

BOTA30003 Environmental Plant Physiology

Credit Points:	12.5																		
Level:	3 (Undergraduate)																		
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.																		
Time Commitment:	Contact Hours: 2 x one hour lectures per week, 24 hours practical work (3 hours per week during the first part of semester) Total Time Commitment: Estimated total time commitment of 170 hours																		
Prerequisites:	One of <table border="1" data-bbox="387 600 1485 976"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BOTA20001 Green Planet: Plants and the Environment</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>AGRI20026 Plant Growth Processes</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>EVSC20001 Leaves to Landscape</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>EVSC20002 Soil and Water Resources</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ECOL20003 Ecology</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	BOTA20001 Green Planet: Plants and the Environment	Semester 1	12.50	AGRI20026 Plant Growth Processes	Semester 1	12.50	EVSC20001 Leaves to Landscape	Semester 1	12.50	EVSC20002 Soil and Water Resources	Semester 2	12.50	ECOL20003 Ecology	Semester 2	12.50
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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:	Prof Ian Woodrow																		
Contact:	i.woodrow@unimelb.edu.au (mailto:i.woodrow@unimelb.edu.au)																		
Subject Overview:	<p>This subject deals with how plants function in relation to changing physical environments and is designed for students interested in plant biology and physiology, including those seeking majors in plant science, agricultural science, landscape management, and environmental science. The practical work includes a six-week research project on topics selected by students and run in small groups of 2-3.</p> <p>Topics to be covered will include:</p> <ul style="list-style-type: none"> # coping with environmental extremes and stress; # water use and drought tolerance; # plant defence and plant-animal interactions; # nutrient cycling and nutrient-use efficiency; 																		

	# hyperaccumulation of toxic metals and phytoremediation.
Learning Outcomes:	<p>Upon completion of this subject, students should have a knowledge of:</p> <ul style="list-style-type: none"> # plant function and performance in relation to the environment; # plant responses to various biotic and abiotic factors; and # the role of plants in global nutrient and carbon cycling.
Assessment:	Laboratory test during the semester (10%); practical reports totalling up to 2000 words due during the semester (30%); a 2-hour written examination in the examination period (60%).
Prescribed Texts:	None
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/2016/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/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
Notes:	<p>This subject is available for science credit to students enrolled in the BSc (both pre-2008 and new degrees), BAsC or a combined BSc course.</p> <p>Previously known as 606-304 Environmental Plant Physiology (prior to 2010)</p> <p>Previously known as BOTA30003 (606-304) Functional Plant Biology (prior to 2011)</p>
Related Majors/Minors/Specialisations:	<p>Botany Botany Botany Botany Botany (pre-2008 Bachelor of Science) Cell Biology (pre-2008 Bachelor of Science) Ecology and Evolutionary Biology Forest Science Genetics Genetics Genetics Genetics Genetics Plant Cell Biology and Development (specialisation of Cell and Developmental Biology major) Plant Science Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED</p>