TOX-TOXICOLOGY

TOX 361. Basic Toxicology
3 Credits (3)
Introduction to the principles of toxicology, discussion of toxic agents, environmental problems, testing procedures, and regulations. Prior course work in biology and chemistry recommended. Course taught with ENVS 361.
Prerequisite: CHEM 2120 or CHEM 313 and BIOL 2610G or BIOL 2110G.
Learning Outcomes

1. Learn how toxins are absorbed, distributed, metabolized, and excreted from living systems.
2. Demonstrate how metabolism can appreciably alter the toxicity of compounds as well as dictate the resultant toxicity with an emphasis on target organ(s).
3. Explain the specific mechanism(s) of actions of toxins targeting the liver, lung, kidney, and nervous systems.
4. Delineate how certain toxins induce cancer and/or promote the development of cancer.
5. Understand how and why certain plants and animals are poisonous and venomous, specifically linking discreet chemicals or complex mixtures to the resultant toxic manifestation.

TOX 461. Toxicology I
3 Credits (3)
Introduction to principles of toxicology. Crosslisted with: TOX 361.
Prerequisite(s): (CHEM 1226 or CHEM 1225G) and (BIOL 2610G or BIOL 2110G).

TOX 598. Special Research Programs
1-3 Credits
Individual investigations, either analytical or experimental. Graded S/U.