

## 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:	<ul style="list-style-type: none"> <li>• Completion of HVAC/R diploma.</li> </ul>
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> <li>1. Analyze liquid and suction line sizing requirements.</li> <li>2. Select appropriate method of capacity control.</li> <li>3. Assess different compressor types by their advantages and disadvantages.</li> <li>4. Describe evaporator differences depending on application.</li> <li>5. Describe the different ice machine manufacturers' methods of producing quality ice.</li> <li>6. Demonstrate the proper methods of cleaning commercial cubers and flakers.</li> <li>7. Contrast rack refrigeration to stand-alone systems.</li> <li>8. Evaluate different means of temperature and humidity control in commercial refrigeration.</li> <li>9. Compare methods for increasing condenser subcooling.</li> <li>10. Diagnose compressor failure using manufacturer's data.</li> <li>11. Determine when heat reclaim is a viable option.</li> <li>12. Demonstrate the need for oil pressure safety switches.</li> <li>13. Analyze vapor and liquid charging methods on large horsepower or rack refrigeration systems.</li> </ol>
MnTC goal areas:	None

\*Can be taking as a Prerequisite or Corequisite.