

Course Outline Psyc*3410: Winter 2017

General Information

Course Title: Psyc*3410 - Behavioral Neuroscience II

Course Description: This course will broaden your view and knowledge of the neurobiology of behavior, building on basics of brain structure and function covered in Psyc*2410. We will cover such topics as neuroanatomy, the regulation of feeding, sleep, stress and emotions, the hormonal regulation of behavior as well as the neurobiology of psychiatric disorders and drug addiction. Throughout, we will emphasize the behavioral 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 2017

Class Schedule and Location:

Lectures: Tue & Thur: 02:30-03:50PM, MacLachlan Building Room 102

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

Monday 4:30-6:20; taught by Richard Matta

Wednesday 5:30-7:20; taught by Richard Matta

Friday 8:30-10:20; taught by Paul Sheppard

Friday 10:30-12:20; taught by Paul Sheppard

Friday 1:30-3:20; taught by Samantha Creighton

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

Instructor Information

Instructor Name: Krista Mitchnick

Instructor Email: kmitchni@uoguelph.ca

Office location and office hours: MacKinnon Building, Room 3016. Scheduled office hours will occur during the following times:

-Prior to Midterm 1: Tuesday Jan 31 and Thurs Feb 2, from 4-530pm

-Prior to Midterm 2: Tuesday Mar 7 and Thurs Mar 9, from 4-530pm

-Prior to Final Exam: Tuesday Apr 18 and Wed Apr 19, from 9-11am

On all other occasions, email to arrange a meeting.

GTA Information

GTA Names & Emails:

Kelsy Ervin; kervin@uoguelph.ca
Richard Matta; rmatta@uoguelph.ca
Paul Sheppard; pshepp01@uoguelph.ca
Sam Creighton; screight@uoguelph.ca

GTA office location and office hours: Blackwood Hall, Rm. 211 ext. 56906. Office Hours:
Meeting by arrangement, e-mail at all times.

*Allow 24 hours for an email response, Monday-Friday.

Course Content

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 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 faster or slower through each topic.

DATE	READING	TOPIC
Jan 10 th	Chpt 10.	Course Overview - Brain Damage and Neuroplasticity
Jan 12 th	Chpt 10.	Brain Damage and Neuroplasticity
Jan 17 th	Chpt 10.	Brain Damage and Neuroplasticity
Jan 19 th	Chpt 11.	Learning and Memory
Jan 24 th	Chpt 11.	Learning and Memory
Jan 26 th	Chpt 12.	Regulation of Feeding
Jan 31 st	Chpt 12.	Regulation of Feeding
Feb 2 nd	Chpt 12.	Regulation of Feeding

Feb 7thFeb 9th Chpt 13. Behavioral EndocrinologyFeb 14th Chpt 13. Behavioral EndocrinologyFeb 16th Chpt 13. Behavioral Endocrinology**Feb 20-24 Reading Week – NO CLASSES**Feb 28th Chpt 14. Sleep and activity biorhythmsMarch 2nd Chpt 14. Sleep and activity biorhythmsMarch 7th Chpt 15. Drugs, Addictions and RewardMarch 9th Chpt 15. Drugs, Addictions and Reward*March 10th 40th Class Day.***March 14th Midterm 2 (20%)**March 16th Chpt 16. Lateralization and LanguageMarch 21st Chpt 16. Lateralization and LanguageMarch 23rd Chpt 17. Emotions, Stress and HealthMarch 28th Chpt 17. Emotions, Stress and HealthMarch 30th Chpt 18. Neurobiology of Psychiatric DisordersApril 4th Chpt 18. Neurobiology of Psychiatric DisordersApril 6th Chpt 18. Neurobiology of Psychiatric Disorders**Labs: Lab sessions will proceed as follows**

LAB DATES

TOPIC

Jan 16, 18, 20 Orientation/Safety/Group Assignment

Jan 23, 25, 27 Outside View dorsal – ventral

Jan 30, Feb 1, 3 Sagittal cut

Feb 6, 8, 10 Coronal cut

Feb 13, 15, 17 Horizontal cut

Feb 20-24 Reading Week – NO LABS

Feb 27, Mar 1, 3 Hippocampal dissection

March 6, 8, 10 Cerebellum

March 13, 15, 17 Review

LAB DATES	TOPIC
March 20, 22, 24	Bell Ringer Exam Practice
March 27th, 29th, 31st	Bell Ringer Exam

If you have a **valid excuse** 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 assigned session (week of Mar 27).

Course Assignments and Tests:

Assignments and Grade Scheme	Due Dates
1 st Midterm - 20 %	February 7, 2016 (in class)
2 nd Midterm (non-cumulative) - 20 %	March 14, 2016 (in class)
Lab Exam - 25%	March 27 <i>or</i> March 29 <i>or</i> March or, 2016, in the lab (lab exam to be taken on the lab session for which you are registered)
Final Exam (cumulative) - 35 %	April 20, 2016, (2:30-4:30pm), location TBA
<i>*Participation – up to 3% extra</i>	<i>During lectures</i>

The written exams may contain:

- multiple choice questions
- short-answer questions
- questions relating to diagrams (e.g. label the diagram; explain the diagram)
- fill in the blank questions

The lab exam will be a "bell ringer" type of 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 pins and specify their main functions. You will have a certain number of minutes for each tray, and then you will progress to the next tray (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.

***Class Participation - Optional**

During class, excellent questions or excellent answers to questions will be awarded with an additional 0.5-1% added to your final grade, up to a maximum of 3% (i.e. during the entire course). This is in an effort to enhance critical thinking and engagement with the material.

Final examination date and time: Apr 20, 2016, (2:30-4:30) location TBA
Final exam weighting: 35%

Course Resources

Required Texts: J. P. Pinel (2014). Biopsychology. New York: Allyn and Bacon, Ninth Edition. There are a few copies of the textbook on reserve in the library.

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

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:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

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:
<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08...>

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. 56208 or email csd@uoguelph.ca or see the website: <https://www.uoguelph.ca/csd/>

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 Friday March 10, 2016. For [regulations and procedures for Dropping Courses, see the Academic Calendar](#):
<https://www.uoguelph.ca/registrar/calendars/undergraduate>