

ERTH90033 Geology from Geophysics

Credit Points:	6.25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: February, Parkville - Taught on campus. This subject is taught through the Victorian Institute of Earth and Planetary Sciences: https://vieps.earthsci.unimelb.edu.au/ .
Time Commitment:	Contact Hours: 16 hours of lectures and 24 hours of practicals Total Time Commitment: 85 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Knowledge of third-year geology strongly recommended.
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>
Coordinator:	Assoc Prof Kevin Walsh
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Subject Overview:	The course is designed to provide practical experience in the processing of regional geophysical datasets or the purpose of undertaking geological interpretation. The course is designed to allow the student to go through step-by-step methodologies of processing data, interpretation techniques, and modelling of geophysical data.
Learning Outcomes:	<ul style="list-style-type: none"> # This subject aims to equip students with discipline-specific knowledge and expertise appropriate for post-graduate research in the field; equip students with discipline-specific knowledge and expertise enabling them to take their place as professional geologists in industry or government organisations; # to develop skills to process regional geophysical datasets, develop strategies to interpret geology from regional aeromagnetic and gravity data, integrate geological data into the geophysical interpretation, practical experience in geophysical interpretation and model geophysical data.
Assessment:	A 2000-word equivalent interpretation of geophysical images produced by the students including lithologies, structures and overprinting relationship, due by last day of classes (60%) A final 3000-word report on the method for interpretation and a short tectonic history of the area consistent with the interpretation, incorporating portions of the text of the first assessment, due by the last day of classes (40%)
Prescribed Texts:	Reading expected to be completed in the pre-teaching period:Geophysics for the Mineral Exploration Geoscientist, Michael Dentiith, Stephen T. Mudge, 2014; Geological Interpretation of aeromagnetic data, Dave Isles and Leigh Rankin, Publisher: ASEG

Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ul style="list-style-type: none"># Exercise critical judgement;# undertake rigorous and independent thinking; adopt a problem-solving approach to new and unfamiliar tasks;# develop high-level written report and/or oral presentation skills;# interrogate, synthesise and interpret the published literature;# work as part of a team.
Related Course(s):	Master of Geoscience Master of Science (Earth Sciences)
Related Majors/Minors/ Specialisations:	Earth Sciences Honours Program - Earth Sciences