EVSC10001 The Global Environment

Credit Points:	12.5
Level:	1 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 3 x one hour lectures per week, 1 x two hour practical class per week Total Time Commitment: 170 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	**Subject** / **Study Period Commencement:** / **Credit Points:** ENVS10001 Natural Environments / Semester 1, Semester 2 / 12.5
Core Participation Requirements:	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. 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
Coordinator:	Dr Anne-Marie Tosolini
Contact:	**Email: a.tosolini@unimelb.edu.au (mailto:a.tosolini@unimelb.edu.au)**
Subject Overview:	This subject is an introduction to Geology, Geography, Climate and Environmental Science. It provides an overview of the processes controlling the formation and evolution of our global environment. We begin by exploring the origin of the Earth as a planet within the solar system, its layered structure and (solid and fluid) constituent properties, and the importance of the orbital characteristics in controlling changes in the global climate. The evolution of the major physical features and landscapes of the Earth, including the mountain belts, continents, rivers, coastlines and ocean basins, are described in terms of plate tectonics and its constituent processes of continental drift, seafloor spreading and sea-level changes. The nature of volcanoes and earthquakes are discussed, as are surface processes, such as weathering, erosion and the transport of sediments. Natural chemical and energy cycles are highlighted and causes of biogeographic patterns are explored, all at a number of different time scales. The circulation and interactions of the atmosphere, ocean and land are also examined. The Earth's present climate, the hydrological cycle and past and future climate change are studied, including glacial/interglacial cycles and their relationship to landscapes, biogeography and anthropogenic impacts.
Learning Outcomes:	On completion of this subject, students should have gained a holistic view of the global environment, encompassing the solid and fluid Earth and its formation, evolution, and modern structure. Students will be familiar with: the materials that comprise the Earth and atmosphere and their impact on biota; the complex interplays between these four spheres; the modes of formation and the underlying processes that drive the evolution of the solid Earth and landscape and life; and changes in the Earth's climate on modern and geological timescales. This subject

	provides the foundation for further study in Geology; Climate and Weather, Environmental Science and/or Geography.
Assessment:	Two equally weighted short tests each the equivalent of approximately 500 words, held during practical sessions in Weeks 5 and 8 (20%); Group research project as a poster presentation (equivalent of 1000 words) due week 12 (20%); 2-hour written examination in the examination period (60%). Hurdle requirement: A pass in both the practical work and the end semester theory exam are necessary to pass the subject.
Prescribed Texts:	To be advised
Recommended Texts:	Earth's Dynamic Systems, Web Edition, Hamblin and Christiansen, available online through the LMS.
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/2016/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/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:	The generic skills acquired in this subject include: # learning how to approach problems when there may be no right answer; # applying discipline knowledge to issues of public debate (e.g. climate change); # tackling complex exercises within a team environment in the laboratory; and # observing in the laboratory the basic materials of the global environment.
Related Majors/Minors/ Specialisations:	Science-credited subjects - new generation B-SCI and B-ENG.