

625-301 Structural Geology & Geodynamics

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 practical classes.
Time Commitment:	Contact Hours: 24 lectures (two per week); 12 hours of practical work (two hours per week for six weeks) and five days of fieldwork Total Time Commitment: 120 hours total time commitment.
Prerequisites:	<i>Earth Structure and Dynamics</i> (625-202 Sedimentary Basins to Mountain Belts prior to 2009). An additional 37.5 points selected from 625-201, 625-222, 625-203 or 625-223 is strongly recommended.
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:	Dr Sandra Noeline McLaren
Subject Overview:	This subject covers topics in geological processes involved in large-scale tectonics. Topics include the structure and composition of the Earth; plates defined in terms of the thermal and rheological structure of the outer part of the Earth; isostasy; stress and strain in the crust and lithosphere; the origin and processes in mobile belts and their relationship to continental amalgamation and fragmentation; intraplate deformation; and convergent, divergent and transform plate boundaries.
Objectives:	On completion of this subject, students should comprehend the geometrical techniques of structural geology, how the plates that make up the Earth's surface are defined by large-scale thermal and rheological properties of the earth, and the tectonic processes that may affect metamorphic rocks and ore bodies. They will have developed the skills in laboratory geology that are relevant to the understanding of deformed rocks, and the skills to draw together observations from petrology and structural geology to interpret Earth processes. They will appreciate how the processes that occur within and between plates can be interpreted in terms of the stress and strain in the outer parts of the Earth.
Assessment:	A written field report of up to 1500 words due during the semester (20%); assessment of practical and field mapping exercises totalling not more than 1000 words due during the semester (10%); a survey of a geodynamics literature topic of up to 1500 words due during the semester (30%); a 2-hour written examination in the examination period (40%). Hurdle requirement: students must make an oral presentation of their geodynamics literature survey.
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)

	<p># Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)</p> <p>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.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Notes:	<p>Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.</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>
Related Majors/Minors/ Specialisations:	Geology