

**PSYC 375**
**Brain and Behaviour**
**Winter 2017**

<b>Instructor:</b>	Dr. Simon Spanswick	<b>Lecture Location:</b>	ENE 243
<b>Phone:</b>	403-220-4948	<b>Lecture Days/Time:</b>	TR 14:00 – 15:15
<b>Email:</b>	scspansw@ucalgary.ca		
<b>Office:</b>	A032		
<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	PLO(s)	Level(s)
List the major structures of the brain and know their general function.	1	I
Understand the basics of neural communication (neurotransmitters, the action potential, etc.).	1	I
Explain the role of the nervous system in the production of behaviour.	1	I
Understand the relationship between nervous system dysfunction and disease states (Alzheimer's disease, depression, etc.).	1	I
Compare and contrast the usefulness of different species, techniques, and levels of analysis for studying brain and behaviour.	1, 2, 6	C, I
Critically evaluate information presented in the media regarding brain and behaviour.	2, 4, 5	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* (5<sup>th</sup> Edition), B. Kolb, I.Q. Whishaw, and G.C. Teskey (2016), Worth Publishers. The text is available from the university bookstore.

## Evaluation

Quizzes (4 total):	10%
Midterm #1 (Ch. 1-4; February 7 <sup>th</sup> )	25%
Midterm #2 (Ch. 5-7; March 14 <sup>th</sup> )	25%
Written Assignment (March 23 <sup>rd</sup> )	10%
Final Exam (Ch. 8-14; scheduled by the registrar):	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 done at the beginning of lecture**, and will consist of 1 to 3 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 February 7<sup>th</sup> and is worth 25% of your final grade. Midterm #2 is scheduled for March 14<sup>th</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 of 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 (double-spaced, 12 point Times New Roman font with 1" margins), **it is due by 11:00 pm on March 23<sup>rd</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 on 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 appropriate documentation.

## Department of Psychology Grade Distribution Policy

The distribution of grades in Psychology courses (the percentage of A grades, B grades, etc.) will be similar to the distribution of grades in other courses in the Faculty of Arts. The Department monitors the grade distributions of 200-, 300-, and 400-level courses in the Faculty to ensure that the grade distributions in Psychology courses are comparable. Based on these reviews, students can expect that 1) up to 30% of grades in 200- and 300-level psychology courses will be "A" grades (A+, A, and A-), and 2) up to 40% of grades 400-level psychology courses will be "A" grades.

## 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
T Jan 10	Introduction to the Course. What is the Brain and Where Does it Come From? (Chapter 1)
R Jan 12	What is the Brain and Where Does it Come From? Nervous System Function (Chapter 1/2)
T Jan 17	Nervous System Function (Chapter 2)
R Jan 19	Nervous System Function/Functional Units of the Nervous System (Chapter 2/3)
F Jan 20	<i>Last day to drop Winter Term half-courses.</i>
M Jan 23	<i>Last day to add or swap Winter Term half courses. Last day for change of registration from audit to credit or credit to audit.</i>
T Jan 24	<b>Quiz #1</b> , Functional Units of the Nervous System (Chapter 3)
R Jan 26	Functional Units of the Nervous System (Chapter 3)

T Jan 31	Functional Units of the Nervous System/How do Neurons Communicate? (Chapter 3/4)
R Feb 2	How do Neurons Communicate? (Chapter 4)
T Feb 7	<b>Midterm #1 (25% of final grade)</b>
R Feb 9	How do Neurons Communicate/Neurotransmitters (Chapter 4/5)
T Feb 14	Neurotransmitters (Chapter 5)
R Feb 16	Neurotransmitters (Chapter 5)
Feb 19-26	Reading Week. No lectures. University open (except Family Day). Alberta Family Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
M Feb 20	Alberta Family Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
T Feb 28	<b>Quiz #2, Drugs and Hormones (Chapter 6)</b>
R Mar 2	Drugs and Hormones (Chapter 6)
T Mar 7	Drugs and Hormones (Chapter 6)
R Mar 9	Drugs and Hormones/Studying Brain and Behaviour (Chapter 6/7)
T Mar 14	<b>Midterm #2 (25% of final grade)</b>
R Mar 16	Studying Brain and Behaviour (Chapter 7)
T Mar 21	Development (Chapter 8)
R Mar 23	<b>Written Assignment Due, (10% of final grade) Sensation and Perception (Chapter 9/10)</b>
T Mar 28	<b>Quiz #3, Sensation and Perception/Movement (Chapter 9/10/11)</b>
R Mar 30	Movement/Sleep (Chapter 11/13)
T Apr 4	Sleep/Learning and Memory (Chapter 13/14)
R Apr 6	Learning and Memory (Chapter 14)
T Apr 11	<b>Quiz #4, Learning and Memory (Chapter 14)</b>
W Apr 12	<i>Winter Term Lectures End.</i> <i>Last day to withdraw from full courses and Winter Term half courses.</i>
F Apr 14	Good Friday. No Classes. University Closed
Apr 15-26	Winter Term Final Examinations.

### Reappraisal of Grades

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class; no reappraisal of term work is permitted after the 15 days. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

### **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 Accommodation**

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\\_0.pdf](http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf) .

Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than 14 days after the start of this course.

### **Absence From A Test/Exam**

Makeup tests/exams are **NOT** an option without an official University medical excuse (see the University Calendar). A completed Physician/Counselor Statement will be required to confirm absence from a test/exam for health reasons; the student will be required to pay any cost associated with this Statement. Students who miss a test/exam have up to 48 hours to contact the instructor and to schedule a makeup test/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. Except in extenuating circumstances (documented by an official University medical excuse), 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-review-and-makeup-exams>. 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 [http://www.ucalgary.ca/registrar/exams/deferred\\_final](http://www.ucalgary.ca/registrar/exams/deferred_final). Under no **circumstances** will this be accommodated by the department.

### **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

[http://www.ucalgary.ca/registrar/exams/deferred\\_final](http://www.ucalgary.ca/registrar/exams/deferred_final).  
accommodated by the department.

Under no circumstances will this be

### **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.

### **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 **April 12, 2017**.

### **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 [suypaca@ucalgary.ca](mailto:suypaca@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 **January 20, 2017**. Last day for registration/change of registration is **January 23, 2017**. The last day to withdraw from this course is **April 12, 2017**.