

Psychology 475 (02)		Drugs and Behaviour		Winter 2018	
Instructor:	Brendan McAllister	Lecture Location:	ST 064		
Phone:	403-220-3969	Lecture Days/Time:	TR 11:00-12:15		
Email:	bmcallis@ucalgary.ca				
Office:	AD 034				
Office Hours:	By appt. Please email me to arrange a convenient time				

Course Description

The aim of this course is to provide insight into the mechanisms whereby drugs exert their action on the central nervous system to influence biochemical, physiological, and behavioural processes.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see psyc.ucalgary.ca/undergraduate/program-learning-outcomes), and the expected level of achievement.

Course Learning Outcomes	Assessment Methods	PLO(s)	Level(s)
Explain the mechanisms of drug action	Exams, term paper	1,4	I
Explain how different drugs interact with nervous system function and influence behaviour	Exams, term paper	1,4	I
Outline the theories and mechanisms of drug addiction and its treatment	Exams	1,4	I
Evaluate methods and findings from behavioural pharmacological studies	Exams, term paper	1,2,4,5,7	C
Summarize and critically evaluate information regarding behavioural pharmacology	Exams, short assignment, term paper	1,2,3,4,5,7	A
Discuss the ethics of drug use/abuse	Short assignment, exams	2,4,6	C
Evaluate the claims made in the media concerning drug use and drug action	Short assignment	1,2,3,4	A

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles, 7 = apply psychological knowledge and skills. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Prerequisites

Psyc 312 – Experimental Design and Quantitative Methods for Psychology

Psyc 375 – Brain and Behaviour

Required Text

Psychopharmacology: Drugs, the Brain, and Behavior (2nd Edition), Meyer JS, Quenzer LF (2013), Sunderland, MA: Sinauer Associates Inc. Available at the University Bookstore and through online vendors.

Assessment Methods

The final course grade will be based on:

- 1) Midterm Exam 1: 15%
 - a. During class period of **Feb 1, 2018**.
 - b. Based on text (Chap 1-4) & corresponding lecture material
- 2) Midterm Exam 2: 20%
 - a. During class period of **March 6, 2018**.
 - b. Based on text (Chap 5, 7, 12-14) & corresponding lecture material
- 3) Final examination: 30%
 - a. **Date TBD**; scheduled by registrar.
 - b. Based on text (Chap 6, 8-11, 15, 18, 19) & corresponding lecture material
- 4) Short Assignment: 10%
 - a. Due **Feb 15, 2018** at the beginning of the lecture
 - b. Maximum 4 pages, not including references
- 5) Research Proposal (For Term Paper): 5%
 - a. Topics must be approved by the instructor by **March 15, 2018**
 - b. Due **March 22, 2018** at the beginning of the lecture.
 - c. Maximum 2 pages, not including references
- 6) Term Paper: 20%
 - a. Maximum 20 pages, not including references
 - b. Due at the beginning of the last lecture (**April 12, 2018**)

There are three exams for this course. **The exams will not be cumulative.** The midterms will consist of multiple choice and short answer questions. Questions will be drawn from the lecture material, the assigned textbook chapters, and any supplementary reading materials. The final exam will also include long answer/essay questions. Exams will be graded such that half marks will be given if it is clear that you know the general answer, but have omitted specific details or scientific terms. Full marks will be given to those that include specifics, and employ the correct terminology and concepts. **No books, notes, computers, calculators, or cellular phones will be allowed during exam writing.**

There will be one short written assignment to be completed during the term, worth 10% of the final grade, as well as a research proposal, worth 5% of the final grade, and a term paper, worth 20% of the final grade. All assignments should be typed in 12-point, Times New Roman font.

The short assignment will be assigned in class on February 6th, and will be due at the beginning of class on February 15th. The assignment will focus on a current topic in behavioural pharmacology and its relevance to society. The assignment will require evaluating information from media reports based on your understanding of the scientific literature. The report should be a maximum of 4 double-spaced pages, not including references. Further details regarding the short assignment will be provided in class and posted on D2L.

The research proposal is due on March 22nd at the beginning of class, and is worth 5% of the final grade. The proposal should briefly discuss the topic chosen for your term paper (see below). The purpose of the proposal is primarily for you to get some early feedback on your chosen term paper topic, and to ensure that your topic is viable (i.e., that there is sufficient information available to in the literature to support the topic). The research proposal should be a maximum of 2 pages in length (not including the reference section), and include 3-5 references.

The term paper is to be written on a topic of your choice within the field of behavioural pharmacology. Topics must be approved by the instructor no later than by March 15th. The paper is due at the beginning of class on April 12th. It can be a maximum of 20 double-spaced pages, not including references. The papers will be evaluated primarily based on the depth of the background research conducted for the paper, and your ability to clearly communicate this information. Further details regarding the term paper will be provided in class and posted on D2L.

All written assignments are to be handed **at the beginning of class** in paper format. There will be a reduction of 10% for each 24 hour interval that the assignment is late, including weekends.

Department of Psychology Criteria for Letter Grades

Psychology professors use the following criteria when assigning letter grades:

A+ grade: *Exceptional Performance.* An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: *Excellent Performance.* Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance.* Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance.* Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards.* Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met.* Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Date	Topic/Activity/Readings/Due Date	Chapters
T Jan 9	Winter term lectures begin. Course introduction. Principles of Pharmacology.	1
R Jan 11	Principles of Pharmacology. Pharmacokinetics/Pharmacodynamics.	1
T Jan 16	Pharmacokinetics/Pharmacodynamics. Electrical Transmission.	1, 2
R Jan 18	Chemical Signaling by Neurotransmitters and Hormones.	3
F Jan 19	Last day to drop Winter Term half-courses.	
M Jan 22	Last day to add or swap Winter Term half courses. Last day for change of registration from audit to credit or credit to audit.	
T Jan 23	Chemical Signaling by Neurotransmitters and Hormones.	3
R Jan 25	Research Methods in Psychopharmacology.	4
T Jan 30	Research Methods in Psychopharmacology.	4
R Feb 1	Midterm Exam 1	
T Feb 6	Catecholamines. Psychomotor Stimulants.	5, 12
R Feb 8	Catecholamines. Psychomotor Stimulants.	5, 12
T Feb 13	Acetylcholine. Nicotine.	7, 13
R Feb 15	Short Assignment Due. Acetylcholine. Nicotine and Caffeine.	7, 13
Feb 18-25	Reading Week. No lectures. University open (except Family Day). Alberta Family Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.	
M Feb 19	Alberta Family Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.	
T Feb 27	Marijuana & the Cannabinoids.	14

R Mar 1	Marijuana & the Cannabinoids.	14
T Mar 6	Midterm Exam 2	
R Mar 8	GABA. Alcohol.	8, 10
T Mar 13	GABA. Sedative-Hypnotic and Anxiolytic Drugs.	8, 18
R Mar 15	Glutamate. PCP and Ketamine.	8, 15
T Mar 20	Glutamate. PCP and Ketamine.	8, 15
R Mar 22	Research Proposal Due. Guest Lecture – Jennaya Christensen	
T Mar 27	Serotonin. Hallucinogens.	6, 15
R Mar 29	Serotonin. Affective Disorders.	6, 19
F Mar 30	Good Friday. University Closed	
T Apr 3	Opioids.	11
R Apr 5	Opioids.	11
T Apr 10	Drug Abuse and Addiction	9
R Apr 12	Term Paper Due. Drug Abuse and Addiction. Final Class.	9
F Apr 13	Winter Term Lectures End. Last day to withdraw from full courses and Winter Term half courses.	
Apr 16-26	Winter Term Final Examinations.	

Reappraisal of Grades

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class; no reappraisal of term work is permitted after the 15 days. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

Plagiarism and Other Academic Misconduct

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

Academic Accommodations

The student accommodation policy can be found at: ucalgary.ca/access/accommodations/policy.

Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities ucalgary.ca/policies/files/policies/student-accommodation-policy. Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the instructor.

Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without an official University medical excuse (see the University Calendar). A completed Physician/Counselor Statement will be required to confirm absence from a test/exam for health reasons; the student will be required to pay any cost associated with this Statement. Students who miss a test/exam have up to 48 hours to contact the instructor and to schedule a makeup test/exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup test/exam must be written within 2 weeks of the missed test/exam during exam make-up hours provided by the department <http://psychology.ucalgary.ca/undergraduate/exam-and-course-information#mues>. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam http://www.ucalgary.ca/registrar/exams/deferred_final. Under no circumstances will this be accommodated by the department.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam http://www.ucalgary.ca/registrar/exams/deferred_final. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Freedom of Information and Protection of Privacy (FOIP) Act

The FOIP legislation disallows the practice of having student's retrieve tests and assignments from a public place. Therefore, tests and assignments may be returned to students during class/lab, or during office hours, or will be made available only for viewing during exam review sessions scheduled by the Department. Tests and assignments will be shredded after one year. Instructors should take care to not link students' names with their grades, UCIDs, or other FOIP-sensitive information.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website (<http://www.ucalgary.ca/mentalhealth/>).

Course Credits for Research Participation (Max 2% of final grade)

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. **A maximum of two credits (2%) per course, including this course, may be applied to the student's final grade. Students earn 0.5% (0.5 credits) for each full 30 minutes of participation.** The demand for timeslots may exceed the supply in a given term. Thus, students are not guaranteed that there will be enough studies available to them to meet their credit requirements. Students should seek studies early in the term and should frequently check for open timeslots. Students can create an account and participate in Departmentally approved research studies at <http://ucalgary.sona-systems.com>. The last day to participate in studies and to assign or reassign earned credits to courses is **April 13, 2018**.

Evacuation Assembly Point

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at <http://www.ucalgary.ca/emergencyplan/assemblypoints>. Please check this website and note the nearest assembly point for this course.

Student Organizations

Psychology students may wish to join the Psychology Undergraduate Students' Association (PSYCHS). They are located in Administration 130 and may be contacted at 403-220-5567.

Student Union VP Academic: Phone: 403-220-3911 suypaca@ucalgary.ca
Student Union Faculty Rep.: arts1@su.ucalgary.ca

Student Ombudsman's Office

The Office of the Student Ombudsmen provides independent, impartial and confidential support for students who require assistance and advice in addressing issues and concerns related to their academic careers. The office can be reached at 403-220-6420 or ombuds@ucalgary.ca (<http://www.ucalgary.ca/provost/students/ombuds>)

Safewalk

The safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.
Call 403-220-5333.

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **January 19, 2018**. Last day for registration/change of registration is **January 22, 2018**. The last day to withdraw from this course is **April 13, 2018**.