

AGRI10044 Plant Systems

Credit Points:	12.5
Level:	1 (Undergraduate)
Dates & Locations:	2015, Dookie This subject commences in the following study period/s: Semester 2, Dookie - Taught on campus.
Time Commitment:	Contact Hours: 60 hours Total Time Commitment: 170 hours.
Prerequisites:	None
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>
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Subject Overview:	This subject introduces students to plant science with particular emphasis on crop and pasture species. Students will gain an understanding of plant growth and development to achieve desired levels of yield and quality. This subject considers how crop and pasture canopies grow by acquiring resources from the environment, how plants allocate resources to different growth processes, and how management and environment (including climate change) affect plant production in Australia and worldwide.
Learning Outcomes:	<p>Students will gain an understanding of</p> <ul style="list-style-type: none"> * Plant physiology including the relationship between structure and physiology of plants at cell, tissue, organ, whole plant and community levels * Plant growth and development * Root growth and function, nutrient uptake, nitrogen fixation and the importance of plant nutrition in managing crops and pastures, as well as implications for nutrient run-off and water quality * Water uptake, transpiration, xylem flow, stomatal control and the implications of these processes for managing crop transpiration and soil evaporation in dryland cropping and under irrigation * The growth phases of pastures and crops and how to monitor and measure these growth stages * The determinants that drive plant growth and yield of pastures and crops * How to develop a pre-season plan for crops and pastures including forecasting potential yields * The major constraints to plant growth including soil limitations, plant disease, insect and weed management

	* Harvesting/grazing methods of crops and pastures and why they are used
Assessment:	1 hour mid-semester test (due mid-semester, 20%), two practical/field reports totalling 1500 words (due approximately in weeks 7 & 12, 30%), 2 hour end of semester examination (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
Generic Skills:	<p>This subject encompasses particular generic skills so that on completion of the subject students should have developed skills relating to:</p> <ul style="list-style-type: none"> # The use of electronic forms of communication; # The student's flexibility and level of transferable skills should be enhanced through improved time management # Working collaboratively with other students; and # Enhanced ability to communicate their ideas effectively in both written and verbal formats. # Accessing information from the library via both electronic and traditional means; # Problem solving and critical thinking
Related Course(s):	Diploma in General Studies