



COURSE OUTLINE: ELR624 - INSTAL. METHODS I

Prepared: shager

Approved: Corey Meunier, Chair, Technology and Skilled Trades

Course Code: Title	ELR624: INSTALLATION METHODS - LEVEL 1	
Program Number: Name	6520: CONST & MTCE ELE BAS	
Department:	ELEC. APPRENTICES	
Semesters/Terms:	19F, 20W, 20F	
Course Description:	This is a hands-on course focusing primarily on residential wiring practices. Installation methods applying to common electrical cables and conduits are also covered.	
Total Credits:	6	
Hours/Week:	6	
Total Hours:	48	
Prerequisites:	There are no pre-requisites for this course.	
Corequisites:	There are no co-requisites for this course.	
General Education Themes:	Science and Technology	
Course Evaluation:	Passing Grade: 50%, D	
Other Course Evaluation & Assessment Requirements:	Grade Definition Grade Point Equivalent A+ 90 - 100% 4.00 A 80 - 89% B 70 - 79% 3.00 C 60 - 69% 2.00 D 50 - 59% 1.00 F (Fail)49% and below 0.00 CR (Credit) Credit for diploma requirements has been awarded. S Satisfactory achievement in field /clinical placement or non-graded subject area. U Unsatisfactory achievement in field/clinical placement or non-graded subject area. X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. NR Grade not reported to Registrar's office. W Student has withdrawn from the course without academic penalty.	
Course Outcomes and Learning Objectives:	Course Outcome 1	Learning Objectives for Course Outcome 1
	Correctly select and safely install common residential electrical wiring systems and equipment within the regulations and standards set out by the Canadian Electrical Code (CEC).	- Demonstrate the correct installation procedures and wiring connections for common residential switching devices and outlets, ensuring strict adherence to CEC (Canadian Electrical Code) and NBC (National Building Code) regulations. - Demonstrate the proper installation procedures required for the following wiring methods while ensuring strict adherence to CEC regulations: non-metallic sheathed cable, armoured cable, mineral insulated cable, metallic sheathed cable, rigid conduits, flexible conduits, liquid-tight conduit, electrical metallic tubing,



	and electrical non-metallic tubing. - Demonstrate the ability to install a complete 100 amp, residential service including the following circuits: hot water heater, range outlet, dryer outlet, split duplex receptacle, bathroom outlet, outside weather-proof receptacle, general branch circuit. - Prepare a layout drawing for a service mast and indicate the procedure for installation. - Demonstrate the proper use of common hand tools used in the electrical trade. - Demonstrate the proper installation of enclosures and fittings common to the electrical trade. - Demonstrate the proper installation of cable, conduit and enclosure supports common to the electrical trade. - Demonstrate the proper techniques for the terminating of conductors. - Identify and terminate copper communication and hard wired cables for telephones.								
Evaluation Process and Grading System:	<table> <tr> <th>Evaluation Type</th><th>Evaluation Weight</th></tr> <tr> <td>Final Project</td><td>25%</td></tr> <tr> <td>Shop reports/practical work</td><td>50%</td></tr> <tr> <td>Tests</td><td>25%</td></tr> </table>	Evaluation Type	Evaluation Weight	Final Project	25%	Shop reports/practical work	50%	Tests	25%
Evaluation Type	Evaluation Weight								
Final Project	25%								
Shop reports/practical work	50%								
Tests	25%								
Date:	August 29, 2019								
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.								