

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

\*Can be taking as a Prerequisite or Corequisite.