

610-341 Inorganic Chemistry IIIB

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus. Lectures and tutorials
Time Commitment:	Contact Hours: 36 lectures and 12 tutorials Total Time Commitment: 120 hours total time commitment.
Prerequisites:	One of # 610-240 (prior to 2009) # 610-241 (prior to 2009) Concurrent enrolment in <i>Inorganic Chemistry Practical III</i> is strongly recommended.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Credit cannot be gained for this subject and <i>Inorganic Chemistry IIIA</i> .
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. 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 Stephen Best
Subject Overview:	<p>Upon completion of this subject, students should comprehend the main types of reactions of coordination compounds, cluster molecules, organometallic species and biomolecules; understand the reasons for the different types of structures observed for such molecules; have developed a knowledge of the procedures for determination of the structures via spectroscopic and related techniques; be able to identify the mechanisms of the more important reactions and evaluate the effect that this has on the chemistry; have an appreciation of the electronic structure and photochemistry of metal complexes; understand the structure of the solid state; and apply concepts developed in relation to small molecule chemistry to catalysis in biological and non-biological systems.</p> <p>The lecture course covers symmetry, group theory, and their applications; metal and main group chemistry; coordination, cluster and organometallic species; reactivity, including redox and catalytic processes; and applications of nuclear magnetic resonance and related structural techniques.</p>
Objectives:	.
Assessment:	Written assignments not exceeding six pages due during the semester (10%); a 3-hour written examination in the examination period (90%).
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)

	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 the student with the opportunity to establish and develop the following generic skills: an advanced understanding of the changing knowledge base, problem-solving and critical thinking skills, an ability to evaluate the research and professional literature, a capacity to apply concepts developed in one area to a different context, and the ability to use conceptual models to rationalise observations.
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 Majors/Minors/ Specialisations:	Chemistry