610-211 Light, Matter & Chemical Change B

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: 36 lectures and 12 tutorials 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. 100-level mathematics and 100-level physics are recommended. Concurrent enrolment in 610-215 is strongly recommended.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Credit cannot be gained for this subject and 610-210.
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:	Associate Professor M L Gee
Subject Overview:	Upon completion of 610-211, students should have an appreciation for the rates and mechanisms of enzyme catalysed reactions and environmentally significant atmospheric processes; understand the concepts of entropy and free energy and their application to chemical and biological systems; understand the interactions between molecules and light and its use in the determination of molecular structure; and understand modern views of molecular structure and the interaction of light with matter and its chemical consequences. The subject covers the dynamics of molecular processes; energy transformation and storage in chemical and biological systems; the interaction between molecules and light and its relationship to molecular structure; and molecular structure and the harnessing of energy by absorption of light.
Assessment:	Written assignments not exceeding 30 pages due during the semester (15%); a 3-hour written examination in the examination period (85%).
Prescribed Texts:	Physical Chemistry (PW Atkins), 5th edn, OUP, 1994
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):	Bachelor of Engineering (Chemical) and Bachelor of Arts Bachelor of Engineering (Chemical) and Bachelor of Commerce Bachelor of Engineering (Chemical) and Bachelor of Laws Bachelor of Engineering (Chemical) and Bachelor of Science Bachelor of Engineering (EngineeringManagement) Chemical

	Bachelor of Engineering(Biochemical Engineering)and Bachelor of Science