

BIBB 270 DRUGS, BRAIN, AND MIND
Fall 2019
TR 1:30-2:50pm

Course Personnel:

Lecturer: Michael J. Kane, Ph.D.

Email: kanemi@sas.upenn.edu

Office: 468 Levin

Office Hours: Wednesdays 10:30-noon or by appointment (No office hours on 9/4)

Graduate Teaching Assistant: Alexis Crockett

Email: alexmary@pennmedicine.upenn.edu

Office:

Office Hours: Tuesdays 3-4

Undergraduate Teaching Assistant: Alexander Farid

Email: afarid@sas.upenn.edu

Office:

Office Hours:

Course Description:

This is a survey course in the field of neuropsychopharmacology. The course will begin by focusing on the basics of pharmacology, Research Methods in psychopharmacology, and major neurotransmitter systems. We will then cover several major categories of drugs of abuse, with a focus on the mechanisms of action of these drugs. Last, we will cover the pharmacology and pathophysiology of psychiatric disorders.

BIBB 109 / PSYC 109 / BIOL 109: Introduction to Brain and Behavior is a *pre-requisite* for the course. The course will assume that students have a basic background in neuroscience and neurotransmitter systems.

Text:

Meyer, JS & Quenzer, LF. (2018). ***Psychopharmacology: Drugs, the Brain, and Behavior***, 3rd Edition, Sinauer Associates, Inc., Sunderland, MA. ISBN: 978---0---87893---510---9.

Course Web Page:

Lectures, weekly quizzes, additional readings, and other important course information will be posted routinely on CANVAS. Please monitor this website regularly.

Lectures:

This course will be taught in a **lecture-based** format. If you have any questions or if there is something that you do not understand in class, please speak up! It is likely that many of your classmates do not understand it either.

If you want to do well in the class, it is best to **attend** the lectures. Lecture slides will be posted on CANVAS before the lecture. You are welcome to print these out prior to the lecture to aid in your note-taking. You are forewarned that the slides are only **part** of the lecture and **may not**

convey information that was presented orally. Neither the posted slides nor the textbook provides an adequate substitute for attending class. Exam questions will only come from material covered in the lectures!

Readings:

You should read the assigned portions of the textbook ***prior to*** class. At certain points in the course, the lectures will coincide closely with the textbook, while at other points the lecture may diverge from the text. In the case of divergence, you should consider the lecture as primary material and the textbook as supporting material.

Grades:

Your grade will be a product of your performance on three, non-cumulative exams (each worth 30% of the final grade) and 8 take-at-home quizzes (worth a total of 10%). All exams consist of multiple choice/fill-in-the-blank/matching questions (covering factual material and to test critical thinking) and free-response questions (to test critical thinking).

Quizzes:

There is a total of **9** take-at-home quizzes during the semester. Each quiz will consist of 5 multiple choice questions (based on the material covered in the lectures during the week), and you will have 5 minutes to complete them. You may use your notes, textbook, etc... during the quiz. The quizzes will be posted on Canvas on by Thursday at midnight and are to be completed by the following Tuesday at 1:29 pm. You must complete the quiz **on time** to receive credit.

Your final quiz score will be based on your top 8 scores. There are no make-up or late quizzes.

Exam Make-Up Policy:

Make-up exams will be scheduled on a case-by-case basis. Please look at the dates for the exams **now**. If any exam conflicts with a religious holiday that you observe, please let me know via e-mail by the **end of the second week of the course**.

Re-grading Policy (Testivus):

In the spirit of the most famous made-up holiday (Festivus), you will have the opportunity to air your grievances with any exam question that you felt was unfair. As part of Testivus, you must submit your grievance to me *in writing* to have your work re-evaluated, **no more than one week after the work is returned in class**. No re-grade requests will be considered beyond this date.

Your request must explain the specific error or fallacy that you think was made. If you submit a request, **your work will be re-graded in its entirety**, and the final grade could be higher or lower than your original grade. Please only submit a Testivus request if you genuinely believe that a question was unfair or an error has been made.

Review Sessions:

Before each exam, the TAs will run review sessions outside of class. Be sure to email them specific questions and/or topics to cover during the reviews.

Office Hours/Email Policy:

The instructor and TAs will have office hours every week; you are encouraged to attend office hours if you have any questions about the content or structure of the course. Please only e-mail the instructor or TAs if you have a question that can be answered in a few sentences or less. If

you have a question that requires a longer response, please come to one of our office hours. Please allow 24 hours for a response to your e-mail.

Academic Integrity:

Please note that Penn has strict rules on academic integrity (see: <https://catalog.upenn.edu/pennbook/code-of-academic-integrity/>)

Violations of the rules will be reported to the Office of Student Conduct and will likely result in automatic failure of the course.

Course Absence Report:

The Course Absence Report (CAR) system has been designed to provide a consistent way for students to notify course instructors of short-term absences for one or more courses. It also provides a method for advising offices to track absences and coordinate support for students who miss classes. The submission of a CAR does not excuse you from your course obligations; students are still responsible for following up with each instructor directly and adhering to course policies and procedures as outlined in the course syllabus. All students enrolled in a class can submit a CAR during the current term using Penn InTouch.

All notifications of class absences must be sent to the instructor through the *CAR only*. If you will be absent for more than five days as a result of a University-approved excuse, please contact a CaseNet advisor with the College Office, who will notify your instructors directly.

Classroom Etiquette:

Although you are encouraged to come to lectures, you are not required to do so; however, this will likely be reflected in your grades. Laptop computers should be used only for taking notes, not for sending instant messages, surfing the web, monitoring status updates on Facebook, or any other purpose.

Tentative Course Schedule

27 Aug	Course introduction and overview	
29 Aug	Principles of Pharmacology	Ch. 1
3 Sep	Principles of Pharmacology	Ch. 1
5 Sep	Principles of Pharmacology; Research Methods in Psychopharmacology	Ch. 1 Ch. 4
10 Sep	Research Methods in Psychopharmacology; Catecholamines	Ch. 4 Ch. 5 Quiz 1 Due
12 Sep	Catecholamines	Ch. 5
17 Sep	<i>“The Case of the Frozen Addict”</i> Serotonin	Quiz 2 Due Ch. 6
19 Sep	Serotonin Acetylcholine	Ch. 6 Ch.7
24 Sep	Acetylcholine Glutamate and GABA	Ch. 7 Ch. 8 Quiz 3 Due
26 Sep		MIDTERM EXAM 1
1 Oct	Glutamate and GABA	Ch. 8
3 Oct	Shawn Bates, Ph.d.: Guest Lecture on Addiction	Ch. 9; <i>Radiolab Clip</i>
8 Oct	Alcohol	Ch. 10 Quiz 4 Due
10 Oct	<i>Fall Break—No Class</i>	
15 Oct	Alcohol Opioids	Ch. 11 Quiz 5 Due https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2720914

		https://www.npr.org/sections/health-shots/2019/08/13/741113454/its-the-go-to-drug-for-opioid-addiction-so-why-won-t-more-pharmacists-stock-it
17 Oct	Opioids <i>"Addiction"</i>	http://static.latimes.com/oxycontin-part1/#nt=oft12aH-11a1 http://www.latimes.com/projects/la-me-oxycontin-part3/ https://www.nytimes.com/2018/05/29/health/purdue-opioids-oxycontin.html
22 Oct	Psychomotor Stimulants	Ch. 12 Quiz 6 Due
24 Oct	Psychomotor Stimulants Nicotine and Caffeine	Ch. 13
29 Oct	Catch-up	
31 Oct		MIDTERM EXAM 2
5 Nov	Marijuana and Cannabinoids	Ch. 14
7 Nov	Marijuana and Cannabinoids Hallucinogens	Ch. 15 https://www.nytimes.com/interactive/2018/05/15/magazine/health-issue-my-adventures-with-hallucinogenic-drugs-medicine.html
12 Nov	<i>"The Business of Recovery"</i>	https://www.nytimes.com/2018/07/20/opinion/sunday/opioid-addiction-treatment.html Quiz 7 Due
14 Nov	Anxiolytic Drugs and Anxiety Disorders	Ch. 18
19 Nov	Antidepressants and Affective Disorders	Ch. 19 Quiz 8 Due
21 Nov	Antidepressants and Affective Disorders Antipsychotics and Schizophrenia	Ch. 20

26 Nov	Antipsychotics and Schizophrenia	Quiz 9 Due
28 Nov	<i>Thanksgiving—No Class</i>	
3 Dec	Catch-up	
5 Dec		MIDTERM EXAM 3

Exam Review Sessions

Exam 1:

Exam 2:

Exam 3:

Important Dates to Note: **October 7**– Drop period ends **October 10-13** – Fall Break
November 4 – Withdrawal deadline

Revised Fall 2019