ENVH 515 - ENVIRONMENTAL AND OCCUPATIONAL TOXICOLOGY II
COURSE SYLLABUS

Winter Quarter, 2004 - M,W,F 10:30-11:20 a.m., E-212

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ENVH 515 Home Page Address:
http://courses.washington.edu/tox515/index.html

Course Objectives: This is the second course of a three-course sequence, with ENVH 514 (Drs. Zhengui Xia & Terry Kavanagh) and ENVH 516 (Dr. Lucio Costa). The overall goal is for students to gain a basic working knowledge of how chemicals interact with biological systems to produce adverse effects, i.e., the science of toxicology. The second quarter of this series is organized with sections pertaining to:

a) organ system toxicology, i.e., liver, kidney, lung, cardiovascular, blood/bone marrow, skin, endocrine & immunotoxicology
b) neurotoxicology, behavioral toxicology & sensory system toxicology
c) developmental & reproductive toxicology

Thus, the second quarter of this series will concentrate on **organ toxicology** while the first quarter concentrated on **basic concepts and mechanisms of toxicology** and the third quarter will concentrate on **specific agents**. Guest lecturers are a valuable asset to the course in general and will assist in providing coverage of subject areas within their respective areas of expertise.

Intended Student Audience: The 514-516 course sequence serves as the core of the graduate toxicology program for both M.S. and Ph.D. Toxicology students in the Department of Environmental & Occupational Health Sciences. Graduate students from DEH and other allied biomedical science departments sharing an interest in toxicology, e.g., Pharmacology, Medicinal Chemistry, Epidemiology, Physiology & Biophysics, Biochemistry, also are encouraged to register. Prerequisites for this class include a year of undergraduate general biology, two quarters of organic chemistry, and two quarters of graduate level biochemistry. Previous background in mammalian physiology is strongly recommended.

Required Reading: The text for the 514-516 course series is: Klaassen, C.D. (ed.) *Casarett and Doull's Toxicology: The Basic Science of Poisons*, 6th edition, 2001. Chapters 10-21 are covered in 515. Additional handout materials will be provided for most classes and are also required reading.

Grading: The final grade for this class will be based on an accumulated score from two mid-term exams, one final exam, and a student Powerpoint/poster presentation.

Final Exam: 3/14/05, 8:30–10:20 a.m., E-212.