

**PSYC 375 (LEC 2)**
**Brain and Behaviour**
**Fall 2022**

<b>Instructor:</b>	Dr. Nichole Flynn	<b>Lecture Location:</b>	ST 141
<b>Phone:</b>		<b>Lecture Days/Time:</b>	MWF 12:00-12:50
<b>Email:</b>	nichole.flynn@ucalgary.ca	<b>TA:</b>	TBA
<b>Office:</b>			
<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, sensory systems, thought, 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	Multiple choice exams, short answer questions	1	I
Demonstrate an understanding of the basics of neuronal communication (neurotransmitters and their receptors, the action potential, structure and function of synapses)	Multiple choice exams, short answer questions	1,2	I,C
Compare and contrast research techniques in behavioural neuroscience	Multiple choice exams, short answer questions	1,2	I, I
Demonstrate an understanding of the neural basis of sensation, motor behaviour, and higher cognitive processes such as learning and memory	Multiple choice exams, short answer questions	1	I
Critically evaluate information presented in the media regarding brain and behaviour.	Written Assignment	2,4,5,7	C,C,II

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 200 – Principles of Psychology

### **Required Text**

*An Introduction to Brain and Behaviour* (6<sup>th</sup> Edition), B. Kolb, I.Q. Whishaw, and G.C. Teskey (2019), Worth Publishers. The text is available from the university bookstore.

### **Assessment Methods**

<u>Midterm 1</u> : Oct. 7 (In class). Covers material from Sept. 7 – Sept 28.	25%
<u>Midterm 2</u> : Nov. 16 (In class). Covers material from Oct. 3 – Nov. 4	25%
<u>Written Assignment</u> : Due by 11pm on Oct. 24 (via D2L Dropbox)	10%
<u>Final Exam (Cumulative)</u> : Registrar-scheduled	40%

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.

### Exam Procedure:

- Belongings left at front of room (bags, books, etc.)
- 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 15 min of exam to limit disruptions

Midterms 1 and 2 will be multiple choice and held during regular class time. Only material covered in lecture will be tested. The cumulative final exam is registrar-scheduled, and will be predominantly multiple choice, with some short answer questions.

The written assignment should be two pages in length (not including the reference section or title page) and formatted according to APA guidelines. The assignment is worth 10% of your final grade and is **due by 11:00 pm on Oct 24<sup>th</sup>** (handed in via the assignment dropbox in D2L). 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 of brain and behaviour in the classroom. Further details regarding the assignment will be provided in class and posted on D2L. Late assignments will not be accepted without instructor approval.

### **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.

Page numbers for readings TBA.

Date	Topics Covered	Readings
Wed. Sept. 7	Course Introduction Origins of Brain and Behaviour	Ch. 1
Fri. Sept. 9	Origins of Brain and Behaviour The Scientific Method	Ch. 1 No readings
Mon. Sept. 12	Functional Anatomy of the Nervous System	Ch. 2
Wed. Sept. 14	Functional Anatomy of the Nervous System	Ch. 2
<b>Thurs. Sept. 15</b>	<b>Last day to drop a class without a penalty</b>	
Fri. Sept. 16	Structure and Function of Cells in the Nervous System <b>Last day to add or swap a course</b>	Ch. 3

Mon. Sept. 19	Structure and Function of Cells in the Nervous System	Ch. 3
Wed Sept. 21	Structure and Function of Cells in the Nervous System	Ch. 3
Fri. Sept. 23	Neuronal Communication  <b>Fee payment deadline for Fall Term full and half courses.</b>	Ch. 4, Ch. 5
Mon. Sept. 26	Neuronal Communication	Ch. 4, Ch. 5
Wed Sept. 28	Neuronal Communication	Ch. 4, Ch. 5
<b>Fri. Sept 30</b>	<b>NO CLASS. University closed.</b>	<b>National Day for Truth and Reconciliation</b>
Mon. Oct. 3	Discuss written assignment and formatting	
Wed. Oct. 5	Neuronal Communication	Ch. 4, Ch. 5
Fri. Oct. 7	<b>Midterm 1 (In class)</b>	<b>Includes material from Sept. 7 – Sept. 28</b>
<b>Mon. Oct. 10</b>	<b>NO CLASS. University closed.</b>	<b>Thanksgiving</b>
Wed. Oct. 12	How to study brain and behaviour	Ch. 7
Fri. Oct. 14	How to study brain and behaviour	Ch. 7
Mon. Oct. 17	Nervous System Development	Ch. 8
Wed. Oct. 19	Nervous System Development	Ch. 8
Fri. Oct. 21	Sensation, Perception and Vision	Ch. 9
Mon. Oct. 24	<b>Written Assignment Due by 11pm (via D2L dropbox)</b>  Sensation, Perception and Vision	Ch. 9
Wed. Oct 26	Audition, Music, and Speech	Ch. 10
Fri. Oct. 28	Audition, Music, and Speech	Ch. 10
Mon. Oct. 31	Movement	Ch. 11
Wed. Nov. 2	Movement	Ch. 11
Fri. Nov. 4	Emotional and Motivated Behaviour	Ch. 12
<b>Mon. Nov. 7</b>	<b>NO CLASS. University closed.</b>	<b>TERM BREAK</b>
<b>Wed. Nov. 9</b>	<b>NO CLASS. University closed.</b>	<b>TERM BREAK</b>
<b>Fri. Nov. 11</b>	<b>NO CLASS. University closed.</b>	<b>TERM BREAK</b>
Mon. Nov. 14	Emotional and Motivated Behaviour	Ch. 12
Wed. Nov. 16	<b>Midterm 2 (In class)</b>	<b>Includes material from Oct. 3 – Nov. 4</b>
Fri. Nov. 18	Sleep	Ch. 13
Mon. Nov. 21	Sleep	Ch. 13
Wed. Nov. 23	Learning and Memory	Ch. 14
Fri. Nov 25	Learning and Memory	Ch. 14
Mon. Nov. 28	Thought and Intelligence	Ch. 15
Wed Nov. 30	Thought and Intelligence	Ch. 15
Fri. Dec. 2	Psychiatric and Neurological Disorders	Ch. 16
Mon. Dec. 5	Psychiatric and Neurological Disorders	Ch. 16

Wed. Dec. 7	Final Exam Review.  Fall Term Lectures End.  <b>Last day to withdraw with permission from Fall Term half courses.</b>	
-------------	---	--

**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/](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/university-policies-procedures/accommodation-students-disabilities-procedure>.

### **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://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> ) 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, September 15, 2022**. Last day add/swap a course is **Friday, September 16, 2022**. The last day to withdraw from this course is **Wednesday, December 7, 2022**  
<https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html#fall2017>