



## COURSE SYLLABUS

PO Box 1189  
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**COURSE:**    **AHR 110**       **INTRODUCTION TO REFRIGERATION**

**HOURS:**     Lecture: 2        Lab/Shop: 6        Work Exp/Clinical: 0       Credits: 5

### **COURSE DESCRIPTION:**

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

**PREREQUISITE(S):** None

**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. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Identify and explain the theory, operating principle, and components of the refrigeration cycle.
3. Identify tools, materials, and equipment used in the refrigeration industry.
4. Evacuate, charge, recover, and safely operate a basic refrigeration/cooling system in accordance with EPA regulations.
5. Demonstrate refrigeration piping and soldering techniques.
6. Demonstrate active oral and written communication skills as well as select and use appropriate means and methods to communicate thoughts and ideas.

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