PSYC 3346: Drugs of Abuse and Behavior – Spring 2023
Synchronous Meeting Times: 10:30-11:50am, Tues/Thurs mountain time

**Professor:** Katherine Serafine, Ph.D.  
E-mail: kmserafine2@utep.edu

**Office Hours:** Email to schedule a virtual or audio appointment M-F

**Social Media:** [@SerafineLab](twitter); [@Serafine_Laboratory](instagram)

**Required Text:**  
Meyer & Quenzer (2022). *Psychopharmacology* (4th ed.). Sunderland, MA: Sinauer Associates. *note that all required chapters will be provided at no cost to students in PDF form (available on Blackboard). If you prefer a hardcopy text, you can purchase from the bookstore or online retailers.

**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 abused substances. **Prerequisites:** Psych 1301, 3201 and 3101 and PSYC 2324 or BIOL 2340 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 pharmacodynamic 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 need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, by email to cass@utep.edu. Note that their office works with students who might have a disability, physical or psychological conditions that impact their ability to engage in class, participate in coursework or meet course deadlines. Beyond preexisting or chronic conditions, if you are experiencing a personal medical or family emergency, you can contact their office as well to inquire about accommodations support. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass). The instructor must be notified by CASS by the end of the first week of classes to facilitate accommodations support implementation. However, if an emergency happens after the semester begins, contact CASS ASAP. In the event of any emergency situation, you are also strongly encouraged to contact the Dean of Students through the Student Success Helpdesk at [https://www.utep.edu/advising/student_resources/student-success-helpdesk.html](https://www.utep.edu/advising/student_resources/student-success-helpdesk.html) (studentsuccess@utep.edu or call 915-747-8887).
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. If you are not receiving emails from Blackboard, reach out to UTEP tech support.

Virtual Attendance (synchronous and asynchronous options):
To do well in this course, you are required to watch every lecture video and stay on top of the course videos. Lectures will typically be streamed live on zoom on Tuesday and Thursday from 10:30-11:50am mountain time (though some lectures will be pre-recorded), and you are strongly encouraged to attend the livestream whenever possible. Additionally, recorded lectures will typically be online by 5pm (mountain time) the same day of class, so you can tune in later if you need to. You are strongly encouraged to watch the Tuesday lectures on Tuesday, and so on, so that you do not fall behind. Respondus Lockdown pop quizzes will occur randomly throughout the semester and will be based on the lecture material (and are worth extra credit, see below). Watching lectures (live or recorded) is the key to success in this course, and historically – students that don’t miss the lectures end up performing better in the course than those who do not.

Grades: up to 400 points total
Note that due to the heavy writing component for exams, quizzes and assignments in this course, it could take up to 2 weeks from the deadline of an assignment or the end of an exam window before grades are posted to Blackboard.

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 each 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 textbook quizzes). Extra credit will also appear on each exam (see extra credit below for details).
- **Exams will take only 90 minutes and are timed.** If you require any additional time or accommodation you must provide appropriate documentation at least one week prior to the first exam.
- All exams will be available on Blackboard for a full 48-hour window during which you can take the exam at your convenience; however, be advised that if you run into technical issues in the middle of the night, tech support won’t be able to assist you until the next day.
- **No make-up exams will be administered under any circumstances, no matter how compelling.** You must take the exam during the allotted exam window and the dates are not flexible.
- Exams require you to use Respondus Lockdown, a program that will “lock” you out of being able to use other websites or items to take the exam. No notes, books, power points, electronic devices, devices that transmit audio or other materials are allowed during the exams. You are also prohibited from discussing the exam with each other during the exam window. However, you are strongly encouraged to study together virtually before the exam window begins. You should download Respondus Lockdown and install it on your computer ASAP: https://www.utep.edu/technologysupport/_Files/docs/MM_Respondus-Student.pdf
• Before each exam you will have access to a comprehensive review sheet (created by the instructor to help guide you as you study on your own at home) and there will also be an instructor-hosted review session prior to each exam (see course schedule below for dates). Study strategies are also provided at the top of each review sheet.

Assignments and Final Paper: 100 pts (see breakdown below). Late work will not be accepted, no matter the circumstance (including variable upload speeds). If it is uploaded 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 Guidelines for Assignments, which is available on Blackboard. This document is very long, but it contains a lot of very critical information, so read it thoroughly and refer back to it as you write. I am very strict on deducting points if the directions are not followed, so please read the instructions carefully.

1. **Paper topic (1pt).** You must select a topic to research for your final paper. There are several preapproved topic options, which can be found in the Guidelines for Assignments document on Blackboard. Paper topics must be uploaded no later than 11:59pm on Feb 5th via Blackboard assignments.

2. **References (9pts).** You must find 3 peer-reviewed journal articles to use as references for your final paper. There are very strict rules to follow as you look for articles, and these instructions are provided in the Guidelines for Assignments document on Blackboard. Full PDFs of the articles must be uploaded no later than 11:59pm on Feb 12th via Blackboard assignments. Each article will be worth 3 points, for 9 points total.

3. **Reference worksheets (30pts).** You must complete a worksheet for each of your 3 peer-reviewed article references. In these worksheets, you will be guided to articulate the hypothesis, rationale, methods and results for each study. To assist, there is an example worksheet on Blackboard. More instructions can be found in the Guidelines for Assignments document on Blackboard, which also contains a grading rubric for the worksheets. Each worksheet is worth 10 points, and you must complete 3. These should be uploaded no later than 11:59pm through Blackboard assignments and are due on consecutive Sundays. Worksheet 1 (for Reference 1) is due on Sunday Feb 26th, Worksheet 2 is due on Sunday March 5th and Worksheet 3 is due on Sunday March 12th.

4. **Final Paper (60 pts).** You will write a final paper for this course. The paper must be between 940-1520 words long (roughly, 3-5 pages double spaced). There are many specific guidelines to follow for the final paper, all of which are outlined in the Guidelines for Assignments document on Blackboard. Final Papers must be uploaded no later than 11:59pm on April 30th via Blackboard assignments. Plagiarism will be assessed using Blackboard SafeAssign and other software. Late papers will be accepted with a point deduction, described in detail in the Guidelines for Assignments.

Extra Credit:

• **Asynchronous Blackboard Textbook Quizzes (5pts)**
  - A total of approximately 14 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. These quizzes are based on the 3rd edition of the text, not the 2nd.
  - Quizzes 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.
Quizzes are not timed, but they do expire—so if you don’t want to be rushed, do not wait to start it until close to the expiration time.

- There will also be a syllabus quiz, which will expire on census day (Feb 1st). The syllabus quiz 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. Since there will be 14 quizzes at 10 points each, that means the equation is (points earned divided by 140) then multiply the answer by 5. The quiz total 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.

- Note that all textbook quiz expiration dates should be visible in the Blackboard calendar for this course, and typically any quizzes that you do not yet see available will open 1-2 weeks before the deadline.

**Documentary Video Viewing (10 pts)**

- After the first exam you’ll get the link to watch an HBO documentary on your own time. After the second exam, there will be a second “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 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 your instructor 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 April 2nd via email to kmserafine2@utep.edu. Drafts sent after that deadline will not be graded for extra credit, and the instructor will not have time to provide you with feedback on them. See the Guidelines for Assignments document on Blackboard for more details about the rough draft as well as a grading rubric.

**University Writing Center (5pts)**

- If you consult with the University Writing Center by April 23rd you can earn up to 5 points extra credit toward the final paper. To earn this credit you can sign up a consultation at the University Writing Center. During your consultation, you must request from the University Writing Center “proof of your visit”. If you ask for “proof of your visit” to give to your instructor, they will send you a document you can email to me. To earn this extra credit you must visit the writing center no later than April 23rd. Please note that proof of visit forms dated after this deadline will not count toward extra credit (but you can still go late for help if you need it). You can go to the writing center as many times as you like, but only one form will count for extra credit. To schedule, go to the writing center website: https://www.utep.edu/uwc/

**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, which is why they are worth extra points. There will be between 2.5-5pts extra credit on each exam.
Respondus Lockdown Lecture Pop Quizzes (??)

- Occasionally there will be spontaneous pop quizzes, and you will have the opportunity to earn extra credit based on performance on these quizzes. These will typically only be open for 24-48 hours each. 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.
- The goal of these is to familiarize you with the Respondus program, and allow you to check for any technical issues with your wifi/internet service.
- You are not permitted to use other devices, the internet or your book/notes during these pop quizzes. These quizzes are designed to help you prepare for the test environment.

Final Presentation Videos (up to 10pts). At the end of the semester, you can boost your grade by submitting a short video presentation about your final paper topics due at the end of the final exam time (due by 12:45pm on 05/11/23). This is a lot of points to earn, so in order to keep things fair, there are some rules...

- Late submissions will not be eligible for extra credit, so you must upload your presentation before the deadline. Since upload speeds vary, you are strongly encouraged to start the upload process no later than one hour before the final exam time.
- Details including a rubric for grading, as well as what video formats work best are provided in the “guidelines for assignments” document on Blackboard.

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. 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 (Office of Student Conduct and Conflict Resolution) for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

Important Contact Information

University Counseling Center 202 Union West 747-5302
Center for Accommodations and Support Services 106 Union East 747-5148
University Career Center 103 Union West 747-5640
Department of Psychology 112 Psychology 747-5551
Student Success Helpdesk 747-8887, studentsuccess@utep.edu

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 = 60.0-69.9%
F < 60.0%
Please note that grades will not be “rounded up”. **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. Dr. Serafine does not hand back exams, if you wish to see your exam after it has been graded, you must schedule an appointment to virtually meet with the instructor or with the TA. You should not contact the TA directly (Dr. Serafine will loop the TA in only if needed). If you want to file a formal complaint about grading, please contact the UTEP Psychology Department Chair.

Note that there is already information about an extensive amount of extra credit written above. **No additional extra credit opportunities beyond what is provided on the syllabus or in class to the entire group will be provided.**

### Class Schedule:

**Lecture title bold, reading (to be completed prior to class time italicized), BLUE indicates important deadlines, Yellow highlight indicates Exams.**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
</table>
| T   | 01/17| The neuron, brain & nervous system  
*Chapter 2: Structure and Function of the Nervous System* |
| TH  | 01/19| The neuron (continued)  
*Introduction to Pharmacology: Pharmacokinetics and Pharmacodynamics*  
*Chapter 2: Structure and Function of the Nervous System*  
*Chapter 1: Principles of Pharmacology* |
| T   | 01/24| Pharmacology (continued)  
*Chapter 1: Principles of Pharmacology* |
| TH  | 01/26| The action potential  
*Neurochemistry: level of the synapse*  
*Chapter 1: Principles of Pharmacology*  
*Chapter 3: Chemical Signaling by Neurotransmitters and Hormones* |
| T   | 01/31| Neurochemistry (continued)  
*Chapter 3: Chemical Signaling by Neurotransmitters and Hormones* |
| W   | 02/01| Census day – Syllabus Quiz Expires at 11:59pm |
| TH  | 02/02| Neurotransmitter classification: Acetylcholine  
*Major excitatory and inhibitory neurotransmitters: Glutamate*  
*Chapter 3: Chemical Signaling by Neurotransmitters and Hormones*  
*Chapter 7: Acetylcholine* |
| Sunday 02/05 | Paper topic due via Blackboard by 11:59pm |
| T   | 02/07| Glutamate (continued)  
*Major excitatory and inhibitory neurotransmitters: GABA*  
*Chapter 8: Glutamate and GABA* |
TH 02/09  **Monoamines: Catecholamines & Indolamines**  
*Chapter 5: Catecholamines*  
*Chapter 6: Serotonin*

Sunday 02/12  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.*

T 02/14  Exam Review (see Blackboard for details)

TH 02/16  **Exam 1 Window: opens at 5pm Wednesday 02/15 & closes at 5pm Friday 02/17**

T 02/21  **In class workshop: References & Worksheets**

TH 02/23  **Methods of research**  
*Chapter 4: Methods of Research in Psychopharmacology*

Sunday 02/26  Reference 1 worksheet due via Blackboard by 11:59pm

T 02/28  **Addiction & the biology of reward**  
*Chapter 9: Drug Abuse & Addiction*

TH 03/02  **Addiction & the biology of reward**  
*Chapter 9: Drug Abuse & Addiction*

Sunday 03/05  Reference 2 worksheet due via Blackboard by 11:59pm

T 03/07  **The stimulants: cocaine & amphetamine**  
*Chapter 12: Psychomotor stimulants: Cocaine, Amphetamines & Related Drugs*

TH 03/09  **The narcotics: opioids and pain**  
*Chapter 11: The Opioids*

Sunday 03/12  Reference 3 worksheet due via Blackboard by 11:59pm

T 03/14  Spring Break

TH 03/16  Spring Break

T 03/21  **The narcotics: opioids and pain & The legal drugs: alcohol**  
*Chapter 10: Alcohol*

TH 03/23  **The legal drugs: alcohol (continued), nicotine and caffeine**  
*Chapter 10: Alcohol*  
*Chapter 13: Nicotine and Caffeine*

T 03/28  **The cannabinoids and the hallucinogens**  
*Chapter 14: Marijuana and the Cannabinoids*  
*Chapter 15: Psychedelic & Hallucinogenic Drugs, PCP & Ketamine*

TH 03/30  Exam Review (see Blackboard for details)  
*last day to drop Spring 2023 courses*
Sunday 04/02  (Extra credit) Optional Rough Draft due via email to kmserafine2@utep.edu by 11:59pm
*late drafts will not be provided feedback due to grading time constraints

T  04/04  Exam 2 Window: Exam opens 5pm Monday 04/03 & closes 5pm Wednesday 04/05

TH  04/06  Introduction to pharmacotherapeutics
  Schizophrenia
  Chapter 19: Schizophrenia: Antipsychotic Drugs

T  04/11  Schizophrenia (continued)
  Chapter 19: Schizophrenia: Antipsychotic Drugs

TH  04/13  Affective disorders
  Chapter 18: Affective Disorders: Antidepressants and Mood Stabilizers

T  04/18  Affective disorders (continued)
  Chapter 18: Affective Disorders: Antidepressants and Mood Stabilizers

TH  04/20  Anxiety disorders
  Chapter 17: Disorders of Anxiety & Impulsivity & the Drugs Used to Treat Them

Sunday 04/23  (Extra credit) Last day to visit the University Writing Center for extra credit. Turn in your proof of visit via email to Dr. Serafine before 05/05

T  04/25  Sleep disorders and treatments
  Chapter 17: Disorders of Anxiety & Impulsivity & the Drugs Used to Treat Them

TH  04/27  Flex * any remaining slides

Sunday 04/30  Final Paper due via Blackboard by 11:59pm

T  05/02  Exam Review Session (see Blackboard for details)

TH  05/04  Exam 3 Window: opens at 5pm Wednesday 05/03 & closes at 5pm Friday 05/05

TH  05/11  OPTIONAL FINAL VIDEO PRESENTATIONS due by 12:45pm. Details will be provided on Blackboard and the Guidelines for Assignments document. Videos will be due at the end of our final exam period (12:45pm on Thursday 05/11/23). Final exam schedule available here: https://www.utep.edu/student-affairs/registrar/Scheduling/Final%20Exam%20Schedule%20Spring%202023.pdf

**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.
**Virtual Classroom Courtesy**

Please adhere to the following:

1. Be mindful of your behavior and language online. Remember that members of the class and the instructor will be reading any postings.
2. Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
3. When reacting to someone else’s discussion board post or in class questions, address the ideas, not the person. Post only what anyone would comfortably state in a face to face situation.
4. Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).
5. No solicitations. This includes “note takers for hire” and similar paid for tutoring services.

**Other Resources** (blue text is clickable as a link)

- **UTEP Library**: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- **Help Desk**: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.
- **University Writing Center (UWC)**: Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- **Math Tutoring Center (MaRCS)**: Ask a tutor for help and explore other available math resources.
- **History Tutoring Center (HTC)**: Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- **Military Student Success Center**: UTEP welcomes military-affiliated students to its degree programs, and the Military Student Success Center and its dedicated staff (many of whom are veterans and students themselves) are here to help personnel in any branch of service to reach their educational goals.

**COVID-19 Information**

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please contact CASS and let your instructors know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. **If you still need the vaccine, it is widely available in the El Paso area.** For more information about the current rates, testing, and vaccinations, please visit epstrong.org.