

**PSYC 375 (LEC 02)**
**Brain and Behaviour**
**Fall 2019**

<b>Instructor:</b>	Dr. Simon Spanswick	<b>Lecture Location:</b>	ST 141
<b>Phone:</b>	403-220-4948	<b>Lecture Days/Time:</b>	MWF 12:00 – 12:50
<b>Email:</b>	<a href="mailto:scspansw@ucalgary.ca">scspansw@ucalgary.ca</a>	<b>TA:</b>	TBA
<b>Office:</b>	AD 032		
<b>Office Hours:</b>	Email me to arrange a convenient time		

### Course Description

The task of behavioural neuroscience is to explain behaviour 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.	Multiple choice exams, short answer questions	1	I
Outline the basics of neural communication (neurotransmitters, the action potential, etc.).	Multiple choice exams, short answer questions	1	I
Illustrate the relationship between nervous system dysfunction and disease states (Alzheimer's disease, depression, etc.).	Multiple choice exams, short answer questions	1	I
Compare and contrast the usefulness of different species, techniques, and levels of analysis for studying brain and behaviour.	Multiple choice exams, short answer questions	1,2,6	C, I
Critically evaluate information presented in the media regarding brain and behaviour.	Written Assignment	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, 7 = apply psychological knowledge and skills. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

### 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 (2016), Worth Publishers. The text is available from the university bookstore.

## Assessment Methods

Quizzes (4 total):	10%
Midterm #1 (Ch. 1-4; October 4 <sup>th</sup> )	25%
Midterm #2 (Ch. 5-7; November 1 <sup>st</sup> )	25%
Written Assignment (November 20 <sup>th</sup> )	10%
Final Exam (Ch. 10,11,13,14; TBA)	30%

There will be 4 quizzes spread throughout the course; each quiz will be worth 2.5% of your final grade (for a total of 10%). **The quizzes will test you on the lecture material that has been covered since the last assessment**, and are designed to keep you up to date with the course material. **Quizzes will be written at the beginning of lecture**, and will consist of approximately 3-4 short answer questions. Please ensure that you have a writing utensil with you at the beginning of each class.

There are three exams for this course; the two midterms will consist of multiple-choice questions. Questions can be drawn from lecture material and the assigned textbook chapters. Midterm #1 will be held on October 4<sup>th</sup> and is worth 25% of your final grade. Midterm #2 is scheduled for November 1<sup>st</sup> and will also be worth 25% of your final grade. **Midterm #2 will NOT be cumulative**. The final exam will be scheduled by the registrar and is worth 30% of your final grade, it will include multiple-choice and short answer questions; **the final exam will NOT be cumulative**.

Quizzes and the short answer questions on the final exam 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. Unless specified by your instructor, **no books, notes, computers, calculators, or cellular phones will be allowed during exam/quiz writing**.

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 11:00 pm on November 20<sup>th</sup>** (handed in via the assignment dropbox in D2L) and is worth 10% of your final grade. 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 papers will not be accepted without approved documentation.

## 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
F Sep 6	Introduction to the Course. What are the origins of brain and behaviour? (Chapter 1)
M Sep 9	What are the origins of brain and behaviour? (Chapter 1)
W Sep 11	What are the origins of brain and behaviour? (Chapter 1)
R Sep 12	<i>Last day to drop a class without a penalty</i>
F Sep 13	<i>Last day to add or swap a course</i> What is the nervous system's functional anatomy? (Chapter 1/2)
M Sep 16	What is the nervous system's functional anatomy? (Chapter 2)
W Sep 18	What is the nervous system's functional anatomy? (Chapter 2)

F Sep 20	<i>Fee payment deadline for Fall Term full and half courses.</i> <b>Quiz #1</b> , What is the nervous system's functional anatomy? (Chapter 2)
M Sep 23	What are the nervous system's functional units? (Chapter 3)
W Sep 25	What are the nervous system's functional units? (Chapter 3)
F Sep 27	What are the nervous system's functional units? (Chapter 3)
M Sep 30	How do neurons use electrical signals to transmit information? (Chapter 4)
W Oct 2	How do neurons use electrical signals to transmit information? (Chapter 4)
F Oct 4	<b>Midterm #1 (25% of final grade)</b>
M Oct 7	How do neurons use electrical signals to transmit information? (Chapter 4)
W Oct 9	How do neurons communicate and adapt? (Chapter 5)
F Oct 11	How do neurons communicate and adapt? (Chapter 5)
M Oct 14	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
W Oct 16	How do neurons communicate and adapt? (Chapter 5)
F Oct 18	<b>Quiz #2</b> , How do drugs and hormones influence brain and behaviour? (Chapter 6)
M Oct 21	How do drugs and hormones influence brain and behaviour? (Chapter 6)
W Oct 23	How do drugs and hormones influence brain and behaviour? (Chapter 6)
F Oct 25	How do we study the brain's structures and functions? (Chapter 7)
M Oct 28	How do we study the brain's structures and functions? (Chapter 7)
W Oct 30	How do we study the brain's structures and functions? (Chapter 7)
F Nov 1	<b>Midterm #2 (25% of final grade)</b>
M Nov 4	How do we hear, speak, and make music? (Chapter 10)
W Nov 6	How do we hear, speak, and make music? (Chapter 10)
F Nov 8	How do we hear, speak, and make music? (Chapter 10)
Nov 10-16	Term Break No Classes
M Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
M Nov 18	How does the nervous system respond to stimulation and produce movement? (Chapter 11)
W Nov 20	<b>Written Assignment Due (10% of final grade)</b> How does the nervous system respond to stimulation and produce movement? (Chapter 11)
F Nov 22	How does the nervous system respond to stimulation and produce movement? (Chapter 11)
M Nov 25	<b>Quiz #3</b> , Why do we sleep and dream? (Chapter 13)
W Nov 27	Why do we sleep and dream? (Chapter 13)
F Nov 29	Why do we sleep and dream? (Chapter 13)
M Dec 2	How do we learn and remember? (Chapter 14)
W Dec 4	How do we learn and remember? (Chapter 14)
F Dec 6	Fall Term Lectures End. <i>Last day to withdraw with permission from Fall Term half courses.</i> <b>Quiz #4</b> , How do we learn and remember? (Chapter 14)
Dec 9-19	<b>Fall Final Exam Period</b>

Reappraisal of Graded Term Work <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work reappraised as follows. The student shall discuss the work with the instructor **within ten business days** of being notified about the mark or of the item's return to the class. If not satisfied, the student shall take the matter to the head of the department offering the course **within 2 business days of receiving the decision from the instructor**, who will arrange for a reappraisal of the work **within the next ten business days**. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. Students in faculties without a departmental structure should take the matter to the dean, or designate, of the faculty offering the course. The result of that reappraisal will be given to the student in writing along with information about appealing the reappraisal.

*The reappraisal of graded term work may cause the grade to be raised, lowered or to remain the same. There is no limit to the number of pieces of graded work that a student may request be reappraised, however a single piece of work may only be reappraised once.*

**Reappraisal of Final Grade** <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

In the reappraisal of a final grade, the only element that will be considered is the grading of the final assessment that makes up the final mark (e.g., final examination, final project, final paper). An exception may occur when the Instructor of Record evaluates a piece of graded term work at the end of the term; that grade may also be considered in a reappraisal of final grade.

A student seeking a reappraisal of a final grade should first attempt to review the final assessment with the department or faculty offering the course. After which, the student shall obtain a Reappraisal of Final Grade form from [ucalgary.ca/registrar](http://ucalgary.ca/registrar) (under Student Forms). The student must indicate exactly what error was made in marking the final assessment and/or in computing the final grade. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected.

Students requesting a reappraisal of a final grade must submit their request by the following dates:

Fall Term – March 1

Winter Term – June 30

Spring Intersession – August 15

Summer Term – October 15

Supplemental Examinations: 30 calendar days from the date the examination was written

For information relating to Law, Veterinary Medicine and the Cumming School of Medicine (MD) courses, please refer to the faculty section.

The reappraisal form shall be submitted to Enrolment Services who will forward it to the department head or dean of the faculty offering the course. Reappraisals of final grades are dealt with by the head of the academic unit in consultation with members of academic staff. Normally, the department/faculty will respond to a reappraisal request within thirty calendar days of its initiation. After the reappraisal is completed, the department shall return the form to the Registrar's Office who shall inform the student in writing of the decision.

Students should be aware that the grade being reappraised may be raised, lowered or remain the same. A student may request a reappraisal of final for a maximum of two courses in one academic year (September 1 – August 31).

### **Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

### **Academic Accommodations**

The student accommodation policy can be found at: [ucalgary.ca/access/accommodations/policy](http://ucalgary.ca/access/accommodations/policy). Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities [ucalgary.ca/policies/files/policies/student-accommodation-policy](http://ucalgary.ca/policies/files/policies/student-accommodation-policy). Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the instructor.

### **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).**

### **Freedom of Information and Protection of Privacy (FOIP) Act**

The FOIP legislation disallows the practice of having student's retrieve tests and assignments from a public place. Therefore, tests and assignments may be returned to students during class/lab, or during office hours, or will be made available only for viewing during exam review sessions scheduled by the Department. Tests and assignments will be shredded after one year. Instructors should take care to not link students' names with their grades, UCIDs, or other FOIP-sensitive information.

### **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.

### **Wellness and Mental Health Resources**

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website (<http://www.ucalgary.ca/mentalhealth/>).

### **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 **Friday, December 6, 2019**.

### **Evacuation Assembly Point**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at

<http://www.ucalgary.ca/emergencyplan/assemblypoints>

Please check this website and note the nearest assembly point for this course.

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

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

### **Student Ombudsman's Office**

The Office of the Student Ombudsmen provides independent, impartial and confidential support for students who require assistance and advice in addressing issues and concerns related to their academic careers. The office can be reached at 403-220-6420 or [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca)

(<http://www.ucalgary.ca/provost/students/ombuds>)

### **Safewalk**

The safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.

Call 403-220-5333.

### **Important Dates**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Thursday, September 12, 2019**. Last day add/swap a course is **Friday, September 13, 2019**. The last day to withdraw from this course is **Friday, December 6, 2019**.