HORT10008 Ecology, Soil and Plants

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	2011, Burnley This subject commences in the following study period/s: Semester 2, Burnley - Taught on campus.
Time Commitment:	Contact Hours: Twenty-four hours lectures, 36 hours tutorials, laboratory work and/or field trips Total Time Commitment: Not available
Prerequisites:	N/A
Corequisites:	N/A
Recommended Background Knowledge:	N/A
Non Allowed Subjects:	N/A
Core Participation Requirements:	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: http://www.services.unimelb.edu.au/disability/
Coordinator:	Ms Kirsten Raynor
Contact:	**Melbourne School of Land & Environment Student Centre** Ground Floor, Land & Food Resources (building 142) *Enquiries* Phone: 13 MELB (13 6352) Email: **13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)**
Subject Overview:	This subject will describe the relationship between plant growth and the environment in which plants grow. Particular attention will be given to the ecology of plants and to the effect of soil conditions on plant growth. Where appropriate, the consequences of these relationships for horticultural plant management will be described. Specific content will include: soil composition, soil texture and structure, soil water and aeration, behaviour and management of plant nutrients elements in soil, manipulation of nutrient Âlevels, assessment of plant and soil nutrient status, definition of ecology, populations, communities, ecosystems, homoeostasis, energy flow, trophic structures, Australian plant communities, environmental factors, fire and human impact on vegetation.
Objectives:	This subject aims to provide students with an understanding of the ecological processes that influence horticultural operations, from micro to global scales, and to explore how ecological principles can be used in practice when designing human landscapes.
Assessment:	The assesment in this subject comprises:• One 2,500 word report (20%);• Mid-semester exam (30%);• Practical reports (10%); and• Final semester exam (40%).
Prescribed Texts:	Ecology:Knox, B., Ladiges, P., Saint, R. and Evans, T. (2009), Biology: an Australian focus, (4th Edition), McGraw-Hill.Soils:Handreck, K. and Black, N. (2002), Growing Media for Ornamental Plants and Turf, (3rd Edition), UNSWP.
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

Generic Skills:	• Development of capacity for independent critical thought, rational inquiry and self-directed learning; • Identification and description of the biophysical resources of soils, plants and ecosystems; • An ability to derive, interpret and analyse ecological and soil and water related information from primary sources; • An ability to integrate information to solve problems in applied ecological and soil related situations; and • Development of written communication skills to allow informed dialogue with individuals and groups from industry, government and the community.
Related Course(s):	Associate Degree in Environmental Horticulture