# Air Conditioning, Refrigeration, and Heating Technology 2

Program Name: Number: Program Hours:

Air Conditioning, Refrigeration and Heating Mechanic 2	ACR0049	250
Air Conditioning, Refrigeration and Heating Technician OR Refrigeration Mechanic	ACR0044/45	350
Total Clock Hours in Program		600

Instructor(s): James Love
HVAC Industry for over 30 years
Certified
State Certified Mechanical Contractors license
A.A. Degree
EPA 608 Universal Certification
Lovej@walton.k12.fl.us

Instructor(s): Redgie White HVAC Industry for 30 years Certified State Certified Mechanical Contractors License EPA 608 Universal Certification

Instructor(s): Jeff Falivene HVAC Industry for 30 years State Certified Mechanical Contractors 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.

### **Prerequisites:**

None

Purpose: 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.

### **Industry Certification:**

For AC 2 students only

North American Technician Excellence (NATE)

NATEX001 - Air Conditioning Service Technician

NATEX002 - Air Conditioning Installation Specialist

NATEX003 - Air to Air Heat Pump

NATEX004 - Air to Air Heat Pump Service Technician



### ACCA certifying agency

This test is not required but it is encouraged to show commanding knowledge of the HVAC service and repairs that is recognized throughout the industry

The above tests are not required but encouraged.

### **Occupational Completion Points:**

OCP	Course Number	Course Title	Course Length	SOC Code
D	ACR0049	Air Conditioning, Refrigeration and Heating Mechanic 2	250	49- 9021
E	ACR0044/45	Air Conditioning, Refrigeration and Heating Technician OR Refrigeration Mechanic	350	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:

N/A

### **Grading Scale:**

A = 94 to 100 B = 84 to 93

C= 74 to 83

73 or lower is failing

#### **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

### **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, 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

### Classroom:

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

### 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.

### **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 located in each area.

### Rules and Regulation / Policies and Procedures:

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

- Forms
- N/A