



## COURSE OUTLINE: ARB712 - TOOLS & EQUIPMENT

Prepared: Colten Tourigny

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

<b>Course Code: Title</b>	ARB712: UTILITY ARBORIST TOOLS AND EQUIPMENT	
<b>Program Number: Name</b>	6561: UTILITY ARBORIST II	
<b>Department:</b>	NATURAL RESOURCES PRG	
<b>Academic Year:</b>	2023-2024	
<b>Course Description:</b>	On completion of this reportable subject, the apprentice is able to operate live line tools, brush chippers and aerial devices used in utility arboricultural practices.	
<b>Total Credits:</b>	1	
<b>Hours/Week:</b>	18	
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<b>Prerequisites:</b>	There are no pre-requisites for this course.	
<b>Corequisites:</b>	There are no co-requisites for this course.	
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<b>6561 - UTILITY ARBORIST II</b>	
Please refer to program web page for a complete listing of program outcomes where applicable.	VLO 2 Utility Arborist - L2	
<b>Essential Employability Skills (EES) addressed in this course:</b>	<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>	
<b>Course Evaluation:</b>	<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>	
<b>Other Course Evaluation &amp; Assessment Requirements:</b>	A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.	
<b>Course Outcomes and Learning Objectives:</b>	<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
	Demonstrate how to select, inspect, adjust, maintain, set up and store live line tools.	Select appropriate tool based on pruning methods, voltage level, diameter of limb and work to be completed. Identify Live Line Tools. Inspect tools for defects. Describe tool and



		equipment maintenance requirements. Demonstrate storage of live line tools.
	<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
	Describe the requirements and process for testing insulated aerial devices and dielectric tools used in proximity to energized electrical apparatus.	State Electrical Utility Safety Rules, 134 related to dielectric testing. Describe what is meant by a certified testing laboratory and the process of cleaning for dielectric testing. Describe testing frequencies for dielectric components of aerial devices.
	<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
	Demonstrate the procedure to inspect and set up insulated aerial devices used in proximity to energized apparatus.	Verify dielectric inspection and stability test stickers are current. Identify that voltage limits of the aerial device are not exceeded based on what voltage the unit has been tested to. Confirm that auxiliary hydraulic hoses are dielectric in nature. Clean booms and dielectric tools according to manufacturer's recommendations. Address moisture concerns that could impact dielectric integrity. Set up aerial device to achieve maximum boom reach and maneuverability to maintain Limits of Approach for personnel and equipment.
	<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
	Demonstrate the operation of insulated aerial devices around energized apparatus.	State Electrical Utility Safety Rules, rule 123. Maintain a safe limit of approach to electrical conductors while operating the insulated aerial device aloft. Demonstrate the safe handling of conductive tools such as chainsaws and conductive material and woody stems when working around energized conductors

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
Participation	25%
Quizzes / Assignments	25%
Skills Demonstrations	50%

**Date:** November 6, 2023

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