

Air Conditioning, Heating, and Refrigeration Program

TEAC 1248 EPA 608 Refrigerant Handling

Course Description:

Prepares the student to take the required EPA Section 608 Certification. Section 608 of the US Federal Clean Air Act requires all persons who work with regulated refrigerants on stationary equipment to be certified. This certification is needed to work with refrigerates anywhere in the US.

Required Materials:

EPA 608 Study Guide, ESCO, ISBN 1-930044-01-0

Course Competencies/Objectives:

As a student you will be required to complete the following Competencies:

- Explain core procedures and regulations for EPA 608 refrigerant handling.
- Explain EPA 608 handling procedures for servicing small appliances (type I).
- Explain EPA 608 handling procedures for high and very high-pressure appliances (type II).
- Explain EPA 608 handling procedures for low pressure appliances (type III).

To accomplish these Competencies, you will be working to fulfill these Learning Objectives:

- Explain the effects of ozone depletion.
- Describe the impact of the Clean Air Act, the Montreal Protocol, and EPA section 608 regulations.
- Explain the procedures used with substitute refrigerants and oils.
- Explain refrigerant and refrigeration characteristics and properties.
- Define the 3Rs [recover, recycle, reclaim] and recovery procedures.
- Explain the process of evacuation for system dehydration.
- Explain refrigerant handling safety guidelines.
- Explain refrigerant shipping guidelines.
- Explain specificity items needed for Type I.
- Describe recovery equipment requirements.
- Identify leak repair requirements for Type I.
- Explain recovery requirement levels and techniques for Type I.

- Explain refrigerant handling safety guidelines for Core and Type I.
- Define leak detection for Type II.
- Identify leak repair requirements for Type II.
- Explain recovery requirement levels and techniques for Type II.
- Review refrigeration cycle for Type II.
- Explain refrigerant handling safety guidelines for Type II.
- Define leak detection for Type III.
- Identify leak repair requirements for Type III.
- Explain recovery requirement levels and techniques for Type III.
- Explain recharging techniques for Type III.
- Review refrigeration cycle for Type III.
- Explain refrigerant handling safety guidelines for Type III.

Attendance & Attendance Schedules:

This course is structured to allow students to work at their own pace. However, this course must be completed by the end of the semester the course was registered in. While substantial preparation work can be performed outside of the classroom and lab, most of the lab assignments are hands-on and require that students be in attendance for these assignments as well as for most quizzes and all exams. Students are expected to manage their schedules and complete all current (registered) coursework by the end of the current semester. Any course not completed by the end of the semester will receive a failing grade and the student will need to repeat the course before proceeding to other courses in the program.

Classroom and lab hours are Monday through Thursday 8:00AM—2:00PM and 6:00PM—10:00PM. However, if instructors have not had, or do not have, any students in the lab at 8:00PM, at their discretion, they may close the lab for the evening. Therefore, if you will be later than 7:30PM, please communicate with the instructor for that evening. The classroom and lab are located in room TAB-109 of the Technical Arts Building (TAB) on the Taylorsville campus, 1902 Community Blvd.

Parking permits are available via the SLCC website. There are some parking spaces with meters.

Grading and Evaluation:

Each assignment, quiz, and exam has an assigned point value. The course grade is determined by summing all of the assignments, quizzes, and exams and dividing the sum by the total possible points. A letter grade is determined using the percentage of points earned and the following grading standard:

Range	Grade	Range	Grade
100% to 94%	А	<84% to 80%	B-
<94% to 90%	A-	<80% to 77%	C+
<90% to 87%	B+	<77% to 74%	С
<87% to 84%	B+	<74% to 0%	E