



COURSE OUTLINE: ARB713 - LINE CLEARING

Prepared: Jeff Gales

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

Course Code: Title	ARB713: UTILITY LINE CLEARING
Program Number: Name	6561: UTILITY ARBORIST II
Department:	NATURAL RESOURCES PRG
Academic Year:	2023-2024
Course Description:	On completion of this reportable subject, the apprentice is able to describe reliability standards for transmission circuits, identify Right-of-Ways (ROW) system information from maps and drawings, perform a condition patrol inspection to assess hazards to line integrity and document findings for future actions.
Total Credits:	2
Hours/Week:	15
Total Hours:	15
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:	6561 - UTILITY ARBORIST II VLO 2 Utility Arborist - L2
<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:	EES 4 Apply a systematic approach to solve problems. EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Books and Required Resources:	Pocket Ontario OH&S Act & Regulations 2021 Publisher: Thomson Reuters Softbound Book Electrical Utility Safety Rule Book



Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Describe the standards related to Transmission Reliability.	1.1 Describe NERC and FERC and their governance functions as it relates to transmission reliability 1.2 Describe FAC-003 including all of the requirements and measures 1.3 Describe a Transmission Vegetation Management Plan (TVMP) and its components
Course Outcome 2	Learning Objectives for Course Outcome 2
Interpret maps, drawings and diagrams to identify features of the transmission system.	2.1 Identify system information including voltages, structures and access routes using maps and drawings 2.2 Interpret special considerations on maps and drawings for work planning: - water - AOC - property owner specifications 2.3 Describe ROW status - Identify Right- of-Ways (ROW) property information from maps and drawings and determine type: - owned - easement acquired on private land - land use agreement in place 2.4 Interpret system operating diagrams to identify: - transmission circuits - generation - station locations - system configuration
Course Outcome 3	Learning Objectives for Course Outcome 3
Describe the process for conducting a condition patrol inspection.	3.1 Identify requirements for access permission 3.2 Describe the process for acquiring authorization on both private and crown land 3.3 Describe sag and sway as a consideration when performing condition patrols 3.4 Describe consideration of cycle lengths when assessing vegetation compatibility
Course Outcome 4	Learning Objectives for Course Outcome 4
Perform a condition patrol inspection to identify hazards to line integrity by assessing vegetation for compatibility within the ROW.	4.1 Use tree measuring devices e.g. clinometer, laser range finder and measuring sticks to measure the height of vegetation in the ROW 4.2 Document findings from condition patrol

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Attendance / Participation	50%
Quizzes / Assignments	50%

Date:

November 9, 2023

Addendum:

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

