

## 610-102 Chemistry 2

<b>Credit Points:</b>	12.500
<b>Level:</b>	Undergraduate
<b>Dates &amp; Locations:</b>	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus. Lectures, practicals, tutorials/workshops, independent learning tasks, computer-aided learning.
<b>Time Commitment:</b>	Contact Hours: 36 one-hour lectures (three per week), 18 hours of practical activities (6 three-hour practicals), 12 one-hour tutorial/workshop sessions, 6 hours of computer aided learning, 8 hours of independent learning tasks. Total Time Commitment: 120 hours
<b>Prerequisites:</b>	Chemistry 610-101 Chemistry 1, 610-141 Chemistry A or 610-121 Chemistry A (Advanced Studies)
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	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.
<b>Coordinator:</b>	Dr B Abrahams
<b>Subject Overview:</b>	The subject provides an introduction to organic acids and bases; nucleophilic substitution reactions; elimination reactions; addition reactions; electrophilic aromatic substitution reactions; nucleophilic addition reactions; organic redox reactions; chemical kinetics; elementary quantum mechanics, atomic spectra and atomic structure; redox reactions and electrochemistry; and transition metal and coordination chemistry.
<b>Assessment:</b>	A 30-minute written test held mid-semester (5%); ongoing assessment of practical work (16%); completion of independent learning tasks (4%); a 3-hour written examination in the examination period (75%). Satisfactory completion of practical work is necessary to pass the subject.
<b>Prescribed Texts:</b>	Chemical Principles (S. S. Zumdahl), 5th edn, Houghton Mifflin, 2005. Organic Chemistry (J. McMurry), 6th edn, Thomson Brooks/Cole, 2004.
<b>Breadth Options:</b>	This subject potentially can be taken as a breadth subject component for the following courses: <ul style="list-style-type: none"> <li># Bachelor of Arts</li> <li># Bachelor of Commerce</li> <li># Bachelor of Environments</li> <li># Bachelor of Music</li> </ul> You should visit <b>learn more about breadth subjects</b> ( <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a> ) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	This subject encompasses particular generic skills so that on completion of this subject students should have developed skills relating to: <ul style="list-style-type: none"> <li># the organization of work schedules which permit appropriate preparation time for tutorials, practical classes and examinations;</li> <li># the use of electronic forms of communication;</li> </ul>

	<ul style="list-style-type: none"> <li># the utilisation of computer-aided learning activities to enhance understanding;</li> <li># the performance of basic manipulations with laboratory equipment;</li> <li># the recording of observations, the analysis of information and the interpretation data within a laboratory setting;</li> <li># accessing information from the library employing both electronic and traditional means;</li> <li># working collaboratively with other students;</li> <li># the use of conceptual models;</li> <li># problem solving; and</li> <li># critical thinking.</li> </ul>
<b>Notes:</b>	<p>Students enrolled in the BSc (both pre-2008 and new degrees), BASc or a combined BSc course will receive science credit for the completion of this subject.</p> <p>Students with a high level of achievement in 610-171 or 202-101 may be permitted to enrol in 610-102 upon successful completion of the computer aided learning modules of 610-101 Chemistry 1 during the winter recess.</p> <p>A laboratory coat and safety glasses are required for laboratory activities.</p>
<b>Related Course(s):</b>	<p>Bachelor of Engineering (Chemical Engineering)          Bachelor of Engineering (Chemical and Biomolecular Engineering)          Bachelor of Engineering (Environmental) and Bachelor of Arts          Bachelor of Engineering (Environmental) and Bachelor of Commerce          Bachelor of Engineering (Environmental) and Bachelor of Laws          Bachelor of Optometry          Bachelor of Veterinary Science(PV)</p>