ECOL90001 Restoration Ecology

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014. Lectures, a computer laboratory, a chemical laboratory, and fieldtrips.
Time Commitment:	Contact Hours: 20 hours of lectures, 16 hours of practicals and 2.5 days of fieldtrips. Total Time Commitment: The subject is taught intensively over dates in the September mid-semester break. There are fieldtrips to visit urban waterways and an overnight fieldtrip to a gold mine at Stawell.
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/
Contact:	.
Subject Overview:	This subject aims to introduce students to the field of restoration ecology through an investigation of the properties and causes of degradation and/or contamination of land, waterways and wetlands under the influence of human activities, and the theory and practice of assessment and restoration of such systems.The subject examines two themes: **Contamination and Degradation** The origins and dimensions of derelict and contaminated land are considered, particularly sources of organic and inorganic contaminants, methods for the identification and quantification of pollutants and site and risk assessment strategies. Strategies for reinstatement of land is considered with specific reference to problems arising from base metal mining practices (mineral extraction, beneficiation and smelting) in both Australia and overseas, as well as consideration of other industrial and non-industrial examples of extreme substrata. Widely implemented practices for off-site and in-situ decontamination and reinstatement of land are compared and contrasted with novel and/or low-technological solutions using plants and ecological science. **Restoration and Revegetation** The practice of restoration and revegetation is explored using theoretical and applied knowledge. The origins, intent, theory and practices of restoration ecology are introduced. Critical examination of a range of strategies available and options for defining and measuring success are explored through specific reference to current practices. Site-specific examples (rural open-space, mine sites, rivers and wetlands) are provided.
Learning Outcomes:	.
Assessment:	A research essay of 3000 words (50%) and a field trip report of 2000 words (50%).
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

Notes:	It is expected that students will either be familiar with the computer program Microsoft Excel, or will be willing to learn to use Excel during the study program.
Related Majors/Minors/ Specialisations:	Environmental Science Environmental Science