REFR2204 - Commercial Refrigeration and Air Conditioning Lab

Credits:	3 (0/3/0)
Description:	This course covers practical applications related to commercial refrigeration and air conditioning equipment. The commercial refrigeration and air conditioning lab learning experience includes sequence of operation, troubleshooting, repair, maintenance and installation. Safety is emphasized throughout the course.
Prerequisites:	• Completion of HVAC/R diploma.
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Demonstrate the use of various personal safety equipment. 2. Demonstrate ways to safely remove high and low pressure manifold hoses. 3. Properly use safety glasses when working with refrigerants. 4. Demonstrate the ability to use the correct solder, brazing rod and flux for joining different types of metals. 5. Identify points in a refrigeration system where the refrigerant is saturated, superheated or subcooled. 6. Demonstrate use of saturation pressure charts in system analysis. 7. Demonstrate proper methods of recovering, recycling and reclaiming refrigerants. 8. Demonstrate methods of refrigeration piping to assure proper refrigerant flows and oil return. 9. Evaluate methods of measuring superheat and subcooling. 10. Demonstrate different procedures for finding leaks in a refrigeration system. 11. Compare methods of system evacuation used prior to charging. 12. Contrast charging by weight, evaporator superheat, condenser subcooling and performance charts. 13. Describe the difference between zeotropic and azeotropic blends and their effect on temperature glide. 14. Demonstrate the procedure for measuring and adjusting the superheat of a thermal expansion valve.
MnTC goal areas:	None

Can be taking as a Prerequisite or Corequisite.