

EVSC90017 Global Environmental Change

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours comprising 3 x one-hour lectures per week Total Time Commitment: 170 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
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:	Assoc Prof Tim Dempster
Contact:	dempster@unimelb.edu.au (mailto:dempster@unimelb.edu.au)
Subject Overview:	<p>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.</p> <p>You will explore contemporary global environmental issues such as chemical processes in the environment, 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.</p>
Learning Outcomes:	<p>At the completion of the subject, participants should be able to:</p> <ul style="list-style-type: none"> # Describe major current global environmental challenges facing scientists and policy-makers. # Discuss the relevance of a range of scientific disciplines to environmental management including chemistry, 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:	A group assignment comprising a report of up to 6000 words prepared in small groups of typically 3-5 students, two individual critical appraisals of up to 1000 words each of reports produced by other groups, and group participation (40%) An oral symposium presentation of up

	to 15 minutes towards the end of the semester (15%) Symposium participation (10%) A take-home exam at the end of semester (35%)
Prescribed Texts:	Students will be provided with information about text books at the commencement of the subject.
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:	<p>At the completion of the subject, participants should be able to:</p> <ul style="list-style-type: none"> # 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:	<p>Botany Botany Climate Change Climate Change Education Education and Social Change Environmental Science Environmental Science Honours Program - BioSciences Honours Program - Botany Integrated Water Catchment Management Integrated Water Catchment Management Tailored Specialisation</p>