**Lesson Information**

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| Lesson: (1 of 5) Conductors and Cables Length: 90 minutes  Unit: (2 of 3) System Elements  Course: Electrical |

**Content Assumptions**

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| Prior to this class, students have taken safety courses. |

**Essential Questions**

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| 1. How are conductor and cable installations planned? 2. How are conductors and cables properly installed? |

**Objectives Assessments**

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| After completing this lesson, students will be able to:   1. Demonstrate their knowledge of conductors and cables (including handling and storage practices). 2. Describe the processes related to planning and installing conductors and cables. | 1. Cable dissection drawing — checklist 2. Process guide — rubric |

**Activities/Instruction**

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| **Show…** (45 minutes)  Using samples (as described in the Materials section), Instructor guides an exploration of conductors and cables, describing what they are made of and how they are handled and stored. Students ask questions and take notes. When Instructor is finished, students draw diagrams of cables, labeling all components and including handling and storage practices as described by Instructor.  **…and Tell** (45 minutes)  Using samples and tools (as described in the Materials section), Instructor demonstrates a variety (Instructor’s choice) of conductor installations, terminations, and splices. Students ask questions and take notes. After the demonstrations, Instructor assigns students a scenario in which to plan a conductor installation. Students are to write up the processes for planning and installing conductors for the given scenario. |

**Materials**

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| For Instructor:   * Samples of various kinds of conductors, cables, and the tools used to work with them * [CABLE DISSECTION CHECKLIST] * [CABLE PROCESS RUBRIC] |