

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY AIR 276 – REFRIGERANT USAGE EPA CERTIFICATION (1 CR.)

Course Description

Prepares HVAC technicians for a refrigerant certification test mandated by the Environmental Protection Agency (EPA). Reviews refrigerant recovery, recycle, and reclamation procedures for service work associated with air conditioning and refrigeration. Examines environmental impact including ozone depletion resulting from refrigeration utilization.

General Course Purpose

The course is intended to prepare HVAC/R technicians for an EPA certification test that is required of all persons who maintain, service, repair, or dispose of appliances that contain regulated refrigerants. The course is not a substitute for formal technical refrigeration training and/or experience.

Course Prerequisites/Corequisites

Prerequisite or Corequisite: AIR 121 or students should have previous training and/or working knowledge of vapor-compression, common service equipment and procedures in HVAC/R.

Course Objectives

Upon completing the course, the student will be able to:

- a) define the legal requirements associated with the use of regulated refrigerants.
- b) identify the harmful effect of refrigerants on the atmosphere especially to the ozone layer that engenders global warming.
- c) identify best practices for refrigerant recovery, recycle, and reclamation procedures.

Major Topics to be Included

- a) Core requirements and basic compression cycle for HVACR EPA certification
- b) Technician certification requirements for small appliances
- c) Certification requirements for high pressure equipment
- d) Certification requirements for low pressure chillers
- e) Automotive type air conditioning applications