# FALL 2016 TR 1:30-2:50pm ANNS 110

# **Course Personnel:**

Faculty:

Michael J. Kane, Ph.D.

Email: kanemi@sas.upenn.edu

Office: 468 Levin Phone: 215-746- 6808

Office Hours: Wednesdays 1:30pm-3pm or by appointment

#### **Graduate Teaching Assistant:**

**Graham Baum** 

Email: gbaum@mail.med.upenn.edu

Office:

Office Hours: Thursdays, 3:00-4:00 pm

# **Undergraduate Teaching Assistant:**

Tina Lulla

Email: tlulla@sas.upenn.edu

Office: 121 Levin (The BBB advising office located within the BBB "suite")

Office Hours: Tuesdays, 3:00-4:00 pm

# **Course Description:**

The course is divided into three modules:

**Module 1 (Basic Principles)** will cover the basics of pharmacology, Research Methods in psychopharmacology, and several major neurotransmitter systems.

**Module 2 (Drugs of Abuse)** will cover several major categories of drugs of abuse, with a focus on the mechanisms of action of these drugs.

**Module 3 (Psychopathology)** will cover the biological basis of several psychiatric disorders and the drugs used to treat these disorders.

**BIBB 109 / PSYC 109 / BIOL 109: Introduction to Brain and Behavior** is a *pre-requisite* for the course. If you have not taken 109, you will be **dropped** from the course. The course will assume that students have a basic background in neuroscience and neurotransmitter systems.

# Text:

Meyer, JS & Quenzer, LF. (2013). Psychopharmacology: Drugs, the Brain, and Behavior, 2<sup>nd</sup> Edition, Sinauer Associates, Inc., Sunderland, MA. ISBN: 978--- 0--- 87893--- 510--- 9. sites.sinauer.com/psychopharm2e

#### 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, 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 <u>part</u> of the lecture and <u>may not convey information</u> that was <u>presented orally</u>. Neither the posted slides nor the textbook provide 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 <u>prior to</u> 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 case of divergence, you should consider the lecture as primary material and the textbook as supporting material.

#### Exams:

Your grade will be a product of your performance on three **non-cumulative** exams (each worth 30% of the total grade) and 8 take-at-home quizzes (worth a total of 10%). All exams consist of multiple choice/fill-in-the-blank questions (covering factual material and to test critical thinking) and free-response questions (to test critical thinking). The exams are rolling cumulative, so that concepts presented in each block are fair game for questions asked in succeeding exams.

#### Quizzes:

There are a total of **8** take-at-home quizzes during the semester. Each quiz will consist of ~5 multiple choice questions (based on the material covered in the two lectures during the week), and you will have 10 minutes to complete them. You may use your notes, textbook, etc... during the quiz. The quizzes will be posted on Canvas on Friday and are to be completed by the following Friday at midnight. You must complete the quiz <u>on time</u> to receive credit. **There are no make-up or late quizzes**.

# 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 by e-mail by the end of the second week of the course. For all other instances, I will work with you to make-up the exam in a timely manner.

# 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 was** 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 requestifyougenuinely believethat a question was unfair or an error has been made.

#### **Review Sessions:**

The TAs will run review sessions outside of class before each exam. Be sure to email them specific

questions and/or topics to cover during the reviews.

#### Office Hours/Email Policy:

The instructor and teaching assistants 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 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 www.upenn.edu/academicintegrity). 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. Cell phones/Smartphones should be turned off during class. Laptop computers should be used only for taking notes and completing in class assignments, not for sending instant messages, surfing the web, monitoring status updates on Facebook, or any other purpose. Violation of this policy will result in penalization by lowering of your final class grade.

# **Tentative Course Schedule**

30-Aug	Course introduction and overview	
	MODULE 1: BASIC PRINCIPLES	
1-Sep	Principles of Pharmacology	Ch. 1
6-Sep	Principles of Pharmacology, continued	Ch. 1
8-Sep	Principles of Pharmacology, continued	Ch. 1
	Research Methods in Psychopharmacology	Ch. 4
13-Sep	Research Methods in Psychopharmacology	Ch. 4
15-Sep	Catecholamines	Ch. 5
20-Sep	"The Case of the Frozen Addict"	
22-Sep	Serotonin	Ch. 6
27-Sep	Acetylcholine, Glutamate and GABA	Ch. 7 & 8
29-Sep	Acetylcholine, Glutamate and GABA Catch-up	Ch. 7 &8
4-Oct	EXAM1	
	MODULE 2: DRUGS OF ABUSE	
6-Oct	Fall Break—No Class	
11-Oct	Alcohol	Ch. 10
13-Oct	Opioids	Ch. 11
18-Oct	"Chasing Heroin"	http://static.latimes.com/oxycontin-
20-Oct	Psychomotor Stimulants	Ch. 12
25-Oct	"The Meth Epidemic"	
27-Oct	Nicotine and Caffeine	Ch. 13
1-Nov	Marijuana and Cannabinoids	Ch. 14
3-Nov	Hallucinogens	Ch. 15
8-Nov	Catch-up	
10-Nov	EXAM 2	
	<b>MODULE 4: PSYCHOPATHOLOGY</b>	
15-Nov	Drug Abuse and Addiction	Ch. 9, Volkow_2015_Cell
17-Nov	Anxiety Disorders	Ch. 18
22-Nov	Affective Disorders	Ch. 19
24-Nov	Thanksgiving—No Class	
29-Nov	Schizophrenia	Ch. 20
1-Dec	"The New Asylum"	
6-Dec	Neurodegenerative Disease	Ch. 21
8-Dec	EXAM 3	

<u>Important Dates to Note:</u> October 10– Drop period ends October 6-9 – Fall Break

November 11 – Withdrawal deadline

Revised Fall 2016