**Mohawk Valley Community College**

**Utica & Rome, New York**

**ET115: Basic Electricity 1 Cr-3**

**Catalog Description:** This web based introductory course is designed to provide the student with basic knowledge of electrical theory. The course includes a study of electron theory, Ohm’s Law, series and parallel circuits, electrical energy and power relationships. Electromagnetism is also studied. DC circuit theory will be studied rigorously throughout the course. This course does not satisfy the requirements of any courses in the Electrical Service Technician programs.

**Prerequisites:**  None

**Student Learning Outcomes:** The student will:

1. Develop the essentials of theoretical DC electricity.
2. Develop an understanding of basic measuring instruments and their uses.
3. Be able to identify specific mathematical concepts that are reinforced in emphasizing practical application and the use of the electronic calculator.
4. The student will be introduced to the preliminary skills in documenting technical information and in the writing analysis of experimental results.
5. Be prepared to begin studies in the alternating current concepts of Basic Electricity 2.
6. Solve technical circuit calculations.

**Major Topics:** Series & parallel DC circuits, AC theory, AC Circuits