PSYC 6378: Special Topics in Behavioral Neuroscience: Toxicology II  
MW 1030-1150am in Psychology 224H

Professor: Katherine Serafine, Ph.D.  
Office: 216B Psychology Building  
Office Hours: Mondays 12-130pm  
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Text:  
We will use a variety of open access readings focused on toxicology and refer to some content from this textbook: A Pharmacology Primer: Theory, applications, and methods. Third edition, 2009. Author: Terry P. Kenakin

Course Description:  
We will review materials from the Johns Hopkins Bloomberg School of Public Health scientific applications in toxicology course as a framework to learn about basic principles of toxicology and scientific applications of toxicological methods. Materials from the Kenakin text will also be used to enhance modules.

Learning Objectives:  
The goal of this course is to provide graduate students with an overview of basic toxicology and pharmacokinetic principles that would be applicable to a wide range of career paths. Students will also engage in scientific communication about toxicology via a written assignment and oral presentation.

Accommodations and Support Services:  
If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass. Please notify Dr. Serafine ASAP (and one week prior to each exam) if you require CASS support services, especially if you require exam support/accommodations.

Blackboard:  
Everything you need for this class can be found on Blackboard. Please check Blackboard for announcements at least once per week. Blackboard is also where you will find online quizzes and other supplemental materials relevant to the course. Make sure you check your email regularly for updates via blackboard.

Grades: up to 400 points total

Grade Breakdown:  
- Completion of all modules = 300 points  
- Final Presentation = 30 points  
- Final Paper = 70 points

Final Grade Calculation: Final grades will be calculated as follows (points earned /400) x 100.

Grading scale:  
- A = 90.0-100.0%  
- B = 80.0-89.9%  
- C = 70.0-79.9%  
- D = 60-69.9%  
- F < 60.0%
Final Presentation: By the end of the semester, students will present 2 case studies outlining the pharmacokinetic profile of a historical example of a medication, as well as the toxicological profile of a drug currently under review (using source material from a New Drug Application – NDA). To earn full credit students must demonstrate mastery of understanding about the two case studies, including information about the time course (onset of action, half-life, etc) of pharmacokinetic effects as well as a basic understanding of the pharmacodynamics.

Academic Dishonesty: Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. You can read these policies by following this hyperlink: https://www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be taken seriously and will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

Important Contact Information
University Counseling Center 202 Union West 747-5302
Center for Accommodations and Support Services 106 Union East 747-5148
University Career Center 103 Union West 747-5640
Department of Psychology 112 Psychology 747-5551

Class Schedule:
Week 1 (January 16-19) Course introduction
Week 2 (January 22-26) History of Toxicology (Module 1A)
Week 3 (January 29-February 2) Toxicity Testing (Module 1B)
Week 4 (February 5-9) Adverse Outcome Pathways & Exposure-Based Chemical Prioritization (Module 2A)
Week 5 (February 12-16) US EPA Endocrine Disruptor Screening Program (Module 2B)
Week 6 (February 19-23) Vascular Disruption Signatures & Vascular Development Assays (Module 2C)
Week 7 (February 26-March 1) Human Toxome Project (Module 3)
Week 8 (March 4-8) REACH Legislation and the concept of “read-across” (Module 4)
Week 9 (March 11-15) Spring Break (no classes)
Week 10 (March 18-22) Epigenetics & miRNA in toxicology and environmental health (module 5)
Week 11 (March 25-29) Quality Assurance, Good Practices, and Validation (Module 5)
Week 12 (April 1-5) In Vitro Toxicology Part 1 (Module 6A)
Week 13 (April 8-12) In Vitro Toxicology Part 2 (Module 6B)
Week 14 (April 15-19) Integrated Testing Strategies (Module 7)
Week 15 (April 22-26) Case Study Research: Example from History
Week 16 (April 29-May 3) Case Study Research: New Drug Application
Week 17 (May 6-10) Finals Week: Final paper and presentations due