = no orienting?)

Additional Example Topics

A theory of consciousness

An ANT subtopic - e.g. Fan paper from J. Cog. Neurosci.

What does change blindness or inattentional blindness really mean?

How to study for success.

Cognitive benefits and bilingualism

How to measure memory? (Brady et. al.)

Are there cognitive maps? Tolman, E. C. (1948).

Memory competitions - Are those with remarkable memories special brains or those who have learned a powerful technique?

Are there special brain areas for language?

Accessibility

Refer to the Student Accommodation Policy for information on how Dalhousie instructors and staff work collaboratively with students to create and sustain an accessible educational environment.

If there are aspects of this course, including but not limited to its design, teaching approaches, learning activities, and assessments, that result in barriers to your learning or do not align with your formal academic accommodations, reach out to me to collaboratively find a solution that meets your needs.

You are eligible for accommodations based on protected characteristics such as religion. If you have religious, cultural, or community-significant observances that conflict with course

requirements, reach out to me to collaboratively find alternatives for completing the course requirements.

To begin the process of requesting a formal academic accommodation, contact the Student Accessibility Centre (or the Student Success Centre for Faculty of Agriculture courses).

Academic Integrity

Dalhousie expects all students to be responsible learners, demonstrating the values of intellectual honesty, trust, fairness, and respect in your work. Key aspects of academic integrity include, but are not limited to: avoiding plagiarism, not engaging in cheating, submitting original work, and acknowledging sources of information and ideas when they are not your own. Refer to the Statement on Intellectual Honesty for definitions of various academic offences. Failure to meet Dalhousie's academic integrity standards will result in appropriate disciplinary and/or corrective measures.

Appendix

The standard syllabus appendix is available online.

https://dalu.sharepoint.com/sites/learn-teach/SitePages/syllabus-appendix.aspx