

COURSE NUMBER: 452
COURSE TITLE: Electricity Fundamentals in Industry and Agriculture
COURSE LENGTH: Semester, One Credit
PREREQUISITE: Intro to Industrial Technology Strongly Recommended
GRADE LEVEL: 10, 11, 12

COURSE DESCRIPTION:

This course is designed to teach in depth the AC electrical circuits and various components which make up home and agricultural/industrial building electrical circuits. Included in this course will be the study of electric motors and control devices. Students will assemble and disassemble various components found in AC electrical circuits. Electrical safety and troubleshooting will be taught as part of this course through the use of electricity labs. **This course may articulate with some community colleges.**

Students enrolled in this class are eligible for FFA membership.

COURSE RATIONALE:

Since many of life's activities depend on electricity, it is important for the student to understand the theory behind and application of AC electrical circuits and components.

METHOD OF INSTRUCTION:

Students will study from a workbook, have hands on experience with circuits in the lab, completing learning activities, and take a test after completion of each unit.

ASSESSMENT:

1/2 - tests; 1/4 - workbook; 1/4 - projects

CRITICAL OBJECTIVES:

The student will learn to work with the following electrical components:

1. switches
2. outlets
3. lamp holders
4. electric motors and controls
5. circuits
6. projects