

Psychology 404
Psychological Application of Drugs
Sample Syllabus

Text: Handbook of Clinical Psychopharmacology for Therapists, J. Preston, J.H. O'Neal and M.C. Talaga (2004), fourth or fifth edition.

Prerequisites: This course requires a general background in psychology and preferably a course in abnormal psychology. Knowledge of pharmacology would be helpful, but is certainly not essential.

Prospectus: The purpose of Psychology 404 is to provide an overview of (1) basic principles of clinical psychopharmacology, (2) clinical trials, (3) clinical efficacy, pharmacology, and side effects of drugs used in the treatment of schizophrenia, depression, bipolar disorder, obesity, sexual disorders, attention deficit hyperactivity disorder, anxiety, obsessive compulsive disorder, Parkinson's Disease, and Alzheimer's Disease, (4) issues related to drugs and special populations, and (5) issues related to the use of herbal treatments in clinical psychopharmacology.

Course Goals: By the end of the semester, you should have an understanding of (1) the basic principles of drug action, (2) how drugs produce their behavioral and physiological effects, (3) the process by which drugs go from the laboratory to the market, (4) the importance of placebo controls and dose-response analyses when evaluating psychopharmacological research, (5) the clinical efficacy of psychopharmacological agents, and (6) how to provide a cost / benefit analysis of psychopharmacological agents.

Tests: Each of three tests will be composed of a mixture of fill in the blanks, multiple choice, definitions and short answer essays. All tests will be worth 100 points (bonus points will be given for exceptional answers, thus the total number of points available could exceed 100). Tests will be given on the average of once every 5 weeks, with all tests announced 2 weeks in advance. For the first two exams, requests for a regrade must be submitted prior to the next scheduled class meeting. The final test, a non-comprehensive final, will be given at the time scheduled by the University. When the class period preceding an exam is canceled due to unforeseen circumstances, the exam will be rescheduled to the next class meeting.

Makeup Policy: Only under extenuating circumstances will makeup exams be given. In addition, such exams will be given only when I am informed prior to the start of the exam (via email, phone, or in person) as to the excuse. Otherwise, a grade of 0 (or F) will be assigned.

Research Articles / Discussion Topics / Opinion Papers: For selected topics, current research articles will be made available on Blackboard. Be prepared to discuss these articles during the assigned class meeting as the findings will have implications for the topic being covered. In addition, on three occasions during the semester the class period will be devoted to a discussion of a selected topic. These topics include the use of monies from pharmaceutical firms to fund the Food and Drug Administration, the good and bad of direct drug-to-consumer advertising, and why our society prefers taking medications as opposed to more behaviorally oriented interventions. Information on Blackboard concerning these topics (article or PowerPoint presentation) will be made available. Attendance and active participation at these class meetings are critical for earning participation points (see below). In addition, a 4-5 page (typed, double-spaced) research/opinion paper is due on the day scheduled for each of the discussions. Each of the papers is worth 45 points (10 points subtracted for each day late) and should detail your opinion on the discussion topic. Grading will be based, in part, on how well you defend, research, and articulate your opinion. Researching these issues, either on the web or through scientific journals, is essential for formulating opinions and providing information supporting your views. Please note that under no circumstances should you email me a copy of the paper.

Total Participation/Attendance Grade: It is my expectation that students will take an active part in the direction of the class and in discussing articles and topics presented in class. Therefore, it is essential that all students participate in class and attend as many class meetings as possible. The total participation grade consists of an attendance component and an in-class participation component. These two components combine to equal 65 total points. The breakdown for this grade is as follows. In order to earn your active participation grade, you must consistently participate in class discussions and answer questions. Students are also expected to ask me questions about the lectures to let me know that they have been doing the assigned readings and that they are

making an effort to learn the material. As you are expected to attend every class, the attendance portion of the grade will reflect the number of classes in which you failed to attend with an excessive number of absences resulting in a significant drop in the total attendance portion of your grade. Conversely, exceptional attendance and exceptional participation will earn bonus points. It is important to note, however, that attending all class meetings without participating in class could still have a negative impact on your final grade. This is a very strict policy and therefore I advise you to choose your absences wisely.

Blackboard: Articles and PowerPoint presentations (lectures) used in class will be made available.

Honor Code: University policy will be followed with respect to cheating, plagiarism, and related matters; that is, I adhere to UNC's Honor Code system. If you have any questions about the Honor Code, please consult with someone in either the Office of the Student Attorney General or the Office of the Dean of Students.

Grading: Grades will be assigned according to the percentage of total possible points earned.

<u>Grade</u>	<u>Total Possible Points Earned (%)</u>	
A	470 - 500	(94 - 100)
A-	450 - 469	(90 - 93)
B+	435 - 449	(87 - 89)
B	420 - 434	(84 - 86)
B-	400 - 419	(80 - 83)
C+	385 - 399	(77 - 79)
C	370 - 384	(74 - 76)
C-	350 - 369	(70 - 73)
D+	335 - 349	(67 - 69)
D	300 - 334	(60 - 66)
F	0 - 299	(0 - 59)

General Course Issues: These are certain issues which should help the course run smoothly and help you plan your work. First, class attendance is required and both class attendance and class participation will clearly improve your chances of obtaining an exceptional grade. Conversely, since questions on the exams are taken directly from material covered in the class and much of the material covered in class is not contained in the book, the failure to attend class will clearly decrease your chances of obtaining a passing grade. Second, as class attendance will be taken at the beginning of class, arriving late for class will be counted as a class absence.

Topics and Readings

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| 1. Introduction to Drugs | Assignment: chapter 1 |
| 2. Pharmacology I: Pharmacokinetics | Assignment: chapter 3, 4, appendix A |
| 3. Pharmacology I: Pharmacokinetics | Assignment: chapter 3, 4, appendix A |
| 4. Pharmacology II: Chronic Drug Therapy | Assignment: chapter 3, 4 appendix A |
| 5. Drug Tolerance and Sensitization | Assignment: chapter 3, 4 appendix A |
| 6. Neuropharmacology | Assignment: chapter 3, 4 appendix A |
| 7. Clinical Trials | Assignment: chapter 5 |
| 8. Generic Drugs and Bioequivalence | Assignment: chapter 5 |
| <u>Discussion Topic</u> | <u>Funding of the FDA by Pharmaceutical monies</u>
See Blackboard for information
#1 Opinion paper is due |

9. Test I

10. Antipsychotics I: Conventionals/Atypicals	Assignment: chapters 10, 18 <u>Article for discussion:</u> see Blackboard
11. Antipsychotics II: Pediatric Population	Assignment: chapters 10, 18
12. Antidepressants I: Tricyclics / MAOIs	Assignment: chapters 6, 15
13. Antidepressants II: SSRIs	Assignment: chapters 6, 15
14. Antidepressants: Pediatric Population	Assignment: chapters 6, 15 <u>Article for discussion:</u> see Blackboard
15. Mood Stabilizers: Bipolar Disorders	Assignment: chapters 7, 16
16. <u>Discussion Topic</u>	<u>Direct Drug-to-Consumer advertising</u> See Blackboard for information #2 Opinion paper is due Assignment: none
17. Anti-obesity Agents I: Basic Issues/Drugs	Assignment: none
18. Anti-obesity Agents II: Surgical Options	Assignment: none
19. Test II	
20. Alzheimer's Disease	Assignment: none
21. Attention Deficit Hyperactivity Disorder I	<u>Article for discussion:</u> see Blackboard
22. Attention Deficit Hyperactivity Disorder II	Assignment: none
23. Antianxiety Agents	Assignment: chapters 8, 17
24. Parkinson's Disease: Pharmacotherapy	Assignment: none
25. Parkinson's Disease: Surgical Options	Assignment: none
26. Obsessive Compulsive Disorder	Assignment: chapter 9
27. <u>Discussion Topic</u>	<u>Why drugs and not behavioral interventions</u> See Blackboard for information #3 Opinion paper is due
28. Drugs for Sexual Dysfunction	Assignment: none
Test III (Administered during final's week)	