ERTH20001 Dangerous Earth

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus. Lectures and tutorials/workshops.
Time Commitment:	Contact Hours: 2 x one hour lectures per week; 1 x two hour practical workshop per week 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
ERTH10002 Understanding Planet Earth	Semester 2	12.50
ENVS10001 Natural Environments	Semester 1, Semester 2	12.50

Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request 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 of 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:	Prof Andy Gleadow
Contact:	Email: **gleadow@unimelb.edu.au (mailto:gleadow@unimelb.edu.au)**
Subject Overview:	An introduction to the study of natural hazards on the Earth, at various different spatial and temporal scales, their impact on human populations and principles of planning, response and mitigation. The course will cover hazards of geological and meteorological origin, as well as major global catastrophes such as those that may be produced by climate change and large impact events. Topics to be covered include: Earthquakes and their consequences; Tsunamis and other coastal hazards; Volcanoes and volcanic eruptions; Land instability and mass movements; Flooding and flood hazards, Drought and bushfire hazards; Tropical cyclones, thunderstorms and tornadoes; Extraterrestrial impacts and mass extinction events; Climate change and its implications for human populations; Managing and reducing the risks from natural hazards. At the end of this subject, students will have acquired: an understanding of the nature and causes of natural hazards, their distribution and predictability; a knowledge of how natural disasters impact on human populations and activities, and the kinds of responses that are possible; an appreciation of what can be done to manage and minimise the dangers posed by natural disasters.
Objectives:	The subject aims to introduce students to the nature and causes of various natural hazards, and to consider ways in which these impact on human populations, as well as how, through appropriate planning and management strategies, these effects can be understood, predicted, avoided and mitigated. The subject maintains a balance between understanding the phenomena involved and managing their effects.

Assessment:	Group and individual assignments during semester (50%), a 2-hour written examination in the examination period (50%).
Prescribed Texts:	Donald Hyndman and David Hyndman, Natural Hazards and Disasters, 2nd Edition Brooks/Cole 2009, or 3rd Edition 2011
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:	At the completion of this subject students should be able to: # analyse and interpret natural phenomena # critically evaluate responses to actual disasters # assess appropriate strategies for dealing with natural disasters # research complex events in an interdisciplinary context # contribute constructively to group projects # understand basic principles of risk analysis # communicate results of their work to a wider group
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. Students undertaking this subject will be expected to access online information about natural disasters. Appropriate IT facilities are widely available on campus in existing work spaces.
Related Majors/Minors/ Specialisations:	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):	Living in Australia's Hazardous Ecosystems Understanding Disasters, Their Management and Planning Climate and Water