PSYC 3346
Drugs of Abuse and Behavior – Fall 2018
10:30-11:50am, MW
Room: Liberal Arts 108

**Professor:** Katherine Serafine, Ph.D.
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Office Hours: (Email for time)

**TA:** CJ Woloshchuk
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Office: 201 Psychology Building
Office Hours: email for appointment

**Required Text:**
*note that the 2nd edition of this text is fine, but the 1st edition is not sufficient for this course as the material is outdated.

**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, 3201 and 3101 with a “C” or better. Prerequisites must be completed prior to taking this class, and cannot be taken concurrently.**

**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](http://www.sa.utep.edu/cass). Individuals requiring more time for the exam through CASS must schedule their exam time with CASS to be completed no later than 5pm the same day the class takes the exam. You must notify me if you require accommodations via CASS no later than one week before the first exam.

**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 online quizzes and other supplemental materials relevant to the course. Make sure you check your email regularly for updates from me via blackboard.
Attendance:
To do well in this course, you are encouraged to attend every class session, listen actively, take notes and ask questions. However, lecture slides will be made available on blackboard. I do not have a formal attendance policy; however, often there will be in class extra credit opportunities for those who are in attendance (see below). Note that in class pop quizzes cannot be made up, so it is recommended that you come to class in person as often as possible to maximize opportunities to get extra credit.

Grades: up to 400 points 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. Exams are not cumulative, but concepts in this course build off each other as the semester progresses.
- 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).
- **Exams will only occur during class, and no additional time will be provided.** If you show up late on exam day, you only have until the end of class to complete the exam. If you need more time, please contact CASS for academic support accommodations prior to the first exam.
- If you show up late on exam day, and someone has already finished the exam, you will not be permitted to take it.
- **No make-up exams will be administered under any other circumstances, no matter how compelling.**

Assignments: 100 pts (see breakdown below). Late work will not be accepted, no matter the circumstance (including variable upload speeds). If it is late, even by a few seconds, it will be a zero. Do not wait until the last minute to upload your assignments! Improper formatting will result in point deductions. Specific directions can be found in a document titled: Final Paper Guidelines, and there is also a second document called Tips for Writing with more guidance, which are both available on blackboard. I am very strict on deducting points if the directions are not followed, so please read both documents t carefully.

1. **Paper topic** (1pt). Uploaded no later than 11:59pm on September 16th selecting your paper topic must be uploaded via blackboard assignments.

2. **References** (9pts). 3 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) via blackboard no later than 11:59pm on September 23rd. Only one of these papers should be a “review” paper, which means the others must be original research. Your final paper should at a minimum have 3 peer-reviewed references total in the reference section. There are some rules about what will and won’t count as a reference, so please read the directions in the Final Paper Guidelines document on blackboard to ensure you do not lose points for incorrect submission. Each paper is worth 3 points.

3. **Reference worksheets** (30pts). You must complete the worksheets on blackboard for your references. You must clearly articulate the hypothesis, rationale, and methods of each study. You must identify whether or not your paper is an empirical research article or a review paper. An example worksheet is provided on blackboard and a rubric is provided on the “final paper guidelines” document on blackboard. You will use these worksheets to guide you in writing your final paper. Each worksheet is worth 10 points and you must complete 3. These should be
4. **Final Paper (60 pts).** Due by 11:59pm on November 25th, uploaded via blackboard assignments. Blackboard assignments does have a plagiarism checking feature (SafeAssign) and you will be able to see how much of your text is being flagged as potentially plagiarized. You can revise once you upload, and please be sure to use proper citations where appropriate. Direct quotes are not permitted. Paper must adhere to the guidelines provided in separate documents which also contain the grading rubric (see blackboard for **Final Paper Guidelines and Tips for Writing**). Late papers will receive a point deduction, described in detail in the **Final Paper Guidelines**.

**Extra Credit:**

- **Quizzes (5pts)**
  - A total of 10-13 quizzes will be available on blackboard throughout the semester. These will consist of multiple choice and 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 11:59pm each week on Friday.
  - I will also provide a syllabus quiz, which will expire on census day. If you take the syllabus quiz it will replace your lowest quiz grade at the end of the semester.
  - 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 Assignments (10 pts)**
  - At some point during the semester I will give you the link to watch an HBO documentary on your own time. Later in the semester there will be an additional “homework” video from National Geographic. You will be able to earn up to 5 points extra credit from questions that will show up on the exam that falls after each video is shown or after the link is provided. These points will be added as extra credit to the exam on which the questions appear. There will be a maximum of 5 points extra credit corresponding to each video, for 10 extra credit points total.

- **Final Paper Rough Draft (5pts)**
  - A rough draft of your paper (format as described on the final paper guidelines document) can be turned in to Dr. Serafine for extra credit. 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. If you decide to do this, your rough draft is due no later than 11:59pm on Sunday October 28th via email to me at kmserafine2@utep.edu. Don’t forget the “2” in my email address, and do not reply to a blackboard email, or it will bounce back and you will not receive credit. If you fail to type my email address correctly, and miss the deadline you will not get credit. Drafts sent after 11:59pm on October 28th will not be graded for extra credit, and I will not have time to provide you with feedback on them. See the **Final Paper Guidelines** document on blackboard for more details about the rough draft as well as a grading rubric.

- **University Writing Center (5pts)**
  - If you bring your paper to the University Writing Center **before** November 25th at 11:59pm, and get proof of your visit (they will give you a form to turn into me) I will give you 5pts extra credit on the final paper. Do not lose the form, as it is your only way to
prove that you went to the writing center for feedback, and without it I cannot assign the points. Writing Center forms dated after the final paper deadline will not count toward extra credit. You can go to the writing center as many times as you like, but only one form will count for extra credit.

- **Exam Extra Credit (??)**
  - 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. There will be between 2.5-5pts extra credit on each exam.

- **In Class Pop Quizzes (??)**
  - Occasionally I will have unannounced pop quizzes in class, and you will have the opportunity to earn extra credit based on performance on these quizzes. These cannot be made up if you are absent, regardless of the circumstance. Typically, there will be 2.5-5pts possible via in class pop quizzes between each exam, and points will be added to the exam that follows the quiz. For example, a quiz occurring after Exam 1 will mean that any points earned get added to the Exam 2 grade.

- **Final Debate (up to 10pts).** At the end of the semester, you can boost your grade by participating in an oral debate about your final paper topics during the final exam time (Friday December 14th, from 10am-12:45pm), see below. **Attendance and participation are both required to earn full points.** This is a lot of points to earn, so in order to keep things fair, there are some rules...
  - Late attendance will result in point deduction (-1 point per minute late, up to 5 points. **Anyone arriving more than 5 minutes late will still lose 5 points. If you are more than 30 minutes late, you will not be able to participate in the debate, and you will not earn any of the 10 possible points.**)
  - You must declare that you will participate in the debate no later than November 25th at 11:59pm. That is, you cannot decide the day of the debate that you want to participate. You must notify me in advance. To put in your “notice of intent” to participate you must answer a short quiz on blackboard no later than November 25th regarding your topic and position (pro/con).
  - If the debate teams are uneven by more than 1 extra person, volunteers will be sought to “switch sides” or “switch teams”. **Students who volunteer will have a more lenient grading rubric than those who do not.** Details about the grading are in the Final Paper Guidelines document on blackboard.
  - If there are insufficient volunteers, I will randomly assign some students to switch, in which case the stricter grading rubric will be used. In other words, volunteering could make the debate a little easier for you, and can be thought of as another type of “extra credit” though it will not come with “extra points” beyond the 10 already available for the debate.

**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.  

**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%

Please note that grades will not be “rounded up”. Therefore a 79.5% will be entered as a “C”. That might sound frustrating, and you might be thinking – seriously? Why can’t Dr. Serafine just “give” us the 0.5 points to make that a “B”? The thing is, it isn’t 0.5 points. It is 0.5% of 400 points, which is really 2/400 points. 2 points could have been easily earned by taking the blackboard quizzes, or from the in class pop quizzes. Part of Dr. Serafine’s teaching philosophy is that grades are earned, they are not “given”. The point of the extra credit opportunities (outlined above) is to make it easy for you to earn a better grade. **As such, “rounding up” will not occur in this class. No exceptions will be made.**

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. I do not hand back exams, if you wish to see your exam after it has been graded, you must schedule an appointment to come meet with me or with the TA. Typically, the TA will meet with you first and if you have lingering questions, I can also meet with you. If you want to file a formal complaint about grading, please contact the UTEP Psychology Department Chair.

Exams and assignments are graded based on instructions provided (e.g., you must circle answers for multiple choice, and write answers in the appropriate place on the exams for short answers). The instructor and the TA will only grade answers that are written in the appropriate place (e.g., on lined paper provided, on the blanks for fill in the blanks, not in the margins of the exam). Please read and follow the instructions carefully.

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 or in class to the entire group.

**Class Schedule:**

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Title</th>
<th>Reading</th>
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<tbody>
<tr>
<td>08/27</td>
<td>Course overview</td>
<td><em>Intro to the brain and behavior</em></td>
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<tr>
<td></td>
<td><em>Chapter 2: Structure and Function of the Nervous System</em></td>
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<tr>
<td>08/29</td>
<td>The neuron</td>
<td><em>The brain &amp; nervous system</em></td>
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<tr>
<td></td>
<td><em>Chapter 2: Structure and Function of the Nervous System</em></td>
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<tr>
<td>09/03</td>
<td>No Class – Labor Day</td>
<td></td>
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09/05  Introduction to Pharmacology: Pharmacokinetics and Pharmacodynamics
        Chapter 1: Principles of Pharmacology

09/10  Pharmacology (continued)
        The action potential
        Neurochemistry: level of the synapse
        Chapter 1: Principles of Pharmacology
        Chapter 3: Chemical Signaling by Neurotransmitters and Hormones

09/12  Neurochemistry: level of the synapse (continued)
        Neurotransmitter classification: Acetylcholine
        Chapter 3: Chemical Signaling by Neurotransmitters and Hormones
        Chapter 7: Acetylcholine

09/16  Paper topic due via blackboard by 11:59pm

09/17  Workshop: How to find references for your final paper
        Acetylcholine (Continued)
        Chapter 7: Acetylcholine

09/19  Major excitatory and inhibitory neurotransmitters: Glutamate
        Chapter 8: Glutamate and GABA

09/23  Paper references (3) due via blackboard by 11:59pm
        *must upload PDF of actual references, not abstract, and not a link or word document
        reference section for credit. See final paper guidelines document on blackboard for
        more details.

09/24  Major excitatory and inhibitory neurotransmitter systems: GABA
        Monoamines: Catecholamines
        Chapter 8: Glutamate and GABA
        Chapter 5: Catecholamines

09/26  Monoamines: Catecholamines & Indolamines
        Chapter 5: Catecholamines
        Chapter 6: Serotonin

10/01  Exam Review/Flex

10/03  Exam 1: Chapters 1-3, 5-8

10/07  Reference 1 worksheet due via blackboard by 11:59pm

10/08  Methods of research
        Chapter 4: Methods of Research in Psychopharmacology

10/10  Addiction & the biology of reward
        Chapter 9: Drug Abuse & Addiction
10/14  Reference 2 worksheet due via blackboard by 11:59pm

10/15  The stimulants: cocaine & amphetamine  
       *Chapter 12: Psychomotor stimulants: cocaine and the amphetamines*

10/17  The narcotics: opioids and pain  
       *Chapter 11: The Opioids*

10/21  Reference 3 worksheet due via blackboard by 11:59pm

10/22  The legal drugs: Alcohol  
       *Chapter 10: Alcohol*

10/24  The legal drugs: Nicotine and Caffeine  
       *Chapter 13: Nicotine and Caffeine*

10/28  (Extra credit) Rough Draft due via email to kmserafine2@utep.edu by 11:59pm  
       *drafts sent after this date, through April 16 will be reviewed but no extra credit will be provided.*

10/29  The cannabinoids and the hallucinogens  
       *Chapter 14: Marijuana and the Cannabinoids*  
       *Chapter 15: Hallucinogens, PCP, and Ketamine*

10/31  Exam Review/Flex

11/05  Exam 2 (chapter 9-15)

11/07  Introduction to pharmacotherapeutics  
       Schizophrenia  
       *Chapter 19: Schizophrenia: Antipsychotic Drugs*

11/12  Schizophrenia, Affective Disorders  
       *Chapter 19: Schizophrenia: Antipsychotic Drugs*

11/14  Affective disorders: depression and bipolar disorder  
       *Chapter 18: Affective Disorders: Antidepressants and Mood Stabilizers*

11/19  Anxiety disorders  
       *Chapter 17: Anxiety Disorders: Sedative-Hypnotic and Anxiolytic Drugs*

11/20  Anxiety disorders: Why Zebras Don’t Get Ulcers  
       *Chapter 17: Anxiety Disorders: Sedative-Hypnotic and Anxiolytic Drugs*

11/25  Final Paper due via blackboard by 11:59pm  
       Last day to “opt in” for Final Debate extra credit

11/26  Sleep disorders and treatments
Chapter 17: Anxiety Disorders: Sedative-Hypnotic and Anxiolytic Drugs

11/28  Neurodegenerative Diseases and treatments

Chapter 20: Neurodegenerative Diseases

12/03  Exam Review/Flex

12/05  Exam 3 (Chapters 18-20 plus supplemental reading)

12/14  10:00am-12:45pm: FINAL EXAM in class debate – paper topics. You cannot make this up if you miss it because it requires in class participation. *note the earlier meeting time!

**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.