PSYC*3410, Course Outline: Winter 2022

General Information

DUE to the ongoing COVID-19 pandemic some courses are being offered virtually and some face to face. This course is being 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 university 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, neurodevelopment, 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 2022

Class Schedule and Location:

Lectures: T/Th: 8:30-9:50AM, Richards Building (RICH), Room 2520

Laboratories: (please be sure to attend the weekly session for which you are registered) Monday: 5:30-7:20PM Wednesday: 5:30-7:20PM Friday: 8:30-10:20AM Friday: 10:30-12:20PM Friday: 12:30-2:20PM Friday: 2:30-4:20PM

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: Office hours T/Thu 10:00-11:00AM; Meetings virtually by arrangement; e-mail at all times.

GTA Information

GTA Name: GTA Email:

GTA office location and office hours: TBD; TAs will be available for midterm review.

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	Торіс
Jan 11	Chpt 9	Course Overview - Neurodevelopment
Jan 13	Chpt 9.	Neurodevelopment
Jan 18	Chpt 9.	Neurodevelopment
Jan 20	Chpt 10.	Brain Damage and Neuroplasticity
Jan 25	Chpt 10.	Brain Damage and Neuroplasticity
Jan 27	Chpt 10.	Brain Damage and Neuroplasticity
Feb 1	Chpt 12.	Regulation of feeding
Feb 3	Chpt 12.	Regulation of feeding
Feb 8		First midterm exam
Feb 10	Chpt 12.	Regulation of feeding
Feb 15	Chpt 12.	Regulation of feeding

Feb 17	Chpt 13.	Behavioral Endocrinology
Feb 22-24		No classes – winter break
March 1	Chpt 13.	Behavioral Endocrinology
March 3	Chpt 13.	Behavioral Endocrinology
March 8	Chpt 13.	Behavioral Endocrinology
March 10	Chpt 17.	Emotions, Stress and Health
March 15	Chpt 17.	Emotions, Stress and Health
March 17	Chpt 17	Emotions, Stress and Health
March 22		Second midterm exam
March 24	Chpt 17.	Emotions, Stress and Health
March 29	Chpt 14.	Sleep and activity biorhythms
March 31	Chpt 14.	Sleep and activity biorhythms
April 5	Chpt 18.	Neurobiology of Psychiatric Disorders
April 7	Chpt 18	Neurobiology of Psychiatric Disorders

Labs: Lab sessions will proceed as follows

Date	Topics
Jan 17-21	Orientation – Safety
Jan 24-28	Outside View dorsal – ventral
Jan 31-4	Sagittal cut
Feb 7-11	Coronal cut
Feb 14-18	Horizontal cut
Feb 21-25	No class-Winter Break
Feb 28-4	Hippocampal dissection
March 7-11	Cerebellum
March 14-18	Review
March 21-25	Bell Ringer Exam Practice
March 28-1	Lab Exam

If you have a valid reason for missing your normally scheduled lab session on any week, please contact the TAs to arrange to attend a different session that week. The same applies to those with a valid reason for missing the Bell Ringer Exam in their regular session during the week of March 21 (proper documentation will be requested for changing the date of the exam).

Seminars: N/A

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
1 st Midterm	February 8, 2022, in class	20%	1-5
2 nd Midterm (not cumulative)	March 22, 2022, in class	20%	1-5

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Lab Exam	March 28-April 1, during labs	25%	1, 2
Final Exam (cumulative)	TBD	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 exam will be a "bell ringer" style exam. There will be several stations, each containing a brain with 3-4 pins that are numbered. 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: TBD

Final exam weighting: 35%

Course Resources

Required Texts:

J. Pinel & Steven J. Barnes (2021). Biopsychology, 11th Edition.

There are a few 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 <u>Student Accessibility Services</u> as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the <u>Student Accessibility Services Website</u>

Student Feedback Questionnaire

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March. 28th – April 08th. 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. <u>Student Feedback Questionnaire</u>

Drop date

The last date to drop one-semester courses, without academic penalty, is April 08, 2022. For regulations and procedures for Dropping Courses, see the <u>Schedule of Dates in the Academic</u> <u>Calendar</u>.

Instructors must provide <u>meaningful and constructive feedback</u>, at <u>minimum 20% of the final</u> <u>course grade</u>, 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. <u>Current Undergraduate Calendar</u>

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.