

SAM HOUSTON STATE UNIVERSITY
DEPARTMENT OF PSYCHOLOGY AND PHILOSOPHY

PSYC 5361 Neuropsychopharmacology

3 Credit Hours

Spring 2018

College of Humanities and Social Sciences (CHSS) Building, Room 330

Tuesdays – 1:00 to 3:50 pm

Instructor: David V. Nelson, Ph.D., ABPP (Clinical Health Psychology)
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Office Hours: Mondays 11:00 am – 11:45 am
Tuesdays 12:00 noon - 12:45 pm & 4:00 pm - 5:00 pm
And by appointment
(Faculty/committee meetings are sometimes scheduled during these times,
so it is best to call and confirm appointment; however, you are always
welcome to drop by any time to see if I am in.)

REQUIRED TEXTBOOKS:

Preston, J. D., O’Neal, J. H., & Talaga, M. C. (2017). *Handbook of clinical psychopharmacology for therapists* (8th ed.). Oakland, CA: New Harbinger Publications. (Indicated in Course Schedule Readings as Preston-8e.)

Preston, J. D., O’Neal, J. H., & Talaga, M. C. (2015). *Child and adolescent psychopharmacology made simple* (3rd ed.). Oakland, CA: New Harbinger Publications. (Indicated in Course Schedule Readings as Preston-C.)

Maisto, S. A., Galizio, M., & Connors, G. J. (2019). *Drug use and abuse* (8th ed.). Boston, MA: Cengage Learning. (Indicated in Course Schedule Readings as Maisto-8e.)

ADDITIONAL REQUIRED READING:

Other readings may occasionally be required to supplement material covered in the course. These will be announced in class.

RECOMMENDED SUPPLEMENTARY REFERENCE:

Schatzberg, A. F., & DeBattista, C. (2015). *Manual of clinical psychopharmacology* (8th ed.). Arlington, VA: American Psychiatric Publishing, Inc. Available through the SHSU Newton

Gresham Library PsychiatryOnline database. (Indicated in Course Schedule Readings as Schatzberg & DeBattista.)

PURPOSE OF THE COURSE:

This course examines the field of behavioral pharmacology: the systematic study of the effects of drugs on behavior and the way in which behavioral principles can help in understanding how drugs work. The focus is on the neurophysiological mechanisms of action of various psychoactive drugs and on the various neurotransmitter systems within the nervous system. In addition, clinical applications of psychopharmacology to various psychological/psychiatric symptoms and disorders are emphasized.

Goal: To introduce the student to basic principles of psychopharmacology

- Learning outcome: You will understand the basic structure of the nervous system, neural transmission, and the major neurotransmitter systems that are particularly pertinent to an understanding of psychopharmacology in clinical psychology practice.
- Learning outcome: You will understand the basic principles of pharmacokinetics and pharmacodynamics.

Goal: To learn the most common clinical applications of psychopharmacology

- Learning outcome: You will understand the specifically targeted psychopharmacological treatments for the most common clinical psychological/psychiatric symptoms and disorders.
- Learning outcome: You will understand the differences in psychopharmacological approaches to children, adults, and the elderly.
- Learning outcome: You will understand some of the psychopharmacological alternatives for addressing first-line drug refractory conditions.
- Learning outcome: You will understand other special applications of psychopharmacology, such as the treatment of alcohol and other drug abuse/dependence and during pregnancy and lactation.
- Learning outcome: You will understand basic principles of adjustments to treatment based on drug interactions and related metabolic mechanisms.

Goal: To learn about emerging trends in the field of psychopharmacology

- Learning outcome: You will understand the basic principles and implications of genomics or biomarkers for personalized medicine in the future.

FORMAT:

The course will include classroom lectures and discussions, and possibly brief student presentations, in addition to the assigned textbook and other required readings and/or activities.

GRADING:

There will be three exams. Although we will have to be selective about what is covered in class per se, it is important for you to be sure to cover all of the textbook material and you will be responsible for all lecture, classroom discussion, and textbook material on the exams. Test format may include multiple choice, true/false, identification/labeling, matching, short answer, and/or case material/vignette analysis. All exams will be cumulative, but the first two will emphasize primarily the material covered in the respective segments of the course. As you become increasingly exposed to principles and practices of psychopharmacology, you will see how it is a natural extension of your learning to think in terms of a cumulative application of knowledge. Exam 3, the Final Exam, will be cumulative and may include relatively more complicated case material/vignette analysis. *If extended case material is included, there may be a 24-hour open-book, take home component to the Final Exam.* **Students will need to provide their own #2 pencils and “Scan-Tron” answer sheets (#882-E) for each exam.** All exams must be taken as scheduled in order to pass the course. Make-ups will be allowed only in extraordinary circumstances.

If you are asked to make a brief presentation, no grade or points will be awarded, and there will be no effect on your final course grade as long as you follow through with the assignment. Essentially, then, such activities will be considered simply as “completion” activities.

Exam 1 = 100 points

Exam 2 = 100 points

Exam 3 = 200 points

Total = 400 points

Grades will be based on the total points achieved. The highest total points achieved by any one student in the class will set the standard for cut-off criteria as indicated below, as long as that score is still in the 90's.

A = 90-100% (or 90-100% of the highest total points achieved)

B = 80-89% (or 80-89% of the highest total points achieved)

C = 70-79% (or 70-79% of the highest total points achieved)

F = Less than 70% (or < 70% of the highest total points achieved)

Grades of D are not assigned in graduate courses.

ATTENDANCE AND PARTICIPATION POLICY:

Regular attendance is expected. You should stay up to date on course requirements, including any potential changes to the schedule, as they are announced/posted. Borderline cases regarding grades (i.e., within a point or two of qualifying for a higher grade) may be decided by the degree of your participation in addition to your performance in other aspects of the course.

ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Academic dishonesty in this course will result in a grade of F.

MORE ON OFFICIAL UNIVERSITY POLICIES

CLASSROOM RULES OF CONDUCT:

According to University guidelines and general sense of decency, students are expected to assist in maintaining a classroom environment that is conducive to learning. Mutual respect and courtesy are the expected standards.

AMERICANS WITH DISABILITIES ACT:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disability that might affect their academic performance are expected to visit with the Office of Services for Students with Disabilities located in the Lee Drain Annex. They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may adversely affect your work in this class, then I encourage you to register with the SHSU Office of Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the Office of Services for Students with Disabilities Center.

RELIGIOUS HOLIDAYS:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911(a)(2) defines religious holy days as: “a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. . . .” A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will notify the student of a reasonable timeframe in which the missed assignments and/or examination are to be completed.

VISITORS IN THE CLASSROOM:

In a regular on-campus course, unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor’s discretion whether or not the visitor will be allowed to remain in the classroom. In general, visitors to this course should be cleared by the instructor for some specific purpose directly relevant to the educational experience. Otherwise, only registered students who have paid university/course fees are allowed to be in the classroom.

For additional information regarding these matters, please see

<http://www.shsu.edu/syllabus/#>

as well as the following:

Academic Dishonesty

<http://www.shsu.edu/dotAsset/728eec25-f780-4dcf-932c-03d68cade002.pdf>

Observance of Religious / Holy Days

<http://www.shsu.edu/dotAsset/0953c7d0-7c04-4b29-a3fc-3bf0738e87d8.pdf>

Americans with Disabilities Act – Students with Disabilities

<http://www.shsu.edu/dotAsset/9edd8433-cad5-40d1-b4bf-6a91b08f90e4.pdf>

INSTRUCTOR EVALUATION:

You may be asked to complete a course/instructor evaluation form toward the end of the semester.

COURSE OUTLINE/APPROXIMATE SCHEDULE (Take note of announcements during class time regarding any changes. Also check Blackboard for updates):

This schedule should be considered fluid and subject to change depending on how the nature of the classroom and other course-related activities progress as well as student feedback regarding the density and intensity of the material covered. Changes will be announced in as timely a manner as possible.

Date		Topic	Readings
January	23	Introduction General Principles and Practical Issues History of Biological Psychiatry Integrated Biological-Psychological Models Drug Use and Abuse Drug Use: Yesterday and Today	Preston-8e, Chapters 1 & 2 Maisto-8e, Chapters 1 & 2 Schatzberg & DeBattista, Chapter 1 through Practice Guidelines
	30	Basic Neurobiological (Neuroanatomical, Neurophysiological, Neurotransmission) Principles (Begin) Pharmacokinetics	Preston-8e, Chapter 3 Maisto-8e, Chapter 3 Preston-8e, Chapter 4 & Appendix A Maisto-8e, Chapter 4
February	6	Pharmacokinetics and Pharmacodynamics	Preston-8e, Chapter 4 & Appendix A Maiston-8e, Chapter 4
	13	Exam 1 Antidepressant, Bipolar/Mood Stabilizing, Antianxiety, and Antipsychotic Medications	 Preston-8e, Chapters 16, 17, 18, & 19
	20	Antidepressant, Bipolar/Mood Stabilizing, Antianxiety, and Antipsychotic Medications continued Medications to address OCD, PTSD, Sleep, Borderline Personality, and Eating Disorders	Preston-8e, Chapters 16, 17, 18, & 19 See also Chapters 10, 12, 13, & 15
	27	Medications to address OCD, PTSD, Sleep, Borderline Personality, and Eating Disorders continued Over-the-counter Dietary Supplements and Herbal Products	See Preston-8e, Chapters 10, 12, 13, & 15 Preston-8e, Chapter 20

March	6	Medication Nonadherence Medication Discontinuation Red Flags: When to Reevaluate Differentiating Psychotropic Side Effects from Psychiatric Symptoms Psychotropic Drug Interactions Medication Safety and Patient Education Pregnancy and Lactation Issues Elderly/Geriatric Considerations	Preston-8e, Chapters 5, 21, 22, Appendix B, Appendix C, Appendix D, & Appendix G
	13	SPRING BREAK	
	20	Child and Adolescent Psychopharmacology	Preston-C, Chapters – all
	27	Exam 2	
		Alcohol	Maisto-8e, Chapter 9
April	3	Opiates Stimulants	Maisto-8e, Chapter 10 Masito-8e, Chapter 6
	10	Nicotine Caffeine	Maisto-8e, Chapter 7 Maisto-8e, Chapter 8
	17	Marijuana Hallucinogens	Maisto-8e, Chapter 11 Maisto-8e, Chapter 12
	24	Psychopharmacogenomics, Biomarkers, and Personalized Medicine Legal, Ethical, and Economic Issues	Preston-8e, Epilogue Maisto-8e, Chapter 5 Schatzberg & DeBattista, Chapter 1-Legal, Ethical, and Economic Issues
May	1	Final Exam	