

AGRI30031 Crop Production and Management

Credit Points:	12.5											
Level:	3 (Undergraduate)											
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.											
Time Commitment:	Contact Hours: 60 Total Time Commitment: 170 hours											
Prerequisites:	None											
Corequisites:	None											
Recommended Background Knowledge:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EVSC20002 Soil and Water Resources</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>AGRI20026 Plant Growth Processes</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	EVSC20002 Soil and Water Resources	Semester 2	12.50	AGRI20026 Plant Growth Processes	Semester 1	12.50
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EVSC20002 Soil and Water Resources	Semester 2	12.50										
AGRI20026 Plant Growth Processes	Semester 1	12.50										
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:	Dr Marc Nicolas											
Contact:	marcen@unimelb.edu.au (mailto:marcen@unimelb.edu.au)											
Subject Overview:	<p>Field crop production is a major component of Australia's economy, and landholders manage their resources to balance ecological, environmental and social demands. This subject discusses how these strategies are employed to produce high quality crop products.</p> <p>Topics include:</p> <ul style="list-style-type: none"> # an appraisal of the cropping enterprises in southern Australia - the location, scale and nature of cropping enterprises and their contribution to the national economy; # growth, development and yield in crop production - definitions and relations between growth and development attributes, yield and yield components, measurement of crop yields, biological and economical yield and harvest index (complemented by field exercises); # environmental constraints limiting productivity - climate and growing season, water and nutrient availability; # agronomic management to optimise production and product quality, including water and nutrient management, soil management and rotations; # problems and prospects of both dryland and irrigated crop production within farm systems, comparative cost-return analysis, marketing strategies. 											
Learning Outcomes:	<p>The objectives of this subject are to extend the students ability to:</p> <ul style="list-style-type: none"> # Identify the ecological principles underpinning crop production systems; # Understand how the processes of growth and development of plants interact with management operations in a crop production system; # Identify the role and place of selected crops in production systems; 											

	# Develop skills in predicting outcomes from particular management practices on economic and environmental benchmarks.
Assessment:	One 2-hour final examination (end of semester - 40%), 2 x practical reports based on the field trips - 1000 words each (due approximately weeks 4 & 8 - 20% each), a small plant collection - collection, presentation and short description of approximately 10 plants (due towards end of semester - 20%)
Prescribed Texts:	R. S. Loomis, D. J. Connor 1992. Crop Ecology: Productivity and Management in Agricultural Systems. Cambridge University Press.
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/2015/B-ARTS) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2015/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2015/B-MUS) <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:	<p>On completion of this subject, the student should have developed the following generic skills:</p> <ul style="list-style-type: none"> # an ability to demonstrate a broad knowledge of fundamental scientific precepts across crop production systems; # an understanding of the structures of agriculture and related industries and the principal factors that determine location, environmental impact, sustainability, profitability and international trade competitiveness; # the capacity to apply scientific knowledge to the definition, analysis, and solution of agricultural and environmental problems; # a capacity for the exchange, acquisition and dissemination of scientific and industry information and for technology transfer.
Related Majors/Minors/Specialisations:	<p>Agricultural Science Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED Sustainable Production</p>