

PSYC/NEUR 475		Drugs and Behaviour		Winter 2024	
Instructor:	Dr. Derya Sargin	Lecture Location:	ST 128		
Phone:	403-2204349	Lecture Days/Time:	MWF 16:00-16:50		
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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, written assignment	1,4	C
Explain how different drugs interact with nervous system function and influence behaviour	Exams, written assignment	1,4	A
Outline the theories and mechanisms of drug addiction and its treatment	Exams, written assignment	1,4	C
Evaluate methods and findings from behavioural pharmacological studies	Exams, written assignment	1,2,4,5,7	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 is an in-person class held on campus.

Prerequisites

[Psychology 300](#), [301](#), [375](#) and admission to the Psychology major or Honours program.

Required Text

Psychopharmacology: Drugs, the Brain, and Behavior, Jerrold S. Meyer and Linda F. Quenzer

Available at the University Bookstore and online vendors.

Assessment Methods

Midterm Exam #1 (Lectures 1-12; February 5):	25%
Midterm Exam #2 (Lectures 13-22; March 8):	25%
Written Assignment (due March 20 th)	20%
Final Exam (Lectures 23-34; TBA):	30%

Exams:

There will be two midterms for this course, each consisting of a mix of short answer/multiple choice questions. Exam questions will be drawn from lectures and textbook. Midterm #1 will be held on February 5th and will be worth 25% of your final grade. Midterm #2 will be held on March 8th and will also be worth 25% of your final grade. The final exam will be scheduled by the registrar and is worth 30% of your final grade. **Exams will NOT be cumulative.** Short answer questions 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.

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.

Written Assignment:

The written assignment will be worth 20% 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 due at the beginning of class on March 20th. 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.**

Once approved by the course instructor, and at their discretion, alternative arrangements for missed assessments may be considered. <https://www.ucalgary.ca/pubs/calendar/current/g-1-2.html>. Students may be asked for documentation <https://www.ucalgary.ca/pubs/calendar/current/m-1.html>.

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/legal-services/sites/default/files/teams/1/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%

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
M Jan 8	<i>First day of lectures</i> Lecture 1-Introductory – Meet and Greet
W Jan 10	Lecture 2-Introduction to Drugs and Behaviour (Ch1)
F Jan 12	Lecture 3-Principles of Psychopharmacology (Ch 1)
M Jan 15	Lecture 4- Pharmacokinetics (Ch 1)
W Jan 17	Lecture 5-Pharmacokinetics (Ch 1)
R Jan 18	<i>Last day to drop a class without a penalty</i>
F Jan 19	<i>Last day to add or swap a course</i> Lecture 6- Pharmacodynamics (Ch 1)
M Jan 22	Lecture 7- Nervous System (Ch 2-3)
W Jan 24	Lecture 8- Nervous System (Ch 2-3)
F Jan 26	<i>Fee payment deadline for Winter Term full and half courses.</i> Lecture 9- Catecholamines (Ch 5)
M Jan 29	Lecture 10- Catecholamines (Ch 5)
W Jan 31	Lecture 11- Serotonin (Ch 6)
F Feb 2	Lecture 12- Mood Disorders (Ch 6)
M Feb 5	Midterm 1
W Feb 7	Lecture 13- Acetylcholine (Ch 7)
F Feb 9	Lecture 14- Acetylcholine (Ch 7)
M Feb 12	Lecture 15- Glutamate (Ch 8)
W Feb 14	Lecture 16- Glutamate (Ch 8)
F Feb 16	Lecture 17- GABA (Ch 8)
Feb 18-24	Term Break, no classes
M Feb 26	Lecture 18- Drug Abuse and Addiction (Ch 9)
W Feb 28	Lecture 19-Drug Abuse and Addiction (Ch 9)
F Mar 1	Lecture 20-Drug Abuse and Addiction (Ch 9)
M Mar 4	Lecture 21-Drug Abuse and Addiction (Ch 9)
W Mar 6	Lecture 22-Drug Abuse and Addiction (Ch 9)
F Mar 8	Midterm 2
M Mar 11	Lecture 23- Alcohol (Ch 10)

W Mar 13	Lecture 24- Alcohol (Ch 10)
F Mar 15	Lecture 25- Opioids (Ch 11)
M Mar 18	Lecture 26- Opioids (Ch 11)
W Mar 20	Lecture 27- Psychostimulants-Cocaine (Ch 12) Written Assignment due
F Mar 22	Lecture 28- Psychostimulants-Cocaine (Ch 12)
M Mar 25	Lecture 29- Psychostimulants-Amphetamine (Ch 12)
W Mar 27	Lecture 30- Caffeine/Nicotine (Ch 13)
F Mar 29	<i>UNIVERSITY CLOSED Good Friday</i>
M Apr 1	<i>UNIVERSITY CLOSED Easter Monday</i>
W Apr 3	Lecture 31- Caffeine/Nicotine (Ch 13)
F Apr 5	Lecture 33-Psychedelic Drugs (Ch 15)
M Apr 8	Lecture 34-Psychedelic Drugs (Ch 15)
T Apr 9	<i>Winter Term Lectures End.</i> <i>Last day to withdraw with permission from Winter Term half courses.</i>
Apr 12-23	Winter Final Exam Period

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

Seating During Exams

Instructors and exam invigilators are free to ask students to move seats before an exam begins or even during an exam. Students must comply with this request and refusal to do so may warrant a charge of academic misconduct

Absence From Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor

<https://www.ucalgary.ca/pubs/calendar/current/g-1-1.html> 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 [Deferred Final Exams | University of Calgary \(ucalgary.ca\)](#) 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 <https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/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

(https://library.ucalgary.ca/services/copyright?_gl=1*bcilpn*_ga*OTY1ODc0Njg0LjE2NjkxNTA1NTM.*_ga_X4GN9Y4W7D*MTY3Nzc5MjM3Ni4xNy4xLjE2Nzc3OTI4MDYuMC4wLjA) 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 18th, 2024**. Last day add/swap a course is **Friday, January 19th, 2024**. The last day to withdraw from this course is **Tuesday, April 9th, 2024**.