PHM 980 / Section 735
Current Topics in Pharmacology & Toxicology
for MS Students

Course Overview

**PHM 980 / Section 735**

Current Topics In Pharmacology & Toxicology

This course is intended for online MS students seeking to explore and better understand pharmacology and toxicology topics that have gathered recent attention either in scientific or popular arenas. Explanations for scientific or societal attention, pharmacological and/or toxicological foundations, and related regulatory policies will be explored.

Journal articles and/or articles from reputable non-scientific sources will be selected in initial weeks by faculty, then subsequently by students, for posting and discussion on D2L. Students are expected to read articles and post substantive responses/opinions and contribute additional (related) published material. A final short summary (1-2 pages) of the topic the student found most interesting, or learned most about, is also required.

No textbook required.

Dr. Jane Maddox
received her DVM from Michigan State University. Following a few years of private veterinary practice, she earned her PhD in Pathobiology from The Pennsylvania State University and held a postdoctoral position at Harvard. Her research interests include inflammation and mechanisms of drug-induced liver injury.

Dr. Roseann Vorce
received her PhD from Michigan State University in Pharmacology and Toxicology. She was a faculty member at the University of Nebraska Medical Center in the Pharmacology department and a toxicologist for Pfizer specializing in nonclinical safety assessment and regulatory submissions before returning to MSU.

Course Topics

Will be selected by faculty and students. Potential topics are below:

- The Flint, MI lead water crisis: Health consequences? Causes? Fallout?
- Performance enhancing drugs: Anabolic steroids to ADHD medications
- Fentanyl: A therapeutic opioid turned illicit killer – why/how?
- Drug shortages: Which drugs? Causes? Consequences?
- CRISPR/Cas-9: What is it? How is it used in pharmacology and/or toxicology research?
- The explosion of biologic drugs: Do increased efficacy and/or reduced adverse effects balance increased cost?
- Glyphosate (Roundup®): Toxicity in humans and insects? Differing effects when combined with other chemicals? Lasting environmental effects?

Pre-requisites

PHM 819 or PHM 450 and approval of department required

Course Number: PHM 980/735 (online)
Sections Available: 735 / Online MS Students only
Semesters: Fall 2019
Credits: 1 credit

Successful completion of this course will count as 1 credit of science elective toward the MS degree.

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