

# PSYC\*3410, Course Outline: Winter 2023

## General Information

DUE to the ongoing COVID-19 pandemic some courses are being offered virtually and some face to face. **This course is offered Face-To-Face. The course has a set day, time, and location of class, and students are required to be on campus.** For missed lectures and labs (e.g., due to illness, the requirement to self-isolate, work, etc.), students are expected to take their own steps, such as arranging with other students to catch up on missed materials. A discussion board is available on CourseLink for students to share lecture notes, and specific questions about missed materials can be emailed to the instructor. For missed exams, detailed policies are listed below in the Course Policies section. [Accessibility-related requests for accommodation should follow standard university procedures](#), and all other requests should follow [standard academic consideration policy and procedures](#).

**Course Title:** Behavioural Neuroscience II

### **Course Description:**

This course will broaden your view and knowledge of the neurobiology of behaviour, building on basics of brain structure and function covered in PSYC\*2410 and NEUR\*2000. We will cover such topics as neuroanatomy, learning and memory, the regulation of feeding, sleep, stress and emotions, the hormonal regulation of behaviour as well as the neurobiology of brain damage and psychiatric disorders. Throughout, we will emphasize the behavioural relevance of the biological and physiological mechanisms under discussion. As a complement to in class lectures, the lab will allow a thorough analysis of the anatomy of the brain. You will work in groups of about 4 students, and each of these groups will have several brains to dissect.

**Credit Weight:** 0.5

**Academic Department (or campus):** Psychology, Guelph

**Semester Offering:** Winter 2023

### **Class Schedule and Location:**

Lectures: T/Th: 2:30-3:50PM, MacNaughton Building (MACN), rm 103

Labs: (please be sure to attend the weekly session for which you are registered)

Monday: 3:30-5:20PM

Tuesday: 5:30-7:20PM

Friday: 8:30-10:20AM

Friday: 11:30-1:20PM

Friday: 1:30-3:20PM

All lab sessions are held in the Summerlee Science Complex (SSC), Room 2307. If you have questions regarding the lab material or your lab session, please email the TA that teaches your specific section.

## **Instructor Information**

Instructor Name: Cassidy Wideman

Instructor Email: widemanc@uoguelph.ca

Office location and office hours: Meetings virtually by arrangement; e-mail at all times

## **GTA Information**

GTA Name:

GTA Email:

GTA office location and office hours:

## **Course Content**

### **Specific Learning Outcomes:**

By the end of this course, successful students will be able to:

1. Describe principles of neurobiology and neuroanatomy
2. Identify and remember appropriate terminology
3. Understand how these principles have been revealed by key experimental studies
4. Apply these principles to analyze animal behavior
5. Apply these principles to analyze normal and abnormal human behaviour

To achieve course-specific learning outcomes, successful students will:

1. Attend lectures and actively engage with peers, Instructor, and Teaching Assistants
2. Engage in interactive study groups to complete the Neuroanatomy Laboratory
3. Engage in independent and peer-facilitated studying activity

**Lecture Content:** The following is an outline of how the course will proceed. However, if necessary, I reserve the right to progress more slowly than indicated.

| Date   | Readings | Topic  |
|--------|----------|--|
| Jan 10 | Chpt 10. | Course Overview - Brain Damage and Neuroplasticity |
| Jan 12 | Chpt 10. | Brain Damage and Neuroplasticity                   |
| Jan 17 | Chpt 10. | Brain Damage and Neuroplasticity                   |
| Jan 19 | Chpt 11. | Learning, Memory, and Amnesia                      |
| Jan 24 | Chpt 11. | Learning, Memory, and Amnesia                      |

|           |          |   |
|-----------|----------|---|
| Jan 26    | Chpt 11. | Learning, Memory, and Amnesia                 |
| Jan 31    | Chpt 12. | Hunger, Eating, and Health                    |
| Feb 2     | Chpt 12. | Hunger, Eating, and Health                    |
| Feb 7     |          | First midterm exam                            |
| Feb 9     | Chpt 12. | Hunger, Eating, and Health                    |
| Feb 14    | Chpt 13. | Hormones and Sex                              |
| Feb 16    | Chpt 13. | Hormones and Sex                              |
| Feb 21-23 |          | No classes – winter break                     |
| Feb 28    | Chpt 13. | Hormones and Sex                              |
| March 2   | Chpt 13. | Hormones and Sex                              |
| March 7   | Chpt 17. | Biopsychology of Emotions, Stress, and Health |
| March 9   | Chpt 17. | Biopsychology of Emotions, Stress, and Health |
| March 14  | Chpt 17. | Biopsychology of Emotions, Stress, and Health |
| March 16  |          | Second midterm exam                           |
| March 21  | Chpt 14  | Sleep, Dreaming, and Circadian Rhythms        |
| March 23  | Chpt 14. | Sleep, Dreaming, and Circadian Rhythms        |
| March 28  | Chpt 14. | Sleep, Dreaming, and Circadian Rhythms        |
| March 30  | Chpt 18. | Biopsychology of Psychiatric Disorders        |
| April 4   | Chpt 18. | Biopsychology of Psychiatric Disorders        |
| April 6   | Chpt 18  | Biopsychology of Psychiatric Disorders        |

**Labs:** Lab sessions will proceed as follows.

| Date        | Topics                        |
|-------------|-------------------------------|
| Jan 16-20   | Orientation – Safety          |
| Jan 23-27   | Outside View dorsal – ventral |
| Jan 30-3    | Sagittal cut                  |
| Feb 6-10    | Coronal cut                   |
| Feb 13-17   | Horizontal cut                |
| Feb 20-24   | No class-Winter Break         |
| Feb 27-3    | Hippocampal dissection        |
| March 6-10  | Cerebellum                    |
| March 13-17 | Review                        |
| March 20-24 | Bell Ringer Exam Practice     |
| March 27-31 | Lab Exam                      |

If you have a valid reason for missing your normally scheduled lab session on any week, please contact your lab TA to arrange to attend a different session that week. If there is a valid reason for missing the Bell Ringer Exam during your regular session during the week of March 27, please contact your TA as well as the course instructor to arrange attending another session that week.

**Seminars:** N/A

## Course Assignments and Tests:

| Assignment or Test                       | Due Date                       | Contribution to Final Mark (%) | Learning Outcomes Assessed |
|--|--------------------------------|--------------------------------|----------------------------|
| 1 <sup>st</sup> Midterm                  | February 7, 2022, in class     | 20%                            | 1-5                        |
| 2 <sup>nd</sup> Midterm (not cumulative) | March 16, 2022, in class       | 20%                            | 1-5                        |
| Lab Exam                                 | March 27-31, 2022, during labs | 20%                            | 1,2                        |
| Lab Participation                        |                                | 5%                             | 1,2                        |
| Final Exam (cumulative)                  | April 24, 2022<br>2:30-4:30PM  | 35%                            | 1-5                        |

### Additional Notes (if required):

The written exams may be:

- a) Multiple choice questions
- b) Short answer questions
- c) Questions relating to diagrams (e.g., label the diagram; explain the diagram)
- d) Fill in the blank questions

The lab participation grade will account for 5% of the final grade, with 1% being granted for participating in a brief quiz at the end of each lab session. This is a participation mark only. These grades will be earned during the 6 labs that contain content pertaining to the lab exam (i.e., does not include orientation week and the two weeks of review), meaning that students can miss one week without being deducted a grade on lab participation.

The lab exam will be a “bell ringer” style exam. There will be several stations, each containing brain sections with 3-4 numbered pins. Your job will be to identify the brain structures occupied by the pin and specify their main functions. You will have a certain number of minutes for each tray, and then you will proceed to the next tray (as the bell rings). It is not as difficult as it might sound—you will be given ample opportunity to study and prepare for the exam, and there are not as many structures as there are pins because, in many cases, the same structure appears in different brain slices.

**Final examination date and time:** April 24<sup>th</sup> 2:30-4:30pm, location TBD

**Final exam weighting:** 35%

## **Course Resources**

### **Required Texts:**

J. Pinel & Steven J. Barnes. Revel Biopsychology, 11<sup>th</sup> Edition. This is an e-textbook with interactive elements and quizzes that will serve as excellent study tools. Please see the additional attachment posted on CourseLink for instructions on how to register and access Revel ('Revel Registration Instructions').

There are a few physical copies of the textbook on reserve in the library.

**Recommended Texts:** N/A

### **Lab Manual:**

Peters, M. & Jasper-Fayer F (2004). A laboratory manual for the dissection of the sheep brain. Manual and supplemental files are available for free download on CourseLink.

## **Course Policies**

### **Grading Policies**

All examinations are to be taken on the above-indicated dates.

**Course Policy on Group Work:** N/A

### **Course Policy regarding use of electronic devices and recording of lectures:**

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

## **University Policies**

### **Disclaimer:**

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

## **Academic Consideration**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

[Academic Consideration, Appeals and Petitions](#)

## **Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

[Academic Misconduct Policy](#)

## **Illness**

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

## **Accessibility**

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact [Student Accessibility Services](#) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email [accessibility@uoguelph.ca](mailto:accessibility@uoguelph.ca) or the [Student Accessibility Services Website](#)

### **Student Feedback Questionnaire**

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March 30<sup>th</sup> – April 10<sup>th</sup>. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courselink, a reminder will pop-up when a task is available to complete.

[Student Feedback Questionnaire](#)

### **Drop date**

The last date to drop one-semester courses, without academic penalty, is Monday April 10, 2023. For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#).

Instructors must provide [meaningful and constructive feedback, at minimum 20% of the final course grade, prior to the 40th class day](#). For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.

[Current Undergraduate Calendar](#)

### **Additional Course Information**

Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.