# 534-201 Pharmacology

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| **Credit Points:** | 12.500 |
| **Level:** | Undergraduate |
| **Dates & Locations:** | 2008,<br>This subject commences in the following study period/s:<br>Semester 2, - Taught on campus. |
| **Time Commitment:** | Contact Hours: 36 lectures (three per week); 18 hours of practical work Total Time Commitment: 120 hours |
| **Prerequisites:** | 25 points of 100-level chemistry; biology 650-141 and 650-142 (prior to 2004: 600-141 and 600-142). Exemption may be considered in special cases. |
| **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 G Mackay |
| **Subject Overview:** | The lecture course covers the basic principles of drug action and focuses on receptor sites that mediate drug action and the physiological and biochemical mechanisms associated with the response to a drug. The interaction of drugs with hormones and common therapeutic agents will be used to illustrate these principles. It investigates the ways in which drugs are handled by the body in terms of their absorption, distribution and metabolism. The course examines the development of new drugs from natural sources or new chemical syntheses and how these drugs are evaluated and regulated. Aspects of drugs of abuse and addiction and the potential strategies for dealing with this problem will be examined. The principles of selective toxicity and the toxicology of environmental contaminants will be introduced. Aspects of venoms and toxins will be examined. The practical course will reinforce the lecture material and illustrate the basic concepts of the pharmacological concentration response relationship, competitive antagonism and pharmacodynamic and pharmacokinetic modelling. |
| **Assessment:** | Ongoing assessment of practical work during the semester (20%); a 40-minute written test held mid-semester (10%); a 2-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 should gain skills in:<br># critical thinking and problem solving;<br># participating effectively in group work; and<br># 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. |

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| | Special requirements: laboratory coat.<br>Experiments involving the use of animals are an essential part of this subject; exemption is not possible. This subject is likely to be quota-restricted this year. |
| **Related Course(s):** | Graduate Diploma in Biotechnology |