

## Psychology 475

## Behavioural Pharmacology

Spring 2013

**Instructor:** Dr. Shadna Rana  
**Phone:** 403-220-4497  
**Email:** rans@ucalgary.ca  
**Office:** A157  
**Office Hours:** By appointment

**Lecture Location:** SA 119  
**Lecture Days/Time:** MWF 8:30 – 10:20

**Course Description and Goals**

Behavioural pharmacology, also known as psychopharmacology, is an interdisciplinary field that studies the effects of drugs on behavior. The course aims to provide a basic introduction to neuroanatomy and neuropharmacology, as well as introduce classes of recreational drugs, and psychotherapeutic drugs used for the treatment of neuropsychiatric disorders.

**Prerequisites**

PSYC 312 – Experimental Design and Quantitative Methods for Psychology  
PSYC 375 – Brain and Behaviour

**Required Text**

- *Psychopharmacology: Drugs, the Brain and Behavior (2<sup>nd</sup> ed.)*, Jerrold S. Meyer and Linda F. Quenzer (2013), Sinauer Associates, Inc.
- Textbook is available at the University Bookstore and online vendors.

**Evaluation****1) Midterm: 35%****Wednesday June 5**

- Short/long answers, multiple choice
- Test material covered in Chapters 1- 14 (exclude Chapter 4) and related lecture notes

**2) Term paper: 25%****Due: Wednesday June 26**

- A list of topics will be available to choose from related to course material. No student should share the same topic.
- Page limit: 14 – 20 pages (not including references)
- Format: 12 point, times new roman font, 2" margins, double spaced

- Graded on two criteria:
  - *Presentation (25%)* – includes grammar, organization, clarity of writing and flow of paper
  - *Content (75%)* – includes accuracy of information presented, completeness of review of relevant literature, use of current research (i.e., most references should be based on research conducted in the last 2-3 years, plus seminal papers), etc.
- Papers are due at the end of class on June 26. Hard copy and electronic copy must be submitted.
- Penalty for late submission: 10% per day on paper grade

**3) Oral Presentation: 10%**

**June 19 – 26**

- 10-min talk related to your term paper topic
- Note: Talk date and time will be determined in class

**4) Final exam: 30%**

**Scheduled by Registrar**

- Short/long answers, multiple choice
- Test material covered in Chapters 1-3, 17-21 and related lecture notes

**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/ Due Date/Readings
W May 15	Basics of the nervous system (Chapter 2) Neurotransmitter and hormones (Chapter 3)
F May 17	Neurotransmitter and hormones (cont’d) Overview of pharmacology (Chapter 1)
M May 20	<i>Victoria Day. No Lecture. University Closed.</i>
W May 22	<i>Last day for registration/registration change. Last day to drop a course with tuition refund.</i> Classes of neurotransmitters: Acetylcholine, glutamate, GABA (Chapters 7 - 8)
F May 24	Classes of neurotransmitters: Catecholamines and serotonin (Chapters 5 - 6) <i>Fee payment deadline</i>

M May 27	Introduction to drug abuse (Chapter 9) <b>**Topic for Paper – approval deadline**</b>
W May 29	Stimulants and hallucinogens (Chapters 12 - 13)
F May 31	Cannabinoids (Chapter 14)
M June 3	Central nervous system depressants: Alcohol and opiates (Chapters 10 - 11) <i>Guest Lecturer: Dr. Shaona Acharjee</i>
<b>W June 5</b>	<b>MIDTERM EXAM</b>
F June 7	Environmental neurotoxins and endocrine disruptors (Chapter 17)
M June 10	Anxiety Disorders (Chapter 18)
W June 12	Affective Disorders (Chapter 19)
F June 14	Schizophrenia (Chapter 20)
M June 17	Neurodegenerative Disorders (Chapter 21)
W June 19	Presentations
F June 21	Presentations
M June 24	Presentations
<b>W June 26</b>	Presentations, <b>**Term Paper Due**</b> <i>Spring term lectures end. Last day to withdraw from full session Spring Term courses</i>
<b>June 27-29</b>	<b>FINAL EXAM (Scheduled by the Registrar)</b>

### 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**

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 403-220-8237. 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 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 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.

### **Travel During Exams**

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December, April, or Spring/Summer examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered except under exceptional circumstances. Students are advised to wait until the final examination schedule is posted before making any travel arrangements.

### **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 via the Department Office (Admin 275), 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 (2) 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 **June 26<sup>th</sup>, 2013**.

### **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 170 and may be contacted at 403-220-5567.

**Student Union VP Academic:** Phone: 403-220-3911 [suyaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)

**Student Union Faculty Rep.:** Phone: 403-220-3913 [socialscirep@su.ucalgary.ca](mailto:socialscirep@su.ucalgary.ca)

### **Important Dates**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** the last day for registration/change of registration is **May 22, 2013**. The last day to withdraw from this course is **June 26, 2013**.