207-510 Soil Management and Conservation

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	This subject is not offered in 2008.
Time Commitment:	Contact Hours: Two lectures/wk (1 x 2 hrs; 1 x 1 hr); two practicals (3 hrs each); seminar (2 hrs) Total Time Commitment: Not available
Prerequisites:	202-203 Soil and Water Resources.
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 Tony Weatherley
Subject Overview:	This subject will examine the major current issues in the management of soils under various land uses in Australia. The dynamic nature of the soils will be explored through study of the chemical, physical and biological processes in the soil environment, particularly those which impact directly on plant growth. Content includes: # reactions of nutrients and contaminants with soil surfaces; # processes controlling nutrient availability with particular reference to nitrogen and phosphorus; # assessment of nutrient availability including quantity/intenstity relationships; # processes leading to sodic, salinised and acidified soils; # soil structure classification and management to minimise erosion; # water and solute movement; # soil survey and land capability assessment; # process-based soil management models; and # soil contamination, urban soil issues and soil quality and sustainability indicators.
Assessment:	A three hour examination (60%), a major assignment of 3,000 words (30%) and a class presentation (10%).
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
Generic Skills:	The subject should develop an understanding of how soils can be managed to optimise plant growth and minimise adverse effects on the environment, and present practical solutions to soil management.