

CHEM10006 Chemistry for Biomedicine

Credit Points:	12.5
Level:	1 (Undergraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 3 x one hour lectures per week, 1 x three hour lab/workshop per week, 1 x one hour tutorial/workshop session per week, 6 hours of computer-aided learning during the semester, 8 hours of independent learning tasks during semester. Total Time Commitment: Estimated total time commitment of 170 hours.
Prerequisites:	Admission into the Bachelor of Biomedicine course.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>
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Subject Overview:	<p>An introduction to biomedical chemistry including the nature of:</p> <ul style="list-style-type: none"> # orbitals and bonding; # chirality and its relevance to biology and medicine; # organic molecules and functional groups; # their reactivity; # the structure and reactivity of bio-polymers; # properties of solutions; # the bio-geo-chemical cycles of selected elements; # energy acquisition, storage and transport; # bio-metals.
Learning Outcomes:	To provide students with an understanding of the principles of chemistry underlying biomedical science.
Assessment:	Three equally weighted 30 minute on-line tests conducted during the semester (6%) Ongoing assessment of practical work throughout the semester (20%) A three hour written examination in the examination period (74%) Satisfactory completion of practical work is necessary to pass the subject. Independent learning tasks need to be completed in order to pass the subject.

Prescribed Texts:	A. Blackman, S. Bottle, S. Schmid, M. Mocerino and U. Wille, Chemistry 2nd edition, Wiley, 2012
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:	<p>This subject encompasses particular generic skills so that on completion students should have developed skills relating to:</p> <ul style="list-style-type: none"> # the organization of work schedules that permit appropriate preparation time for tutorials, practical classes and examinations. # the use of electronic forms of communication. # the utilisation of computer-aided learning activities to enhance understanding. # the performance of basic manipulations with laboratory equipment. # the recording of observations, the analysis of information and the interpretation data within a laboratory setting. # accessing information from the library employing both electronic and traditional means. # working collaboratively with other students. # the use of conceptual models. # problem solving. # critical thinking.
Notes:	<p>This subject is only available to students enrolled in the Bachelor of Biomedicine.</p> <p>Required equipment: laboratory coat and safety glasses.</p> <p>It is recommended that students have access to a molecular model kit.</p> <p>B-BMED students who fail this subject with a mark of 45-49%, who do not fail any other subjects in the same semester may be eligible for a progression supplementary exam for this subject in line with the Assessment Procedure (https://policy.unimelb.edu.au/MPF1026) (point 15). Students will be contacted via email by the University Results final release date if they are eligible.</p>
Related Course(s):	Bachelor of Biomedicine