

NRMT20016 Plant Protection

Credit Points:	12.5
Level:	2 (Undergraduate)
Dates & Locations:	2016, Burnley This subject commences in the following study period/s: Semester 1, Burnley - Taught on campus.
Time Commitment:	Contact Hours: 24 hours lectures and 24 hours practical activities. Total: 48 hours Total Time Commitment: Estimated Total Time Commitment: 170
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	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. This course requires all students to enrol in subjects where they must actively and safely contribute to field excursions and laboratory activities. Students who feel their disability will impact on meeting this requirement are encouraged to discuss this matter with the Subject Coordinator and Disability Liaison http://services.unimelb.edu.au/disability/ students email: disability-liaison@unimelb.edu.au
Coordinator:	Dr Virginia Williamson
Contact:	vgw@unimelb.edu.au (mailto:vgw@unimelb.edu.au)
Subject Overview:	This subject examines three key factors that impact on the health of plants: pests (insects and mites), weeds and pathogens. Students will learn how to identify common pest, disease and weed species and understand how to manage and control them, using biological principles and various control methods. Maintaining the health of horticultural crops will be approached from different perspectives such as Integrated Pest Management, beneficial insects, genetic modification, crop rotation, chemical and biological controls. Safe practices when using chemicals will be discussed, as will the legislation pertaining to pests, and noxious and environmental weeds.
Learning Outcomes:	On completion of this subject students should be able to: <ul style="list-style-type: none"> # know the difference between biotic and abiotic symptoms on plants; # identify horticulturally important insects and mites, disease and weed species; # understand the concept of Integrated Pest Management; # be aware of the different insecticide, miticide, herbicide and fungicide groups and their role in chemical resistance; # comprehend the biological attributes of weediness and the various ways to manage and control weeds; # have an awareness of the different symptoms on plants caused by viruses, bacteria, fungi and oomycetes; # know how to adopt good practices to control or reduce the likelihood of diseases in nurseries, orchards and gardens; and # be familiar with the key areas on chemical labels and understand the principles and practice of the safe backpack spray application of chemicals.
Assessment:	1 hour practical examination (20%) mid semester, 45 minute theory examination (15%) mid semester, final 1 hour practical examination (20%) end of semester, final 45 minute theory examination (15%) end of semester, practical book assessment (20%) throughout semester, participation in subject (10%) end of semester.

Prescribed Texts:	Evert, RF & Eichhorn, SE 2013, Raven Biology of Plants, 8th edn, WH Freeman & Company, New York
Recommended Texts:	<ul style="list-style-type: none"> # Entomology notes for higher education (J S Brereton), Burnley Campus, The University of Melbourne # Pests, diseases, disorders and beneficials in ornamentals: field identification guide (Goodwin, ed.), NSW Agriculture, Gosford NSW, 2000
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 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
Generic Skills:	<ul style="list-style-type: none"> • Exercise problem-solving skills (developed through practical exercises and lecture discussions); • Think critically and organise knowledge (from consideration of the lecture material); • Expand from theoretical principles to practical explanations (through observing practical work); • Plan effective work schedules (to meet deadlines for submission of assessable work); and • Develop skills of critical observation and analysis developed through practical exercises.
Related Course(s):	Associate Degree in Urban Horticulture