

## **PSYC 471: Behavioural Pharmacology**

### **Instructor**

Prof. Mary C. Olmstead, PhD  
[olmstead@queensu.ca](mailto:olmstead@queensu.ca)

To ensure a prompt response to email, please include Psyc471 in the subject line.

Class Details:

Monday 10:00-11:30

Wednesday 8:30-10:00

HH 223

### **Acknowledgement of Territory**

To begin, let us acknowledge that Queen's is situated on traditional Anishinaabe and Haudenosaunee territory. We are grateful to be able to live, learn and play on these lands.

To acknowledge this traditional territory is to recognize its longer history, one predating the establishment of the earliest European colonies. It is also to acknowledge this territory's significance for the Indigenous peoples who lived, and continue to live, upon it and whose practices and spiritualities were tied to the land and continue to develop in relationship to the territory and its other inhabitants today. The Kingston Indigenous community continues to reflect the area's Anishinaabek and Haudenosaunee roots. There is also a significant Métis community and there are First people from other Nations across Turtle Island present here today.

To read more about the history of the land, see the Queen's Encyclopedia at <http://www.queensu.ca/encyclopedia/t/traditional-territories>

### **Course Description**

This course focuses on understanding the neuropharmacological basis of psychological processes. The course begins with an overview of basic neuropharmacology, including principles of neurotransmission and neurophysiology. This will be followed by a description of the behavioural effects of drugs in humans and other animals. This will lay the groundwork for in-depth discussions of the neuropharmacological mechanisms mediating recreational and prescription drugs.

### **Course Website**

All communication related to this course will occur through OnQ: access is restricted to students who are registered in this course. Course announcements will be sent through Queen's email addresses, so it is important to access this account on a regular basis throughout the term.

## **Textbook**

All students should purchase or have access to the following textbook, available through the campus bookstore:

Hancock, S.D. & McKim, W.A. (2018). *Drugs and Behavior: An Introduction to Behavioral Pharmacology*. 8<sup>th</sup> edition. New York NY: Pearson Education Inc.  
Cost: Bookstore ebook (67.99) Amazon paper copy (49.99)

## **Learning Outcomes**

With successful completion of Psychology 471, students will be able to:

1. Describe primary areas of research and methodologies in behavioural pharmacology.
2. Outline the biological steps involved in central nervous system neurotransmission.
3. Discuss similarities and differences in pharmacological mechanisms of drugs.
4. Critically evaluate evidence linking pharmacological mechanisms to symptoms of common psychiatric disorders.
5. Communicate, individually and collectively, the rationale, methodology, results, and implications of a scientific study in behavioural pharmacology.
6. Contribute to discussions and debates regarding the public's understanding of topics in behavioral pharmacology.

## **Evaluation**

Term Tests	50%
Test 1 (10%)	
Test 2 (20%)	
Test 3 (20%)	
Lecture Presentation	15%
Research Paper Analysis	20%
Group assignment (10%)	
Individual assignment (10%)	
Group Debate	15%

*Note: Due dates are all listed on the course timeline.*

## **Assignment Descriptions**

### **Term Tests (50%) Learning Outcomes 1, 2, 3**

The three term tests will be based on material in the textbook and weekly lectures. Each test will consist of multiple choice, short answer, and essay questions. The short answer questions can be answered in 1-2 paragraphs; essay questions can be answered in 5-6 paragraphs. Each test is scheduled for 60 minutes and will be written during class time. See the course schedule for specific dates of each test.

**Lecture Presentation (15%)      Learning Outcomes 2, 3, 4**

Each student will prepare **one** lecture that covers material from one chapter of the textbook. Lecture assignments, with corresponding due dates, are listed on a separate document (lecture assignments). The lecture should be 20-30 minutes in length and prepared as a voice over powerpoint. The lecture should summarize the main points in the chapter and highlight important terms or definitions. The primary goal of the lecture is to educate your classmates and to prepare them for in-class tests or other assignments in this course. It is not necessary to use any references beyond the textbook, although you may want to consult other sources if you are looking for images to include on the slides or for alternative ways to explain complex topics.

Please save your file using the chapter number (e.g., Chapter 1), then submit one copy to the OnQ dropbox AND leave one copy on the Discussions Board under Lecture Assignments. That way, other students in the class will have access to your presentation for their own studying.

**Research Paper Analysis (20%)      Learning Outcomes 1, 5**

Each student will complete two assignments (10% each) in which they read a behavioral pharmacology article, then respond to a series of questions about the articles. The article will be distributed to the class 5 days before the assignment is due. One assignment will be submitted as a group (4-6 students per group) and the other by each individual student. Both assignments will be completed during class and should take 60-75 minutes to finalize.

**Group Debate (15%)      Learning Outcomes 4, 6**

Students will work in groups of 4-7 to prepare a debate on a behavioral pharmacology topic that is broadly discussed in the public domain. The purpose of the debate is to use scientific evidence to argue for one position or another. Groups will be randomly selected and topics will be assigned on the day of the class. See Class Schedule for specific dates.

**Due Dates**

Please check the class schedule for specific deadlines of each assignment.

**Academic Accommodations**

For all questions regarding academic considerations in the course, please contact Tara Karasewich ([psyc.accom@queensu.ca](mailto:psyc.accom@queensu.ca)).

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