



COURSE SYLLABUS

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Hamlet, NC 28345
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COURSE: AHR 130 HVAC CONTROLS

HOURS: Lecture: 2 Lab/Shop: 2 Work Exp/Clinical: 0 Credits: 3

COURSE DESCRIPTION:

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

PREREQUISITE(S): AHR 111 or ELC 111 or ELC 112

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Open Educational Resources (OER) are listed in the course Moodle.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Identify relays and protection devices common to the HVAC/R industry.
2. Discuss the operation of thermostats and electronic control devices for HVAC/R systems.
3. Demonstrate a working knowledge of electrical heat controls.
4. Discuss the controls found in modern fossil fuel furnaces.
5. Explain the proper function of comfort cooling controls.
6. Describe the operation of controls for residential refrigeration equipment.
7. Discuss commercial refrigeration controls.
8. Discuss the various controls used in the international transport of refrigerated products.

*****Please refer to the online version of the Richmond Community College Program & Course Catalog and the Student Handbook for current academic and general information.**