

# PSYC 471 Behavioural Pharmacology

## **Instructor**

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## **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 the course website. Access to this site 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:

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.

The text is available through the campus bookstore.

## **Learning Outcomes**

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

### Content

- Identify primary areas of research in behavioral pharmacology.
- Outline the biological steps involved in central nervous system neurotransmission.
- Discuss similarities and differences in pharmacological mechanisms of abused drugs.
- Describe pharmacological underpinnings of common psychiatric disorders.
- Effectively communicate the rationale, methodology, results, and implications of a scientific study in neuropharmacology.

## **Evaluation**

### **In-Class Tests (15%)**

There will be 5 in-class tests, each worth 3% of the final mark. Tests will consist of 15 multiple choice questions, based on the textbook chapters assigned for that week. All tests must be written during class time, with no prescribed time limit. **THERE ARE NO RE-WRITES FOR IN-CLASS TESTS.** If a student misses an in-class test AND receives approval for an absence due to extenuating circumstances from the Faculty of Arts and Science (see below), an extra 3% will be added to the final exam.

### **Final Exam (30%)**

All students are required to write a 3-hour final exam, which will be scheduled during the end of term exam period. The final exam material will cover the entire course, with questions based on both the assigned textbook and the group presentations. The exam will include multiple-choice, short answer (1-2 paragraphs), and long answer (2-5 paragraphs) questions.

### **In-Class Group Assignments (15%)**

In two separate classes, students will work in groups of 4-6 to prepare responses to questions using 1-3 scientific articles provided at the beginning of class. The questions will draw on material in the course textbook, but will also require students to critically evaluate the results of these scientific studies. All assignments are to be submitted at the end of the class. The first group assignment is worth 5%, the second 10%.

### **In-class Individual Assignments (15%)**

Students will complete two individual assignments, following the same protocol as those for the group assignments. Both assignments are to be submitted at the end of the class. The first assignment is worth 5%, the second 10%.

### **Group Project (15%)**

Students will work in groups of 4-6 to prepare an in-class presentation on recent, controversial topics related to the field of neuropharmacology. Groups will be randomly selected and topics will be assigned two weeks in advance of each presentation.

### **Class Participation (10%)**

Marks for class participation will be based on preparation, engagement, and participation in discussions.

## **Class Schedule**

September 11	Introduction
September 18	Lectures: Chapters 1-3
September 25	Test #1: Chapters 1-3 Writing assignment examples Group Project #1 assigned
October 2	Group in-class assignment #1
October 9	Test #2: Chapters 4-6 Group Project #1 Assign Group Project #2
October 16	Group in-class assignment #2
October 23	Test #3: Chapters 7-9 Group Project #2 Assign Group Project #3
October 30	Individual in-class assignment #1 Assign Group Project #4
November 6	Test #4: Chapters 10-12 Group Project #3
November 13	Group Project #4 Assign Group Project #5
November 20	Individual in-class assignment #2
November 27	Test #5: Chapters 11-13 Group Project #5

## **Location and Timing of Final Examinations**

The exam dates for each Term are listed on the Faculty of Arts and Science webpage under “Important Dates.” Student exam schedules for the Fall Term are posted via SOLUS immediately prior to the Thanksgiving holiday; for the Winter Term they are posted on the Friday before Reading Week, and for the Summer Term they are individually noted on the Arts and Science Online syllabi. **Students should delay finalizing any travel plans until after the examination schedule has been posted. Exams will not be moved or deferred to accommodate employment, travel/holiday plans or flight reservations.** Also, as indicated in Academic Regulation 8.3, students must write all final examinations in all on-campus courses on the Kingston campus.

## **Request for Academic Accommodation**

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016

<https://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslcwww/files/files/policies/senate-andtrustees/ACADACCOMMPOLICY2016.pdf> . If you are a student with a disability and

think you may need academic accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at:

<http://www.queensu.ca/studentwellness/accessibility-services/>

## **Academic Consideration for Students with Extenuating Circumstances**

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and are interfering with their ability to complete academic requirements related to a course for a short period of time. The Senate Policy on Academic Consideration for Students in Extenuating Circumstances is available at

<http://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslcwww/files/files/policies/senateandtrustees/Academic%20Considerations%20for%20Extenuating%20Circumstances%20Policy%20Final.pdf>

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the portal where a request can be submitted at: <http://www.queensu.ca/artsci/accommodations> . Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

If you need to request academic consideration for this course, you will be required to provide the name and email address of the instructor/coordinator. Please use the following:

Mary C. Olmstead  
olmstead@queensu.ca

## **Academic Integrity**

“Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility

[http://www.academicintegrity.org/fundamental\\_values\\_project/index.php](http://www.academicintegrity.org/fundamental_values_project/index.php) . These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the ‘freedom of inquiry and exchange of ideas’ essential to the intellectual life of the University (see the Senate Report on Principles and Priorities)

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website

<http://www.queensu.ca/artsci/academics/academic-integrity> , and from the instructor of this course.

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.”

## **Queen’s Copyright Information**

"This material is copyrighted and is for the sole use of students registered in Psychology 471. This material shall not be distributed or disseminated to anyone other than students registered in Psychology 471. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of academic integrity under the University Senate’s Academic Integrity Policy Statement."

## **Grade Conversion**

All components of this course will receive a letter grade, using the Queen's Faculty of Arts and Science Official Grade Conversion Scale:

### *Queen's Official Grade Conversion Scale*

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below