

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. ELPL**

**COURSE NUMBER: 1116**

**NUMBER OF CREDITS: 4**

**Lecture: 1 Lab: 3 OJT 0**

|                                          |
|------------------------------------------|
| <b>Course Title:</b>                     |
| Electrical Distribution of Powerlines II |

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| <b>Catalog Description:</b>                                                                                                                                                                                                                                                                  |
| Electrical Distribution of Powerlines II covers the application, care, and use of rubber goods, insulated coverup use, and the use of bucket trucks. This course also covers pole top insulator change outs, pole replacements, and conductor transfers all simulating the line being 'Hot'. |

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| <b>Prerequisites or Necessary Entry Skills/Knowledge:</b> |
| ELPL1106                                                  |

### FULFILLS MN TRANSFER CURRICULUM AREA(S)

- ☐ Goal 1: Communication: By meeting the following competencies:
- ☐ Goal 2: Critical Thinking: By meeting the following competencies:
- ☐ Goal 3: Natural Sciences: By meeting the following competencies:
- ☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- ☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- ☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- ☐ Goal 7: Human Diversity: By meeting the following competencies:
- ☐ Goal 8: Global Perspective: By meeting the following competencies:
- ☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- ☐ Goal 10: People and the Environment: By meeting the following competencies:

|                                       |
|---------------------------------------|
| <b>Topics to be Covered</b>           |
| Precautions and safety before digging |
| Three-phase overhead lines            |
| Conductor ties                        |
| Open wire and triplex secondaries     |
| URD                                   |

|                                           |
|-------------------------------------------|
| <b>Student Learning Outcomes</b>          |
| Describe before digging precautions       |
| Build three-phase overhead lines          |
| Install conductor ties                    |
| Install open-wire and triplex secondaries |

|                                                            |
|------------------------------------------------------------|
| Splice 600 volt underground cable                          |
| Demonstrate the use of underground cable preparation tools |
| Install 15 KV URD terminators, elbows, and cable splices   |
| Demonstrate ground procedures for URD cable                |

**Is this course part of a transfer pathway: Yes ☐ No ☒**

Revised Date: October, 2020