

ERTH40001 Earth Sciences Research Project

Credit Points:	25
Level:	4 (Undergraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: This subject is an individual research project and weekly contact hours will vary depending on the nature of the project. Total Time Commitment: Students should discuss total time commitment with their supervisor but as a guide, a student would be expected to be engaged in their research for an average of thirty hours per week over two semesters.
Prerequisites:	A major in a field relevant to the research project being conducted. Enrolment in the subject will only be approved if the student has met entry requirements for the course, including having a supervisor who has agreed to supervise this research project.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering requests 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 for 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 Kevin Walsh
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Subject Overview:	<p>The School of Earth Sciences is home to a large and diverse range of research programs. Our interests include the solid Earth, the fluid Earth (including our atmosphere and oceans) and processes that operate at the interface between these upon which all life on our planet depends. Current research activities include: Climate Variability and Change, Atmosphere and Ocean Dynamics, Synoptic and Mesoscale Meteorology, Hydrogeology and Aqueous Biogeochemistry, Sedimentary Geology and Palaeontology, Palaeoclimate and Palaeoenvironmental Reconstruction, Thermochronology, Neotectonics and Landscape Evolution, Ore Deposit Geology, Geochemistry and Geochronology, Structural Geology, Tectonics and Geodynamics, Thermodynamics of Metamorphic Systems (THERMOCALC), Geochemistry and Geochronology of Magmatic Systems, Noble Gas Geochronology and Geochemistry, Computer Simulation of Geological and Geophysical Fluid Dynamics, Physics and Chemistry of the Earth's Deep Interior, and Energy: Resources and Futures.</p> <p>This subject comprises a major piece of original supervised research on a topic as agreed by the student and their supervisor. A literature review is conducted in the first six months of candidature and includes a research proposal describing the aims, significance and approach of the project.</p> <p>Students will be enrolled in a combination of the research project subjects indicated below to ensure they have completed a total of 75 points for the research project by the end of their course.</p> <p>Each of these subjects is available in semester one and semester two.</p> <p>ERTH40001 Earth Sciences Research Project – 25 points ERTH40003 Earth Sciences Research Project – 37.5 points ERTH40006 Earth Sciences Research Project – 50 points</p>

Objectives:	The objectives of the research project are to provide students with the opportunity to: <ul style="list-style-type: none"> # synthesise existing literature on a topic of interest and devise an appropriate research project that addresses key outstanding questions in the field; # plan an appropriate program of data acquisition and manipulation (eg., modelling) in order to constrain the questions being addressed; # interpret the results of their work, perhaps suggesting further avenues for research beyond the cope of their project; # prepare a written report of their results.
Assessment:	Assessment is based on a literature review of no more than 4,000 words (12.5% due around the end of the first semester of study), a 15 minute long project-related oral presentation within two months of the conclusion of the project (hurdle); and a thesis of no more than 15,000 words (62.5%) due at the end of the course. These assessment requirements are applicable to the entire 75 point Research Project.
Prescribed Texts:	None
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:	On completion of their research project students will have had the opportunity to gain new skills in: <ul style="list-style-type: none"> # planning and conducting a program of research # exercising critical judgement # undertaking rigorous and independent thinking # adopting a problem-solving approach to new and unfamiliar tasks # developing high-level writing report and oral presentation skills # interrogating, synthesizing and interpreting the published literature and # field-work (where applicable)
Related Course(s):	Bachelor of Science (Degree with Honours)