

BOTA30003 Environmental Plant Physiology

Credit Points:	12.50																		
Level:	3 (Undergraduate)																		
Dates & Locations:	This subject is not offered in 2014.																		
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 120 hours																		
Prerequisites:	<p>One of</p> <table border="1"> <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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ECOL20003 Ecology	Semester 2	12.50																	
Corequisites:	None																		
Recommended Background Knowledge:	None																		
Non Allowed Subjects:	None																		
Core Participation Requirements:	For the purposes of considering applications for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005) and Students Experiencing Academic Disadvantage Policy, this subject requires all students to actively and safely participate in practical work. Students who feel their disability may impact upon their participation are encouraged to discuss this with the Subject Coordinator and the Disability Liaison Unit. http://www.services.unimelb.edu.au/disability/																		
Contact:	School of Botany botany-enquiries@unimelb.edu.au (mailto:%20botany-enquiries@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; 																		

	<ul style="list-style-type: none"> # 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/2014/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2014/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2014/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/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</p> <p>Botany</p> <p>Botany (pre-2008 Bachelor of Science)</p> <p>Cell Biology (pre-2008 Bachelor of Science)</p> <p>Ecology (pre-2008 Bachelor of Science)</p> <p>Ecology and Evolutionary Biology</p> <p>Forest Science</p> <p>Genetics</p> <p>Genetics</p> <p>Genetics</p> <p>Plant Cell Biology and Development (specialisation of Cell and Developmental Biology major)</p> <p>Plant Science</p> <p>Science credit subjects* for pre-2008 BSc, BAsc and combined degree science courses</p> <p>Science-credited subjects - new generation B-SCI and B-ENG.</p> <p>Selective subjects for B-BMED</p>