

# GEOL30003 Sedimentary Geology

<b>Credit Points:</b>	12.50
<b>Level:</b>	3 (Undergraduate)
<b>Dates &amp; Locations:</b>	<p>2010, Parkville</p> <p>This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.</p>
<b>Time Commitment:</b>	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
<b>Prerequisites:</b>	<p>One of</p> <ul style="list-style-type: none"> <li># <b><a href="#">625-223 Field Mapping and Sedimentary Geology (/view/2010/625-223)</a></b></li> <li># 625-223 Earth Surface Processes (prior to 2010)</li> <li># 625-223 Field Geology (prior to 2009)</li> </ul>
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	<p>Subjects selected from</p> <ul style="list-style-type: none"> <li># <b><a href="#">625-201 Geology of Southeast Australia (/view/2010/625-201)</a></b></li> <li># <b><a href="#">625-202 Structural and Metamorphic Geology (/view/2010/625-202)</a></b></li> <li># <b><a href="#">625-222 Earth Composition, Minerals and Magmas (/view/2010/625-222)</a></b></li> <li># <b><a href="#">625-203 Dangerous Earth (/view/2010/625-203)</a></b></li> <li># 625-202 Earth Structure and Dynamics (prior to 2010)</li> <li># 625-202 Sedimentary Basins to Mountain Belts (prior to 2009)</li> <li># 625-222 Minerals and Magmas (prior to 2009)</li> </ul>
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>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. This subject requires all students to actively and safely participate in laboratory activities and fieldwork. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.</p>
<b>Coordinator:</b>	Assoc Prof Malcolm Wallace
<b>Contact:</b>	<b>Email:</b> <a href="mailto:mww@unimelb.edu.au">mww@unimelb.edu.au</a> ( <a href="mailto:mww@unimelb.edu.au">mailto:mww@unimelb.edu.au</a> )
<b>Subject Overview:</b>	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.
<b>Objectives:</b>	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.

<b>Assessment:</b>	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%).
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <a href="https://handbook.unimelb.edu.au/view/2010/B-ARTS">Bachelor of Arts</a> (<a href="https://handbook.unimelb.edu.au/view/2010/B-ARTS">https://handbook.unimelb.edu.au/view/2010/B-ARTS</a>)</li> <li># <a href="https://handbook.unimelb.edu.au/view/2010/B-COM">Bachelor of Commerce</a> (<a href="https://handbook.unimelb.edu.au/view/2010/B-COM">https://handbook.unimelb.edu.au/view/2010/B-COM</a>)</li> <li># <a href="https://handbook.unimelb.edu.au/view/2010/B-ENVS">Bachelor of Environments</a> (<a href="https://handbook.unimelb.edu.au/view/2010/B-ENVS">https://handbook.unimelb.edu.au/view/2010/B-ENVS</a>)</li> <li># <a href="https://handbook.unimelb.edu.au/view/2010/B-MUS">Bachelor of Music</a> (<a href="https://handbook.unimelb.edu.au/view/2010/B-MUS">https://handbook.unimelb.edu.au/view/2010/B-MUS</a>)</li> </ul> <p>You should visit <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">learn more about breadth subjects</a> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Notes:</b>	<p>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.</p> <p>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.</p>
<b>Related Course(s):</b>	Bachelor of Science
<b>Related Majors/Minors/ Specialisations:</b>	Geology Geology