ERTH10002 Understanding Planet Earth

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 3 x one hour lectures per week for seven weeks; 1 x three hour practical class per week for seven weeks; 4 days of field excursion during the mid semester recess Total Time Commitment: Estimated total time commitment of 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	**Subject** / **Study Period Commencement:** / **Credit Points:** ERTH10001 The Global Environment / Semester 1 / 12.50
Non Allowed Subjects:	Students who have received credit for 625-102 Understanding Planet Earth (prior to 2008) may not enrol in this subject for credit.
Core Participation Requirements:	For the purposes of considering applications for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005) and Students Experiencing Academic Disadvantage Policy, 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. Hhttp://www.services.unimelb.edu.au/disability/
Coordinator:	Dr Anne-Marie Tosolini
Contact:	**Email:** a.tosolini@unimelb.edu.au
Subject Overview:	This subject will allow students to gain a deeper understanding of the processes governing the geological evolution of the Earth. This will be achieved via the lecture series, practical sessions and a four day field trip, providing hands-on and theoretical investigations employing Victoria's geology. Initial topics covered in this subject include minerals, rocks and fossils. The subject continues on to cover the topics of structural, metamorphic and economic aspects of our regional geology. These studies are integrated with field case studies, during a four day field trip to collect fossils, rocks and minerals that are used to interpret the geological evolution of the region. On completion of this subject, students should understand and be able to identify the basic components that make up planet Earth; comprehend the diversity of the rock-forming minerals, the processes by which rocks form and evolve; the use of structural geology in interpreting the relationships between rock units in time and space; and the contribution of palæontology to the study of evolution. Students should appreciate the contribution of geology to the interpretation of the history of planet Earth.
Objectives:	This subject builds upon the theoretical big picture approach of ERTH10001 The Global Environment. It provides greater depth to many of the topics introduced in ERTH10001 The Global Environment using geological studies to a gain an understanding of the evolution of the Melbourne and Victorian environment.

	On completion of this subject students should appreciate how different types of data, samples and observations are integrated to interpret Earth processes. Students should also have begun to develop practical skills in the acquisition of data in the field and laboratory, essential to unravelling such processes.
Assessment:	Assessment of field exercises during the mid-semester field trip (40%); a 2-hour practical examination held during the semester (30%); a written report of up to 1000 words due at the end of the semester (30%). A pass in the practical work is necessary to pass the subject.
Prescribed Texts:	To be advised
Recommended Texts:	"Earth's Dynamic Systems", Web Edition, Hamblin and Christiansen (available online) "Understanding Earth", 6th Edition, Grotzinger and Jordan
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/2012/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS)** 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.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject students should be able to apply their discipline knowledge to issues of public debate. These include the ozone hole, the greenhouse effect and sea level rise. The subject will provide experience in presenting technical topics in written form, a skill that is useful in later work. Students will also participate in some simple collaborative projects that will enable them to develop skills for the design and completion of technical experiments. Other generic skills acquired in this subject include learning how to sharpen observation skills and how to grapple with unravelling complex processes.
Notes:	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. Previously known as 625-104 The Earth, Atmosphere and Oceans (prior to 2010)
Related Majors/Minors/ Specialisations:	Earth Sciences Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.
Related Breadth Track(s):	Earth's structure Geology in the field