

Course Objectives/Course Outline
Spokane Community College

Course Title: Application of Heat & AC

Prefix and Course Number: AUTO 120

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Identify and repair a variety of automotive heating systems.
- Identify and repair a variety of automotive air conditioning systems and their components.
- Identify and repair computer control systems and their components.

Course Outline:

- I. Engine Heating and Cooling Applications
 - A. Body Comfort
 - B. Heat
 - C. Pressure
 - D. Control Devices
 - E. Engine Cooling Systems and Heating Circuits
 - F. Rebuilding the Valves-In-Receiver (VIR)
- II. Air Conditioning Applications
 - A. Refrigerant and Refrigeration Oil
 - B. The Refrigeration Circuit
 - C. Moisture and Moisture Removal
 - D. Service Valves
 - E. Manifold and Gauge Set
 - F. Leak Detectors
 - G. The Receiver/Dehydrator
 - H. The Thermostatic Expansion Valve
 - I. Pressure Controls
 - J. Evacuation and Charging Systems
 - K. Replacing the Compressor Shaft Oil Seal (York and Tecumseh Compressors)
 - L. Replacing the Compressor Shaft Oil Seal (Chrysler Air-Temp)
 - M. Replacing the Seal on Delco Air Compressors, A-6 and DA-6
 - N. Checking and adding oil, Delco Air Six-Cylinder
 - O. Rebuilding the Valves-in-receiver (VIR)
 - P. Air Management Systems