

**Psychology 2530: DRUGS AND BEHAVIOR (Section 001)**  
**Syllabus for Fall 2007**

**Instructor:** Dr. Christopher Newland  
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**Office Hours:** MW 1:30 – 3:00 or by appointment

**Class Time:** TTH 11:00 AM – 12:15 PM  
**Location:** Lowder 33  
**Final Exam:** TBA

**GTA:** Erin Pesek  
**Office:** Thach 210 or Biological Research Facility, Mell Street  
**Phone:** 844-5658 (Thach 210) 844-3295 (BRF)  
**Email:** pesekef@auburn.edu  
**Office Hours:** Tuesday 12:30-1:30 PM, Wednesday 1:00-2:00 PM, or by appointment

**Text book:** McKim, W. (2003). *Drugs and behavior: An introduction to behavioral pharmacology* (5<sup>th</sup> Ed.). Upper Saddle River, NJ: Prentice Hall.

**Supplemental Readings:** I will draw on readings from the published literature to supplement class lectures occasionally. These will be posted on Blackboard.

**Course Correspondence:** The best way to contact me is through e-mail. From time to time, I will correspond with the class via e-mail. Auburn University recognizes e-mail as an official communication tool within the university. Therefore, students are responsible for checking their *university e-mail accounts* on a regular basis and for any information communicated through this medium.

**Course Objectives:** This course is an introduction to behavioral pharmacology, which focuses on the interactions between drugs and behavior. In order to understand the effects of drugs, we must first understand the action of drugs. Thus, the first portion of this course briefly reviews drug actions, including pharmacokinetics, tolerance, dependence, neurotransmitters, the neuron, and the nervous system. Our focus then turns to the different classes of drugs, ranging from the commonly used drugs, such as alcohol, to the less commonly used drugs, such as antipsychotics. By the end of this course, I hope that each of you can

- Compare and contrast the different categories of behaviorally active drugs based on their behavioral, physiological, and social influences
- Understanding what we mean by abuse potential, and how this plays out in the science of addictive disorders, and its clinical management.
- Predict the behavioral and physiological effects of a drug based on its mechanism of action
- Identify the mechanism of action for a drug based on its physiological and behavioral effects
- Understand the treatments associated with various drug classes
- Understand how the concept of the receptor forms our understanding of drug action.

**Blackboard:** There is a Blackboard page for this course. You can access it by opening your internet browser to the AU Web site and following the following directions:

Students → Blackboard → AU Access Blackboard → Log in → Click on Drugs and Behavior

## GRADED ACTIVITIES

**Pop Quizzes:** Reading the assigned material and paying attention in class is important for succeeding in this course. To help you succeed I will administer pop quizzes throughout the semester. They will be short tests based on the assigned reading and are designed to help you understand the material as it is being covered in class. Plan on having a pop test when we start a new chapter. A pop quiz may be given at any time during the class—at the beginning or mid-way through. If you have read the chapter then you should do well on the pop tests, so they will also afford an opportunity for you to earn a good grade. As you are reading and as a study tactic, take notes on concepts that are stressed in the material. Also, write down any questions that you may have while reading and bring them up for discussion the next day.

The cumulative grade on pop tests will count as an exam. We will drop the lowest two before calculating this. Pop tests cannot be made up. If you miss more than two *and* you have a documented university-approved excuse then the pop test grade will be a simple average of the pop-tests that you have taken.

**Experimental Credit:** You may earn 0.5 percentage points (out of 100) toward your final grade for each hour that you participate as a volunteer subject in psychological research for up to 5 hours (2.5 points total). These points will be added to your final grade. Participation in psychological research will be coordinated through the Department of Psychology's Research Participation site: <https://auburn.sona-systems.com>. Details about using the system are posted on the department's website (click on Psychological Research in the Undergraduate Students section) and on the extra credit board located on the 2nd floor of Thach Hall. Students *must* use the Sona system when participating in the research. Be sure to ask the researchers before participating in their study if they are using the Sona system. Students cannot use credit earned in another course for this course. You will find an information sheet posted on blackboard on how to get started in the Sona system.

**Exams:** There will be five in-class exams and one cumulative final exam over the course of the semester.

Each exam is worth 100 points. At the end of the semester the lowest exam, not counting the final, will be dropped before calculating your class average. The final will be worth 200 points.

Structure: The exams will be a combination of multiple-choice, fill-in-the-blank, and essay questions.

### Grading:

Pop Quizzes	12 @ 10 points	100	(drop lowest 2)
Exams	5 @ 100 points	400	(drop lowest)
<u>Final Exam</u>	1 @ 200 points	<u>200</u>	(cannot be dropped)
<b>Total Points</b>		<b>700</b>	

### Grade                      Minimum Points Required

A	(90%)	630
B	(80%)	560
C	(70%)	490
D	(60%)	420
F	(Less than 60%)	below 420

## IMPORTANT COURSE POLICIES

**Make-Up Policy:** Make-up work will be administered according to the policy outlined in the Tiger Cub and articulated below. **Contact Erin Pesek for arrangements.** This policy pertains to exams and any other work missed due to a *university-approved* absence:

“Arrangement to make up missed major examinations (e.g. hour exams, mid-term exams) due to properly authorized excused absences shall be initiated by the student within one week from the end of the period of the excused absence. Normally, a make-up exam shall occur within two weeks from the time that the student initiates arrangements for it. Instructors are encouraged to refrain from giving make-up examinations during the last three days prior to the first day of final examinations. The format of make-up exams and opportunities for students to make up work other than major examinations are at the discretion of the instructor whose make-up policies should be stated in writing at the beginning of the term.”

This policy, along with a list of university-approved absences, is provided in the online version of the Tiger Cub at <http://web6.duc.auburn.edu/tigercub/rules/section1.pdf>.

Make-ups for non-university-approved absences will be given at the discretion of the instructor. Work made up under these circumstances will automatically lose 10% of the total number of points available for the activity. If you fail to show up for **ANY** scheduled make-up activity without notifying me in advance (including make-ups due to university-approved absences), you will receive zero points for that assignment.

You must provide a written, signed excuse for missing class if you want to make up missed work for full credit. This excuse must be turned in to Erin Pesek before you will be allowed to make up any missed assignments.

**Quizzes: Pop quizzes cannot be made up. See section on pop quizzes above.**

The last day to make up an exam will be **6 December 2007**. Make-ups will not be given past this date and zero points will be awarded for the exam.

**Class Attendance:** Because the material presented during the class is important for your understanding, attending class is a must. You cannot take a pop test if you are not in class. We will take role.

**Students with Disabilities:** Please let me know immediately if you have an AU recognized disability. I will make the necessary accommodations as soon as possible.

**Academic Dishonesty:** Academic dishonesty of any kind will not be tolerated. This includes, but is not limited to, copying answers from someone else's work. All incidents of academic dishonesty will be dealt with according to the rules outlined in the Tiger Cub (see <http://web6.duc.auburn.edu/tigercub/rules/section4.pdf>). **If you have any question as to whether an activity constitutes academic dishonesty, please discuss it with me immediately.**

**On a personal note...** Courses like Drugs and Behavior can touch on personal issues, and may make you more sensitive to difficulties in your own life. If you feel like you could benefit from personal counseling, contact the Student Counseling Services (844-5123) or the Psychological Services Center (844-4889). For specific feedback regarding your use of alcohol and other drugs, contact the Health Behavior Assessment Center (HBAC; 844-4823).

**CLASS CALENDAR**

**\*\*\*This syllabus may be modified at any time during the course of the semester. Any changes will be announced in class and posted on Blackboard\*\*\***

Week	Date	Topic
1	8/16	Introduction; syllabus review Ch 1: Basic pharmacology
2	8/21	Ch. 1 cont'd
	8/23	Ch. 2: Research Design
3	8/28	Ch. 2 cont'd
	8/30	Ch. 3: Tolerance, etc.
4	9/4	Chapter 3 cont'd
	9/6	<b>EXAM 1: CHAPTERS 1-3</b>
5	9/11	Ch. 4: Neurophysiology, etc.
	9/13	Ch. 4 cont'd.
6	9/18	Ch. 4 cont'd.; Ch. 5: Dependence, Addiction, and Self-Administration
	9/20	Ch. 5 cont'd.
7	9/25	<b>EXAM 2: CHAPTERS 4-5 (TO "BEHAVIORAL ECONOMICS, PAGE 119) &amp; SUBSTANCE ABUSE</b>
	9/27	Behavioral economics
8	10/2	Behavioral economics cont'd;
	10/4	Ch. 6: Alcohol
9	10/9	Ch. 6 cont'd.
	10/11	Ch. 7: Tranquilizers & sedative hypnotics
10	10/16	Ch. 7 cont'd.
	10/18	<b>EXAM 3: CHAPTER 5, FROM PAGE 119, CHAPTERS 6, 7</b>
11	10/23	Ch. 11: Psychomotor stimulants
	10/25	Ch. 11 cont'd; Reinforcing abstinence in cocaine abusers. (Silverman et al., 1998)
12	10/30	Reinforcing...cont'd.

	11/1	Ch. 9: Nicotine
13	11/6	Ch. 12: Opiates
	11/8	<b>EXAM 4: CHAPTERS 9, 11, 12, REINFORCING ABSTINENCE</b>
14	11/13	Ch. 13: Antipsychotic drugs
	11/15	Ch. 13 cont'd.
15	11/20	<b>NO CLASS – THANKSGIVING BREAK</b>
	11/22	<b>NO CLASS – THANKSGIVING BREAK</b>
16	11/27	Ch. 14: Antidepressants and mood stabilizers.
	11/29	Behavioral Toxicology - Lead. (Needleman, 1990; Dietrich et al., 2001).
17	12/4	<b>EXAM 5: CHAPTERS 13, 14, BEHAVIORAL TOXICOLOGY</b>
	12/6	Ethical considerations: Use of humans and animals in research.
	12/8	<b>CUMULATIVE FINAL EXAM TBA (Lowder 33)</b>

Please note that this schedule is tentative. While I will try to stay on schedule, weather events permitting, if I do get off schedule, tests may be postponed, but will not rescheduled for an earlier date.

Dietrich, K. N., Ris, M. D., Succop, P. A., Berger, O. G., & Bornschein, R. L. (2001). Early exposure to lead and juvenile delinquency. *Neurotoxicology and Teratology* 23. 511 – 518.

Needleman, H. L. (1990). The future challenge of lead toxicity. *Environmental Health Perspectives*, 89. 85-89.

Silverman, K., Wong, C. J., Umbricht-Schneiter, A., Montoya, I. D., Schuster, C. R. & Preston K. L. (1998). Broad beneficial effects of cocaine abstinence reinforcement among methadone patients. *Journal of Consulting and Clinical Psychology*, 66(5). 811-824.