CHEM30017 Specialised Topics in Chemistry A

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Three modules comprising twelve one hour lectures each throughout the semester; up to two one-hour tutorials per module. Only two modules run simultaneously in 4 week blocks, resulting in a maximum of 8 contact hours in any given week. Total 42 hours Total Time Commitment: Estimated total time commitment of 170 hours
Prerequisites:	One of **Subject** / **Study Period Commencement:** / **Credit Points:** CHEM30016 Reactivity and Mechanism / Semester 1 / 12.50 (CHEM30016 may also be taken concurrently) Or both of **Subject** / **Study Period Commencement:** / **Credit Points:** CHEM20018 Chemistry: Reactions and Synthesis / Semester 1 / 12.50 CHEM20020 Chemistry: Structure and Properties / Semester 2 / 12.50 Exchange students are required to contact the subject coordinator prior to enrolment.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	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. 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
Coordinator:	Assoc Prof Brendan Abrahams
Contact:	**bfa@unimelb.edu.au (mailto:bfa@unimelb.edu.au)**
Subject Overview:	This subject provides a series of specialised modules in the areas of organic, inorganic and physical chemistry Students choose three modules from the following selection of topics. Each module consists of 12 lectures: # Bio-Organic Chemistry,

	# Spectroscopy – Identification of Organic Molecules, # Photomolecular Science, # Polymer Chemistry, # Metal chemistry: Principles and applications. # Bioanalytical Chemistry.
Learning Outcomes:	Students should develop an advanced perspective on theory and applications across the disciplines of Chemistry. They should obtain problem-solving skills and training in chemistry sufficient to allow them to pursue careers in applied chemistry and chemicals-based research. In the latter case, students should obtain the chemical knowledge needed to be able to complete successfully the honours/masters coursework.
Assessment:	Each of the three modules selected by the student will contribute one third of the marks to the final grade. The assessment for each module will take one of the following two forms: i) One 60 minute exam at the end of the semester (80%) and one or two assignments during the semester which will run concurrently with each of the modules (20%).ii) Several assignments (written and/ or oral) conducted during the semester. The assignments will run concurrently with the module. In the first lecture of each module the lecturer will indicate which assessment option will be adopted.
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/ breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	This subject will provide opportunities to enhance the following generic skills: # the ability to comprehend complex concepts and to communicate this understanding; # the ability to analyse and solve abstract and technical problems; # an awareness of advanced technologies in the discipline of chemistry; # the ability to think and reason logically; # the ability to think critically and independently.
Notes:	It is recommended that students who plan to major in Chemistry to also have completed the following: # Mathematics and Statistics - two semesters of first year mathematics, for example MAST10005 Calculus 1, MAST10006 Calculus 2 and/or MAST10007 Linear Algebra. # Physics - VCE Units 3/4 12 Physics or equivalent, for example PHYC10005 Physics 1: Fundamentals
Related Majors/Minors/ Specialisations:	Chemical Biotechnology (specialisation of Biotechnology major) Chemistry Chemistry Chemistry Chemistry Chemistry Chemistry (specialisation of Chemistry major) Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED