

PSYC/NEUR 475		Drugs and Behaviour		Winter 2020	
<b>Instructor:</b>	Dr. Derya Sargin	<b>Lecture Location:</b>	SA 119		
<b>Phone:</b>	403-2204349	<b>Lecture Days/Time:</b>	MW 16:00-17:15		
<b>Email:</b>	derya.sargin@ucalgary.ca	<b>[Lab and/or TA info in remaining cells (delete if N/A)]</b>			
<b>Office:</b>	AD016				
<b>Office Hours:</b>	Email me to arrange a convenient time				

### 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 [psyc.ucalgary.ca/undergraduate/program-learning-outcomes](http://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	1	I
Explain how different drugs interact with nervous system function and influence behaviour	Exams	1	I
Outline the theories and mechanisms of drug addiction and its treatment	Exams	1	I
Evaluate methods and findings from behavioural pharmacological studies	Exams, assignment	1,2,5,7	C
Summarize and critically evaluate information regarding behavioural pharmacology	Exams, assignment	1,2,4,5,7	A
Demonstrate scientific writing skills	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, 7 = apply psychological knowledge and skills. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

### Prerequisites

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

### Required Text

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

## Assessment Methods

### Exams

Midterm Exam #1 (Chapters 1-6; February 10th):	25%
Midterm Exam #2 (Chapters 7-11; March 16th):	25%
Term Paper (due April 6 <sup>th</sup> )	20%
Final Exam (Chapters 12-15; April 24th):	30%

### Midterm Exam #1:

- A mix of short answer/multiple choice questions.
- Based on chapters 1-6 and any supplementary reading materials if provided.
- Worth 25% of the final grade.

### Midterm Exam #2:

- A mix of short answer/multiple choice questions.
- Based on chapters 7-11 and any supplementary reading materials if provided.
- Worth 25% of the final grade.
- Midterm Exam #2 will be administered online via D2L.

### Term paper:

- On a topic related to course material.
- Literature review on a topic of choice (Topic should be approved by the supervisor).
- Maximum of 10 double-spaced pages (excluding title page and references).
- Font style: 12-point Times New Roman.
- More information will be provided in class and posted on D2L.
- Should be submitted electronically through D2L by 4:00 pm on Monday, April 6.
- Without approved documentation, late assignments will be penalized 10% per day.
- Worth 20% of the final grade.

### Final Exam:

- 2 hrs. To be scheduled by the registrar.
- A mix of short answer/multiple choice questions.
- Based on chapters 12-15 and any supplementary reading materials if provided.
- Worth 30% of the final grade.
- Final Exam will be administered online via D2L within a period of 24 hours. It will start at 8:30 am on April 24<sup>th</sup> and will end at 8:30 am on April 25<sup>th</sup>.

## 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 (revise and add columns & rows as necessary)
M Jan 13- W Jan 22	Chapters 1-3 <i>Pharmacokinetics</i> <i>Pharmacodynamics</i> <i>Nervous System</i> <i>Neurotransmitters and Hormones</i>
R Jan 23	Last day to drop Winter Term half-courses.
F Jan 24	Last day to add or swap a course
M Jan 27- W Feb 5	Chapters 4-6 <i>Research Methods in Psychopharmacology</i> <i>Classes of Neurotransmitters</i>
M Feb 10	<b>Midterm #1</b>
W Feb 12	Chapters 7-8 <i>Classes of Neurotransmitters</i> <i>Drug Abuse and Addiction</i> <i>CNS depressants</i> <i>CNS stimulants</i>
M Feb 17	<i>Alberta Family Day</i>
Feb 16-22	<i>Term Break, No Classes (University if Open, Except on Alberta Family Day)</i>
M Feb 24- W Mar 11	Chapters 9-12 <i>Drug Abuse and Addiction</i> <i>CNS depressants</i> <i>CNS stimulants</i>
M Mar 16	<b>Midterm #2</b>
W Mar 18- W Apr 1	Chapters 13-18 <i>CNS stimulants</i> <i>Cannabinoids</i> <i>Hallucinogens and Psychedelics</i> <i>Anxiolytics</i> <i>Antidepressants</i>
M Apr 6	<b>Term Paper due</b>
M Apr 6- W Apr 8	Chapters 19-20 <i>Antipsychotics</i> <i>Neurodegenerative Diseases</i>
F Apr 10	<i>Good Friday, No Classes</i>

M Apr 13	<i>Non-Instructional Day, University Open</i>
W Apr 15	Review for Final Exam <i>Last day of classes, last day to withdraw from winter courses</i>
Apr. 18-29	<b>Final Exam Period</b>

## **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 A Test/Exam**

Makeup tests/exams are **NOT** an option without the approval of the instructor. A student may be asked to provide supporting documentation for an exemption/special request for a make-up exam <https://www.ucalgary.ca/pubs/calendar/current/n-1.html>. 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 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 <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/](http://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](http://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>

### **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.

### **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 [suyvaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)

**Student Union Faculty Rep.:** [arts1@su.ucalgary.ca](mailto:arts1@su.ucalgary.ca)

### **Important Dates**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **January 23, 2020**. Last day for registration/change of registration is **January 24, 2020**. The last day to withdraw from this course is **April 15, 2020**.