625-222 Minerals and Magmas

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 24 lectures (two per week), 24 hours of practical work (two hours per week), and four days of field work (held on weekends throughout the semester) Total Time Commitment: 120 hours
Prerequisites:	Earth sciences 625-102. VCE Chemistry is desirable.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
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 active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
Coordinator:	Associate Professor D Phillips
Subject Overview:	Topics include an introduction to the optical properties of minerals in thin section, identification of common rock-forming minerals in thin section and hand specimen, and chemical variations in minerals; melting, transport and crystallisation processes in the formation of igneous rocks; the classification and textures of igneous rocks; and igneous rocks in thin section, hand specimen and in the field. On completion of this subject, students should be able to describe and identify the common rock-forming minerals in thin section and hand specimen; be able to explain certain processes involved in the formation of igneous rocks and related ore deposits; and be able to recognise and describe the most important rock types in the laboratory and in the field. This subject should help develop your ability to synthesise data and interpret your observations, allowing you to tackle the description and identification of unfamiliar samples. Opportunities will be provided for you to work with other students during laboratory and in a fieldwork environment.
Assessment:	Four short quiz exercises (5% each) throughout the semester (including one held on the Western Victorian Volcanoes field excursion); participation in both field excursions (5%); a 2-hour practical examination during the semester (20%); a 2-hour written examination in the examination period (55%).
Prescribed Texts:	None
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.

	Special Requirements: Geological hammer, hand lens and magnet. Students should consult the Earth Sciences web site for dates, charges for excursions, accommodation and food and other information including safety requirements.