



COURSE OUTLINE: ARB613 - ARBORICULTURAL SCI.

Prepared: Andrea Mattioli

Approved: Sherri Smith, Chair, Natural Environment, Business, Design and Culinary

Course Code: Title	ARB613: ARBORICULTURAL SCIENCES I					
Program Number: Name	6560: UTILITY ARBORIST I					
Department:	NATURAL RESOURCES PRG					
Academic Year:	2022-2023					
Course Description:	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.					
Total Credits:	3					
Hours/Week:	24					
Total Hours:	36					
Prerequisites:	There are no pre-requisites for this course.					
Corequisites:	There are no co-requisites for this course.					
Vocational Learning Outcomes (VLO's) addressed in this course:	<p>6560 - UTILITY ARBORIST I</p> <p>VLO 1 Utility Arborist - L1</p>					
<small>Please refer to program web page for a complete listing of program outcomes where applicable.</small>						
Essential Employability Skills (EES) addressed in this course:	<p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p>					
Course Evaluation:	<p>Passing Grade: 50%, D</p> <p>A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.</p>					
Course Outcomes and Learning Objectives:	<table border="1"> <thead> <tr> <th>Course Outcome 1</th> <th>Learning Objectives for Course Outcome 1</th> </tr> </thead> <tbody> <tr> <td>Identify and describe the structure, functions and interrelationship of the main</td> <td>1.1 Describe the structures of leaves, branches, the plant vascular system, roots, flowers, fruiting structures, and seeds.</td> </tr> </tbody> </table>	Course Outcome 1	Learning Objectives for Course Outcome 1	Identify and describe the structure, functions and interrelationship of the main	1.1 Describe the structures of leaves, branches, the plant vascular system, roots, flowers, fruiting structures, and seeds.	
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	organs of plants.	1.2 Explain the plant as a system. 1.3 State the interrelationship of plant parts.
	Course Outcome 2	Learning Objectives for Course Outcome 2
	Describe plant growth and all affecting factors, including environmental conditions, soil, and plant competition.	2.1 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	Learning Objectives for Course Outcome 3
	Describe the compartmentalization of decay in trees.	3.1 Review the creation of wall 1-4 within a tree. 3.2 Explain the protection of branch tissue through proper pruning. 3.3 Describe the effects of poor pruning techniques on CODIT.
	Course Outcome 4	Learning Objectives for Course Outcome 4
	Identify the physical condition and soundness of interim, and final anchor points based on tree size, tree condition and species.	4.1 Describe attributes of a solid anchor point. 4.2 Explain the impacts of various loads on tree structure when selecting an interim and final anchor point.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	25%
Attendance / Participation	25%
Final Test	25%
Quizzes	25%

Date: June 30, 2022

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