HORT10016 Plant Biology 2

Credit Points:	12.5
Level:	1 (Undergraduate)
Dates & Locations:	2015, Burnley This subject commences in the following study period/s: Semester 2, Burnley - Taught on campus.
Time Commitment:	Contact Hours: 24 hours lectures, 12 hours tutorials, 30 hours practicals = 66 hours Total Time Commitment: 170
Prerequisites:	HORT10007 Plant Biology 1
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	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. 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
Coordinator:	Dr Virginia Williamson
Contact:	**Faculty of Science** *Enquiries* Phone: 13 MELB (13 6352) Email: **13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)** Subject Coordinator: **vgw@unimelb.edu.au (mailto:vgw@unimelb.edu.au)**
Subject Overview:	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
Learning Outcomes:	On completion of this subject students should be able to: # understand how the processes of photosynthesis and respiration result in energy acquisition and growth for plants; # comprehend the importance of plant nutrients to growth; # have an awareness of the importance of genes and gene expression in plants; # understand the physiological mechanisms behind herbicide action; # appreciate the effects of a changing climate on plant growth; # understand the physiological basis of plant responses to diseases, decay and senescence;

	# perform experiments testing various plant processes such as enzyme action, photosynthesis, plant nutrition, response to herbicides, effects of plants hormones and tissue culture; # search the professional literature and develop good report writing skills based on the collation of scientific information; and # become confident in the field of horticultural science.
Assessment:	1x 50 minute written examination - Mid Semester 20%, 1 x 1000 word practical report - Mid Semester 20%, 1 x 1500 word practical report - End Semester 30%, 1 hour written examination - End Semester 25%, Participation in subject - During Semester 5%.
Prescribed Texts:	Evert, RF & Eichhorn, SE 2013, Raven Biology of Plants, 8th edn, WH Freeman & Company, New York.
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
Related Course(s):	Associate Degree in Urban Horticulture