Neuropsychopharmacology 830:412

Spring 2016

Class Meeting Times: 12:00-1:20pm, Monday/Thursday Location: ARC 105

Prerequisite: Physiological Psychology

Instructor: Benjamin Samuels, Ph.D.

Office Location: Busch Psychology Building, Room 215

Office Hours: TBA

Email: ben.samuels@rutgers.edu

Course Textbook

There is no required textbook for this course. Exams will be based on the lectures. All required readings will be announced in class and provided on the sakai website.

Course Description

This course will focus on the causes and treatment of neuropsychiatric disorders including schizophrenia and mood disorders (such as depression and anxiety). More specifically, we will pay close attention to the neurochemical and molecular biological mechanisms underlying these disorders and how drugs are used to affect different forms of chemical transmission and communication of information in the brain.

Sakai

This course will have a dedicated sakai website. All lecture slides will be posted on the sakai website after class. The site also includes downloadable readings for the course, this syllabus, and a venue for announcements to the class. This is the tool I will use to email the entire class when necessary. Exam grades will also be posted to this site.

Exams

There will be three exams (two midterms and one final). Exams 1 and 2 will each be worth 30% of the total grade. The Final Exam will be cumulative and will be worth 40% of the total grade. Exams will be a combination of multiple choice questions and short written answer questions.

Makeup Exams

All students are expected to take the exams on the day they are offered. Any student that misses an exam must provide acceptable evidence for their absence. One makeup exam will be offered between the final class and the final exam. This exam will be different than the corresponding midterm exam and will be entirely composed of written answer questions. In other words, it will be much harder! If you have athletic or religious obligations that conflict with the exams, then anticipate the interruption and let me know in advance!

Class Attendance/Extra Credit

The course and the exams will be based on the information supplied in the lectures. I will also provide some required readings. If you miss any classes, please use the University's absence reporting website at https://sims.rutgers.edu/ssra. This is a small(ish) class and I expect questions, discussions, and other forms of class participation from all of you. I will offer extra credit at various times during the course, but it will be in "pop" quiz or other surprise formats that are only offered **IN CLASS**.

Grading System

Students will need to achieve predetermined cut-off points for grades of A, B+, and so on.

Cut-off points will be as follows:

A: 90-100, B+: 85-89.9, B: 75-84.9, C+: 70-74.9, C: 60-69.9, D: 50-59.9, F: <50

Lecture Topics

Unit 1

Topics covered prior to Exam 1:

- 1. Drug Targets and Principles of Pharmacology
- 2. Neurobiology Overview/Review
- 3. Neurotransmitters, Transporters, Receptors, and Intracellular Signaling
- 4. Neuroanatomy
- 5. Genetics vs Epigenetics

EXAM 1: Thursday, Febraury 18th

30% of Final Grade

Unit 2

Topics covered prior to Exam 2:

- 6. Schizophrenia
- 7. Bipolar Disorder
- 8. Depression

EXAM 2: Thursday, March 31st

30% of Final Grade

Unit 3

Topics covered prior to Exam 3:

9. Anxiety Disorders

10-?. Students' Choice

FINAL EXAM: Thursday, May 5th (8-11am) 40% of Final Grade