610-220 Organic Chemistry

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 24 lectures (three per week for eight weeks), eight tutorials and 30 hours of practical work Total Time Commitment: 120 hours
Prerequisites:	One of chemistry 610-141, 610-121 or 610-051 plus one of 610-142, 610-122 or 610-052.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Credit cannot be gained for this subject and 610-221 or 610-225.
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:	Associate Professor J M White
Subject Overview:	Upon completion, students should have developed skills to synthesise complex organic molecules from smaller components in the laboratory; qualitative laboratory manipulative skills; and skills to record and interpret scientific observations. Students should gain an awareness of safe and diligent laboratory practice. Students should appreciate the importance of rational, critical and independent thought in the molecular sciences and in their understanding of the chemistry of carbon compounds. Students should have an understanding of stereochemistry; the synthesis and some reactions of simple polyfunctional organic compounds, aromaticity; and the basic types of heterocyclic molecules. The subject covers the topics molecular architecture and its relationship to chemical and biological change; the principles of organic synthesis: C-C bond formation; and the fundamentals of aromatic and heterocyclic chemistry. The laboratory course will consist of a number of experiments involving techniques for the synthesis of important classes of organic compounds. The experiments are aimed at the exemplification of some of the lecture material. This subject will provide the student with the opportunity to establish and develop the following generic skills: problem-solving and critical thinking skills, the ability to use conceptual models to rationalise observations, an understanding of the changing knowledge base, a capacity to articulate knowledge and understanding in written presentation, and a capacity to manage competing demands on time including self-directed work.
Assessment:	Ongoing assessment of practical work in the form of short reports due during the semester (25%); a 1-hour multiple-choice examination held during the semester (10%); a 3-hour written examination in the examination period (65%). Satisfactory completion of both theory and practical work is necessary to pass the subject.
Prescribed Texts:	None
Breadth Options:	This subject is a level 2 or level 3 subject and is not available to new generation degree students as a breadth option in 2008. This subject or an equivalent will be available as breadth in the future. Breadth subjects are currently being developed and these existing subject details can be used as guide to the type of options that might be available.

	2009 subjects to be offered as breadth will be finalised before re-enrolment for 2009 starts in early October.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
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.
Related Course(s):	Graduate Diploma in Biotechnology