# PSYC\*3410, Course Outline: Winter 2021

# **General Information**

DUE to the ongoing COVID-19 pandemic, this course is offered in an alternative format. Alternative Delivery Synchronous – AD-S Virtual: day and time for class lecture

Course Title: PSYC\*3410 - 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 topics such 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 virtual neuroanatomy labs will allow a thorough analysis of the gross anatomy of the brain.

Credit Weight: 0.5

Academic Department (or campus): Psychology, Guelph

Semester Offering: Winter 2021

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

**Lectures:** Asynchronous Lectures posted each week on Courselink

Optional Office Hours: Tuesdays 04:00-5:20PM (EST) via Zoom (accessed through Courselink) Synchronous Classes: Thursdays 04:00-5:20PM (EST) via Zoom (accessed through Courselink) Details are provided in the Lecture Content section below.

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

0101: Wednesdays, 5:30-7:20PM

0102: Fridays: 8:30-10:20AM

0103: Fridays: 10:30AM-12:20PM

0104: Fridays: 12:30-2:20PM 0105: Fridays: 2:30-4:20PM

All lab sessions will be held online using Zoom. If you have questions regarding the lab material or your session, email the TA that teaches your specific section.

# **Instructor Information**

Instructor Name: Parker Holman, MSEd, PhD Instructor Email: <a href="mailto:pholman@uoguelph.ca">pholman@uoguelph.ca</a>

**Correspondence**: This term we will be using Piazza for Q&A about course content, assignments, etc. The system is highly catered to getting you help fast and efficiently from classmates, TAs, and myself. Please post your questions about course content on Piazza. Find our class page at: <a href="https://piazza.com/uoguelph.ca/spring2021/psyc3410/home">https://piazza.com/uoguelph.ca/spring2021/psyc3410/home</a>. If you have any problems or feedback, email <a href="mailto:team@piazza.com">team@piazza.com</a>.

If you have a question specific to your personal needs, please use your UofG email account (please write "PSYC 3410" in the Subject Line) to reach me. As a general rule, I will do my best to answer emails within 2 business days.

Office location and office hours: Available to meet online using Zoom (via Courselink). Office Hours: Tuesday 4:00-5:20PM (EST)

# **GTA Information**

#### **GTA Names and emails:**

**TBD** 

**GTA office location and office hours:** Online meetings. Office Hours: Meeting by arrangement, Piazza/e-mail at all times. Students should communicate using Piazza for all course-related questions.

# **Course Content**

### **Learning Outcomes**

- 1. Critical and Creative thinking,
  - a. Depth and Breadth of Understanding, (introduce/reinforce)
  - b. Creativity (reinforce)
- 2. Methodological Literacy (reinforce)
- 3. Global understanding, sense of historical development (introduce)
- 4. Communication
  - a. Written (introduce)
  - b. Reading (master)
  - c. Integrative (introduce/reinforce)
- 5. Ethical Issues in Research (introduce/reinforce)

### Course-Specific Learning Outcomes: At 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 typical and atypical human behaviour

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

- 1. Watch asynchronous lectures and actively engage with peers, Instructor and Teaching Assistants during synchronous activities (Thursday sessions, Lab sessions)
- 2. Engage in interactive study groups to complete the Neuroanatomy Laboratory
- 3. Engage in independent and peer-facilitated studying activities

### **Class Expectations:**

### **Student Expectations**

- a. PLEASE BE ACTIVE AND PARTICIPATE IN CLASS
- b. Listen and respect others
- c. Be comfortable taking risks
- d. Complete all assignments (on time)
- e. Limit cell phone / computer use to coursespecific activities
- f. Be punctual for all synchronous sessions
- g. Discuss class concerns either after class or during designated office hours
- h. Be prepared for class by completing assigned readings prior to the lesson

### **Instructor Expectations**

- a. BE ACTIVE AND ENTHUSIASTIC TO FACILITATE STUDENT LEARNING
- b. Listen and respect students' views
- c. Accommodate differences in students' learning
- d. Mark objectively, consistently, and in a timely manner
- e. Limit cell phone / computer use to coursespecific activities
- f. Be available to address students concerns outside of class
- g. Respond swiftly and effectively to student concerns
- h. Be prepared for class

The most critical factor determining your success in any course is <u>participation</u>. Watch pre-recorded lectures, take good notes, and then review and outline the material presented. Use Piazza to post questions and help answer your classmates' questions; attend virtual office hours to request clarification about a lecture concept and participate in guided practice; interact with me and each other during synchronous sessions via chat and/or webcam and audio. Participation with course content will be logged and will be reflected in your final mark; you will do poorly in this course if you do not view pre-recorded lectures and participate in synchronous sessions. Finally, come to me or your TAs if you need help, ideally as early as possible. <u>Successful students are those who ask for help</u>. You will enjoy the material much more if you understand it. Don't wait until it's too late to rectify the problem!

**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	Topic	Synchronous (S) Meeting	Readings
T Jan. 12	Course Overview	S	
Th Jan. 14	Neurodevelopment		Chpt. 9
T Jan. 19	Neurodevelopment		Chpt. 9
Th Jan. 21	Neurodevelopment	S	Chpt. 9
T Jan. 26	Brain Damage and Neuroplasticity		Chpt. 10
Th Jan. 28	Brain Damage and Neuroplasticity	S	Chpt. 10
T Feb. 2	Brain Damage and Neuroplasticity		Chpt. 10
Th Feb. 4	Regulation of feeding	S	Chpt. 12
T Feb. 9	Regulation of feeding		Chpt. 12
Th Feb. 11	First midterm exam	S - Online Exam	
T Feb. 16	No classes – winter break		
Th Feb. 18	No classes – winter break		
T Feb. 23	Behavioral Endocrinology		Chpt. 13
Th Feb. 25	Behavioral Endocrinology	S	Chpt. 13
T Mar. 2	Behavioral Endocrinology		Chpt. 13
Th Mar. 4	Behavioral Endocrinology	S	Chpt. 13
T Mar. 9	Emotions, Stress and Health		Chpt. 17
Th Mar. 11	Emotions, Stress and Health	S	Chpt. 17
T Mar. 16	Emotions, Stress and Health		Chpt. 17
Th Mar. 18	Second midterm exam	S - Online Exam	
T Mar. 23	Circadian Rhythms		Chpt. 14
Th Mar. 25	Circadian Rhythms	S	Chpt. 14
T Mar. 30	Drug Addiction and Brain Reward Systems		Chpt. 15
Th Apr. 1	Drug Addiction and Brain Reward Systems	S	Chpt. 15
T Apr. 6	Neurobiology of Psychiatric Disorders		Chpt. 18
Th Apr. 8	Neurobiology of Psychiatric Disorders	S	Chpt. 18

## Labs: Lab sessions will proceed as follows

Date	Topics
Jan. 13, 15	Online Lab Orientation
Jan. 20, 22	CNS Overview
Jan. 27, 29	Basal Ganglia
Feb. 3, 5	Hypothalamus
Feb. 10, 12	Limbic System
Feb. 17, 19	No labs - winter break
Feb. 24, 26	Cortex & Fibre Tracts
Mar. 3, 5	Brainstem & Cranial Nerves
Mar. 10, 12	Review
Mar. 17, 19	Bell Ringer Exam Practice
Mar. 24, 26	Lab Exam

If you have a **valid excuse** for missing your normally scheduled lab session on any week, <u>please</u> <u>contact the TAs</u> to arrange to attend a different session that week. The same applies to those with a **valid reason** for missing the <u>Bell Ringer Exam</u> in their regular session during the week of March 26 (proper documentation will be requested for changing the date of the exam).

### **Course Assignments and Tests:**

There will be weekly lecture/reading quizzes, two midterms, a laboratory exam and the final exam. The time of the Final exam is set by the university.

Component	Percent of Final Mark	Dates
Lecture Quizzes / Participation	10%	Weekly (online via Courselink or Zoom)
Midterm I	15%	February 11, 2021 (online via Courselink)
Midterm II	25%	March 18, 2021 (online via Courselink)
Lab Exam	20%	March 26, 2021 online (lab exam to be taken on the lab session for which you are registered)
Final Exam (cumulative)	30%	April 16, 2020, 7:00-9:00PM (online via Courselink)

For pre-recorded lectures (asynchronous), there will online quizzes embedded within each video lecture. You will earn full credit for each lecture session if you answer at least one question correctly. Deadlines for watching asynchronous lectures and completing associated participation quizzes are provided to help you keep up with the content; completing these tasks by these deadlines is strongly encouraged, though there is no penalty for late completion.

The lecture quizzes and written exams may be:

- a) multiple choice questions
- b) multiple answer questions
- c) questions relating to diagrams (e.g. label the diagram; explain the diagram)
- d) fill-in-the-blank questions
- e) short-answer questions
- f) long-answer/essay questions

The **lab exam** will be a "bell ringer" type of exam. There will be multiple images, each displaying a brain with labels that are numbered. Your job will be to identify the brain structures occupied by the pins and specify their main functions. You will have a certain amount of time for each image and then you will progress to the next image (as a bell rings). This 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 16, 2020 7:00-9:00PM (EST)

Final exam weighting: 30%

### MISSED EVALUATIONS

**Midterm:** If a student is unable to complete the online midterm due to acute medical, academic, or personal reasons, its contribution to their final grade will be automatically shifted to the final exam (i.e., the midterm will contribute 0% to their final grade, and the final exam 50%). No instructor consent is required for this redistribution of grading.

Requests of changes to the above policy will be considered only in exceptional circumstances. If granted, the % value of the missed midterm can be substituted by an optional oral exam to be administered by the instructor over Zoom.

**Final exam:** Students who do not write the final exam must follow the University's procedures for requesting academic consideration (see below). Undergraduate Grading Procedures.

### **Course Resources**

**Required Texts:** J. P. Pinel & Steven J. Barnes (2018). Biopsychology. New York: Allyn and Bacon, Tenth Edition.

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

Lab Manual: Manual and supplemental files are available for free download on Courselink.

**Technology:** We will use Canvas, Zoom, and Piazza. We may use Google Docs/Slides, however, you will not need a Google account (and should log in from a "Private" or "Incognito" browser tab to protect your privacy.

# **Course Policies**

### **Grading Policies**

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

### **Re-Grading of Assignments Policy**

Where a student is of the belief that an assignment has not been accurately graded, they are to pursue a 2-step course policy: 1) as soon as possible, meet with the original TA that graded the assignment, and if a student remains dissatisfied, 2) they can request from the instructor that another TA re-grade the assignment. Note that the student will be required to accept the re-grade, whether it be higher or lower.

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

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

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials (e.g., Chegg, Coursehero, etc.) by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

### Student Rights and Responsibilities when Learning Online

### **Privacy Rights**

Synchronous sessions held via Zoom may be recorded for the purpose of student review of content as well as for students who miss a session. As a student, you have the right to protect your privacy online and may choose to turn off your video and/or audio when in session. In the event that your video and/or audio remain on, please note that you are consenting to your presence in lecture recordings. Under no circumstances are you permitted to transmit copies of the recordings to others, without the express written consent of the instructor.

### Online Behaviour

According to the University Secretariat, students have a responsibility to help support community members' access to the tools they need to engage in their learning and development, both in and

outside of the classroom. An example of this type of responsibility is the requirement to abide by the following:

Section 4.3.3. Disruption - to not interfere with the normal functioning of the University, nor to intimidate, interfere with, threaten or otherwise obstruct any activity organized by the University, including classes, or to hinder other members of the University community from being able to carry on their legitimate activities, including their ability to speak or associate with others. As such, appropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your username and password

# **University Policies**

#### **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

### 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 the <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 Student Accessibility Services Website

#### **Course Evaluation Information**

Please refer to the Course and Instructor Evaluation Website.

### **Drop date**

The last date to drop one-semester courses, without academic penalty, is April 12, 2021. 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. As the Undergraduate Calendar states: "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".