# **TOXICOLOGY (TOX)**

#### TOX\*2000 Principles of Toxicology Fall Only (LEC: 3) [0.50]

This course will establish the scientific principles underlying the toxic actions of various substances and will introduce the various challenges within the field of toxicology. The chemical nature of injurious substances, their uptake and metabolism by non-target organisms, and their mode of toxic action will be studied in addition to the methods used in safety evaluations and risk assessment.

Prerequisite(s): CHEM\*1050, (1 of IPS\*1500, MATH\*1080, MATH\*1200),

(1 of BIOL\*1040, BIOL\*1070, BIOL\*1080, BIOL\*1090)

Department(s): Department of Chemistry

Location(s): Guelph

## TOX\*3360 Environmental Chemistry and Toxicology Winter and Summer (LEC: 3) [0.50]

This course examines the chemistry of the natural environment and the influence of pollutants upon the environment. Topics will include methods of introduction of pollutants to, and removal of pollutants from, the environment. (Also listed as CHEM\*3360.)

Offering(s): Also offered through Distance Education format.

Prerequisite(s): CHEM\*1050 Equate(s): CHEM\*3360

Department(s): Department of Chemistry

Location(s): Guelph

### TOX\*4000 Medical Toxicology Fall Only (LEC: 3) [0.50]

This course will focus on the toxicology of mammalian body systems with emphasis on dose-response, mechanisms and the sites of action of major groups of chemical toxicants and biological toxins. The course is designed for students majoring in Bio-Medical Sciences, Biomedical Toxicology and Toxicology.

Prerequisite(s): BIOM\*3090

**Restriction(s):** This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. See department for more information.

Department(s): Department of Biomedical Sciences

Location(s): Guelph

### TOX\*4100 Toxicological Pathology Winter Only (LEC: 2, LAB: 2) [0.50]

Evaluation of the pathologic responses of cells and tissues to toxic compounds. The course is designed for students majoring in toxicology.

Prerequisite(s): PATH\*3610 (or equivalent)

Department(s): Department of Pathobiology

Location(s): Guelph

## TOX\*4200 Topics in Toxicology Winter Only (LEC: 3) [0.50]

Topics in toxicology will consist of oral and written presentations by students, faculty members, and guest lecturers. The emphasis will be on the broad integrative aspects of toxicology with particular reference to the whole organism and higher levels of natural systems; risk assessment and regulatory toxicology.

Prerequisite(s): TOX\*2000, (CHEM\*3430, TOX\*3300)

Restriction(s): Restricted to students in BSCH.TOX, BSCH.TOX:C Department(s): Department of Biomedical Sciences, School of

Environmental Sciences **Location(s)**: Guelph

#### TOX\*4590 Biochemical Toxicology Fall Only (LEC: 3) [0.50]

This course will focus on the biotransformation of drugs, carcinogens, and other toxicants, including consideration of human health implications of these metabolic processes. The enzymes catalyzing these reactions will be discussed in detail.

Prerequisite(s): (1 of BIOC\*3570, CHEM\*3430, TOX\*3300), BIOC\*3560,

(MBG\*2020 or MBG\*2040)

Department(s): Department of Chemistry

Location(s): Guelph

## TOX\*4900 Toxicology Research Project I Summer, Fall, and Winter (LAB: 9) [1.00]

This research project in toxicology is designed to provide senior undergraduate students with an opportunity to conduct research in an area of toxicology. Students should note that most projects are of two semesters' duration, and should plan their studies with the expectation that they will also register in TOX\*4910 in a subsequent semester. Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester in advance. The project supervisor should normally be a faculty member from the Toxicology Program.

Prerequisite(s): CHEM\*3430 or TOX\*3300

Restriction(s): Normally a minimum cumulative average of 70% is

required. Instructor consent required. **Department(s):** Department of Chemistry

Location(s): Guelph

# TOX\*4910 Toxicology Research Project II Summer, Fall, and Winter (LAB: 9) [1.00]

This course involves a research project in toxicology. Students must make arrangements with both the faculty supervisor and the course coordinator at least one semester in advance. The project supervisor should normally be a faculty member from the Toxicology Program.

Prerequisite(s): TOX\*4900

Restriction(s): Normally a minimum cumulative average of 70% is

required. Instructor consent required. **Department(s):** Department of Chemistry

Location(s): Guelph