

## ELWT1100 - Introduction to Lineworker Theory

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| Credits:           | 4 (2/2/0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Description:       | This introductory course provides the student with knowledge of electrical theory including atomic structure, Ohms law, and series and parallel circuits. This course also includes some hands-on dealing with the terminating of underground wire and rigging of ropes used in the electrical lineworker industry.                                                                                                                                                                                                                                                                                                               |
| Prerequisites:     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Corequisites:      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pre/Corequisites*: |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Competencies:      | <ol style="list-style-type: none"><li>1. Demonstrate electrical safety.</li><li>2. Apply electrical formulas.</li><li>3. Apply direct current (DC) theory.</li><li>4. Demonstrate understanding of meter skills.</li><li>5. Demonstrate the terminating of a 200 amp underground elbow.</li><li>6. Identify electrical circuit components.</li><li>7. Construct DC circuits.</li><li>8. Troubleshoot DC circuits.</li><li>9. Demonstrate the tying of knots used in industry.</li><li>10. Compute formulas used in the solving of Ohm's law.</li><li>11. Display professional conduct.</li><li>12. Diagram DC circuits.</li></ol> |
| MnTC goal areas:   | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

\*Can be taking as a Prerequisite or Corequisite.