



# COURSE OUTLINE

## ARB605

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Prepared: Andrea Mattioli    Approved: Sherri Smith

<b>Course Code: Title</b>	ARB605: UTILITY ARBORICULTURAL SCIENCE I								
<b>Program Number: Name</b>	6560: UTILITY ARBORIST I								
<b>Department:</b>	UTILITY ARBORIST - APPR.								
<b>Semester/Term:</b>	18W								
<b>Course Description:</b>	This course will provide the student with the skills, tools and knowledge necessary to identify various woody plant parts, growth factors, compartmentalization of decay, diseases, disorders and pathology that could be harmful to the integrity of the electrical system, evaluate the condition of anchor points used in fall protection, and evaluate work operations within environmentally sensitive areas.								
<b>Total Credits:</b>	3								
<b>Hours/Week:</b>	15								
<b>Total Hours:</b>	15								
<b>Essential Employability Skills (EES):</b>	#4. Apply a systematic approach to solve problems. #5. Use a variety of thinking skills to anticipate and solve problems. #9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. #10. Manage the use of time and other resources to complete projects. #11. Take responsibility for ones own actions, decisions, and consequences.								
<b>Course Evaluation:</b>	Passing Grade: 50%, D								
<b>Evaluation Process and Grading System:</b>	<table><tr><th>Evaluation Type</th><th>Evaluation Weight</th></tr><tr><td>Attendance and Participation</td><td>25%</td></tr><tr><td>Final Test</td><td>25%</td></tr><tr><td>Quizzes / Assignments</td><td>50%</td></tr></table>	Evaluation Type	Evaluation Weight	Attendance and Participation	25%	Final Test	25%	Quizzes / Assignments	50%
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Attendance and Participation	25%								
Final Test	25%								
Quizzes / Assignments	50%								
<b>Course Outcomes and Learning Objectives:</b>	<b>Course Outcome 1.</b>  Identify and describe the structure, functions and interrelationship of the main organs of plants.								



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### Learning Objectives 1.

- Describe the structures of leaves, branches, the plant vascular system, roots, flowers, fruiting structures, and seeds.
- Explain the plant as a system.
- State the interrelationship of plant parts.

### Course Outcome 2.

Describe plant growth and all affecting factors, including environmental conditions, soil, and plant competition.

### Learning Objectives 2.

- Discuss the effects of temperature, water availability, spatial distribution, wind, pollution, sunlight, topography, soil texture, drainage, and soil science on tree growth.

### Course Outcome 3.

Describe the compartmentalization of decay in trees.

### Learning Objectives 3.

- Review the creation of wall 1-4 within a tree.
- Explain the protection of branch tissue through proper pruning.
- Describe the effects of poor pruning techniques on CODIT.

### Course Outcome 4.

Identify the physical condition and soundness of interim, and final anchor points based on tree size, tree condition and species.

### Learning Objectives 4.



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<b>Date:</b>

- Describe attributes of a solid anchor point.
- Explain the impacts of various loads on tree structure when selecting an interim and final anchor point.

Thursday, August 31, 2017

Please refer to the course outline addendum on the Learning Management System for further information.