

REFR2212 - Advanced Refrigeration Lab

Credits:	3 (0/3/0)
Description:	This course gives students the opportunity to work on more complicated refrigeration systems through individual or paired groups on field trips, off-site meetings and hands-on projects. Safety is emphasized.
Prerequisites:	<ul style="list-style-type: none"> • Completion of HVAC/R diploma.
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> 1. Determine if non-condensables are present in a refrigeration or air conditioning system. 2. Repair a major leak using proper procedures as outlined by the Environmental Protection Agency (EPA). 3. Inspect a solenoid valve for worn or leaking parts. 4. Solve an evaporator coil freeze-up complaint. 5. Adjust an evaporator pressure regulator valve to maintain desired product temperature. 6. Measure discharge and suction pressures to calculate compression ratio. 7. Test the operation of an electronic oil pressure safety control. 8. Demonstrate brazing techniques using oxyacetylene and TurboTorches. 9. Use an electronic leak detector to locate a refrigerant leak. 10. Maintain cooler temperature using a low-pressure control. 11. Demonstrate how various commercial ice machines produce and harvest ice. 12. Compare electronic and mechanical oil pressure safety controls.
MnTC goal areas:	None

*Can be taking as a Prerequisite or Corequisite.