NEU 380 Neuropharmacology of Drugs

Instructor contact information

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Course objectives:

Understand the basics of pharmacology and pharmacokinetics
Understand how psychoactive drugs interact with our body's natural signaling
Learn how to read scientific papers and interpret graphs
Understand the debate about the legal status of drugs of abuse

Research paper assignment

You will choose an original research paper that studies a drug of your choosing. Use the PubMed database to help you find a paper that interests you. The assignment has two parts, a written section to be handed in on 3/14 before class, and an in-class journal club style discussion of your selected paper.

Evaluation

Midterm exam (20%) Final exam (cumulative, 40%) Assignments and homework (20%) Research paper assignment (20%)

Success in NEU 380

- Read the assignment before class.
- Take notes. You may use your notes during some in-class assignments.
- Don't be afraid to ask questions in class (most preferred), at office hours, or by email. If you are confused about a topic, odds are good that others may be confused as well.
- Be curious. Ask yourself "what if..." These types of test questions challenge your recollection of course material and push you to think on a higher level.

Syllabus

Lect	Topic	Assignment	Other
1	Introduction		
2	Basics of neuroscience	Overview of neuron structure and function	
3	Pharmacokinetics	<u>1.1</u> – <u>1.5</u>	
4	Pharmacodynamics	Neurotransmitters and receptors	
5	Methods	Deneau, 1969 Olds and Milner, 1954	HW due
6	Reward and tolerance	Schultz, 2016	
7	Withdrawal, relapse, and midterm catch up	Frey: <i>A Million Little Pieces</i> p1-19 Nestler and Malenka, 2004	
	Midterm		
8	Alcohol	Cordell, 2013	
9	Nicotine	<u>Nicotine</u>	
10	Sympathetic nervous system and psychostimulants	Weinberg and Bealer: The World of Caffeine Chapter 13	Research paper selection
11	Cannabinoids	Kilmer, 2017	
12	Perception and psychedelics	Hofmann: LSD, My Problem Child Ch1, Ch 5 p30-37	
13	Somatosensation and opioids	<u>Lee, 2012</u>	
14	Sleep and sedatives	Walker: Why we Sleep Ch 14	
15	Neurotoxins	Booth, 1988	
16	Therapeutic drugs – part 1	Langston, 1983	
17	Therapeutic drugs – part 2	Carhart-Harris, 2018	
	Research paper discussions		Research assignment
	FINAL	2:30-4:45	

Grading

Assignment	Points
In-class assignments	100
Exam 1 (1/5 th of grade)	100
Exam 2 (1/5 th of grade)	100
Final Exam	200

	Grading scale	
465 - 500	С	365 - 384
450 - 464	C-	350 - 364
435 - 449	D+	335 - 349
415 - 434	D	300 - 334
400 - 414	F	299 or below
	450 - 464 435 - 449 415 - 434	465 - 500 C 450 - 464 C- 435 - 449 D+ 415 - 434 D

C+

385 - 399

Assignments, lateness policy, make-up exams

Make up in-class assignments will not be given. In the event of serious personal illness or a family emergency, given notice prior to the exam date, an alternate time schedule can be arranged. Send an email with appropriate documentation, and we will work it out.

Students with disabilities

Please meet with me to discuss how accommodations can be made. You are not required to register with the Center for Students with Disabilities (CSD), but if you would like for accommodations to be made, you will have to register. The CSD will provide the services that will assist your success. The CSD can be found at DePaul's Lincoln Park Campus Student Center Room 370 (773 – 325 – 1677).

Sexual and relationship violence reporting

Students may reach out to faculty as a source of help and support. Faculty are required to report information reported to them about experiences with sexual or relationship violence to DePaul's Title IX Coordinator. Students should also know that disclosing experiences with sexual or relationship violence in course assignments or discussion does not constitute a formal report to the University and will not begin the process of DePaul providing a response. Students seeking to report an incident of sexual or relationship violence to DePaul should contact Public Safety (Lincoln Park: 773-325-7777; Loop: 312-362-8400) or the Dean of Students and Title IX Coordinator (Lincoln Park: 773-325-7290; Loop: 312-362-8066; TitleIXCoordinator@depaul.edu).

Statement on academic dishonesty

DePaul University has a zero tolerance policy on academic dishonesty. Academic dishonesty on an assignment or exam will result in receiving a zero for said assignment, and the student in question will be reported for appropriate disciplinary measures.