

## ERTH90022 Research Project

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014.
<b>Time Commitment:</b>	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 this with their supervisor but as a guide, a student enrolled in a 50 point research project subject would be expected to be engaged in their research for an average of forty hours per week or 800 hours for the semester. Students enrolled in a 37.5, 25 or 12.5 point research subject would be expected to be engaged in their research on a pro-rata basis.
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	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. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
<b>Contact:</b>	Email: <a href="mailto:kevin.walsh@unimelb.edu.au">kevin.walsh@unimelb.edu.au</a> ( <a href="mailto:kevin.walsh@unimelb.edu.au">mailto:kevin.walsh@unimelb.edu.au</a> )
<b>Subject Overview:</b>	<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>
<b>Learning Outcomes:</b>	<p>The objectives of the research project is to provide students with the opportunity to:</p> <ul style="list-style-type: none"> <li># synthesise existing literature on a topic of interest and devise an appropriate research project that addresses key outstanding questions in the field;</li> <li># plan an appropriate program of data acquisition and manipulation (eg., modelling) in order to constrain the questions being addressed;</li> <li># interpret the results of their work, perhaps suggesting further avenues for research beyond the cope of their project;</li> <li># prepare a written report of their results.</li> </ul> <p>It is anticipated that students will generate an original piece of research comparable to that produced for a paper submitted to a scientific journal, and will be encouraged to do so.</p>

<b>Assessment:</b>	Assessment is based on: satisfactory completion of a research presentation after completion of 50 points of the research project (hurdle requirement); a literature review of no more than 4,000 words (5%); a project-related oral presentation within two months of the conclusion of the project (5%); and a thesis of no more than 25,000 words (90%) due at the end of the course. These assessment requirements are applicable to the entire 125 point Research Project.
<b>Prescribed Texts:</b>	None.
<b>Recommended Texts:</b>	None.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Generic Skills:</b>	<p>On completion of their research project students will have had the opportunity to gain new skills in:</p> <ul style="list-style-type: none"> <li># planning and conducting a program of research;</li> <li># exercising critical judgement;</li> <li># undertaking rigorous and independent thinking;</li> <li># adopting a problem-solving approach to new and unfamiliar tasks;</li> <li># developing high-level written report and oral presentation skills;</li> <li># interrogating, synthesising and interpreting the published literature;</li> <li># field-work (where applicable); and</li> <li># research appropriate to the level of a professional scientist.</li> </ul>
<b>Related Course(s):</b>	Master of Science (Earth Sciences)