

## HORT10016 Plant Biology 2

<b>Credit Points:</b>	12.50
<b>Level:</b>	1 (Undergraduate)
<b>Dates &amp; Locations:</b>	2014, Burnley This subject commences in the following study period/s: Semester 2, Burnley - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 24 hours lectures, 12 hours tutorials, 30 hours practicals = 66 hours Total Time Commitment: 132
<b>Prerequisites:</b>	HORT10007 Plant Biology 1
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Coordinator:</b>	Dr Virginia Williamson
<b>Contact:</b>	Semester 1: David Beardsell Semester 2: Virginia Williamson <b>Melbourne School of Land &amp; Environment Student Centre</b> Ground Floor, Melbourne School of Land & Environment (building 142) <i>Enquiries</i> Phone: 13 MELB (13 6352) Email: <a href="mailto:13MELB@unimelb.edu.au">13MELB@unimelb.edu.au</a> ( <a href="mailto:13MELB@unimelb.edu.au">mailto:13MELB@unimelb.edu.au</a> )
<b>Subject Overview:</b>	This subject aims to extend students' knowledge of plant biology in both practical and theoretical areas. Students will use core knowledge obtained in Plant Biology I as a base to further their understanding of plant function. Additional areas of study in plant growth and development include respiration, nutrition, senescence, breeding systems, genetics, herbicide action, tissue culture and eco-physiology. Students will develop a deeper understanding and appreciation of plant processes and be able to apply this knowledge to horticultural situations. Practical classes will provide a balance between lecture consolidation, experimental design and horticultural applications of biological plant growth principles
<b>Learning Outcomes:</b>	On completion of this subject students should be able to: <ul style="list-style-type: none"> <li># understand how the processes of photosynthesis and respiration result in energy acquisition and growth for plants;</li> <li># comprehend the importance of plant nutrients to growth;</li> <li># have an awareness of the importance of genes and gene expression in plants;</li> <li># understand the physiological mechanisms behind herbicide action;</li> <li># appreciate the effects of a changing climate on plant growth;</li> <li># understand the physiological basis of plant responses to diseases, decay and senescence;</li> </ul>

	<ul style="list-style-type: none"> <li># perform experiments testing various plant processes such as enzyme action, photosynthesis, plant nutrition, response to herbicides, effects of plants hormones and tissue culture;</li> <li># search the professional literature and develop good report writing skills based on the collation of scientific information; and</li> <li># become confident in the field of horticultural science.</li> </ul>
<b>Assessment:</b>	1x 50 min written examination - Mid Semester 20%, 1 x 1000 word practical report - Mid Semester 20%, 1 x 1500 word practical report - End Semester 30%, 1 final 1 hour written examination - End Semester 25%, Participation in subject - During Semester 5%.
<b>Prescribed Texts:</b>	Evert, RF & Eichhorn, SE 2012, Raven Biology of Plants, 8th edn, WH Freeman & Company, New York.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Related Course(s):</b>	Associate Degree in Urban Horticulture