**Psychology 190 03 and 06**

**Psychopharmacology: Therapeutic Drugs (4 units)**

Spring 2021

**Instructor**:

Dr. Darrin Tracy (dtracy2@ucmerced.edu)

Office Location: n/a (meetings done on zoom platform)

Office Hours: Tuesdays 1pm – 3pm

Darrin Tracy is inviting you to a scheduled Zoom meeting.

Topic: My Meeting

Time: Jan 26, 2021 01:00 PM Pacific Time (US and Canada)

Every week on Tue, until May 4, 2021, 15 occurrence(s)

Jan 26, 2021 01:00 PM

Feb 2, 2021 01:00 PM

Feb 9, 2021 01:00 PM

Feb 16, 2021 01:00 PM

Feb 23, 2021 01:00 PM

Mar 2, 2021 01:00 PM

Mar 9, 2021 01:00 PM

Mar 16, 2021 01:00 PM

Mar 23, 2021 01:00 PM

Mar 30, 2021 01:00 PM

Apr 6, 2021 01:00 PM

Apr 13, 2021 01:00 PM

Apr 20, 2021 01:00 PM

Apr 27, 2021 01:00 PM

May 4, 2021 01:00 PM

Please download and import the following iCalendar (.ics) files to your calendar system.

Weekly: https://ucmerced.zoom.us/meeting/tZwrd-murj8pHdAOnvweivMNWDo\_BxzsXwjf/ics?icsToken=98tyKuGgqDsqHNSRsx6DRpw-BIigc-7ziClegqd8sxHzFCVadC7YAcZNDZBnCsvo

Join Zoom Meeting

https://ucmerced.zoom.us/j/88600604374?pwd=cmhIODdodHN2dUM1dmpjbzFnYVdRdz09

Meeting ID: 886 0060 4374

Passcode: 052262

One tap mobile

+16699006833,,88600604374# US (San Jose)

+12532158782,,88600604374# US (Tacoma)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 646 876 9923 US (New York)

+1 301 715 8592 US (Washington D.C)

+1 312 626 6799 US (Chicago)

Meeting ID: 886 0060 4374

Find your local number: https://ucmerced.zoom.us/u/kctQgbExHA

Join by SIP

88600604374@zoomcrc.com

Join by H.323

162.255.37.11 (US West)

162.255.36.11 (US East)

115.114.131.7 (India Mumbai)

115.114.115.7 (India Hyderabad)

213.19.144.110 (Amsterdam Netherlands)

213.244.140.110 (Germany)

103.122.166.55 (Australia)

149.137.40.110 (Singapore)

64.211.144.160 (Brazil)

69.174.57.160 (Canada)

207.226.132.110 (Japan)

Meeting ID: 886 0060 4374

Passcode: 052262

**Teaching Assistant**:

N/A

**Course Time and Location**:

Location: n/a (remote only)

MW 9:00 am – 10:15 am (section 03)

MW 10:30am – 11:45 am (section 06)

**Course Description**:

This course is designed to provide a general background concerning therapeutic drugs and the psychological impact of these drugs. The course covers the neuro and pharmacodynamic process of drugs most commonly prescribed for psychiatric conditions and diagnoses. The course applies to students coming from a broad range of backgrounds, including psychology, biology, or chemistry. However, background knowledge in these topics areas is not required—the material is presented at an introductory but comprehensive level.

**Prerequisite**:

Successful completion of Psychology 001 (with a grade of C- or higher).

**Required Texts**:

Prus, A. (2021). *Drugs and the Neuroscience of Behavior (3rd ed.)*. Sage.

\*\*Note that I will frequently bring in cutting-edge information from other medical and pharmacy resources to supplement the readings. This will ensure that you are receiving current information about medications and therapies.

**Additional Required Material**:

Please bring a laptop, iPad (or akin), or phone capable of connecting to the internet to class each day. Course exams and quizzes will be conducted via CatCourses (CANVAS) in class. Be sure you have access to CatCourses prior to scheduled assessments in class. In addition, we will be doing interactive sessions that require individual participation via the internet.

**This Course is Relevant to the UC Merced Guiding Principles as Follows:**

(*The Appendix contains the UC Merced Guiding Principles*)

**Decision Making**: Through assignments, lectures, and interactive sessions, students will learn to extrapolate information about detailed topics such as drug receptors and relate these topics to the individual. In addition, common misconceptions (or myths) are discussed related to prescribed drugs. The goal is to help clarify the truth of the impact of these substances on the body and brain, thus giving insight to impact of use.

**Self and Society**: The course content covers many therapeutic drugs, which will help students become more aware and better understand the prevalence in society. Further, the impact of prescription drug use on individuals and the society are discussed and embedded within assignments, quizzes, and exams. Students will also be involved in discussions and interactive sessions highlighting these topics.

**Ethics and Responsibility**: With a better understanding of the impact of prescription drugs, via all course material and assignments, students will be able to use the knowledge gained to help improve their understanding of the impact these medications have on individuals and society.

**Course Learning Goals**:

* Gain a general understanding of basics for how the brain functions, and how information travels in the brain.
* Become familiar with the possible mechanisms of drug action at the cellular level.
* Gain an understanding of psychological diagnoses and the various treatments used, as well as how these various treatments work in the brain and the body.
* Understand that there are various therapeutic avenues that can be taken for a given condition, and each of these avenues has benefits and consequences.
* Gain understanding of the psychological impact of a variety of prescribed drugs.

**Course Learning Outcomes**:

Students will be able to:

* Understand how drugs impact brain functioning.
* Understand how an individual drug’s mechanism of action is linked to a perceived behavioral effect.
* Upon learning the pharmacodynamics of each drug, students should understand the strategy behind why these therapeutic drugs are used as treatments for particular conditions.
* Become familiar with how to apply the scientific knowledge to real-world case studies.

**Program Learning Outcomes**:

To support student success coherently across Psychological Sciences coursework, the Course Learning Outcomes help students to reach the following Psychological Sciences Program Learning Outcomes:

(*The full list of Psychological Sciences Program Learning Outcomes is in the Appendix*)

1. Show knowledge of the key substantive content of the field of psychology, including brain functioning, the impact of therapeutic drugs, and the psychological effects of use.
2. Demonstrate that students understand the basic principles of and correctly interpret applications of the designs and methods used in research examining the impact of therapeutic drugs on the brain and body.

**Course Assignments**:

Grading will be based on the following:

* 6 homework assignments
* 5 quizzes
* 3 exams

**Homework Assignments (30% of final course grade)**

* A total of six homework assignments will be given throughout the semester. These assignments will be posted on CatCourses. The deadlines for these assignments are listed in the course schedule below. Students will be given at least one week to complete the assignments. I will send an announcement via CatCourses, as well as mention in class, when the assignments are “live” and are ready to be completed. You may use your book, or other resources, to complete them. Homework material is derived from lecture material, as well as material presented in the textbook. Each homework assignment will be worth 4.17% of the final course grade.
  + You can only submit an assignment ONCE, but you have an unlimited amount of time to work on it up until the due date.
  + There are **no makeup homework assignments**
  + **Late work will not be accepted** (there will be a strict cutoff time within CatCourses, so make sure the assignment is completed prior to that cutoff time!!)

**Quizzes (10% of final course grade)**

* Quizzes will be administered on select days (see course schedule for details). They are to be completed in class either on a laptop, iPad (or akin), or phone via CatCourses. Over the course of the semester, there will be five quizzes administered. However, only the top four scores will be counted toward the final course grade. In other words, the lowest quiz score will be dropped. Quiz questions will be pulled from lecture material, as well as material presented in the textbook. Each quiz will be worth 2.5% of the final course grade.
  + No reference materials are allowed during the quiz (e.g., no books, notes, websites, etc.).
  + Students must work alone on quizzes—see section below on Academic Integrity for consequences of violations.
  + Given that the lowest quiz score is dropped and does not count toward the final grade, there is a strict policy of no make-up quizzes. If you miss a quiz, then that will count as your drop score.

**Exams (60% of final course grade)**

* Three exams will be administered in this course (see course schedule for details). They are to be completed in class either on a laptop, iPad (or akin), or phone via CatCourses. Two exams are scheduled during the semester and the last exam is scheduled during finals week. Exam material will come from lecture material, as well as material presented in the textbook. Each exam is worth 20% of the final course grade.
  + The exams are treated as three separate exams (i.e., the third exam is not meant to act as a cumulative final, but rather as a third exam). However, given that some of the material builds on earlier concepts, topics covered in the first few chapters (for example) will be needed to understand the later topics discussed.
  + Students must work alone on exams—see section below on Academic Integrity for consequences of violations.
  + Exam dates are non-negotiable. However, there are specific circumstances in which make-up exams can be requested:
    - University approved activities (academic conferences, athletic competitions, academic competitions, etc.). Please notify the instructor in advance of the scheduled absence. You must supply documentation **BEFORE** the missed exam in order to have an opportunity to make up the exam.
    - Personal medical (and nonmedical) emergencies (e.g., illness, illness of a child/family member, transportation emergencies). Please notify me of the emergency as soon as you are able to. You must supply documentation.
  + The ability to make up an exam is determined solely by the instructor on a case-by-case basis: I reserved the right to refuse make-up exams.
    - Note that depending on the circumstances of the make-up exam, I reserve the right to give a make-up that consists entirely of written essay questions in the place of multiple choice items.
* Note: You will have to be signed in with the respondus lockdown browser through Catcourses to take all quizzes and exams. This will lock your screen on your computer while you are taking the exam. There will be a video released with directions on how to do this at a later date.

**Grades**:

Final grades for this course will be determined based on the following:

|  |  |
| --- | --- |
| Letter Grade | Total Percentage |
| A | 100-93% |
| A- | 92.99-90% |
| B+ | 89.99-87% |
| B | 86.99-83% |
| B- | 82.99-80% |
| C+ | 79.99-77% |
| C | 76.99-73% |
| C- | 72.99-70% |
| D+ | 69.99-67% |
| D | 66.99-63% |
| D- | 62.99-60% |
| F | <60% |

Incomplete Grade in the Course:

* A grade of “I” (Incomplete) will be assigned only at the discretion of the instructor and only in the event of extraordinary circumstances. A written request must be filed and a written approval granted before the Incomplete may be taken.

**Use of CatCourses**:

CatCourses (CANVAS) will be used for all homework assignments, in class quizzes, in class exams, and participation “check-ins.” Please be sure that you have access to the course page in CatCourses and remember to bring a device with WiFi capabilities (laptop, etc.) to class each day.

**Study Resources for Students:**

There are a variety of different ways that you can study for this course. I recommend following these tips to be successful in this course.

* The most obvious resource for you is ME! I am truly here to help you be successful in this course (I am in your corner). Please come see me in office hours to chat about the material. I can help clarify confusing points.
* It is very important to attend class. I do not *require* attendance, but you will find it very difficult to be successful with poor attendance. Not only will you miss out on easy participation points, but there are many topics covered only in class that will be on assignments, quizzes, and exams. The lectures are designed to be the primary resource for you.
* I will post the lecture slides by Saturday night for the following week. I recommend downloading them to follow along during lecture. This will enable you to take effective notes on what I am *saying* without having to rewrite the information on the slides.
* The textbooks for this course are valuable resources, and I recommend reading each assigned chapter when that material is covered. Reading this material will strengthen your grasp of the content that I cover in the lectures. If something is confusing, make a note of it and come ask me about it.
* The Prus textbook for this course has a great online resource with many helpful study tools included. I recommend checking out the eFlashcards, as well as the online quizzes (correct answers are provided so you can check your work). These will definitely help solidify the material covered in lectures. The website can be accessed here:
  + <https://study.sagepub.com/prus2e/student-resources>
* You should know that homework assignments and in class quizzes are great study tools for the exam.

**Academic Integrity**:

Students should be familiar with University policies on academic honesty. A general code of conduct for the University of California can be found at: http://www.ucop.edu/ucophome/coordrev/ucpolicies/aos/uc100.html.

* Basically, do not cheat or plagiarize.
* There is NO exception to this rule!!
* Students who are caught cheating on an in-class quiz and/or an exam will be immediately asked to leave the class. The cheating incident will be reported to the Undergraduate Dean of Students, and a zero will be given for the score of the quiz/exam. In addition, the student may be removed from the class altogether with a failing grade (“F”).
* Note that this policy will be upheld equally for people trying to copy work and also for people trying to help others.
* If you have questions about this policy and/or the consequences listed above, please see the instructor as soon as possible.

**Use of Electronic Devices in Class**:

Students will be required to use electronic devices (laptops, etc.) for a variety of in class activities (exams, etc.). However, any use spanning outside of these activities are viewed as a privilege and not a right. If even one student is being disruptive while texting, emailing, playing games, reading, etc. during class, then the entire class must put away all electronic devices for the remaining class session (including laptops). These devices can be used as learning tools (e.g., to take notes with or follow along on the slides), but any disruptive use of these devices is strictly prohibited during class time.

**Students with Special Needs**:

University of California, Merced is committed to creating learning environments that are accessible to all. If you anticipate or experience physical or academic barriers based on a disability, please feel welcome to contact me privately so we can discuss options. In addition, please contact Student Accessibility Services (SAS) at (209) 228-6996 or disabilityservices@ucmerced.edu as soon as possible to explore reasonable accommodations. All accommodations must have prior approval from Student Accessibility Services on the basis of appropriate documentation.

If you anticipate or experience barriers due to pregnancy, temporary medical condition, or injury, please feel welcome to contact me so we can discuss options. You are encouraged to contact the Dean of Students for support and resources at (209) 228-3633 or https://studentaffairs.ucmerced.edu/dean-students.

**Classroom Civility**:

Each UCM student is encouraged to help create an environment during class that promotes learning, dignity, and mutual respect for everyone. Students who speak at inappropriate times, sleep in class, display inattention, take frequent breaks, interrupt the class by coming to class late, engage in loud or distracting behaviors, use cell phones or other electronic devices in class, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others could be asked to leave the class and be subjected to disciplinary action.

**Course Schedule**:

\*Note that I reserve the right to modify the content of this schedule, but assignments, quizzes, and exams will be held on the stated dates (they are set in stone).

|  |  |  |  |
| --- | --- | --- | --- |
| **Dates** | **Topics Covered** | **Activities** | |
| **Week 1:** | Introduction to Psychopharmacology | **Reading:** | Chapter 1 (Prus) |
| 1/20 |  |  |
|  |  |  |
|  |  |  |
| **Week 2:** | The Nervous System  Neurotransmission | **Reading:** | Chapters 2 and 3 (Prus) |
| 1/25 | **Homework:** | HW 1 posted on CatCourses 1/28 |
| 1/27 | **Quiz:** | Quiz 1 in class, 1/27 |
|  | *Remember to bring your laptop (or akin) to the quiz!* | |
| **Week 3:** | Neurotransmission  Properties of drugs | **Reading:** | Chapters 3 and 4 (Prus) |
| 2/1 |  |  |
| 2/3 |  |  |
|  |  |  |
| **Week 4:** | Properties of Drugs  Stimulants and ADD drugs | **Reading:** | Chapter 4 and 6 (Prus) |
| 2/8 | **Homework:** | HW 1 due 2/8, 10 pm, CatCourses |
| 2/10 | **Quiz:** | Quiz 2 in class, 2/10 |
|  | **Homework:**  HW #2 posts on Friday, 2/12 | |
| **Week 5:** | Psychostimulants and other ADD drugs | **Reading:** | Chapter 6 (Prus) |
| 2/15 (holiday) | **Homework:** | HW 2 due 2/19, 10 pm CatCourses |
| 2/17 |  |  |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week 6:** | **Exam week!**  Review on Monday (in class) |  |  |
| 2/22 | **Exam:** | Exam 1 in class, 2/24 |
| 2/24 | *Remember to bring your laptop (or akin) to the exam!* | |
|  |  | |
| **Week 7:** | Pain Medication | **Reading:** | Chapter 10 (Prus) |
| 3/1 |  |  |
| 3/3 |  | |
|  |  | |
| **Week 8:** | Depression and Bipolar Disorder | **Reading:** | Chapter 13 (Prus) |
| 3/8 |  |  |
| 3/10 | **Quiz:** | Quiz 3 in class, 3/8 |
|  | **Homework:** | HW 3 posted on CatCourses, 3/10 |
| **Week 9:** | Depression and Bipolar Disorder cont. | **Reading:** | Chapter 13 (Prus) |
| 3/15 | **Homework:** | HW 3 due 3/19, 10 pm, CatCourses |
| 3/17 |  |  |
|  |  | |
| **Week 10:** | SPRING BREAK! | **Reading:** |  |
| 3/22 | **Homework:** |  |
| 3/24 |  |  |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week 11:** | Anxiety meds | **Reading:**  **Homework:** | Chapter 14 (Prus)  HW 4 posted on CatCourses, 3/28 |
| 3/29 | **Quiz:** | Quiz 4 in class, 3/31 |
| 3/31 | *Remember to bring your laptop (or akin) to the exam!* | |
|  |  | |
| **Week 12:** | **Exam week!**  Review on Monday | **Homework:**  **Reading:** | HW 4 due 4/4 10pm on CatCourses |
| 4/5 | **Exam:** | Exam 2 in class 4/7 |
| 4/7 |  | *Remember to bring your laptop (or akin) to the exam!* |
|  |  |  |
| **Week 13:** | Antipsychotic meds | **Reading:** | Chapters 15 (Prus), |
| 4/12 | **Homework:** | HW 5 posted on CatCourses, 4/14 |
| 4/14 |  |  |
|  |  | |
| **Week 14:** | Alzheimer’s  Parkinson’s | **Reading:** |  |
| 4/19 | **Homework:** | HW 5 due 4/23, 10 pm, CatCourses |
| 4/21 | **Quiz:** | Quiz 5 in class 4/21 |
|  |  | *Remember to bring your laptop (or akin) to the exam!* |
| **Week 15:** | Parkinson’s  Sleep Disorders | **Reading:** | Chapter 14 (Prus, for sleep section) |
| 4/26 | **Homework:** | HW 6 posted on CatCourses 4/26 |
| 4/28 |  |  |
|  |  |  |
| **Week 16:** | Review Week  Live Review during class time on 5/5 | **Homework:** | HW 6 due 5/3, 10 pm, CatCourses |
| 5/3 |  |  |
| 5/5 |  |  |
|  |  |  |
| **Finals Week** | **Final Exam**  **Saturday May 8th 8am – 11am** | *Remember to bring your laptop (or akin) to the exam!* | |
|  |

Material on the Assignments

Homework:

#1 Chapters 1,2,3

#2 Properties of drugs and ADHD meds

#3 Pain medications and 1st half of Antidepressants

#4 All of antidepressants / mood disorders and Anxiety

#5 Antipsychotics and Alzheimer’s

#6 Parkinson’s and Sleep disorders

Quizzes:

#1 Chapters 1 and 2

#2 Chapter 3 and Properties of Drugs

#3 Pain meds

#4 Antidepressants / Mood Disorders

#5 Anxiety and Antipsychotics

Exams:

#1 From Chapter 1 up to AND INCLUDING STIMULANTS /ADHD MEDS

#2 Pain, Depression / Mood Disorders, Anxiety

#3 Antipsychotics, Alzheimer’s, Parkinson’s, Sleep meds

**Appendix**

**UC Merced Guiding Principles**

* **Scientific Literacy**: To have a functional understanding of scientific, technological and quantitative information, and to know both how to interpret scientific information and effectively apply quantitative tools;
* **Decision Making**: To appreciate the various and diverse factors bearing on decisions and the know-how to assemble, evaluate, interpret and use information effectively for critical analysis and problem solving;
* **Communication**: To convey information to and communicate and interact effectively with multiple audiences, using advanced skills in written and other modes of communication;
* **Self and Society**: To understand and value diverse perspectives in both the global and community contexts of modern society in order to work knowledgeably and effectively in an ethnically and culturally rich setting;
* **Ethics and Responsibility**: To follow ethical practices in their professions and communities, and care for future generations through sustainable living and environmental and societal responsibility;
* **Leadership and Teamwork**: To work effectively in both leadership and team roles, capably making connections and integrating their expertise with the expertise of others;
* **Aesthetic Understanding and Creativity**: To appreciate and be knowledgeable about human creative expression, including literature and the arts; and
* **Development of Personal Potential**: To be responsible for achieving the full promise of their abilities, including psychological and physical well-being

**Psychological Sciences Program Learning Outcomes**

Students who complete the Psychology major and minor will:

1. Show knowledge of the key substantive content of the field of psychology, including memory and thinking, sensory psychology and physiology, developmental psychology, clinical and abnormal psychology, and social psychology;
2. Demonstrate that they understand the basic principles of and correctly interpret applications of the designs and methods that psychologists use to gather data;
3. Show that they can understand and correctly interpret the statistical analyses psychologists use to analyze data; and
4. Show that they understand and can apply the writing style used in psychological literature (APA style).