



**Instructor:**

Dr. Megan Udala (she/her) Contact Email: [meganu@mail.ubc.ca](mailto:meganu@mail.ubc.ca)

Office Hours: Mondays 12-1 pm or by appointment

Meeting ID: 676 9424 1607

Passcode: 645187

<https://ubc.zoom.us/j/67694241607?pwd=0fkv3v2VyAFp2BUluOdA9k59U9NKmv.1>

**Land Acknowledgment:**

*The UBC Okanagan campus is situated on the traditional, ancestral, unceded territory of the Syilx Okanagan Nation.*

**Academic Calendar Entry:**

**PSYO\_O 230 Biopsychology – Live Online Classes or Asynchronous Online Classes**

Topics will include structure and function of the nervous system, research methods, and their application to a selection of the following topics: human brain damage and recovery, stress, selected psychological and neurological disorders, sleep, memory, and vision.

**Course Overview and Objectives:**

This course will provide students with foundational knowledge of the interaction between biology and human behaviour (biopsychology!). Objectives are to increase knowledge around leading research designs and results in the field with an emphasis on practical neuropsychological application and knowledge translation.

**Required Readings:** *Discovering Behavioral Neuroscience: An Introduction to Biological Psychology* by L. Freberg (4e) ISBN 9781337570961. The MindTap bundle is optional as this may be helpful to your learning but not required to complete the course. **Can be purchased as an online text here:**

<https://www.cengage.ca/c/discovering-behavioral-neuroscience-an-introduction-to-biological-psychology-4e-freberg/9781337570930/>

**Learning Outcomes:**

- Identify and describe main areas of the brain and components of the nervous system (Knowledge Base)
- Compare and contrast research methods and imaging techniques to explore the brain (Communication)
- Describe different brain systems and the consequences on behaviour with disruption (Knowledge Base)
- Apply knowledge of research and evaluate ethics in research studies (Scientific Inquiry; Critical Thinking)
- Describe the role of a neuropsychologist in a hospital setting (Knowledge Base; Communication)
- Understand the purpose, basic procedures, and ethics of neuropsychological assessment

**Course Format:**

The course consists of virtual lectures live on Zoom during class time (posted after class), PowerPoint slides, and textbook readings. PowerPoint slides will emphasize the key points of the chapters and will provide clarification and explanation of course concepts. All lectures will be recorded live and uploaded to *Canvas* by 9 pm PST on Tuesday and Thursday evenings. The lectures will be available on *Canvas* for student viewing until the content-relevant examination and then will be removed. It is the responsibility of the student to stay up to date with the course content and to monitor *Canvas* for important announcements. Please do not distribute any classroom material outside of *Canvas* or for the purposes of this course.

**Class Zoom Link:**

<https://ubc.zoom.us/j/65761944880?pwd=8t0hGbNrnlc3eetb8ie95RiFb8Cq6.1>

Meeting ID: 657 6194 4880

Passcode: 064351



### TA Contact Information

Madison Eagle: [madi2003@student.ubc.ca](mailto:madi2003@student.ubc.ca)

Gloria Cho: [gloria.cho@ubc.ca](mailto:gloria.cho@ubc.ca)

<u>Grading</u>
<b>Exam #1 (33% of grade) February 6, 2025</b> <ul style="list-style-type: none"> <li>• ~35-50 questions</li> <li>• Multiple choice</li> <li>• Open book (class power points and textbook) completed via Canvas</li> <li>• 90 minutes (1.5 hours)</li> <li>• Scheduled during class time</li> </ul>
<b>Exam # 2 (33% of grade) March 13, 2025</b> <ul style="list-style-type: none"> <li>• Non-cumulative</li> <li>• ~35-50 questions</li> <li>• Multiple choice</li> <li>• Open book (class power points and textbook) completed via Canvas</li> <li>• 90 minutes (1.5 hours)</li> <li>• Scheduled during class time</li> </ul>
<b>Exam # 3 (FINAL) (34% of grade) TBD</b> <ul style="list-style-type: none"> <li>• Non-cumulative</li> <li>• ~35-55 questions</li> <li>• Multiple choice</li> <li>• Open book (class power points and textbook) completed via Canvas</li> <li>• 90 minutes (1.5 hours)</li> <li>• Scheduled during the exam period April 11 – 26, 2025</li> </ul>
<b>Sona (2% Bonus) March 25 or April 8, 2025</b> <ul style="list-style-type: none"> <li>• Direct participation in research through the Sona online volunteer subject pool (Option 1), by completing two written summaries of primary research articles (Option 2), or by a combination of the two types of activities</li> <li>• A detailed explanation found in this syllabus under “Required Research Activity”</li> </ul>

### Grading Practices:

Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record.

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014>



It is the policy in this course that final grades cannot be adjusted (through extra assignments or otherwise) in order to achieve a passing mark, higher letter grade etc. In order to maintain fairness within this course, requests for additional assignments or to round up grades will not be considered.

**EXAMS:** As per UBC policy, all examinations must be completed during the scheduled course time (i.e., **Tuesdays or Thursdays from 5:00-6:30 PM PST**). Exceptions to this policy include documented illness and hardship due to time zones. I will be available during all examinations via Zoom should students encounter technical difficulties. It is the responsibility of the student to ensure that any technical issues are reported **immediately**. If you cannot connect with me via Zoom, please document the issue or technical concern via a screenshot. This is the only circumstance in which it is appropriate to document (i.e., screenshot) exam material. Failing to report technical issues in a timely manner, may result in the issue not being resolved and may negatively impact your grade.

**IMPORTANT:** Students who miss an examination must provide documentation (i.e., doctor's note) of the absence and must arrange to make up the exam before the next scheduled class. Students who do not write the exam by the next scheduled class will receive a "0" for the exam unless other arrangements have been made with the instructor.

**Academic Integrity:**

Students are asked to familiarize themselves with the academic integrity pledge found at this link:  
<https://ctl.ok.ubc.ca/teaching-remotely/final-exams/integrity-pledge/>

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise, and harsh sanctions are imposed. **For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course.** Careful records are kept to monitor and prevent recidivism.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at: <http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,54,111,0>



**Course Schedule:**

	<u>Tuesday</u>	<u>Thursday</u>	<u>Reading</u>
Week 1: <b>INTRODUCTION</b>	January 7 – <b>Syllabus Day</b>	January 9	Chapter 1: What is Behavioural Neuroscience?
Week 2	January 14	January 16	Chapter 2: Functional Neuroanatomy and Evolution of the Nervous System
Week 3	January 21	January 23	Chapter 3: Neurophysiology: The Structure and Functions of the Cells
Week 4	January 28	January 30	Chapter 4: Psychopharmacology
Week 5	February 4 – Flex Day: Catch up/Review	February 6 – <b>Midterm 1</b>	<b>MIDTERM WEEK</b>
Week 6	February 11	February 13	Chapter 10: Sexual Behaviour
Week 7: <b>READING WEEK</b>	February 18	February 20	<b>NO CLASS</b>
Week 8	February 25	February 27	Chapter 11: Sleep and Waking
Week 9	March 4	March 6	Chapter 12: Learning and Memory
Week 10	March 11 – Flex Day: Catch up/Review	March 13 – <b>Midterm 2</b>	<b>MIDTERM WEEK</b>
Week 11	March 18	March 20	Chapter 14: Emotion, Aggression, and Stress
Week 12	March 25	March 27	Chapter 15: Neuropsychology
Week 13	April 1	April 3	Chapter 16: Psychopathology
Week 14	April 8 – Flex Day: Catch up/Review		
Weeks 15-16	April 11 – 26 Final Exam (non-cumulative)  Final Exam Date TBD by Dean's Office		

**Final Examination:**

Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 24-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Further information on Academic Concession can be found under Policies and Regulation in the *Okanagan Academic Calendar* <http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0>



## SONA RESEARCH ACTIVITY

Students earn Sona credit points for their eligible courses from participating in research activity. This can be either through direct participation in research through the Sona online research system (Option 1), by completing summaries of primary research articles (Option 2), or by a combination of the two types of activities. First year courses (i.e., PSYO 111 and PSYO 121) include 4% as part of the final course grade for participating in Sona research activity, while second year and higher courses allow for a 2% bonus to be added to the final course grade for participating.

### **Research Participation In Online Research System (Option 1)**

As a participant in one of the numerous research studies posted at <http://ubco.sona-systems.com/>, you will obtain 0.5% credit for each 0.5 hour of participation. Hence, studies requiring a 1-hour time commitment provides a credit of 1%, 1.5 hours provides a credit of 1.5%, and 2 hours provides a credit of 2.0%, etc.

#### *Important Requirements*

You may participate in more than one study in order to earn credits. It is important to sign up for studies early in the semester in order to increase the odds that a timeslot is available. If you wait until later in the semester, timeslots may no longer be available.

Students must participate in at least one study from List A (that is either in-person, uses Zoom interactions, experience sampling, daily diary etc.) of any credit value for each in-person course they are seeking credit for. Studies will be identified as coming from List A or List B on Sona to assist students in ensuring they can fulfill this requirement. This requirement is limited to in-person courses only as there may be students who are taking courses fully remotely from a different location/time zone, for whom in-person or online synchronous studies would not be feasible, thus making it difficult to meet these requirements. Students registered in online courses can complete their credits from participation in studies from either entirely List A, entirely List B, or a combination of the two.

This course will offer a maximum of 2 credits. You will only receive 2 credits if you complete at least 2 credits worth of studies with at least one study completed from List A and at least one study completed from List B. If you earn 2 credits only from a single list, you will incur a 0.5 credit penalty and only receive a maximum of 1.5 credits. This penalty is in effect regardless of how many credits have been earned; it deducts from the maximum amount that can be earned for the course.

#### *Logging On To The System*

Sona is only open for those students who are registered in a psychology course offering Sona credit points. Please only use the request account option if you have never used the Sona system before. If you have used the Sona system before, please use the most recent login information you remember to log in.

#### *Missed Appointments & Penalties*

Missed appointments (i.e., failure to cancel the appointment at least 3 hours prior to the session) will be tracked. The consequence will be that you will not receive credit for participation in the study and you will be assigned an



unexcused no-show. The unexcused no-show designation will cause you to lose the credit value of the study from the total possible credit points you can earn for your course. For example, if you are in PSYO 111 (or 121), you can earn up to 4.0 credits. If you miss an hour-long session that you signed up for (i.e., 1.0 credit) and don't cancel it in advance, the maximum credits that you can now earn for your course is 3.0, regardless of how many studies you complete.

If, after consenting to participate and starting a session (or survey), you decide to withdraw your consent, to avoid receiving an unexcused no-show on Sona, you must do one of the following:

- if it is an online study, you must cancel your Sona sign-up and/or contact Shirley ([psyc.ubco.research@ubc.ca](mailto:psyc.ubco.research@ubc.ca)) if you are unable to cancel your sign-up;
- if it is an in-person study, you must let the researcher know directly. Their email can be found on the main description page for the study (little envelope icon). Depending upon the study, they will either cancel your session or assign you an excused no-show (meaning that you will not be penalized).

Your ability to withdraw your data will depend upon the study. Instructions for withdrawing your data (including limitations) will be described in the study's consent form.

Please email [psyc.ubco.research@ubc.ca](mailto:psyc.ubco.research@ubc.ca) with any questions or concerns that you may have regarding the Sona system. Your professor or instructor does NOT have access to this information.

### **Research Summary Assignment (Option 2)**

As an alternative to participating in research studies, you may obtain Sona credit points by completing library-writing projects to a satisfactory level. Each library-writing project is worth a total of two credits.

#### *Important Requirements*

1. This project consists of reading and summarizing (in written form) a recent, peer-reviewed, primary research article.

- A "recent" article has been published within the past 12 months.
- A "peer reviewed" article is one that has been reviewed by other scholars before it is accepted – for example, it **cannot** be a news item, an article from a popular magazine, a notice, or a letter to the editor.
- A "primary" research article describes an experiment or study where data are collected by the authors. In other words, the article you choose to review **cannot** be a book review, literature review, or summary article.

2. You must choose an article published by one of the following agencies:

- The American Psychological Society - *Psychological Science*, *Current Directions in Psychological Science*, *Psychological Science in the Public Interest*, or *Perspectives on Psychological Science*.
- The American Psychological Association - [www.apa.org/journals/by\\_title.html](http://www.apa.org/journals/by_title.html) has a full listing.
- The Canadian Psychological Association - *Canadian Psychology*, *Canadian Journal of Behavioural Science*, or *Canadian Journal of Experimental Psychology*.



- The Psychonomic Society - *Behavior Research Methods, Cognitive, Affective, & Behavioral Neuroscience, Learning & Behavior, Memory & Cognition, Perception & Psychophysics*, or *Psychonomic Bulletin & Review*.

### 3. Other Assignment Guidelines

The summary should be about 300-500 words in length. The source must be cited and referenced in accordance with the *Publication Manual of the American Psychological Association*. The review will be graded on a pass – fail basis (2% or 0%). At least **14 days before the end of classes** each term, submit the following to the course instructor:

- the article summary
- a copy of the article
- a cover page that specifies your name, student number, email address, and word count of the summary.
- the course title and number

Submitting the assignment 14 days in advance is necessary to ensure that you have an opportunity to make corrections, if required. If you do not check your email frequently, provide a phone number on the cover page.





### **Additional Information:**

#### **Copyright Disclaimer:**

Diagrams and figures included in lecture presentations adhere to Copyright Guidelines for UBC Faculty, Staff and Students (<http://copyright.ubc.ca/requirements/copyright-guidelines/>) and UBC Fair Dealing Requirements for Faculty and Staff (<http://copyright.ubc.ca/requirements/fair-dealing/>). Some of these figures and images are subject to copyright and will not be posted to *Canvas*. All material uploaded to *Canvas* are used with permission of the publisher; are in the public domain; are licensed by Creative Commons; meet the permitted terms of use of UBC's library license agreements for electronic items; and/or adhere to the UBC Fair Dealing Requirements for Faculty and Staff. Access to the *Canvas* course site is limited to students currently registered in this course. Under no circumstance are students permitted to provide any other person with means to access this material. Anyone violating these restrictions may be subject to legal action. Permission to electronically record any course materials must be granted by the instructor. Distribution of this material to a third party is forbidden.

#### **UBC Okanagan Disability Resource Centre:**

The Disability Resource Centre ensures educational equity for students with disabilities and chronic medical conditions. If you are disabled, have an injury or illness and require academic accommodations to meet the course objectives, please contact Earllene Roberts, the Diversity Advisor for the Disability Resource Centre located in the University Centre building (UNC 214).

UNC 214 250.807.9263

Email: [earllene.roberts@ubc.ca](mailto:earllene.roberts@ubc.ca)

Web: [www.students.ok.ubc.ca/drc](http://www.students.ok.ubc.ca/drc)

#### **UBC Okanagan Equity and Inclusion Office:**

UBC Okanagan is a place where every student, staff and faculty member should be able to study and work in an environment that is free from discrimination and harassment. UBC prohibits discrimination and harassment on the basis of the following grounds: age, ancestry, colour, family status, marital status, physical or mental disability, place of origin, political belief, race, religion, sex, sexual orientation or unrelated criminal conviction. If you require assistance related to an issue of equity, discrimination or harassment, or to get involved in human rights work on campus, please contact the Equity and Inclusion Office.

UNC 216 250.807.9291

Email: [equity.ubco@ubc.ca](mailto:equity.ubco@ubc.ca)

Web: [www.equity.ok.ubc.ca](http://www.equity.ok.ubc.ca)

#### **Health & Wellness:**

At UBC Okanagan health services to students are provided by Health and Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Health and Wellness for more information or to book an appointment.

UNC 337 250.807.9270

email: [healthwellness.okanagan@ubc.ca](mailto:healthwellness.okanagan@ubc.ca)

Web: [www.students.ok.ubc.ca/health-wellness](http://www.students.ok.ubc.ca/health-wellness)





**Student Learning Hub: Learning Support:**

The Student Learning Hub is your go-to resource for **free** learning support. The Hub welcomes students from all disciplines and years to access a range of supports that include **tutoring in math, sciences, writing, and languages**, as well as **dedicated learning support** to help you develop skills and strategies for academic success. Don't wait—successful learners access support early and often. For more information, visit [students.ok.ubc.ca/hub](https://students.ok.ubc.ca/hub) or contact [learning.hub@ubc.ca](mailto:learning.hub@ubc.ca).

**Office of the Ombudsperson for Students:**

The Office of the Ombudsperson for Students offers independent, impartial, and confidential support to students in navigating UBC policies, processes, and resources, as well as guidance in resolving concerns related to fairness.

Email: [ombuds.office@ubc.ca](mailto:ombuds.office@ubc.ca)

Web: [www.ombudsoffice.ubc.ca](http://www.ombudsoffice.ubc.ca)

**SAFEWALK:**

Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call 250.807.8076  
For more information, see: [www.security.ok.ubc.ca](http://www.security.ok.ubc.ca)

**Sexual Violence Prevention and Response Office (SVPRO):**

A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide.

Visit [svpro.ok.ubc.ca](http://svpro.ok.ubc.ca) or call us at 250.807.9640

**Independent Investigations Office (IIO):**

If you or someone you know has experienced sexual assault or some other form of sexual misconduct by a UBC community member and you want the Independent Investigations Office (IIO) at UBC to investigate, please contact the IIO. Investigations are conducted in a trauma informed, confidential and respectful manner in accordance with the principles of procedural fairness.

You can report your experience directly to the IIO via email: [director.of.investigations@ubc.ca](mailto:director.of.investigations@ubc.ca) or by calling 604.827.2060 or online by visiting [investigationsoffice.ubc.ca](http://investigationsoffice.ubc.ca)