

PSYC 3346
Drugs of Abuse and Behavior – Summer II 2016
11:40am-1:50pm, M-F
Room: Education 301

Professor: Katherine M. Serafine, Ph.D.
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Office: 216B Psychology Building
Office Hours: Wednesday 9-11am *please email/call for an appointment

Required Text:

Meyer & Quenzer (2013). *Psychopharmacology (2nd ed.)*. Sunderland, MA: Sinauer Associates.
Additional supplemental reading will sometimes be provided (via blackboard) and will be accompanied by an email notification.

Course Description:

This course provides a basic understanding of how drugs produce their behavioral effects. Emphasis will be placed on drugs of abuse and the principles by which these substances modify and regulate behavior in the brain. The course begins with an introduction of pharmacological and neural principles that regulate neural transmission in the brain. We also cover current theories of drug addiction and how these theories apply to different abuse substances. **Prerequisite: Psych 1301 with a "C" or better.**

Learning Objectives:

The goal of the course is to provide an overview of the neuroscientific basis of drugs of abuse as well as drugs used for the treatment of clinical disorders. **This course is taught with a heavy focus on the biological underpinnings of behavior.** As such, special attention will be given to the pharmacodynamics principles of drugs. Economic, governmental, social and cultural perspectives will also be considered where appropriate. Students should leave the class with an understanding of how drugs impact the brain and behavior. Students will also be challenged to think critically about controversial topics regarding legalization and criminalization of drugs in the United States. Lastly, students will engage in a literature search, and write a final paper based on peer-reviewed sources supporting their stance on one of these controversial topics.

Accommodations and Support Services:

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

Blackboard:

Everything you need for this class can be found on Blackboard. Please check Blackboard for announcements at least once per week. Blackboard is also where you will find quizzes and other supplemental materials relevant to the course.

Attendance:

To do well in this course, you need to attend every class session and listen actively. Material presented in lecture during class will not be available at any other time. If you miss a class, you will need to make arrangements to get notes from another student; do not ask the instructor or TA for notes.

Grade Points: up to 400 total

Exams: 300 pts

- There will be 3 exams, each worth 100 points during the course of the semester (dates below).
- Combinations of multiple choice, short answer and/or essay, matching and labeling or fill in the blank questions will be included.
- The majority of the exam will be focused on lecture material, but 10-20% will be from the book (and most of the book questions will be *very similar* to the blackboard quizzes).
- There are typically also 1-2 extra credit questions on each exam. These are extra, and if you get them wrong you will not be penalized, but answering them correctly will get you full or partial extra credit points. They are typically more difficult than the rest of the exam questions.
- **No make-up exams will be administered under any other circumstances, no matter how compelling.**

Discussion: 20 pts

- During the final exam time (August 1, 1-3:45pm) we will have an in class series of debates based on your final paper topics. **Attendance and participation are both required to earn full points.**

Assignments: 30 pts

- Paper topic (5pts). An email no later than midnight on July 11th selecting your paper topic must be uploaded via Turnitin on blackboard.
- References (5pts). 2 peer-reviewed journal article references for your final paper must be uploaded (PDF, not just a link – you need to show me that you have been able to download and read it) uploaded via Turnitin on blackboard no later than midnight on July 18th.
- Rough Draft (20pts). A rough draft of your paper (format as described below) must be turned in for credit. I will provide feedback to you, and if you follow that feedback you should be able to earn all the remaining 50 points when you turn in the paper. If you ignore my comments, you will likely miss some points on the final paper. This is to encourage you to be proactive and to allow me to help you shape the paper so that you turn in your best possible effort. Rough draft is due no later than midnight on Monday July 25th. I will get feedback to you no later than 5pm on Friday July 29th. That will give you all weekend to revise and turn in the final draft by the July 31st deadline (see below). That should be plenty of time, since you will have already written the majority of it by the 25th (and you should in theory just have editing left to do before the 31st). If you want more time to work on the final version, send me your rough draft early, and I will do my best to get it back to you within 5 business days.

Paper: 50 pts

- Due by midnight on Sunday July 31st, uploaded via Turnitin on blackboard.
- Paper must adhere to the following guidelines:
 - 3-5 pages in length
 - Double spaced
 - Times new roman font
 - Size 12 font
 - 1" margins
 - No title, pictures, page numbers, headers, footers or other "space fluffers" allowed. Simply write, and save the file as YourlastnameandFirstInitial.doc or .docx. No need to write your name on the document anywhere, as I prefer to grade blinded to who you are so just save the file with your name, and first initial and that will be sufficient.
 - You must properly cite your sources. You are encouraged to use only peer-reviewed sources from pubmed.gov. Suspected plagiarism will not be tolerated.
- Paper topic options (choose one).

- Should We Encourage Needle Exchange Programs for Intravenous Drug Abusers?
- Should Drug and Alcohol Dependence Be Considered a Brain Disease?
- Is Alcoholics Anonymous the Best Strategy for the Treatment of Alcoholism?
- Should Stimulant Drugs Be Used to Treat Attention Deficit Disorder (ADD) in Children?
- Should Marijuana Be Legally Available as a Medicine?
- Paper will be graded according to these guidelines:
 - Format 5pts (follow the instructions above)
 - Organization 10pts
 - Strength of argument 25pts
 - Conclusion 10pts

Extra Credit: up to 10 pts possible

- Quizzes (5pts)
 - A total of at least 10 (maybe up to 12) quizzes will be available on blackboard throughout the semester. These will consist of multiple choice and/or true false questions. *Quiz questions will come from the reading assignments NOT from the lecture.* They will only be available during the week corresponding to that reading assignment (so if you are supposed to read chapter 2 by the end of the first week, the chapter 2 quiz will expire on Friday of the first week of classes, etc). The quizzes will expire at midnight the night before the class corresponding to that reading assignment.
 - Quiz bonus points will be calculated as follows: (points earned divided by points possible) multiplied by 5.
 - The quiz total for each individual will be added to your total grade once the other 400 points have been completed (e.g., if you get all 400 and still earn 5 quiz points, your final grade will be 405/400.
- Video Assignment (5 pts)
 - At some point during the semester I will either show a video, or give you the link to watch a video on your own time. You will be able to earn up to 5 points for attending class that day (2 pts) and up to an additional 3 points on 3 extra credit questions that will show up on the exam that falls after the video is shown or after the link is provided. These points will be calculated using the following equation: (points earned divided by five) multiplied by 5. That number will also be added to your final grade after the other 400 points have been completed. This is in ADDITION to any extra credit that might already be on the exams, as intended to be a grade booster!

Final Grade Calculation: Final grades will be calculated as follows (points earned + extra credit/400) x 100.

Grading scale:

A = 90.0-100.0%

B = 80.0-89.9%

C = 70.0-79.9%

D = 60-69.9%

F < 60.0%

If you have any questions or disputes regarding grades, you must raise these in writing within ten days of the grade being released. Grades will only be changed in cases of administrative error. Note that there is already information about extra credit written above. Do not ask for additional extra credit opportunities beyond what is provided on the syllabus.

Academic Dishonesty:

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student or possessing unauthorized materials during a test. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another person's as one's own. And, collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be taken seriously and will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

Class Schedule

Lecture title bold, reading (to be completed prior to class time italicized)

07/05	Course overview Intro to pharmacology, the brain and behavior Pharmacokinetics and Pharmacodynamics <i>Chapter 1: Principles of Pharmacology</i> <i>Chapter 2: Structure and Function of the Nervous System</i>
07/06	The neuron The brain & nervous system <i>Chapter 2: Structure and Function of the Nervous System</i>
07/07	The action potential Neurochemistry: level of the synapse <i>Chapter 3: Chemical Signaling by Neurotransmitters and Hormones</i>
07/08	Neurochemistry: level of the synapse (continued) Acetylcholine <i>Chapter 3: Chemical Signaling by Neurotransmitters and Hormones</i> <i>Chapter 7: Acetylcholine</i>
07/11	Monoamines <i>Chapter 5: Catecholamines</i> <i>Chapter 6: Serotonin</i>
07/12	Major excitatory and inhibitory neurotransmitter systems <i>Chapter 8: Glutamate and GABA</i>
07/13	In Class Review Session (11:40am - 12:25pm)*optional attendance Exam 1 (12:30 - 1:50pm) <i>Chapter 1-3, 5-8</i>
07/14	Methods of research Addiction & the biology of reward <i>Chapter 4: Methods of Research in Psychopharmacology</i> <i>Chapter 9: Drug Abuse & Addiction</i>

- 07/15 **Addiction & the biology of reward (continued)**
Models of drug abuse
Chapter 9: Drug Abuse & Addiction
Supplemental reading (will be posted on blackboard)
- 07/18 **The stimulants: cocaine & amphetamine**
Chapter 12: Psychomotor stimulants: cocaine and the amphetamines
- 07/19 **The narcotics: opioids and pain**
Chapter 11: The Opioids
- 07/20 **The legal drugs: alcohol, nicotine and caffeine**
Chapter 10: Alcohol
Chapter 13: Nicotine and Caffeine
- 07/21 **The cannabinoids and the hallucinogens**
Chapter 14: Marijuana and the Cannabinoids
Chapter 15: Hallucinogens, PCP, and Ketamine
- 07/22 In Class Review Session (11:40am - 12:25pm)*optional attendance
Exam 2 (12:30 - 1:50pm)
Chapter 9-15
- 07/25 **Introduction to pharmacotherapeutics**
Schizophrenia
Chapter 20: Schizophrenia: Antipsychotic Drugs
- 07/26 **Affective disorders: depression and bipolar disorder**
Chapter 19: Affective Disorders: Antidepressants and Mood Stabilizers
- 07/27 **Anxiety disorders**
Chapter 18: Anxiety Disorders: Sedative-Hypnotic and Anxiolytic Drugs
- 07/28 **Sleep disorders and treatments**
Supplemental readings (posted on blackboard)
- 07/29 In Class Review Session (11:40am - 12:25pm)*optional attendance
Exam 3 (12:30 - 1:50pm)
Chapter 18-21 and supplemental readings
- 08/01 **FINAL EXAM** in class debate – paper topics. You cannot make this up if you miss it because it requires in class participation.
SPECIAL TIME: 1:00-3:45pm

****Please note: The syllabus is subject to change during the semester. Please make sure I have your best email contact information, to insure you always have the most up to date version of the syllabus. I will also always post the most recent version to blackboard.**

Classroom Courtesy

Please adhere to the following:

1. **Don't come late.** If you will be more than 10 minutes late to class, do not come that day. Late arrivals are disruptive. Please make sure your schedule doesn't prevent you from being on time to class.
2. **Don't leave early.** Plan to stay seated quietly for the entire class period—packing up early prevents others from hearing lecture and announcements. I generally end class at least 2-3 minutes before the official end time of the class, so you will have ample time to get where you are going. If your schedule prevents you from staying until the end of class, please change your schedule.
3. **No phones.** Do not use your cell phone or text messaging device during class— please turn these devices off.
4. **No surfing.** You are welcome to bring your laptop/iPad to take notes, but not for any other purpose. Using laptops to play movies or surf the web is extremely distracting to other students.
5. **No side conversations.** While I highly encourage students to ask questions during class, please refrain from side conversations not related to the larger class discussion. This is very disruptive—students frequently complain that they cannot hear the lecture/films because of other students' conversations.

If you engage in these activities, you are preventing your fellow students from learning. As such, you will be asked to leave the classroom. Don't let other students distract from your learning experience—if you see others engaging in these activities, please ask them to stop.