EVSC90010 Environmental Risk Assessment

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 24 hours lectures and 18 hours practical/tutorial sessions 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 requests 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 for 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:	Dr Terry Walshe
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Subject Overview:	The subject outlines the history and social context of risk, and introduces the psychology of risk perception. On completing this subject you should be familiar with different concepts of risk, means of estimation, and the strengths and flaws of different approaches. The subject outlines exposure pathways, the ecological processes associated with contamination in aquatic and terrestrial ecosystems. You should develop conceptual models and estimate exposures to risk and responses in human environments and ecological systems. You should learn how to perform fundamental hazard and ecological risk assessment procedures, empirical modelling, logic trees, interval arithmetic, Monte Carlo for static and dynamic problems, and applications to species, community and ecosystem problems. The application of these tools is outlined within processes of risk management and communication.
Objectives:	At the completion of the subject, participants should be able to: # Describe approaches to risk assessment in various disciplines; # Discuss the relevance of a range of scientific disciplines to environmental risk assessment including ecology, toxicology, epidemiology, statistics, psychology and sociology; # Analyse the role of different evidentiary approaches to supporting risk assessments including empirical observation and analysis, modelling, and use of expert opinion; and # Judge the merit of scientific arguments based on null hypothesis significance testing.
Assessment:	You are required to complete an application of the methods to a real, work-based problem. A report from this work is worth 20% of your mark. The balance is made up of 30% for practicals and 50% for a 3-hour exam.
Prescribed Texts:	None
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
Related Course(s):	Master of Forest Ecosystem Science Master of Science (Geography)

	Master of Urban Planning
Related Majors/Minors/ Specialisations:	Climate Change Conservation, Restoration and Landscape Management Development Education Energy Efficiency Modelling and Implementation Energy Studies Environmental Science Environmental Science Integrated Water Catchment Management Public Health Sustainable Forests Waste Management