

**PSYC 375 - 01**
**Brain and Behaviour**
**Spring 2024**

<b>Instructor:</b>	Katelyn Horsley	<b>Lecture Location:</b>	AD 142
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<b>Office:</b>	AD - 09A		
<b>Office Hours:</b>	By appointment		

### Course Description

The purpose of this course is to study the neural basis of behaviour. The structural and functional anatomy of the nervous system will be explored, covering topics that include neuronal communication, nervous system development, research techniques and the scientific method, olfaction, sleep, circadian rhythms, drugs and behaviour, learning and memory, and neurological disorders.

### 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)
Identification of major brain structures and their general function	Quizzes, multiple-choice exams, and participation	1, 2	C, C
Demonstrate an understanding of the basics of neuronal communication (neurotransmitters and their receptors, the action potential, structure, and function of synapses)	Quizzes, multiple-choice exams, and participation	1, 2,	C, C
Compare and contrast research techniques in behavioural neuroscience	Quizzes, multiple-choice exams, and participation	1, 2	I, C
Demonstrate an understanding of the neural basis of sensation, motor behaviour, and higher cognitive processes such as learning and memory	Quizzes, multiple-choice exams, and participation	1, 2	I, C

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 the Métis Nation of Alberta (Districts 5 and 6).

### **Course Format**

This is an in-person class held on campus.

### **Prerequisites**

PSYC 200 – Principles of Psychology

### **Required Text**

An Introduction to Brain and Behaviour (7<sup>th</sup> Edition), B. Kolb, I.Q. Whishaw, and G.C. Teskey (2023), Worth Publishers. The text (or a digital version) is available from the university bookstore.

### **Assessment Methods**

**Participation:** Evaluated throughout the course. **2%**

**Midterm 1:** May 15<sup>th</sup> (In class). Covers lecture material from May 6<sup>th</sup> – 13<sup>th</sup> (or less). **25%**

**Quiz 1:** May 29<sup>th</sup> (In class). Cover lecture material from May 15<sup>th</sup> – 22<sup>nd</sup> (or less). **9%**

**Midterm 2:** June 5<sup>th</sup> (In class). Covers lecture material from May 15<sup>th</sup> – 29<sup>th</sup> (or less). **25%**

**Quiz 2:** June 17<sup>th</sup> (In class). Covers lecture material from June 5<sup>th</sup> – 10<sup>th</sup> (or less). **9%**

**Final Exam** (Cumulative): Registrar-scheduled. **30%**

**Participation** will be evaluated throughout the course via questions (multiple-choice, fill in the blank, short answer, True/False, matching, ordering, and labeling questions) that incorporate TopHat and group discussions within the lectures. Participation will be graded as follows:

<b>% of Questions Completed on TopHat</b>	<b>Participation Grade (%)</b>
<50	0
50	50
60	60
70	70
80	80
90	90
100	100

Quizzes/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.

### Quiz Procedures:

- Absolutely no electronic devices allowed at your seat or on your person.
- Writing implements, ID card, water bottles at desk only.
- All Quizzes will be multiple choice and based on the material covered in lecture. Quiz 1 and 2 will be held during regular class time.
- Quizzes are designed to be completed within 30-minutes.
- If a student arrives 15+ minutes late, the student will not be permitted to write the quiz and will receive a grade of 0.
- All students must stop writing when time is up or their test will not be marked, receiving a grade of zero.
- No student is permitted to leave within last 10 min of test to limit disruptions.

### Midterm/Exam Procedures:

- Absolutely no electronic devices allowed at your seat or on your person.
- Writing implements, ID card, water bottles at desk only.
- If a student arrives 15+ minutes late, the student will not be permitted to write the exam and will receive a grade of 0.
- All students must stop writing when time is up or their exam will not be marked, receiving a grade of zero.
- No student is permitted to leave within last 10 min of exam to limit disruptions.
- All exams will be multiple choice and based on the material covered in lecture. Midterms 1 and 2 will be held during regular class time.
- The registrar-scheduled final exam is cumulative.

Quizzes 1 and 2 will take place during the first 30 minutes of class. Lecture will resume following a 15-minute break. Midterms 1 and 2 will take place during the first 60 minutes of class. Lecture will resume following a 30-minute break.

Once approved by the course instructor, and at their discretion, alternative arrangements for missed assessments may be considered

<https://calendar.ucalgary.ca/pages/78a7b12034b64946b663e1cec5605d38>. Students may be asked for documentation <https://calendar.ucalgary.ca/uofcregs/university-regulations/additional-regulations>.

### 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/Quiz and Exam Dates	Readings
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M May 6	Spring term lectures begin.  The Origins of Brain and Behaviour The Scientific Method	Ch 1
W May 8	Functional Anatomy of the nervous system	Ch 2
R May 9	Last day to drop classes without penalty and last day to add or swap classes.	
M May 13	Structure and Function of Cells in the Nervous System System Neuronal Communication – Part 1	Ch 3 Ch 4
W May 15	<b>Midterm 1 (25%): 1 – 2:00 pm</b> <b>Break:</b> 2:00 – 2:30 pm <b>Lecture:</b> 2:30 – 3:45 pm  Neuronal Communication – Part 1	<b>Midterm 1 covers material from May 6 - 13</b>  Ch 4
M May 20	Victoria Day UNIVERSITY CLOSED	
W May 22	Neuronal Communication – Part 2 How do Drugs Influence the Brain and Behaviour  <b>*** ONLINE ASYNCHRONOUS LECTURE ***</b>	Ch 5 Ch 7
M May 27	How to Study Brain and Behaviour Brain Development	Ch 6 Ch 8
W May 29	<b>Quiz 1 (9%): 1 – 1:30 pm</b> <b>Break:</b> 1:30 – 1:45 pm <b>Lecture:</b> 1:45 – 3:45 pm  Brain Development Sensation and Perception – Olfaction	<b>Quiz 1 covers material from May 15 – 22</b>  Ch 8 Ch 9
M Jun 3	Movement Emotional and Motivated Behaviour	Ch 11 Ch 12
W Jun 5	<b>Midterm 2 (25%): 1 – 2:00 pm</b> <b>Break:</b> 2:00 – 2:30 pm <b>Lecture:</b> 2:30 – 3:45 pm  Learning and Memory	<b>Midterm 2 covers material from May 15 – 29</b>  Ch 14
M Jun 10	Learning and Memory Sleep and Biological Rhythms	Ch 14 Ch 13
W Jun 12	Sleep and Biological Rhythms Disorder of the Brain and Behaviour	Ch 13 Ch 16
M Jun 17	<b>Quiz 2 (9%): 1 – 1:30 pm</b> <b>Break:</b> 1:30 – 1:45 pm <b>Lecture:</b> 1:45 – 3:45 pm	<b>Quiz 2 covers material from June 5 – June 10</b>

	Disorders of the Brain and Behaviour	Ch 16
M Jun 17	End of Spring Lectures and last day to withdraw from a course.	
W Jun 19	Start of Final Exams	
S Jun 22	End of Final Exams	

**Course Credits for Research Participation 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://calendar.ucalgary.ca/pages/6fcc1fb40bb54524809685d7096c8b76>. 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://calendar.ucalgary.ca/pages/c53034e7579d4455815e37ce1c1f80da>.

### 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](mailto:psyugrd@ucalgary.ca)

### Reappraisal of Graded Term Work

<https://calendar.ucalgary.ca/pages/e31a7115dca740ec83579e946d4a4193>

### Reappraisal of Final Grade

<https://calendar.ucalgary.ca/pages/030b5a67a21048c7b4e6a5d167c628d8>

### 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 <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 <https://calendar.ucalgary.ca/uofcregs/university-regulations/integrity-conduct>

### **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\\*bcjlpn\\*\\_ga\\*OTY1ODc0Njg0LjE2NjkxNTA1NTM.\\*\\_ga\\_X4GN9Y4W7D\\*MTY3Nzc5MjM3Ni4xNy4xLjE2Nzc3OTI4MDYuMC4wLjA](https://library.ucalgary.ca/services/copyright?_gl=1*bcjlpn*_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, May 9<sup>th</sup>, 2024**. Last day add/swap a course is **Thursday, May 9<sup>th</sup>, 2024**. The last day to withdraw from this course is **Monday, June 17, 2024**.