

# **PSYCHOLOGY 409**

## **COGNITIVE NEUROPSYCHOLOGY**

Section 001 Winter 2024-25, Term 2  
Tu-Th 2:00 - 3:30

### **INSTRUCTOR**

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### **ACKNOWLEDGING THIS LAND AND ITS PEOPLE**

First, a moment for reflection. Please appreciate that we are all deeply fortunate to have our learning and living experiences take place in this most beautiful of locations, the ancestral home of the Musqueam people. As the caretakers of this land from time immemorial, we should all acknowledge their long history with humility and respect, and never take for granted that they openly welcome all of us here regardless of where our own ancestral roots may be.

### **LEARNING OBJECTIVES**

This course is not a traditional survey of topics and issues in cognitive neuropsychology as one might find in a textbook. The goal is to develop an understanding of human neurocognitive function not through a brain-centric lens of neural systems and networks that process information in support of basic behavioral tasks performed in a controlled laboratory setting, but rather, through a body-centric perspective of a physically mobile organism adapted to navigate its way through a physical and socio-cultural environment that is often complex, unpredictable, and dangerous. Throughout, emphasis will be placed not on describing and detailing neurocognitive function in mechanistic, impersonal, third-person terms, but rather, from appreciating neurocognitive function as a first-person, subjectively lived experience that unfolds in the flow of everyday life. As such, at the end of the course, the successful student should be able to:

1. Understand the larger biological context for cognition and brain function, be able to answer the question of why we have brains, and be able to articulate why this is a critical question to address.
2. Understand the role of the body and environment in shaping human cognition and its evolution

## **BUYER BEWARE: ATTENDANCE AND ELECTRONICS**

Towards promoting a learning-positive agenda, this course has two important policies in place. First, learning begins with coming to class on a regular basis. To encourage this, ***there are regular in-class quizzes, assignments, and exercises that need to be turned in during class.*** So beware: this is not a good course for the attendance-challenged. Second, to support an equitable learning environment, to minimize the negative impacts others can have on our attention when in social environments, and to maximize thinking and discussion in class, I politely request that no electronics are used or otherwise engaged with during class time.

## **COURSE ORGANIZATION**

This course is not lecture-based. Rather, as a smaller, fourth-year course, it is taught in a seminar-based style, which emphasizes open discussion rather than formal lectures. **In terms of structure, the course after the first week is broken down into four modules, each three weeks (or 6 class days) in length:**

- Day 1: **Quiz** on an assigned reading.
- Day 2: **Thought Assignment for in-class Discussion**
- Day 3: **Quiz** on an assigned reading.
- Day 4: **Thought Assignment for in-class Discussion**
- Day 5: **Thought Assignment for in-class Discussion**
- Day 6: **Written Assignment Due and In-Class Presentation**

**Note:** Module 4 only has 5 class sessions, so we will skip the third Question Assignment for that module, and have the Written Assignment and In-Class Presentation on the 5th module day.

## **ASSIGNED READINGS**

Each module will have two assigned articles. All will be made available for download in pdf format from the course CANVAS site, on the MODULES page. To facilitate your reading of the papers, I have also included a short document on the MODULES page under ASSIGNED READINGS titled *Reading Strategies*; if you adopt them, these strategies will hopefully help you to maximize what you learn from the papers while minimizing the natural anguish and stress that can come with reading material that feels difficult to digest. Please note that in order to keep things focused on the here-and-now, I will post assigned readings one at a time, in the order we will be reading them.

## **QUIZZES**

To incentivize reading the assigned articles and attending class sessions, each assigned reading includes an in-class quiz. Each quiz (there will be 8 over the term) will ask approximately 5 short questions concerning major themes/concepts/ideas from the assigned paper it is targeting. To aid

in preparing for these quizzes, I will provide key questions to study from the article one or more days ahead of the quiz; these questions will either be given in class or posted on the course Canvas site.

**Each quiz will be worth 5 points each, for a total of 40 possible points.**

### **THOUGHT ASSIGNMENTS**

To incentivize both attending class and engaging with the discussions raised by each assigned reading, **on Day 2, 4 and 5 of each Module** you are expected to come to class with a thought or question you have in light of, or building on, the discussion from the prior class. At the start of class you will be given a sheet on which to fill out your thought or question, and you will be asked to hand that sheet/question in at the end of class. We will use these to guide discussion for that class period. Assignments will be marked based on the level of thought manifest, and the extent to which it reflects engagement with the class discussion and material. **Note:** there are only 5 class sessions in Module 4, so we will skip the third thought assignment in that module.

**Each of the 11 thought assignments will be worth 3 points, for a total of 33 possible points.**

### **WRITTEN ASSIGNMENTS**

On the evening of **Day 5** of each module I will post a short written assignment on Canvas to complete by hand and turn in on **Day 6** of each module, in class. The assignment will build on an issue or topic from the papers and discussions from that module. You will need to be prepared to discuss your assignment in-class in a small-group setting on that day. The purpose is to facilitate (1) attendance, (2) discussion and class participation, and (3) linking the issues raised in class with your own, lived, everyday experience, and (4) preparing you for the Term Paper as described below. **Note:** because there are only 5 class sessions in Module 4, the written assignment for Module 4 will be on the 5th day of the Module, Tuesday, April 8.

**These will be worth 10 points each, for a total of 40 possible points.**

### **TERM PAPER**

This will be due as an electronic submission on Canvas at the time and date of our assigned final exam slot; note however, that **we will not have a final exam**. You will need to (1) take a picture that captures how you experience an issue of neurocognitive function as it relates to physical mobility in your everyday life, and then (2) describe that experience and what you think about it while making informed references back to two assigned papers from the class. There are three further things to note regarding how to go about this:

First, the picture needs to be one you take; images downloaded from the internet or any other source than your own camera/phone are not to be used. If it comes to light that the photo was downloaded from an outside source, the paper will receive a 0.

Second, the assignment concerns reflecting on something from your own everyday experience. As such, the writing itself needs to be from the first-person perspective. So try to have fun, be creative, and think about it more as a scientifically-informed blog post you might make, rather than a typical science paper to write for a class.

Finally, the assignment is to make direct reference to two course papers. This means that papers citing three or more papers are not actually meeting the requirements of the assignment and will be marked down accordingly. The intent here is not only to test one's ability to follow guidelines, but more importantly, to avoid students feeling like there is an arms race to cite as many papers as possible. What's impressive is how papers are used/cited, not simply how many references can be stuffed in.

### **What To Upload:**

The assignment is three pdf pages. The first page should simply be your photograph, centered in the middle of the page, between 4.5"-5.5" wide, and 7"-8" tall; this page should contain no other text of any kind; let the picture do ALL the initial talking. The actual writing is to be contained on pages 2 and 3, printed in 12-point Times New Roman font, single-spaced with margins of 1" on each side. **As such, you have two pages to write about what your picture captures about your everyday life.** The writing should include a title, but do not put your name or student number on either page; instead, to keep marking anonymous, please write your name and student number by hand on the back of the last page. **There is no need to provide references for your two class papers; just cite them in your text.**

**This assignment is worth 40 points total.**

## **GRADING RUBRIC FOR WRITTEN ASSIGNMENTS AND TERM PAPER**

A RANGE: Exceptional Performance. Strong evidence of original thinking; good organization in written work; capacity to analyze (i.e., break ideas down) and to synthesize (i.e., bring different ideas together in a coherent way); superior grasp of subject matter with sound critical evaluations that go beyond what is/was discussed in readings and class; evidence of extensive knowledge base.

B RANGE: Competent Performance. Evidence of grasp of subject matter; some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues as discussed in readings and class; evidence of familiarity with the assigned reading(s).

C-D RANGE: Adequate Performance. Understanding of the subject matter; ability to develop solutions to simple problems in the material; acceptable but uninspired work; not seriously faulty but lacking style and vigor.

F RANGE: Inadequate Performance. Little or no evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the assigned reading(s).

### **MISSED CLASS SESSIONS**

If you miss a session, I do not need to be told or informed for the reason for your absence. There are no make-ups for missed quizzes; a missed quiz is a missed quiz and I am not in a position to judge whether or not a reason for missing is valid. Also please note that quizzes cannot be done remotely or done at an alternative time. Assignments can be handed in late, but will be downgraded according to the degree of lateness. Assignments will not be accepted electronically as a proxy for attending; I will only mark/grade hard copies handed in by the student doing the assignment (i.e., I do not accept copies of assignments handed in by friends or other students). Please understand that this course rewards attendance, and this is part of the incentive to attend. Please also note that not all circumstances regarding missed quizzes and assignments can be anticipated ahead of time, and so further grading policies in this domain may be specified to the class at later points in the term in order to fairly deal with such situations if they arise.

### **OVERALL COURSE MARKS**

Course marks will be based on a sum total of quizzes (40 points), thought assignments (33 points), written assignments (40 points), and the term paper (40 points) **for a total of 153 possible points.**

### **DEPARTMENT SCALING POLICY**

The Psychology department employs department-wide grading standards to promote equitable alignment, supporting students and course instructors as they learn and teach across many diverse courses and sections. For each Course Section, instructors should aim for a grade average in the following Target Ranges (before any bonus HSP points are added, but including any mandatory HSP points): B- (68-71%), in Introductory 100-level and 200-level courses; B (72-75%), in Intermediate 300-level courses; B+ (76-79%), for Advanced 400-level courses and Selective-Entry lower-level courses (e.g., PSYC 277, 278, 312, 370, 371, 349, 359, 365).

Ranges are intended to provide some flexibility to instructors and account for differences that can occur between classes. Ranges increase across year levels to account for improvements in student learning, and students' ability to self-select into more specialized courses.

During the course, instructors may choose to adjust grades and/or difficulty of the assessments, to align with the Target Range. At the end of the course, if the average falls outside the Target Range (either direction), instructors will typically be expected to use a linear transformation to adjust final grades (i.e., add or subtract the same number of points to all students' marks, while ensuring no student fails the course due to this transformation).

If a course mean falls in within one +/- letter grade band above the Target Range (e.g., in the B+ range for Intermediate courses), and the instructor believes these grades to be justified, the instructor may submit a justification request using the departmental approval final grades submission form, and the grades may stand. This Upper Range is intended to inspire further excellence in learning and teaching, and allow for the possibility that some classes select for higher performing students. Courses with means exceeding the Upper Range will be expected to provide justification as well as use a linear transformation to fall within the Upper Range.

### **CONTACTING THE INSTRUCTOR**

To avoid having your emails automatically deleted as spam, the subject header must read "Psych 409." The answers to questions regarding lecture/reading content may often be useful for the entire class to hear. As a consequence, questions may be answered in the live lecture rather than via email. Please also note that while I try to be responsive to student emails, there are limits that must be put in place. Unfortunately, to keep things fair for everyone, I can not respond to students who generate excessive/frequent emails or who generate long lists of questions, as it would be impossible for me to provide this level of service to all students. **Finally, in order to promote good problem solving skills, I will deduct 1 point from a student's final course mark for each email question that can be answered by consulting this syllabus, the Department of Psychology web page, and/or the UBC web page.** Examples of such questions would be *When is the next quiz?*, *Where/when is the final?* and *What are the assigned readings for the next exam?*

**PLEASE ALSO NOTE: I DO NOT USE OR MONITOR THE EMAIL SYSTEM ON CANVAS. I WILL ONLY BE MONITORING EMAIL TO MY ADDRESS LISTED AT THE TOP OF THE SYLLABUS.**

### **ACADEMIC CONCESSIONS**

Arts Students must contact Arts Advising as soon as you are aware you may need an [in-term concession](#). Please review [their website](#) for concession criteria as well as process to follow. Students in other Faculties should contact their Faculty advising office for direction.

### **OUTSIDE RESOURCES**

If you run into trouble and need information on effective studying, preparing for exams, how to take notes, or manage your academic time, free workshops and advice are available from the

Student Resources Center, which can be reached through the School and College Liaison Office at 822-4319. UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here: (<https://senate.ubc.ca/policies-resources-support-student-success>)

## **MODULE TOPICS AND DATES**

### **Module 1 — The Brain in Biological Context**

January 14 to 30

### **Module 2 — Cognitive and Affective Diagnostics**

February 4 to 27

### **Module 3 — Cognitive Interventions and Inclusive Design**

March 4 to 20

### **Module 4 — Brain-Culture Co-Construction and Human Uniqueness**

March 25 - April 8