

PSYC/NEUR 475		Drugs and Behaviour		Winter 2021	
Instructor:	Dr. Derya Sargin	Lecture Location:	Online (zoom) and D2L		
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Course Description

The aim of the 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 <https://live-arts.ucalgary.ca/psychology/about#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, Quizzes	1	I
Explain how different drugs interact with nervous system function and influence behaviour	Exams, Quizzes	1	I
Outline the theories and mechanisms of drug addiction and its treatment	Exams, Quizzes	1	I
Evaluate methods and findings from behavioural pharmacological studies	Exams, written assignment	1,2,5,7	C
Summarize and critically evaluate information regarding behavioural pharmacology	Exams, written assignment	1,2,4,5,7	A
Demonstrate scientific writing skills	Written assignment	1,2,4	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 in a diverse world, 7 = apply psychological knowledge and skills, 8 = Demonstrate multicultural competence and awareness of issues related to equity, diversity,* and inclusion. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

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.

Course Format

This course will use an asynchronous format. All lectures will be pre-recorded. Recorded lectures and slides will be posted on D2L as stated on the course outline. Other class materials will be posted to the course D2L page by the day/time of each scheduled class as per the course schedule. There will also be a Discussion component on the D2L. Your questions will be discussed in the review lectures.

Prerequisites

Admission to the Psychology major or Honours program and Psychology 312 or 300 and 301, and 375.

Recommended Text

Psychopharmacology: Drugs, the Brain, and Behavior, 4th Edition, Jerrold S. Meyer and Linda F. Quenzer (2013) Sinauer. Available at the University Bookstore and online vendors.

Assessment Methods

Quizzes (January 27 th , February 24 th , March 31 st)	15%
Written Assignment (due March 1 st)	10%
Midterm Exam #1 (February 1 st):	25%
Midterm Exam #2 (March 15 th):	25%
Final Exam (TBA):	25%

Quizzes:

There will be 3 quizzes spaced throughout the course; each quiz is worth 5% of your final grade (15% total). Each quiz will consist of 10-15 multiple choice questions. These are designed to test you on the lecture material that has been covered since the last assessment in order to keep you up to date with the course material. The quizzes will be administered online via D2L. Quiz #1 will be on January 27th, Quiz #2 on February 24th, and Quiz #3 on March 31st. They will be posted online at the start of the lecture time. You will have access to the quizzes for 24 hours however, you will have **30 minutes** to complete once started. Without Instructor approval failure to complete quizzes within 24 hours will result in a grade of zero.

Written Assignment:

The written assignment will be worth 10% of your final grade. It should be written in 12-point font, and will require a maximum of 3 double-spaced pages (not including references, or title page). It will be assigned on February 12th and will be due at the beginning of class on March 1st. You will be asked a question that pertains to our in-class discussion of drugs and behaviour, as well as contemporary issues in the field. Further details regarding the assignment, including the grading rubric, will be provided in

class and posted on D2L. **All reports are to be handed via Dropbox. Without instructor approval, late assignments will be penalized 10% per day, including weekends.**

Exams:

There will be two midterms for this course, each consisting of several short answer questions. Exam questions may be drawn from lectures and any supplementary reading materials that have been provided. Midterm #1 will be held on February 1st and will be worth 25% of your final grade. Midterm #2 will be held on March 15th and will also be worth 25% of your final grade. The final exam will be scheduled by the registrar and is worth 25% of your final grade, it will consist of short answer questions.

Exams will NOT be cumulative. 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.

All exams will be administered online via D2L. You will have the option to start your exams at a time that best suits your situation within the 24-hour time period. Once you start, you will have **75 minutes** to complete the Midterm Exams and **2 hours** to complete the Final Exam.

Exams in this course are closed book. The use of resources, including class notes, the textbook, online resources, and calculators is prohibited during the exams in this course. Students may not communicate with others about course material or the exam either in person or electronically during exams.

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity.

Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy:

<https://www.ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>.

Department of Psychology Criteria for Letter Grades

Psychology course instructors 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

Ideally in table format with date of class, topics to be covered, and chapters/readings to be read. Due dates for tests/exams and assignments should be included in this schedule as well.

Date	Topic/Activity/Readings/Due Date (revise and add columns & rows as necessary)
M Jan 04	Winter term begins (block week January 4-8)
M Jan 11	Start of Classes Introduction to the course
W Jan 13	Principles of Pharmacology
F Jan 15	Pharmacokinetics
M Jan 18	Pharmacokinetics review
W Jan 20	Pharmacodynamics
R Jan 21	<i>Last day to drop Winter Term half-courses.</i>

F Jan 22	<i>Last day to add or swap a course</i> Pharmacodynamics continued Introduction to Nervous System
M Jan 25	Pharmacodynamics review
W Jan 27	Quiz #1 Nervous System-recorded lecture and slides will be posted on D2L
F Jan 29	<i>Fee payment deadline for Winter Term fees.</i> Catecholamines
M Feb 1	Midterm #1
W Feb 3	Serotonin
F Feb 5	Acetylcholine
M Feb 8	Monoamines lecture review
W Feb 10	Glutamate and GABA
F Feb 12	Glutamate and GABA
M Feb 15	<i>Alberta Family Day</i>
Feb 14-20	<i>Term Break, No Classes (University if Open, Except on Alberta Family Day)</i>
M Feb 22	Catecholamines/Mood Disorders lecture review
W Feb 24	Quiz #2 Drug Abuse and Addiction
F Feb 26	Drug Abuse and Addiction
M Mar 1	Drug Abuse and Addiction Written Assignment due
W Mar 3	Drug Abuse and Addiction
F Mar 5	Drug Abuse and Addiction
M Mar 8	Reward Circuit and Addiction review
W Mar 10	Alcohol
F Mar 12	Alcohol
M Mar 15	Midterm #2
W Mar 17	Opioids
F Mar 19	Psychostimulants-Cocaine
M Mar 22	Opioids/cocaine review
W Mar 24	Psychostimulants-Amphetamine
F Mar 26	Cannabinoids
M Mar 30	Amphetamine/cannabinoids review
W Mar 31	Quiz #3 Caffeine
F Apr 2	<i>Good Friday, University Closed</i>
M Apr 6	<i>Easter Monday, University Closed</i>
W Apr 7	Nicotine
F Apr 9	Psychedelic Drugs
M Apr 12	Caffeine/Nicotine/Psychedelic drugs review

W Apr 14	Disorders of Anxiety and Impulsivity
R Apr 15	<i>Last day of classes, last day to withdraw from winter courses</i>
Apr. 19-29	Final Exam Period
R Apr 30	End of Term

Extra Research Participation Course Credit is Not Offered for this Course.

Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. Students who miss a test/exam have up to 48 hours to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up 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. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. 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 <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

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 <https://www.ucalgary.ca/registrar/exams/deferred-exams>. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Reappraisal of Graded Term Work <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

Reappraisal of Final Grade <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Freedom OF Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

Student Support and Resources

<https://www.ucalgary.ca/registrar/registration/course-outlines>

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Thursday, January 21, 2021**. Last day add/swap a course is **Friday, January 22, 2021**. The last day to withdraw from this course is **Thursday, April 15, 2021** <https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>