Behavioral Pharmacology PHAR 5091-11
Special Topics: Microelectives

Spring 2017

CLASS DAYS and TIME: To be determined

CLASSROOM: Medical School 209B

COURSE FACULTY: Charles P France

OFFICE LOCATION and HOURS: 209B Medical School (By appointment)

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READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

The goal of this course is to teach basic principles of behavioral pharmacology, provide guidance in the evaluation of basic research in behavioral pharmacology, and facilitate scientific presentation skills.

Pre-requisites – None

Semester credit hours – 0.5

By the end of this course, each student should be able to:

- Present and constructively criticize original research reports in the area of behavioral pharmacology.
- Design rigorous behavioral and pharmacological experiments.
- Articular basic principles of behavioral pharmacology.
- Describe seminal findings in the area of behavioral pharmacology.

COURSE ORGANIZATION

The main teaching modalities used in this course include:

1) The primary teaching modality for this course is facilitated discussion. Students read original research papers in behavioral pharmacology and make oral presentations of papers in regularly scheduled classes. Assignment of students for presentations is made by the instructor and all students are expected to contribute to discussions.

Materials – No special materials are required

Computer Access – Computer access to receive required reading is recommended but not required; the instructor will provide printed copies of required readings as needed.

Reading Assignments – Required readings can vary depending on the experience and interest of enrolled students. An example of required readings is provided below.

ATTENDANCE

Attendance, participation in discussions, and presentations of research papers are required. Any student with unexcused absences of more than 10% of classes will not pass the course.

TEXTBOOKS

Required: No required textbooks

Recommended: Drugs and Behavior: Introduction to Behavior Pharmacology, WA McKim, Prentice Hall, Inc. Schedules of Reinforcement, CB Ferster and BF Skinner, Harvard University. Goodman and Gilman's The Pharmacological Basis of Therapeutics, L Brunton, B Chabner and B Knollman, McGraw Hill. Introduction to Neuropharmacology, PB Bradley, Butterworth-Heinemann. Handbook or Substance Abuse, RE Tarter, RT Ammerman and PJ Ott, Springer.

GRADING POLICIES AND EXAMINATION PROCEDURES

Grades are determined based on attendance, participation in discussions, and presentation of research papers. Any student with unexcused absences of more than 10% of classes will not pass the course.

Grading System

Pass/fail

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, **Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA)**, any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100) to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at http://uthscsa.edu/eeo/request.asp.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/

TITLE IX AT UTHSCSA

Title IX Defined:
Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

University of Texas Health Science Center San Antonio's Commitment:
University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at http://students.uthscsa.edu/titleix/

EMAIL POLICY

Email will be used by the instructor to distribute electronic copies of required reading. Appointments for meeting with the instructor must occur by email request.

USE OF RECORDING DEVICES

Recording devices allowed with permission of both the instructor and all enrolled students

ELECTRONIC DEVICES

No cell phone or computer use allowed.

The class schedule will be determined based on availability of the enrolled students and the instructor. Typically classes will occur 1-2 hr/week in the instructor's office.

An example of prior required readings for this course is as follows:

JR Weeks (1962) Experimental morphine addiction: method for automatic intravenous injections in unrestrained rats. Science 138:143-144.

R Clark, CR Schuster and JV Brady (1961) Instrumental conditioning of jugular self-infusion in the rhesus monkey. Science, 133:1829-1830.

PB Dews (1955) Studies on behavior. I. Differential sensitivity to pentobarbital of pecking performance in pigeons depending on the schedule of reward. Journal of Pharmacology and Experimental Therapeutics, 113:393-401.

PB Dews (1955) Studies on behavior. II. The effects of pentobarbital, methamphetamine and scopolamine on performances in pigeons involving discriminations. Journal of Pharmacology and Experimental Therapeutics, 115:380-389.

PB Dews (1957) Studies on behavior. III. Effects of scopolamine on reversal of a discriminatory performance in pigeons. Journal of Pharmacology and Experimental Therapeutics, 119:343-353.

PB Dews (1958) Studies on behavior. IV. Stimulant actions of methamphetamine. Journal of Pharmacology and Experimental Therapeutics, 122:137-147.

RD Porsolt, M Le Pichon and M Jalfre (1977) Depression: a new animal model sensitive to antidepressant treatments. Nature, 266:730-732.

MS Kleven and W Koek (1999) Effects of benzodiazepine agonists on punished responding in pigeons and their relationship with clinical doses in humans. Psychopharmacology, 141:206-212.

JB Smith (1990) Situational specificity of tolerance to decreased operant responding by cocaine. Pharmacology Biochemistry & Behavior, 36:473-477.

Colpaert FC, Niemegeers AJE and Janssen PA (1976) Theoretical and methodological considerations of drug discrimination learning. Psychopharmacologia, 46:169-177.

SR Goldberg, F Hoffmeister, U Schlichting and W Wuttke (1971) Aversive properties of nalorphine and naloxone in morphine-dependent rhesus monkeys. Journal of Pharmacology and Experimental Therapeutics, 179:268-276.

VF Gellert and SG Holtzman (1979) Discriminative stimulus effects of naltrexone in the morphine-dependent rat. Journal of Pharmacology and Experimental Therapeutics, 211:596-605.

RD Spealman (1979) Behavior maintained by termination of a schedule of self-administered cocaine. Science 204:1231-1233.

ME Carroll, CP France and RA Meisch (1979) Food deprivation increases oral and intravenous drug intake in rats. Science, 205:319-321.

SR Goldberg, JH Woods and CR Schuster (1969) Morphine: conditioned increases in self-administration in rhesus monkeys. Science, 166:1306-1307.

JV Brady (1956) Assessment of drug effects on emotional behavior. Science, 123:1033-1034.

K Ando and T Yanagita (1981) Cigarette smoking in rhesus monkeys. Psychopharmacology, 72:117-127.

M Lenoir, F Serre, L Cantin and SH Ahmed (2007) Intense sweetness surpasses cocaine reward. PLoS One, 2:e698.

AM Young, G Kapitsopoulos and MM Makhay (1991) Tolerance to morphine-like stimulus effects of mu opioid agonists. Journal of Pharmacology and Experimental Therapeutics, 257:795-805.

G Zernig, ER Butelman, JW Lewis, EA Walker and JH Woods (1994) In vivo determination of mu opioid receptor turnover in rhesus monkeys after irreversible blockade with clocinnamox. Journal of Pharmacology and Experimental Therapeutics, 269:57-65.