

ERTH90028 Urban Soils, Substrates and Water

Credit Points:	12.50						
Level:	9 (Graduate/Postgraduate)						
Dates & Locations:	This subject is not offered in 2013.						
Time Commitment:	Contact Hours: 36 Total Time Commitment: Not available						
Prerequisites:	- or a comparable introductory subject as approved by the course coordinator. <table border="1" data-bbox="387 459 1485 607"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>HORT90003 Plants and the Urban Environment</td> <td>Not offered 2013</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	HORT90003 Plants and the Urban Environment	Not offered 2013	12.50
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HORT90003 Plants and the Urban Environment	Not offered 2013	12.50					
Corequisites:	None						
Recommended Background Knowledge:	None						
Non Allowed Subjects:	None						
Core Participation Requirements:	<p><p>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.</p> <p>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</p> </p>						
Contact:	<p>Melbourne School of Land & Environment Student Centre Ground Floor, Melbourne School of Land & Environment (building 142)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)</p>						
Subject Overview:	Urban soils can present distinct and unique challenges to the land manager, landscape architect or horticulturist responsible for developing, maintaining or improving urban landscapes. Often compacted, contaminated, or otherwise unsuitable for plant growth, urban soils require assessment, solutions and practical methods to ensure successful outcomes. This applications-oriented subject covers several fundamental soil science issues with direct relevance to urban landscape impacts, uses and requirements. Topics covered include compaction, nutrition, contamination, water supply, drainage and structural soils.						
Objectives:	<p>Upon completion of this subject students will be able to:</p> <ul style="list-style-type: none"> # Discuss key soil physical and chemical properties and their application to urban soil typologies. # Undertake field assessments/measurement of soil properties (physical, hydrologic & chemical), including sampling of urban soils for laboratory analysis # Discuss the mechanisms that impact urban soil conditions. # Describe the rationale, function, design and installation of structural soils, containerised soils and other specialised environments # Assess methods used to remediate, alleviate and improve urban soils. # Investigate case studies of soil assessment, analysis and problem solving in different urban landscape scenarios (turf, tree, construction, horticultural, roads, etc.) # Discuss hydrological issues associated with soil water availability, irrigation supply and drainage management. 						

	Discuss ecosystem services that urban soils provide to the population, built landscape and biodiversity
Assessment:	Short answer tests, Weeks 4 & 11, 20% Practical exam, Week 8, 20% Framing an urban soil management case study (group oral presentation) 15 minutes, Week 9, 10% Urban soil management case study (individual report) up to 4000 words, 2 weeks after week 12, 50%
Prescribed Texts:	None
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:	<p>Generic skills obtained during this course will be:</p> <ul style="list-style-type: none"> # Soil management skills for residential gardens, production horticulture, local government and major infrastructure. # Scientific understanding of key soil physical, chemical and hydrological properties. # Basic field and laboratory competencies for urban soil and landscape assessments. # Systems understanding of the urban landscape (water, substrate, vegetation, society, climate). <p>Oral presentation skills and inter-personal skills for group work under pressure.</p>
Related Course(s):	Graduate Diploma in Urban Horticulture Master of Urban Horticulture