REFR2211 - Advanced Refrigeration Principles

Credits:	4 (4/0/0)
Description:	This course prepares students for more advanced lab sessions on commercial refrigeration systems. Students need to have a very good understanding of commercial refrigeration and electrical systems. Safety is emphasized.
Prerequisites:	• Completion of HVAC/R diploma.
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Analyze liquid and suction line sizing requirements. 2. Select appropriate method of capacity control. 3. Assess different compressor types by their advantages and disadvantages. 4. Describe evaporator differences depending on application. 5. Describe the different ice machine manufacturers' methods of producing quality ice. 6. Demonstrate the proper methods of cleaning commercial cubers and flakers. 7. Contrast rack refrigeration to stand-alone systems. 8. Evaluate different means of temperature and humidity control in commercial refrigeration. 9. Compare methods for increasing condenser subcooling. 10. Diagnose compressor failure using manufacturer's data. 11. Determine when heat reclaim is a viable option. 12. Demonstrate the need for oil pressure safety switches. 13. Analyze vapor and liquid charging methods on large horsepower or rack refrigeration systems.
MnTC goal areas:	None

Can be taking as a Prerequisite or Corequisite.