

Psychology 375 – Brain and Behaviour

Winter Session 2007

Instructor: Dr. Evelyn Field Lecture Location: KNB 132

Phone: 220-4497 (Lab) Lecture T/Th 8:00 - 9:15

Days/Time:

Email: efield@ucalgary.ca

Office: TBA
Office Hours: TBA

Course Description and Goals

Understanding the organization and complexity of our nervous systems or 'brain', and how it is influenced by the environment within which it develops, is one of the final frontiers of science. In this course we will examine our current understanding of how the brain is structurally organized, how the cells within the brain communicate with one another, and how the components of our central and peripheral nervous systems work together to generate behaviour. We will also explore how the generation of behaviour can be altered by experience, maturation or injury of the nervous system. This will be done within the context of behaviors such as aggression, sex, learning and memory, sensory perception and motor control

Required Text

The text for this class can be obtained at the University Bookstore.

Biological Psychology: An Introduction to Behavioral and Cognitive Neuroscience Rosenzweig, Breedlove and Watson (4th Edition) Sinauer Associates Inc.

In addition to the text there will be one required reading per week. The reading list will be available the first day of class. The material presented in these articles will be relevant for questions that will be on the midterm and final exams. All articles are from peer reviewed journals and are available via e-journals at the University of Calgary Library website.

Evaluation

Evaluation of performance in this course will consist of three multiple choice exams. The two midterm exams will be written in class. The final exam will be written according to the final exam schedule. The exams will not be comprehensive. It is possible however, that material on the second and third exams will rely on knowledge gained in the previous sections of the course. Each exam will be worth 33.3% of your final grade. No electronic aides will be permitted during exams.

The exam dates and chapters covered are:

Midterm Exam I - February 1 - Chapters 1-6

Midterm Exam II - March 8 - Chapters 7-11, 13, 14

Final Exam - During Final Exam Period - Chapters 12, 15-19

One week prior to an exam a study guide will be handed out in class. This study guide, while not exhaustive, will highlight the material that will be covered in each exam.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	В	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 up or down to determine a final grade when the average of term work and final exam is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (i.e., 89.5% will be rounded up to 90%; 89.4% will be rounded down to 89%, etc.).

Lecture Schedule

DATE	
Jan. 2	Block Week (Jan. 2-6)
Jan. 8	Winter Session lectures begin.
Jan. 9	Introductory Lecture - Chapter 1
Jan. 11	Neuroanatomy - Chapter 2
Jan. 16	Neurophysiology - Chapter 3
Jan. 18	Chemical Basis of Behavior - Chapter 4
Jan. 19	Last day for Winter registration and change of registration.
Jan. 23	Chemical Basis of Behavior - Chapter 4 Cont. Hormones - Chapter 5
Jan. 25	Hormones - Chapter 5 Cont Study Guide for Chapters 1-6
Jan. 30	Evolution of the CNS - Chapter 6
Feb. 1	Midterm Exam I - Chapters 1-6 (33%)
Feb. 6	Development of the CNS - Chapter 7
Feb. 8	General Principles of Sensory Processing - Chapter 8
Feb. 13	Hearing, Vestibular Perception, Taste and Smell - Chapter 9
Feb. 15	Vision Chapter 10
Feb. 18-25	No classes – Reading Week
Feb. 27	Motor Control and Plasticity - Chapter 11
March 1	Homeostasis - Chapter 13 - Study Guide for Chapters 7-11, 13, 14
March 6	Biological Rhythms - Chapter 14
March 8	Midterm Exam II - Chapters 7-11, 13, 14 (33%)
March 13	Sex: Evolutionary, Hormonal, and Neural Bases - Chapter 12
March 15	Sex: Evolutionary, Hormonal, and Neural Bases - Chapter 12 Cont.
March 20	Emotions, Aggression and Stress - Chapter 15
March 22	Emotions, Aggression and Stress - Chapter 15 Cont.
March 27	Psychopathology: Biological Basis of Behavioral Disorders - Chapter 16
March 29	Psychopathology: Biological Basis of Behavioral Disorders - Chapter 16 Cont.
April 3	Learning and Memory: Biological Perspectives - Chapter 17
April 5	Chapter 17 Cont. Learning and Memory: Neural Mechanisms - Chapter 18
April 10	Learning and Memory: Neural Mechanisms - Chapter 18 Cont. Study Guide
	for Chapters 12, 15-19
April 12	Language and Cognition - Chapter 19
	Last day to allocate Research Credits to Winter Session half courses and full
	courses.
April 13	Last day of lectures for Winter Session. Last day to withdraw from full courses

	and Winter Session half courses.
April 16-26	Winter Session Final Examinations - Final Exam (33%) Chapters 12, 15-19

University of Calgary Curriculum Objectives

This course addresses the following core competencies:

- Critical and creative thinking
- Organizing information
- Abstract reasoning

With the following course characteristics:

- Considerable class discussion; students are prompted to think critically about course material
- Test questions in which students are required to address theoretical issues
- Integration of current research findings
- Weekly discussion of a contemporary research finding relevant to the topic of discussion
- All readings are published research articles
- Class discussions centering on methodological and conceptual issues in research studies

Reappraisal of Grades

A student who feels that a piece of graded term work (exam) has been unfairly graded, may have the work re-graded as follows: 1) the student shall discuss the work with the instructor within fifteen days of being notified about the mark or of the item's return to the class. 2) 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 fifteen days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. 3) 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 fifteen 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 exam 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

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and **have not** registered with the Disability Resource Centre, please contact their office at 220-8237. 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 fourteen (14) days after the start of this course.

Absence from a Test

Make-up exams are **NOT** an option without an official University medical excuse (see the University Calendar). You must contact the instructor <u>before</u> the scheduled examination or you will have forfeited any right to make up the exam. At the instructor's discretion, a make-up exam may differ significantly (in form and/or content) from a regularly scheduled exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup exam is written within two (2) weeks of the missed exam.

A completed Physician/Counselor Statement will be required to confirm absence from a test for health reasons. The student will be required to pay any cost associated with the Physician Counselor Statement.

Student Organizations

Psychology students may wish to join the Psychology Undergraduate Students' Association (PSYCHS). They are located in the Administration building, room 170 or may be contacted at 220-5567.

Student Union VP Academic: Phone: 220-3911 <u>suvpaca@ucalgary.ca</u>

Student Union Faculty Rep.: Phone: 220-3913 <u>socialscirep@su.ucalgary.ca</u>

Important Dates

The last day to drop this course and **still receive a fee refund** is January 19, 2007. The last day to withdraw from this course is April 13, 2007.