600-654 Global Environmental Change

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 36 hours comprising 3 one-hour lectures per week Total Time Commitment: Not available
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
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 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 Michael Ray Kearney, Dr Uta Wille
Subject Overview:	Environmental change scenarios may elicit alarmism or a false sense of security depending on one's perspective. Science and scientists are frequently called upon to act as arbiters of contested perspectives. This subject equips participants with an understanding of the role and limitations of science in environmental debates and decision-making. You will explore contemporary global environmental issues such as biodiversity loss, desertification, climate change and the spread of infectious disease. You will gain an appreciation of strengths and limitations in the diversity of scientific approaches used to understand and manage environmental problems. You will develop skills in applying tools that evaluate, synthesise and resolve the perspectives of multiple disciplines and stakeholders. You will examine and critique the lines of evidence used to support arguments regarding environmental trends and change, including empirical observation, simulation modelling and expert opinion. Collectively, these elements provide a sound foundation for science-based advocacy that recognises the social context of environmental debates.
Objectives:	At the completion of the subject, participants should be able to: • Describe major current global environmental challenges facing scientists and policy-makers. • Discuss the relevance of a range of scientific disciplines to environmental management including meteorology, ecology, toxicology, hydrology, geology and epidemiology. • Analyse the role of various evidentiary approaches to supporting science-based arguments including empirical observation and analysis, modelling and use of expert opinion. • Judge the merit of scientific arguments made in documents related to environmental policy.
Assessment:	An assignment report of up to 3000 words due mid semester (40%) Oral presentation of up to 30 minutes towards the end of semester (30%) An exam of up to 3 hours at the end of semester (30%)
Prescribed Texts:	None

Recommended Texts:	Millennium Ecosystem Assessment (available free online, or as a hardcopy for purchase)
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	At the completion of the subject, participants should be able to: • Work constructively with colleagues to recognise, synthesise and resolve inter-disciplinary perspectives. • Prepare technical reports that are accessible to policy-makers. • Advocate and advance environmental sustainability consistent with scientific evidence. • Recognise the social context of the contribution of science to decision-making, including human rights, equity and ethics
Notes:	Students undertaking this subject will be expected to regularly access an internet-enabled computer.
Related Majors/Minors/ Specialisations:	R05 PE Master of Science (Environmental Science)