NRMT20011 Water, Soil and Nutrient Management

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	This subject is not offered in 2011.
Time Commitment:	Contact Hours: Twenty-four hours of lectures and 36 hours of tutorials/workshops Total Time Commitment: Not available
Prerequisites:	202-110 Land Resources or 207-171 Sustainable Catchment Management.
Corequisites:	N/A
Recommended Background Knowledge:	N/A
Non Allowed Subjects:	N/A
Core Participation Requirements:	For the purposes of considering request 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 of 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/
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Subject Overview:	This subject provides students with an understanding of the importance of optimal use of nutrients and water in production to ensure maximum productivity whilst maintaining sustainability and avoiding off-site impact. The impact of tillage practices, rotational sequences, and livestock grazing on soil physical properties that influence soil fertility, infiltration and soil water availability will be assessed. Topics include: # evaluation of management strategies, cropping systems, and tillage systems that maximise infiltration and use stored soil water efficiently; # developing skills in identifying major soil groups and land capability for specific land-use; # providing a framework for evaluating soil: physical and chemical properties; # developing an understanding of sustainable crop and integrated crop-livestock production systems that sustain soil and water quality without impacting adversely in the environment; # evaluation of soil water and crop properties based on climatic parameters and meteorological conditions; # developing awareness of the impact on soil and water nutrient levels as a result of intensive agricultural practices; # the influence of intensive agriculture and horticulture on soil water and atmospheric conditions with examples of strategies to deal with these issues; # issues associated with allocation of water between agricultural, environmental, urban industrial and recreational uses;

	# developing knowledge of farm water supply systems for both stock and domestic use and irrigation in terms of both quality and quantity; # water reclamation and re-use; # methods of nutrient application including fertigation, broadcasting, row, deep placement and site specific will be discussed; and # efficient and economic application of nutrients including the preparation of nutrient budgets and performance monitoring.
Objectives:	N/A
Assessment:	2 hour Exam 45%2 x Assignments at 30% and 25%
Prescribed Texts:	N/A
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:	N/A