

208-248 Water, Soil and Nutrient Management

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
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:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>
Coordinator:	Mr Roger James Wrigley
Subject Overview:	<p>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.</p> <p>Topics include:</p> <ul style="list-style-type: none"> # 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;

	<ul style="list-style-type: none"> # 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.
Assessment:	Three-hour examination (50%) and two assignments equivalent to 3000 words (each worth 25%).
Prescribed Texts:	None
Recommended Texts:	Information Not Available
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Information Not Available
Related Course(s):	Associate Degree in Agriculture