

# Behavioural Neuroscience (PSY290H1F)

Spring Session, 2023
In-person, on-campus course
Lectures every Tuesday and Thursday, 2 – 5 pm in SS1087

# **Summary**

This course will explore the relationship between the brain and behaviour, including sensory processing, emotions, higher cognitive processes, and everything in between.

# **Learning Objectives**

In this course, you will learn about:

- how the nervous system generates thought and behavior;
- the research techniques and approaches used in biopsychology;
- the treatment of psychological disorders and pathologies of the nervous system;
- the implications of biopsychology for our day-to-day lives.

#### **Our Team**

Instructor: Dr. Paul Whissell (paul.whissell@utoronto.ca)

Office hours every Monday, from 1 – 3 pm in SS4001

Teaching Assistants: Zachary Pierce-Messick

# Recommended Textbook (optional; NOT required)

*Biopsychology*. 10<sup>th</sup> edition. 2017. Pinel, J.P. and Barnes, S. Pearson Publishing. ISBN-10: 9780134567709. *The textbook is now out of print and is only available electronically*.

#### **Assessments**

This is an in-person course with lectures and assessments occurring during a regularly scheduled time (Tuesdays and Thursdays, 2-5 pm). You must be available during this time period. This course should be treated as a synchronous course and should not conflict with other courses you are taking.

# **Marking Scheme and Important Dates**

- 10% Online Quiz, Due May 18 @ 11:59 pm based on Lectures 1 4
  - o Quiz will be delivered online via Quercus
- 35% Term Test on May 23 from 2 4 pm based on Lectures 1 4
  - o 2 hours allotted
  - 30 multiple choice questions (each worth 1 mark) and 5 short written answer questions (each worth 6 marks), total of 60 marks
- 45% Final Assessment between June 21 26 based on Lectures 5 10
  - Format TBA
- 10% Written Assignment, Due June 15 @ 11:59 pm: Behavioral Neuroscience in the Media
  - Details will be given on Quercus and in support sessions (dates TBA)

### **Study Guide**

To assist you in preparing for your assessments, a study guide will be provided on Quercus. This guide will identify key highlights of lecture content that are likely to be tested. If you can provide detailed answers to the questions in this guide, it is likely you will score at least a B grade (70+) on all assessments. The study guide will be reviewed in pre-test tutorials (dates to be posted on Quercus shortly).

# **Course Schedule**

Date	Торіс	Optional readings
May 9	Lecture 01: Introduction; Genes and Behavior	Chapters 1 + 2
May 11	Lecture 02: Neuroanatomy + Neurophysiology; Quiz Opened	Chapters 3 + 4
May 16	Lecture 03: Research Methods	Chapters 5
May 18	Lecture 04: Sensory and Motor Function; Quiz Due	Chapters 6 - 8
May 23	TERM TEST 1 (Lectures 1 – 4)	
May 25	Lecture 05: Neurodevelopment + Neuroplasticity	Chapters 9 + 10
May 30	Lecture 06: Learning	Chapters 11
June 1	Lecture 07: Eating	Chapters 12 + 13
June 6	Lecture 08: Sleep and Dreaming	Chapters 14
June 8	Lecture 09: Substance abuse and neuropsychopharmacology	Chapter 15
June 13	Lecture 10: Emotion	Chapter 17 - 18
June 15	Review Lecture; Assignment Due	
June 21 – 26	FINAL EXAM (DETAILS TBA)	

### **Course Policies**

#### **Missed Tests**

In the event you miss a test due to illness, you must use the illness self-declaration tool on ACORN and notify the instructor by email within one week of the test date. If you miss a test due to other exceptional circumstances, you must still notify the instructor. Each situation will be handled on a case-by-case basis.

If you miss the term test, you must complete a make-up test in a timely fashion. If you do not complete a make-up test, you will receive a grade of 0 for the assessment. To ensure a make-up test can be completed as soon as possible, please contact the instructor immediately following a missed test. Most make-up tests should be scheduled within one week of the original test and completed within two weeks of the original test.

If you miss the final exam, you must attend a deferred final exam at a later date. The deferred final exam will be similar in format to the missed final exam. To be eligible for a deferred exam, you will need to file a petition with your College RO for a deferred exam immediately following the missed final exam.

#### **Late Policies**

The standard late penalty is 10% per day late. If exceptional circumstances prevent you from submitting an assessment on time, please contact the instructor to discuss your situation.

# **Regrade Requests**

Inquiries must be made within two weeks of the returned grade. A regrade of your assessment may increase your grade, have no effect or decrease your grade (e.g. if an adding error is discovered during the re-evaluation). Please let us know if we can help you.

# **Religious Accommodation**

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (like a test, or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with

sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

# **Accessibility Needs**

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (<a href="www.accessibility.utoronto.ca">www.accessibility.utoronto.ca</a>) at the beginning of the academic year. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your condition with any instructor, and your instructors will not reveal that you are registered with AS.

# **Intellectual Property**

Lectures slides and recordings are the intellectual property of the instructors. Under no circumstances should any of this content be shared online (e.g. via sites such as OneClass, Course Hero or Youtube). The Academic Handbook states: "It is absolutely forbidden for a student to publish an instructor's notes to a website or sell them" (section 4.5)" Any student found violating this rule will be brought in to the Office of Student Academic Integrity. If you would like to share material with someone, please obtain approval from the content creator first.

# **Academic Integrity**

You must complete all work in this course independently. You may not collaborate with anyone else (though you are encouraged to ask instructors and teaching assistants for help). Your answers must be your own thoughts, expressed in your own words.

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offence that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <a href="https://www.writing.utoronto.ca/">www.writing.utoronto.ca/</a>. Consult the Code of Behaviour on Academic Matters for a

complete outline of the University's policy and expectations. For more information, please see <a href="http://www.artsci.utoronto.ca/osai">http://www.artsci.utoronto.ca/osai</a> and <a href="http://academicintegrity.utoronto.ca/">http://academicintegrity.utoronto.ca/</a>.

# **Plagiarism Detection Tools**

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<a href="https://teaching.utoronto.ca/ed-tech/teaching-technology/pdt/#pdt1">https://teaching.utoronto.ca/ed-tech/teaching-technology/pdt/#pdt1</a>.

# Writing

As a student here at the University of Toronto, you are expected to write well. The university provides its students with a number of resources to help them achieve this. For more information on campus writing centres and writing courses, please visit <a href="http://www.writing.utoronto.ca/">http://www.writing.utoronto.ca/</a>.

#### Other Resources

- Student Life Programs and Services (<a href="http://www.studentlife.utoronto.ca/">http://www.studentlife.utoronto.ca/</a>)
- Academic Success Services (http://www.studentlife.utoronto.ca/asc)
- Counselling and Psychological Services (http://www.studentlife.utoronto.ca/hwc)