



COURSE SYLLABUS

PO Box 1189
1042 W. Hamlet Avenue
Hamlet, NC 28345
(910) 410-1700
www.richmondcc.edu

COURSE: AHR 115 REFRIGERATION SYSTEMS

HOURS: Lecture: 1 Lab/Shop: 3 Work Exp/Clinical: 0 Credits: 2

COURSE DESCRIPTION:

This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

PREREQUISITE(S): AHR 110

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

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

Other Requirements:

- Safety Glasses with lanyard
- Appropriate Mechanics gloves

STUDENT LEARNING OUTCOMES:

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

1. Recognize the different controls used for commercial refrigeration, compared to air conditioning.
2. Explain the difference between air-cooled, water cooled, and refrigerant cooled compressors.
3. Determine the charge and pump-down procedures used in commercial refrigeration, and explain the difference between this and air condition procedures.
4. Determine the best ozone friendly refrigerant to use in a retrofit situation.
5. Explain and trouble-shoot the electrical system of walk in coolers and freezers.
6. Explain and trouble-shoot the electrical system of reach in coolers and freezers.
7. Demonstrate effective communication skills when dealing with employers, manufacturers, and customer on technical related issues. Identify sources of equipment for different types of domestic and foreign refrigeration systems.

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