

ECT CA and AS Commercial HVAC

PLO (program outcome to which this SLO maps)	PLO Reflection (What were the strong points and weak points students demonstrated in the courses? What areas need more attention? What do your results show about student learning?)	PLO Action Plan (include timeline for implementation, key/responsible personnel, priority high/medium/low, status report/reflection on results of action plan)
<p>1. Demonstrate proper installation and maintenance practices for refrigeration and air conditioning system in commercial facilities for optimal performance.</p>	<p>Most students demonstrated critical thinking skills by troubleshooting electrical, mechanical controls and devices. Students also working in pairs or in groups communicated professionally with each other when asked to present their findings.</p>	<p>We plan to partner with the PCCD facilities department in the fall of 2018 to gain access to the campus' mechanical equipment in order to collect real data for students to analyze and present their findings.</p>
<p>2. Explain the use of data collection and analysis to identify potential performance issues in HVAC and indoor environmental control systems.</p>	<p>Students worked in groups to take water and air flow measurements to evaluate the commercial HVAC system using velometers, anemometers, ultrasonic flowmeters and thermometers giving the students full exposure of the different types of instrumentation. This process allowed students to collect data, and analyze it in order to determine any problems for proper performance of the system.</p>	<p>We plan to partner with the PCCD facilities department in the fall of 2018 to gain access to the campus' mechanical equipment in order to collect real data for students to analyze and present their findings.</p>
<p>3. Describe typical equipment and components, and their functional application and troubleshooting strategies of commercial HVAC systems.</p>	<p>Working in groups, the results show that students were more successful. However, the lack of lab space for some courses was a hindrance to their learning process.</p>	<p>We will try to attain more lab space to accommodate the number of courses the program offers. We plan to meet with the college president to ask for more space in order to expand the lab area. We plan to impliment this by Fall 2019.</p>