

PSYC*3410, Course Outline: Winter 2024

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 4-5 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 2024

Class Schedule and Location:

Lectures: M/W/F: 3:30-4:20PM, Alexander Hall (ALEX) 100

Labs:

Section	Time	TA	TA email
01	Friday, 8:30-10:20AM	TBD	TBD
02	Monday, 8:30-10:20AM	TBD	TBD
03	Friday, 12:30-1:20PM	TBD	TBD
04	Wednesday, 9:30-11:20AM	TBD	TBD
05	Friday, 10:30AM-12:20PM	TBD	TBD

Due to room capacity, you must attend the lab section for which you are scheduled.

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: Kelsy Ervin

Instructor Email: kervin@uoguelph.ca

Office location and office hours: TBD; e-mail M-F 9:30AM-4:30PM

GTA Information

GTA Names: TBD

GTA office location and office hours: e-mail M-F 9:30AM-4:30PM

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 behaviour
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 8	Chpt 9	Course Overview - Neurodevelopment
Jan 10	Chpt 9	Neurodevelopment
Jan 12	Chpt 9	Neurodevelopment
Jan 22	Chpt 9	Neurodevelopment
Jan 24	Chpt 10	Brain Damage and Neuroplasticity
Jan 26	Chpt 10	Brain Damage and Neuroplasticity
Jan 29	Chpt 10	Brain Damage and Neuroplasticity
Jan 31	Chpt 10	Brain Damage and Neuroplasticity
Feb 2	Chpt 12	Hunger, Eating, and Health
Feb 5	N/A	First midterm exam
Feb 7	Chpt 12	Hunger, Eating, and Health
Feb 9	Chpt 12	Hunger, Eating, and Health
Feb 12	Chpt 12	Hunger, Eating, and Health
Feb 14	Chpt 12	Hunger, Eating, and Health
Feb 16	Chpt 12	Hunger, Eating, and Health
Feb 19-23	N/A	No classes – Winter break
Feb 26	Chpt 13	Hormones and Sex
Feb 28	Chpt 13	Hormones and Sex
Mar 1	Chpt 13	Hormones and Sex
Mar 4	Chpt 13	Hormones and Sex
Mar 6	Chpt 13	Hormones and Sex
Mar 8	Chpt 17	Biopsychology of Emotions, Stress, and Health
Mar 11	N/A	Second midterm exam
Mar 13	Chpt 17	Biopsychology of Emotions, Stress, and Health
Mar 15	Chpt 17	Biopsychology of Emotions, Stress, and Health

Mar 18	Chpt 17	Biopsychology of Emotions, Stress, and Health
Mar 20	Chpt 17	Biopsychology of Emotions, Stress, and Health
Mar 22	Chpt 17	Biopsychology of Emotions, Stress, and Health
Mar 25	Chpt 14	Sleep, Dreaming, and Circadian Rhythms
Mar 27	Chpt 14	Sleep, Dreaming, and Circadian Rhythms
Mar 29	N/A	No class – statutory holiday
Apr 1	Chpt 14	Sleep, Dreaming, and Circadian Rhythms
Apr 3	Chpt 18	Biopsychology of Psychiatric Disorders
Apr 5	Chpt 18	Biopsychology of Psychiatric Disorders
Apr 8	Chpt 18	Biopsychology of Psychiatric Disorders

Labs

Lab sessions will proceed as follows.

Date	Topics
Jan 15-19	Orientation – Safety
Jan 22-26	Outside View, including membranes and cranial nerves Lab Safety Quiz on Courselink – complete by 11:59pm on Friday
Jan 29-Feb 2	Sagittal cut
Feb 5-9	Coronal cut
Feb 12-16	Horizontal cut
Feb 19-23	No class – Winter break
Feb 26-Mar 1	Hippocampal dissection
Mar 4-8	Cerebellum
Mar 15, 18, 20*	Review (open lab)
Mar 22, 25, 27*	Practice Bell Ringer Exam (open lab)
Apr 1-5	Lab Exam

* To account for the statutory holiday on Friday, March 29, Friday lab sections (01, 03, 05) will have the review session on Mar 15 and the practice bell ringer on Mar 22. Monday and Wednesday lab sections (02, 04) will be held as regularly scheduled on Mar 18-20 and 25-27.

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 April 1, please contact your TA and 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
Lab Safety Quiz	Friday, January 26, by 11:59pm, on Courselink	5%	1, 2
1 st Midterm	Monday, February 5, in class	20%	1-5
2 nd Midterm (not cumulative)	Monday, March 11, in class	20%	1-5
Lab Participation		5%	1, 2
Lab Exam	April 1-5, during labs	15%	1, 2
Final Exam (cumulative)	Wednesday, April 24, 2:30-4:30PM, location TBD	35%	1-5
Optional written assignment	Friday, April 12 by 11:59pm; upload to Courselink Dropbox	Potential to replace weight of MT1 or MT2 (20%)	1-5

Additional Notes

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 safety quiz is an online quiz that will be available on CourseLink from Friday, January 15 at 5:00pm through Friday, January 26 at 11:59pm. You may attempt the quiz twice, and the highest of your scores will be your grade on the quiz, worth 5% of your final grade.

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 task will be to identify the brain structures

occupied by the pin and specify their main functions. You will have a set amount of time for each tray, and then you will proceed to the next tray when 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.

Optional Written Assignment

Students will have the option to write an essay in which they explore further a “Burning Question” that they have related to the topics covered in class.

****This paper is not mandatory.**** If you choose to complete this assignment and your grade on the paper exceeds the grade on one of your midterms, you will have the option to replace the lower of the two midterm grades.

*****Note that all students must still write both midterms;** this optional assignment merely provides the opportunity to replace the lowest of your two midterm grades.*******

The final exam or lab exam grades cannot be replaced.

The paper will focus on a (one) “Burning Question” or reflection that you have in response to course material. The paper should include: (a) an introduction which briefly describes the course topic that prompted the Burning Question and a clear thesis statement, (b) a brief reflection on the course topic and your response, (c) an analysis of further research that you’ve done to explore your Burning Question, including a **minimum** of 5 peer-reviewed academic journal articles, and (d) a conclusion that summarizes what you’ve learned, how it relates to the course material, and how it has changed your understanding of the course material. The paper should be 5-7 pages (excluding title page and references), double-spaced, and should adhere to APA-7 guidelines for citations and formatting. A session will be held in class after the second midterm to address student questions regarding this assignment. The grading rubric will be available on CourseLink.

The paper must be submitted to the **Optional Written Assignment Dropbox** on CourseLink by **11:59pm on Friday, April 12**. Papers must be submitted in **Microsoft Word (.doc, .docx, .rtf) or PDF** file formats. Late papers will not be accepted.

Final examination date and time: April 24th 2:30-4:30pm, location TBD

Final exam weighting: 35%

Course Resources

Required Text

John P. J. Pinel & Steven J. Barnes. Revel Biopsychology, 11th 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 is a physical copy 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 [Healthy Campus website](#) 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 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 30th – April 10th. 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. For more information, see: [Student Feedback Questionnaire](#)

Drop date

The last date to drop one-semester courses, without academic penalty, is Monday April 8, 2024. 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](#) (Friday, March 8). 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.