625-203 Dangerous Earth

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus. Lectures and tutorials/workshops.
Time Commitment:	Contact Hours: Two 1-hour lectures per week; one 2-hour tutorial/workshop per week. Total 48 hours. Total Time Commitment: 120 hours total time commitment.
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	One of # *The Global Environment* # *The Earth Atmosphere and Oceans* # *Catastrophes, Cultures & the Angry Earth* # *Natural Environments*
Non Allowed Subjects:	None
Core Participation Requirements:	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. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
Coordinator:	Prof Andy Gleadow
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, Thomson Brooks/Cole 2006

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/2009/D09)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)** 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.