



## COURSE SYLLABUS

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**COURSE: AHR 120 HVACR MAINTENANCE**

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

### **COURSE DESCRIPTION:**

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

**PREREQUISITE(S):** None

**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. Explain the operation of a chilled water system.
2. Describe temperature input signals for packaged air handlers.
3. Explain air quality and air conditioning sensor inputs.
4. Understand water or steam coil control valves operation.
5. Explain different types of control systems.
6. Understand the four phases of a planned service call.
7. Explain the difference in planned maintenance for AC and HEAT.
8. Discuss safety checks that should always be included in planned maintenance.
9. Discuss changes in industrial systems from foreign manufacturers.

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