



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:	<p>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</p> <p>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 W Student has withdrawn from the course without academic penalty.</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>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).</td> <td> - 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, </td> </tr> </tbody> </table>	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,	
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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:

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.

