

# Academic/Career & Technical Related/Demonstration Lesson Plan

Instructor Svonavec Date \_\_\_\_\_

Program/Class ELECTRICITY/JUNIORS Period 1-4

## State Indicator/Competency:

2.1: Examine the various materials used in construction

2.1.1 Identify the various materials used in the construction industry

2.1.2 Describe the structure and properties of each material

2.1.3 Discuss similarities and differences between materials that are the same general type (e.g., lumber, pipe fittings, fasteners)

16.5.5 Demonstrate use of code books (e.g., mandatory and fine print rules)

16.5.6 Apply commonly used articles of the NEC and other applicable codes (i.e., Building Officials and Code Administrators (BOCA), OBBC, Life Safety Codes)

16.5.7 Use NEC to calculate various general job requirements (e.g., service conductors; feeders; branch circuits; permissible loads on various circuits; allowable cable tray fills; ampacity of various conductors and fill situations; ampacity of various circuits and load types; overload protection for motors, equipment and phase converters; minimum ampacity for motor disconnecting means; horsepower ratings for motors and disconnecting means; and grounding requirements)

## Instructional Objective(s):

Upon completion, to 75% accuracy, students will be able to research the NEC for flexible metal conduit and liquid-tight flexible metal conduit, listing the uses permitted and not permitted.

Upon completion, to 75% accuracy, students will be able to list the similarities and differences of flexible metal conduit and liquid-tight flexible metal conduit.

Upon completion, to 75% accuracy, students will be able to list the securing and supporting requirements for flexible metal conduit and liquid-tight flexible metal conduit.

## Materials:

National Electrical Code (NEC)

**Method of Instruction:**

Student led learning

**Activities:**

Introduction: this lesson is blizzard bag 3 to make up a lost day of instruction due to weather. You will have two weeks to complete it. The assignment is worth up to 10 points.

Pass out the attached worksheet for the students.

**Closure:**

Grade the assignment.

**Assessment:**

Up to 10 points for the assignment.

**NAME**

**DATE**

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**Blizzard Bag 3      10 points**

You have two weeks to complete the assignment; it is due at the beginning of class on the following day.

Use the National Electrical Code (NEC) to research the following.

1. List the uses permitted and not permitted for flexible metal conduit and liquid-tight flexible metal conduit
2. List the similarities and differences of flexible metal conduit and liquid-tight flexible metal conduit
3. List the securing and supporting requirements for flexible metal conduit and liquid-tight flexible metal conduit