

534-305 Toxicology

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: 12 lectures (two per week for six weeks) and 36 hours of practical work (one 6-hour session per week for six weeks). First half of Semester 2 Total Time Commitment: 120 hours
Prerequisites:	534-301 Cellular and Molecular Pharmacology; exemption may be given at the discretion of the head of the department.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject requires all students to actively and safely participate in laboratory activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
Coordinator:	Prof G Anderson
Subject Overview:	The teaching program will introduce students to the mechanisms by which drugs, chemicals and toxins cause cellular toxicity and how cellular toxicity can lead to effects on specific target organs. The lectures will cover the following topics: general mechanisms of toxicity; principles of toxicity testing; clinical testing of drugs; epidemiological studies; apoptosis and necrosis; free-radicals and cell damage; organ-specific toxicity (including cardiovascular system, lung, liver, kidney, nervous system and reproductive system); and the in-vitro and in-vivo toxic effects of commonly used and encountered drugs, chemicals and toxins. In the practical sessions, students will develop skills in a range of techniques used to examine the toxicity of drugs, chemicals and toxins, including in-vitro assays, in-vivo investigations and computer-based modelling. Throughout the teaching program, the importance of rational and critical scientific analysis of toxicological issues will be stressed.
Assessment:	Ongoing assessment of practical work during the semester (25%); a 2-hour written examination in the examination period covering material presented in lectures and practicals (75%).
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Upon completion of this subject students should develop skills in: <ul style="list-style-type: none"># participating effectively in group work;# applying quantitative analysis to data; and# making use of information technology resources in data presentation.
Notes:	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.

	Experiments involving animals are an essential part of this subject; exemption is not possible.
Related Course(s):	Bachelor of Arts and Bachelor of Science Bachelor of Arts and Sciences Bachelor of Biomedical Science Bachelor of Science Graduate Diploma in Biotechnology