

Emerald Coast Technical College  
Program Syllabus

## Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1

**Program Name:** Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R 1)  
**Number:** C400410      **Program Hours:** 750

**Instructor(s):** James Love  
HVAC Industry for over 30 years  
Certified  
State Certified Mechanical Contractor license  
A.A. Degree  
EPA 608 Universal certification  
[lovej@walton.k12.fl.us](mailto:lovej@walton.k12.fl.us)

**Instructor(s):** Jeff Falivene  
HVAC Industry for 30 years  
State Certified Mechanical License  
EPA 608 Universal Certification

**Program Description:**

This program focuses on broad, transferable skills, stresses the understanding of the heating, air-conditioning, refrigeration and ventilation industry, and demonstrates elements of the industry such as planning, management, finance, technical and production skills, the underlying principles of technology, and health, safety, and environmental issues.

In addition, the program will provide the student with opportunities for individual growth and personal awareness, which can hopefully lead to an expansion in the student's interests, confidence, personal success, work ethics and skills.

The purpose of the program reflects Emerald Coast Technical College's mission as evidenced by the desire to provide students with the training and education that is required to function successfully in the professional workforce.

**Prerequisites:**  
None

**Industry Certification: For HVAC/R 1 Students**

EPA 608 Universal Refrigerant Handlers Card  
HVACE001 – HVAC Excellence Employment Ready - Heat Pump  
HVACE002 – HVAC Excellence Employment Ready - Air Conditioning  
HVACE003 – HVAC Excellence Employment Ready - Light Commercial Air Conditioning  
HVACE004 – HVAC Excellence Employment Ready - Electric Heat  
HVACE005 – HVAC Excellence Employment Ready - Light Commercial Refrigeration  
HVACE006 – HVAC Excellence Employment Ready - Gas Heat

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**Occupational Completion Points:**

OCP	Course Number	Course Title	Course Length	SOC Code
A	ACR0000	Introduction to HVAC/R	250	49-9021
B	ACR0001	HVAC/R Fundamentals	250	49-9021
C	ACR0012	HAC/R Service Practices	250	49-9021

**Program Objectives and Outcomes:** The program includes, but is not limited to:

1. Residential Air Conditioning, Heat Pump and Gas Furnace Service Installations
2. Class Lecture, Videos, Handouts
3. Customer service and human relations.
4. Employability skills.
5. Safe, efficient work practices.

**Textbook:**

Refrigeration & Air Conditioning Technology - Eighth Edition, Textbook ISBN-13 #: 978-1-305-57829-6

Refrigeration & Air Conditioning Technology - Eighth Edition, Lab Manual ISBN-13 #: 978-1-305-57870-8

**Online Resources:**

Refrigeration & Air Conditioning Technology Eighth Edition, Power-Point CD.  
ISBN-13 #: 978-1-305-58327-6

**Tools/Supplies/Materials:** Tools and materials are provided. Students should bring paper and writing utensils.

**Grading Scale:**

A = 93 to 100

B = 84 to 92

C = 70 to 83

F = 69 & BELOW

**Evaluation/Assessment:**

Students are evaluated on their critical thinking skills, technical troubleshooting, general HVAC knowledge retention, utilization of HVAC service tools and the ability to perform basic air conditioning repairs

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### **Satisfactory Progress:**

Please refer to the Catalog for general information regarding Satisfactory Academic Progress. Students in Air-conditioning, Refrigeration, and Heating Technology 2 should have successfully completed Air-conditioning, Refrigeration, and Heating Technology 1 or have been assessed by the instructor as having the equivalent experience.

### **Instructional Delivery Methods:**

Lecture, Power Point, video and handouts, textbook, actual field experience reported by the instructor and class field trips, lab book and hands-on labs where multiple Brand name systems are installed and serviced.

### **Conferences and Assistance:**

Please contact the instructor first. Counselors located in student services are also available.

### **Classroom Location:**

761 N. 20<sup>th</sup> Street DeFuniak Springs, Florida 32433  
Portable Classroom # 1

### **Office Location:**

761 N. 20<sup>th</sup> Street DeFuniak Springs, Florida 32433

### **Office Hours:**

Regular office hours for the instructor are 12:00 PM to 9:30 PM Monday through Thursday, or as scheduled by appointment.

### **Attendance:**

Attendance is mandatory. Students who believe that attendance may present a problem should discuss their situation with the instructor and with student services. Meet with instructor to schedule makeup hours.

### **Meeting Times/Contact Hours: Monday through Thursday 12:00 pm to 9:30 pm**

Monday through Thursday 4:00 pm to 9:30 pm

### **Equipment:**

All equipment is provided for the students other than textbooks

### **Safety:**

- Safety is priority one.
- Report any unsafe conditions to the instructor immediately.
- If you are not comfortable or confident with any lab or project, stop and notify instructor.
- Follow CDC Guideline as they progress.

### **Emergency Procedures:**

- Emergency exits are clearly marked.
- As part of regular classroom instruction, students will be asked to participate in regular safety and emergency drills.
- Fire extinguishers are in each area.

### **Rules and Regulation / Policies and Procedures:**

Students will follow all rules/regulations outlined in the ECTC Catalog.