

# PSY 390 - Neuropsychopharmacology

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## 1 Books

*Background Reading:* A textbook from a course on neuroscience or physiological psychology.

*Required for paper preparation:* American Psychological Association. (2001). *Publication manual of the American Psychological Association*: 5th Edition. Washington, DC: Author.

Additional readings to be assigned.

## 2 Prerequisites

[Introductory Psychology and at least one course that examines the function of the nervous system] OR [Introduction to Neuroscience]

## 3 Overview

In Neuropsychopharmacology, we will examine the chemical substrates of behavior, and the influences of various drugs on the nervous system and on behavior.

Topic	Reading	Week
Introduction		1
Pharmacology	West	1
Behavioral Measures		2
Neurophysiology & Synaptic Transmission (review)	Smith	3-4
		EXAM 1
Anxiolytics		5-6
Psychostimulants & Reward	Wise	6-7
		EXAM 2
Opiates	Pert	8-9
Hallucinogens		10-11
		EXAM 3
Antidepressants		13 - 14
Antipsychotics		15
Drug Legislation		16
		EXAM

This study requires an understanding of pharmacological principles, behavioral procedures, neurophysiology, and synaptic transmission; we will begin by reviewing these topics. Then we will examine the major classes of psychoactive drugs from the standpoint of their effects on neural activity and on behavior. A tentative schedule for the course is provided below.

## 4 Topics & Reading List

See the Table. Please note that exam dates are tentative and might change.

## 5 Grading

**Examinations:** Your grade in the course will be based on four examinations, one term paper, and class discussion including a discussion that you lead. The exams will consist of short answer essay questions, and will be non-cumulative; that is, each exam will cover explicitly only the material presented in the readings and in lecture since the preceding exam. However, the mastery of later material will often require an understanding of material covered earlier in the semester, so please do not assume that because

an exam has occurred the previous material is unimportant.

**Make-up Exams:** I understand that the unexpected does happen, and that sometimes attendance at exams is not possible. Therefore, you may make-up ONE exam this semester, if you let me know why this is necessary within 24 hours of the original exam date. You may not make-up more than one exam, so additional missed exams will receive a grade of 0.

**Term Paper:** The term paper will be a 12 - 15 page review of the literature in some area of drug effects on the nervous system and on behavior, and will be written according to the style guidelines of the American Psychological Association (APA). The topic of the paper may be chosen from a list of suggested topics, or may be of your own design, but all topics must be approved by me in advance! You will receive an additional handout concerning the paper in the near future.

The paper must be turned in to me or to the Psychology Department secretary in Olin 321 before the date that appears below. Late papers will be penalized at a rate of 10 points per day. NOTE: This late penalty is carved in stone and no exceptions will be made. A paper turned in between 12:01 pm Thursday and noon Friday will lose 10 points. A paper turned in between 12:01 pm Friday and noon Saturday will lose 20 points, etc. Finish your papers early!

**Class Discussion:** Each of you will be responsible for leading the class discussion at least once during the semester. Your job will entail finding (with my guidance) an appropriate article or two for the class to read, and then guiding the discussion of those articles. The articles should relate to the topic scheduled for that week of the semester. Ideally you will choose to lead the discussion on a topic related to your term paper, so that your preparation for the discussion meshes with your writing of the paper.

**Course Grade:** Your course grade will be based on a weighted mean of your class discussion and your grades on the exams and paper, computed as follows:

Grade = (.10 x Paper) + (.10 x Discussion) + (.10 x lowest test) + (.2333 x Other Tests),

thus the paper is worth 10%, the class discussion 10%, your worst test 10%, and each of the other tests 23.333% of your grade. The letter grade is then de-

termined as follows:

Weighted average	Grade
90 - 100	4.0
87 - 89.9	3.7
83 - 86.9	3.3
80 - 82.9	3.0
77 - 79.9	2.7
73 - 76.9	2.3
70 - 72.9	2.0
67 - 69.9	1.7
63 - 66.9	1.3
60 - 62.9	1.0
< 60	0

## 6 Attendance

Attendance at class is expected. I will often lecture, but we will equally often discuss articles and ideas. As you will learn from the first exam, material presented in class is important, and material presented in class will not always appear in the readings. If you miss class, it is your responsibility to find out what you missed, both in terms of lecture material and announcements about exams, assignments, etc.

## 7 A Final Note

If you are having difficulties with the course, need to discuss your paper, or just want to talk in more detail about the material that we are covering, please see me during my office hours. If you cannot be here during those hours make an appointment with me, or just track me down. I am on campus every day, often including weekends, and will find time to meet with you.