

**PSYC 375 - 1**
**Brain and Behaviour**
**Summer 2021**

<b>Instructor:</b>	Sarah Thackray	<b>Lecture Location:</b>	Online D2L
<b>Phone:</b>	403-220-3769	<b>Lecture Days/Time:</b>	Tuesday/Thursday 9:00-11:45am
<b>Email:</b>	sthackra@ucalgary.ca		
<b>Office:</b>	N/A		
<b>Office Hours:</b>	By appointment, email to arrange a time		

### Course Description

The task of behavioural neuroscience is to explain behavior in terms of the activities of the brain. This course explores a wide variety of topics that may include the neural basis of learning, memory, sensation, and thinking, as well as behavioural and neurodegenerative disorders that arise from nervous system malfunction.

### 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)
Describe the major structures of the brain and explain their general function.	Exams, quizzes	1	I
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Illustrate the relationship between nervous system dysfunction and disease states (Alzheimer's disease, depression, etc.).	Exams, quizzes	1	I
Compare and contrast the usefulness of different species, techniques, and levels of analysis for studying brain and behavior.	Exams, quizzes	1,2,6	C,I
Critically evaluate information presented in the media regarding brain and behavior.	Discussion posts	2,4,5,7	C,I

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

Lectures will be taught live via Zoom during each scheduled class as per the course schedule below and will be recorded and posted to D2L after class.

### Prerequisites

Psyc 200 – Principles of Psychology

### Recommended Text

*An Introduction to Brain and Behaviour* (6<sup>th</sup> Edition), B. Kolb, I.Q. Whishaw, and G.C. Teskey (2018), Worth Publishers. The text is available from the university bookstore and as an eBook.

The textbook is optional – assessment will be based on material covered in lectures. Associated readings will be provided on the lecture slides posted on D2L.

### Assessment Methods

<u>Assessment</u>	<u>Worth</u>	<u>Due</u>
Discussion Post	5%	Tuesday July 20 <sup>th</sup> at 11:59pm
Written Assignment	10%	Tuesday August 3 <sup>rd</sup> at 11:59pm
Quizzes	15%	See D2L calendar for due dates
Midterm 1	20%	Tuesday July 13 <sup>th</sup> at 10:30am Covers Lectures 1-3
Midterm 2	20%	Tuesday July 27 <sup>th</sup> at 10:30am Covers Lectures 4-7
Final Exam	30%	Final exam period Covers Lectures 1-12 with a focus on 8-12

#### Quizzes:

There will be several quizzes throughout the course. They will consist of 5-10 questions (multiple choice, multiple select, labeling, ordering, fill-in-the-blank, true/false) and are designed to be completed in 10 min. The first quiz will test your knowledge of the course outline; it is mandatory and will be worth 1%. It will be available on D2L for one week beginning at the end of the first class (**Tuesday June 29 at 12:00pm**).

The remainder of the quizzes will be available on D2L after every class, except the classes with midterms. Quizzes will open after the class they are associated with and be available for 1 week (see D2L calendar for full schedule). There will be 10 quizzes total; however, only the best 7 will count toward your final grade (2% each x 7 = 14%). More information will be provided in class and on D2L.

#### Exams:

There are three exams for this course; the two midterms will consist of multiple-choice questions and short answer questions (which may include multiple select, fill-in-the-blank, true/false, ordering,

labeling, matching, and/or written questions). Midterm #1 (covers Lectures 1-3) will open on **Tuesday, July 13<sup>th</sup> at 10:30am** and is worth 20% of your final grade. Midterm #2 (covers Lectures 4-7) is on **Tuesday July 27<sup>th</sup> at 10:30am** and will also be worth 20% of your final grade. Midterm #2 will NOT be cumulative. The midterm exams will be available on D2L for 24 hours starting at 10:30am on the scheduled dates. If any issues arise during completion of the midterms (ex., issues with technology, caregiving responsibilities, or distractions within a students' test-taking environment), contact me by email as soon as possible to discuss options, which may include (but are not limited to) additional time for completion of the assessment, or an alternative time to complete the assessment.

The final exam is scheduled by the registrar and is worth 30% of your final grade, it will include multiple-choice and short answer questions (which may include multiple select, fill-in-the-blank, true/false, ordering, labeling, matching, and/or written questions); the final exam will be cumulative but with a focus on material covered since midterm #2 (i.e., Lectures 8-12). The final exam will be available on D2L for 24 hours; once started you will have 3 hours to complete the exam (2 hours plus 50% as per Section G.5 in the Academic Calendar). All final exams must be submitted by the end time indicated in the registrar final exam schedule.

The written short answer questions on the midterm and final exams will be graded using a similar format. 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 and quizzes 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.**

Discussion Post:

You will select a discussion thread from the provided list on the D2L discussion boards and read the article that is linked in the post. The post should include a brief summary of the study, a brief critical analysis of the study/article and an explanation of how the study/article relates to something we have discussed in class. The response should be 250-350 words. Further details regarding the discussion posts will be provided in class and posted on D2L. Posts are due by 11:59pm on **Tuesday July 20** and is worth 5% of your final grade. Without instructor approval, late assignments will be penalized 10% per day, including weekends

Written Assignment:

Your goal is to find and read a current news article describing research about the brain, and compare it to the original source, as well as relate it back to our discussion on brain and behaviour in the classroom. Further details regarding the assignment will be provided in class and posted on D2L. The written assignment should be two pages in length (not including the reference section or title page) and formatted according to APA guidelines, it is due by 11:59 pm on **Tuesday August 3rd** (handed in via the assignment dropbox in D2L) and is worth 10% of your final grade. Without instructor approval, late

assignments will be penalized 10% per day, including weekends.

### 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 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	Important Dates	Topic	Due Date
M Jun 28	Summer term lectures begin.		
T Jun 29	First day of classes	1 - Introduction to Brain and Behaviour	
R Jul 1	CANADA DAY No Classes		
F Jul 2	Last day to drop classes without penalty and last day to add or swap classes.		
T Jul 6		2 - Neurons	
R Jul 8		3 - Neurons	
T Jul 13		4 - Vision and Movement	Midterm 1 opens at 10:30am Covers Lectures 1-3
R Jul 15		5 - Vision and Movement	
T Jul 20		6 - Communication, hearing, and language	Discussion post due by 11:59pm
R Jul 22		7 - Motivation, Reward, and Drugs	
T Jul 27		8 - Motivation, Reward, and Drugs	Midterm 2 opens at 10:30am Covers lectures 4-7
R Jul 29		9 - Emotion and Stress	
T Aug 3		10 - Emotion and Stress – cont'd Consciousness, Sleep and Circadian rhythms	Written Assignment due by 11:59pm
R Aug 5		11 - Consciousness, Sleep and Circadian rhythms – cont'd	
T Aug 10		12 - Learning and Memory	

W Aug 11	End of Summer Lectures and last day to withdraw from a course.		
Aug 13-17	Summer Final Exams		Final Exam covers lectures 1-12 with a focus on lectures 8-12

### 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 **August 11, 2021**.

### 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/m-1.html> . . Students who miss a test/exam have up to 24 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 24-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 1 week 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 June and August 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](mailto: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>

### **Important Dates**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Friday, July 2<sup>nd</sup>, 2021**. Last day for registration/change of registration is **Friday, July 2<sup>nd</sup>, 2021**. The last day to withdraw from this course is **Wednesday, August 11<sup>th</sup>, 2021**.