

# Syllabus

## Drugs and Behavior

PSYC 414/514 - Fall 2008

Time: 1:00 - 1:50 pm (Monday, Wednesday, Friday)

Class Room: UOM 106

**Instructor:** Dr. XT Wang

**Office:** SDU Room 311

**Email:** [xtwang@usd.edu](mailto:xtwang@usd.edu)

**Class web page:** <http://www.usd.edu/~xtwang/psycpharm>

**Office Hours** 12:00 - 12:50 pm, MWF

**Phone:** 677-5183

The course (1) provides the neurophysiological and biochemical basis for understanding the behavioral effects of psychoactive drugs, (2) discusses the principles of psychopharmacological treatment of mental disorders, and (3) introduces common methodologies used in the studies of drugs and behavior.

**Textbook:** Jerrold Meyer & Linda Quenzer (2005). Psychopharmacology. Sinauer

**Lecture Outlines:** Lecture outlines will be made available on the course webpage for download to facilitate taking notes in class. Power point files used in lectures will NOT be for circulation.

### Course Topics and Exam Schedule:

- 1) Basic principles and Methodologies of Psychopharmacology
- 2) Pharmacokinetics and Drug Tolerance
- 3) Neurons, Nervous Systems, Neuroconduction and Neurotransmission  
Readings: Chapters 1, 2, 3 and 8  
Exam 1: Wednesday, September 24 (1:00 – 1:50 pm)
- 4) Catecholamines and Acetylcholine
- 5) Classification of Psychoactive Drugs\*
- 6) Behavioral Stimulants and Tobacco  
Readings: Chapters 5, 6, 11, and 12  
Exam 2: Wednesday, October 22 (1:00 – 1:50 pm)
- 7) Sedative-Hypnotics and Anxiolytics
- 8) Antipsychotics and Schizophrenia
- 9) Hallucinogens  
Readings: Chapters 4, 5, 6, 11, 17, and 18  
Exam 3: Wednesday, November 14 (1:00 – 1:50 pm)
- 10) Endogenous and Exogenous Opiates (Narcotics) and Antagonists
- 11) Serotonin and Antidepressants
- 12) Steroid Hormones and Birth Control Pills  
Readings: Chapters 10, 13, 14 and 15  
Exam 4: Thursday, December 18 (3:00 – 4:00 pm)

\*: Not in a particular chapter of the textbook.

The course topics and schedule listed above represents the approximate order in which the topics will be discussed. The coverage and order of the lectures may be subject to minor adjustment.

### **Exams and Grading Procedure:**

**1. Attendance and Participation.** Attendance in class is required. Your class participation score will be based on your attendance and participation in class activities. You should read the lecture notes and textbook chapters before class and be prepared to discuss the materials. Lectures and other in-class discussion/activities will not be provided after each class is over.

**2. Exams.** Four regular exams are required. The exams will be largely restricted to the material covered in the corresponding class lectures, the text chapters, and in-class activities.

A missed exam will be given a zero score. A make-up exam can be arranged if a valid written excuse is provided. The make-up exam should be taken no later than five days after the missed exam is administered, except for the last exam.

**3. Written Assignment.** Issues related to drug-use policies and other health related topics (see below) are selected for homework assignments and in-class debates. Your written assignment should include your arguments concerning the topic assigned to you based on research findings and statistical data from at least 3 published papers. You can also select your own topic related to drug effects and mental health

Your written review of the studies on the assigned topic should use a MS Word format with a 12 point-font and double space. The review should include a title page, a 5 to 7-page long text, and a reference list.

Your review paper should be submitted as an email attachment to [Hanako.Shishido@usd.edu](mailto:Hanako.Shishido@usd.edu).

The file name of this MS Word document should include your name (last name first), topic number (i.e., 1, 2, 3, or 4) and Psy414/514 (e.g., **SmithJohnPsy414.doc**). The written assignments will be graded as pass or fail. Late submission will result in point reduction.

The following are the topics and due dates for the written assignment.

Topic 1: Legalization of some psychoactive drugs

Due by Monday, September 29

Topic 2: Genetic Engineering and nanotechnology

Due by Monday, October 6

Topic 3: Human cloning

Due by Monday, October 20

Topic 4: Longevity drugs and genetic control of aging

Due by Monday, October 27

You will be assigned a topic from the above list and assigned as either an advocate or an opponent of the topic in discussion. If you choose to discuss a self-selected topic, you still need to submit the paper by the assigned due day.

**4. Presentation.** Each of you will have no more than 5 minutes to present your written review in class in a debate format where advocates and opponents of a topic take turns. The presentations and debate/discussions will be scheduled throughout the semester after the first due day.

**5. Exam Scores and Grade Distribution.** All exam scores will be recorded as percentage of correct, making each exam worth 100 points. The average of the four best exam scores will account for 90 percent of your overall score.

Your course performance will be evaluated based on the following formula:

Four Exams	80%
Written Paper and Presentation	10%
Presentation and Debate	5 %
Attendance and Participation	5%

Your final grade will be determined according to the following distribution scale.

<u>Overall Score</u>	<u>Final Grade</u>
≥ 90	A
80 - 89	B
65 - 79	C
50 - 64	D
< 50	F

**6. Graduate Paper and Presentation.** For the graduate students who take this course as PSYC 514, an additional paper (about 15 pages long, APA style) is required. Each of you will select a topic from the textbook for your paper.

A complete version of the paper should be submitted electronically to [xtwang@usd.edu](mailto:xtwang@usd.edu) on Monday, December 1. Late submission will result in point reduction. A hardcopy of the paper should be handed in on the same date.

The graduate paper and the four exams will evenly contribute to 80 percent of your total score, and the written assignment, its presentation, and attendance/participation will account for the other 20 percent of your overall score.

### **Freedom in Learning**

Under Board of Regents and University policy student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should contact Associate Dean Kurt Hackemer to initiate a review of the evaluation.”

### **Policy on Academic Dishonesty**

The College of Arts and Sciences considers plagiarism, cheating, and other forms of academic dishonesty inimical to the objectives of higher education. The College supports the imposition of penalties on students who engage in academic dishonesty, as defined in the “Conduct” section of the University of South Dakota Student Handbook.

No credit can be given for a dishonest assignment. At the discretion of the instructor, a student caught engaging in any form of academic dishonesty may be:

- a. Given a zero for that assignment.
- b. Allowed to rewrite and resubmit the assignment for credit.
- c. Assigned a reduced grade for the course.
- d. Dropped from the course.
- e. Failed in the course.

**Disability Policy**

Any student who feels s/he may need academic accommodations or access accommodations based on the impact of a documented disability should contact and register with Disability Services during the first week of class. Disability Services is the official office to assist students through the process of disability verification and coordination of appropriate and reasonable accommodations. Students currently registered with Disability Services must obtain a new accommodation memo each semester.