

PSYCHOLOGY 409

COGNITIVE NEUROPSYCHOLOGY

Section 001 Winter 2022-23, Term 2
Tu-Th 2:00 - 3:30

INSTRUCTOR

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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, but rather, through a body-centric perspective of a physically mobile organism adapted to navigate its way through a physical and socio-cultural environment. 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 LAPTOPS

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 and assignments that need to be turned in during class.*** So beware: this is not a good course for the attendance-challenged. Second, research has shown that the use of laptops in classroom settings (1) distract the user and those around them from class, and (2) students who take notes by hand show greater retention of material from class, relative to students who take notes on laptops. Likewise, please understand that not all students may have access to laptops/tablets, which arguably might confer an unfair advantage on those that do have laptop/tablet access. *As such, laptops, tablets, phones, and other forms of attention-distracting technology are not to be used in class.* For insight into the science on this, please see the "WHY NO LAPTOPS ETC. IN CLASS?" module on the course Canvas site.

RECORDING LECTURES

Although electronics are not permitted to be used in class, it is okay to audio record the lectures. Feel free to place your phone or other recording device on a table at the front of the podium prior to lecture if you'd like to exercise that option.

COURSE ORGANIZATION

This course is not lecture-based. Rather, as a small (for the Psychology Department), 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 is broken down into six sections or modules, each two weeks in length.** The first module presents a general introduction to the course, and establishes a conceptual framework for understanding the brain and human neurocognitive function that we will be using/applying for the remainder of the term, or what I call **the Biological Brain Framework**. The five subsequent modules each introduce a central, defining question to explore from this biological perspective on the brain, questions that not only promote a truly interdisciplinary understanding of the human brain, but even more importantly, that address current, socially-pressing issues:

Module 1: The Biological Brain Framework
Weeks of January 10 and 17

Module 2: Aging
Weeks of January 24 and 31

Module 3: Mental Wellness
Weeks of February 7 and 14

Module 4: Physical Health and Biomechanical Ability
*Weeks of February 28 and March 14**

Module 5: Demographic and Lived Diversity
Weeks of March 21 and 28

Module 6: Human Evolution
Weeks of April 4 and 11

Term Paper: Due at the time/date of our scheduled final exam slot.

*NOTE: There will be no class on March 7 or 9

MODULE ORGANIZATION

As the introduction to the course, Module 1 has a unique structure:

Day 1: Class intro

Day 2: Lecture on the Biological Brain Framework

Day 3: A **quiz** and discussion on an **assigned article**

Day 4: Lecture on measures of physical mobility

Modules 2 - 6 will then all have the same following structure:

Day 1: A **quiz** on and discussion of an **assigned reading**

Day 2: Discussion of a **1-page written assignment**

Day 3: Discussion of **research articles you dig up**

Day 4: A **quiz** on and discussion of an **assigned reading**

ASSIGNED READINGS

Module 1 will have one assigned article, while Modules 2-6 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 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.

QUIZZES

To incentivize reading the assigned articles and attending class sessions, each assigned reading includes an in-class quiz. Each quiz (there will be 11 over the term) will ask 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 10 points each, for a total of 110 possible points.**

WRITTEN ASSIGNMENTS

On **Day 1** of Modules 2 through 6, you will be given a simple assignment to complete for the next class (or due on **Day 2** of Modules 2 through 6). The assignment will build on an issue or topic from the paper assigned for Day 1 of that module, and it will form the basis for in-class discussions on the day it is due (i.e., discussion each **Day 2**). Directives on what needs to be done, including what needs to be turned in will be given in class at the end of **Day 1**. On **Day 2** you should be prepared to present and discuss your issue in a small group setting. The purpose is to facilitate (1) attendance, (2) discussion and class participation, (3) linking the issues raised in class with your own, lived,

everyday experience, and (4) preparing you for the Term Paper as described below. **These will be worth 10 points each, for a total of 50 possible points.**

RESEARCH ARTICLES YOU DIG UP

For Modules 2 thru 6, at the end of **Day 2** of that module I will give you a specific question concerning the module's topic that you then need to then to answer by finding a research paper (e.g., via Web of Science or Google Scholar) that gives some insight into that question. This will form the basis for discussions in the second week of the module. You will need to upload the article you find in pdf format to the course Canvas site by the start of class on **Day 3**. On **Day 3** we will break into small groups, and everyone will give a short description of their paper and what they found to their group; after all presentations are done in the group, the group will vote on the most interesting paper. If your paper is selected by the group as the most interesting, you will receive **1 bonus or extra point** to be added to your total number of points for the term. We will conclude **Day 3** by having the person from each group with the most interesting paper briefly describe it to the class. After class, I will then go on-line and select one of the "most interesting papers" to assign to the class for reading, quizzing, and discussion on **Day 4** of the module.

TERM PAPER

In lieu of a final exam, a two-page term paper will be due on the day of our assigned final exam, at the time it is scheduled to start. You will need to upload your paper to the course Canvas site; versions sent by email or other means will not be accepted. The paper needs to be formatted in 12-point Times New Roman font, single-spaced with margins of 1" on each side; a third page can be included for listing any references used. The actual topic of the paper will be given in class on **APRIL 4**, but it will focus on integrating material from the class with observations of your own everyday experiences. To be clear, APA format will *not* be required. Grading will be based on two dimensions: (1) the general comprehensibility and quality of the writing itself, as marked by the TA, and (2) the rigor/demonstrated ability of applying concepts and ideas from the class, as marked by the professor. **40 possible points.**

MISSED QUIZZES and WRITTEN ASSIGNMENTS

If you miss a quiz or assignment, 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 (110 points), written assignments (50 points), and the term paper (40 points) **for a total of 200 possible points.**

DEPARTMENT SCALING POLICY

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions for final course marks. According to departmental norms, the mean course mark in a 300-level class is 70 for a good class, 68 for an average class, and 66 for a weak class, with a standard deviation of 13. Final course marks may be scaled up or down as necessary by the professor or department in order to comply with these norms. For official UBC policy on grade scaling, please see: <http://students.ubc.ca/calendar/index.cfm?tree=3,42,96,0>. **However, please note that for Term 2 2020-2021, the Department of Psychology is allowing for a 5-point higher mean than normal.**

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>)