GEOL30003 Sedimentary Geology

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 2 x one hour lectures per week; 1 x three hour practical class per week. A field trip may be substituted for some of the lectures and practical class time Total Time Commitment: Estimated total time commitment of 120 hours
Prerequisites:	One of # 625-223 Earth Surface Processes (prior to 2010) # 625-223 Field Geology (prior to 2009)

Subject	Study Period Commencement:	Credit Points:
GEOL20004 Field Mapping and Sedimentary Geology	June	12.50

Corequisites:	None
Recommended Background Knowledge:	Subjects selected from # 625-202 Earth Structure and Dynamics (prior to 2010) # 625-202 Sedimentary Basins to Mountain Belts (prior to 2009) # 625-222 Minerals and Magmas (prior to 2009)

Subject	Study Period Commencement:	Credit Points:
GEOL20001 Geology of Southeast Australia	February	12.50
ERTH20001 Dangerous Earth	Semester 2	12.50
GEOL20002 Structural and Metamorphic Geology	Semester 1	12.50
GEOL20003 Earth Composition, Minerals and Magmas	Semester 1	12.50

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 Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Assoc Prof Malcolm Wallace
Contact:	**Email: mww@unimelb.edu.au (mailto:mww@unimelb.edu.au)**
Subject Overview:	Topics covered include facies analysis and petrology of carbonate, terrigenous and chemical sediments; techniques used in stratigraphic analysis and sequence stratigraphy; sedimentary geochemistry and its applications; principles and applications of palaeontology with respect to stratigraphy; post-depositional processes, including diagenesis and weathering, that alter rocks after their formation; chemical interactions between minerals and groundwater in weathered rocks and weathering products; the processes involved in hydrocarbon generation and organic

	maturation; and application of sedimentary geology to understanding sediment-hosted ore deposits.
Objectives:	After completing this subject, students should have acquired a basic understanding of sedimentary geology, including sedimentary environments of carbonates, clastics, and chemical sediments, sedimentary diagenesis, stratigraphy, micropaleontology, sediment-hosted ore deposits and petroleum geology.
Assessment:	A two hour practical examination held at the end of the semester (25%); practical assessment in the form of short tests during the semester in weeks 4 and 8 (10%) and two assessed practicals due at the end of the practical (5%); a two hour written examination in the examination period (60%).
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/2012/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/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
Notes:	This subject is available for science credit to students enrolled in the BSc (both pre-2008 and new degrees), BASc or a combined BSc course. 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.
Related Majors/Minors/ Specialisations:	Geology Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.