

534-301 Cellular and Molecular Pharmacology

Credit Points:	25.000
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 36 hours of lectures (three per week); 30 hours of practicals (one 5-hour practical every second week); six hours of workshops (one hour with each practical); three 3-hour CAL sessions Total Time Commitment: 120 hours
Prerequisites:	Pharmacology 534-201; exemption may be given at the discretion of the Head of Department. Physiology 536-201 and 536-211 and biochemistry 521-211 and 521-212 are highly recommended.
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:	Dr M Lew
Subject Overview:	After completion of this subject students will have an understanding of pharmacological concepts and skills that will enhance their insight into biomedical sciences. Emphasis will be placed on the role of quantitative pharmacological analysis in the characterisation of biological systems. Topics covered include intercellular communication and signaling pathways, mechanisms of drug-receptor interactions, classification of drug receptors. The disposition of drugs in the body, drug administration, absorption and elimination, and genetically determined variability in drug action will be discussed. A major emphasis will be placed on the molecular nature and behaviour of receptors, and the exploitation of 'new biology' or biotechnology in the service of drug and receptor characterisation.
Assessment:	Ongoing assessment of practical work during the semester (24%); computer-assisted learning tests during the semester (6%); a 3-hour written examination in the examination period (70%).
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:	Students will gain skills in: <ul style="list-style-type: none"> # critical thinking and problem solving; # small group work; # information gathering and report writing; and # systematic evaluation of scientific evidence.

Notes:	<p>Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.</p> <p>This subject is likely to be quota-restricted this year.</p> <p>Formerly known as 534-301 Principles of Pharmacology.</p> <p>Special requirements: Laboratory coat.</p> <p>Experiments involving the use of animals are an essential part of this subject; exemption is not possible.</p>
Related Course(s):	<p>Bachelor of Arts and Bachelor of Science Bachelor of Arts and Sciences Bachelor of Biomedical Science Bachelor of Engineering (Biomedical)Biocellular Bachelor of Science Graduate Diploma in Biotechnology</p>