

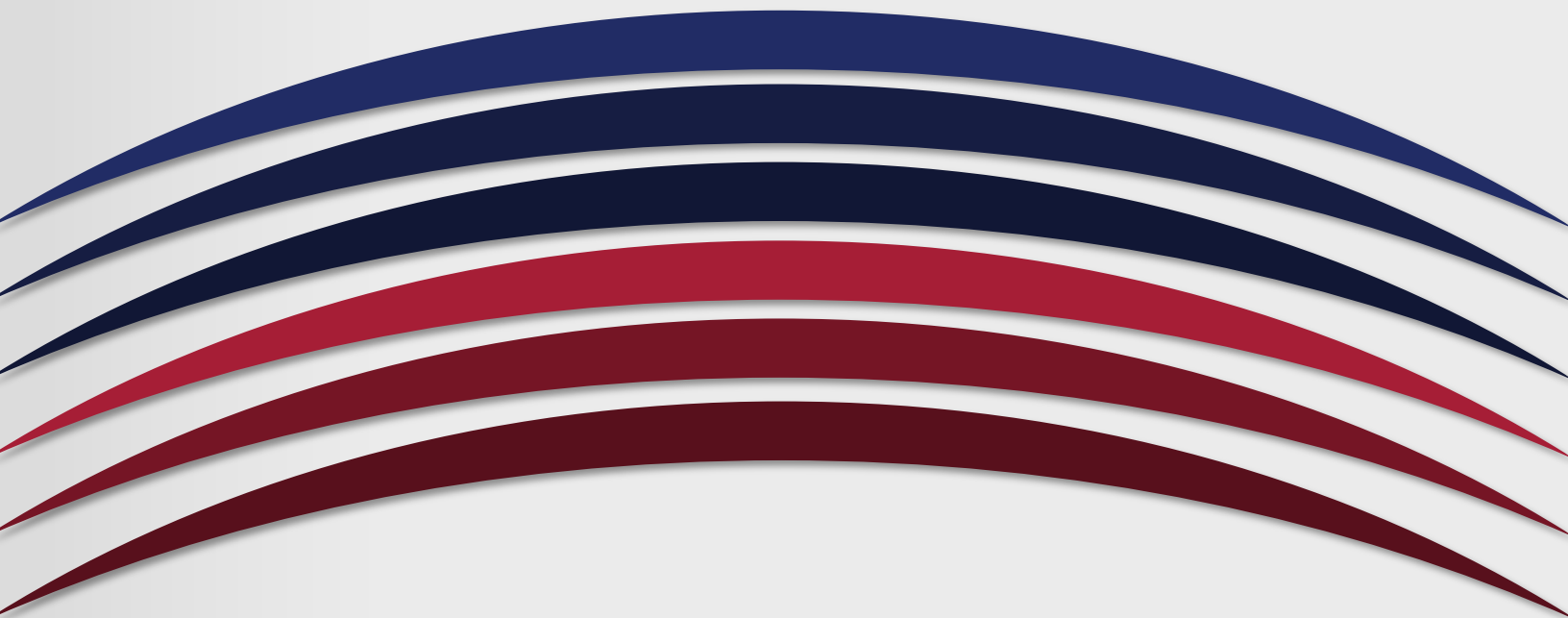
UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report

Course: HVAC 1104

Academic Year: 2021-2022

**Due to Chair/Program Director and Faculty Assessment Chair by
September 1**



1. Name of course: HVAC 1204 Principles of HVAC/R II
2. Name of individual(s) compiling report: Robert Dixon
3. Date of submission: 9/20/2022
4. Academic year: 2021-2022

Course-Level Learning Outcomes

1. What are the Course-Level Outcomes (CLOs)?

1. The students will demonstrate the requisite skills for success in a collegiate and trade environment, such as note taking, reading, memorization, and basic mathematics.
2. The students will demonstrate a basic understanding of the underlying principles and basic equipment needed to maintain their safety in a class, a laboratory, or on a commercial job site.
3. The student will recognize the individual parts of the basic process of mechanical refrigeration and identify the parameters of temperature and pressure indicative of the operation and condition of those parts.
4. The students will describe the protocols necessary to handle refrigerant in a safe and ecologically sound manner. so as not to endanger the student or the environment.
5. The student will describe the major procedures needed for an efficient and mechanically sound installation in residences, and commercial buildings,
6. The student will apply the appropriate measures required to maintain basic HVACR tools.

2. Which CLOs were addressed for the academic year?

For several weeks of this semester the students are reviewed on the same knowledge they learned in Principles I. Therefore, the CLO's look very similar to the ones in Principles I. In this semester, though, we add to the learning of the first semester by taking the students into the lab and requiring them to handle, and use the tools that they had only heard about before. Safety is reemphasized by including O.S.H.A. materials into the class. Safety is also a huge part of learning skills that the student had not been exposed to before, such as brazing. These new skills plus review of the previous knowledge touches on all the above Course level outcomes.

3. Which CLOs are being addressed in your assessment plan in the upcoming academic year?

The emphasis in this class is centered on safety. The safety requirements of each tool is considered. Learning the proper way of deploying power tools, ladders, and welding torches. This is always paramount in this department. Safety is job #1

4. How does this report connect or map to program-level or institutional-level outcomes?

The principles used in troubleshooting HVAC equipment encompass 1 through 4 of the institution Program Level Outcomes.

#1 Analyze information from credible sources. Installation manuals, Manufacturer's specification sheets and trouble shooting guides.

#2 Appropriately apply a variety of technology tools within this discipline. Students are taught to use recovery machines, vacuum pumps, digital multi meters, and gauge manifold sets to analyze the performance of a system.

#3 Communicate effectively with diverse audiences in multiple contexts. Teams share the work.

#4 Apply critical thinking. Use the tools available to diagnose and repair a system

For each Course Level Outcome assessed this academic year,
please complete the chart below, providing the assessment data
for both fall and spring, and then a total for the academic year.

<p>Assessment Methods- How did you assess student learning (define direct assessment methods used) in relation to the course level outcome being reported?</p> <p><i>Note: If more than one assessment method was used, you may insert an additional row.</i></p>	<p><i>Students in both classes were given written tests containing questions about the knowledge they should have learned in class. A grade was entered for each student's results through the semester, with a final test and a final cumulative grade given at the end of the semester.</i></p>	
<p>Were indirect assessment methods also used to assess students? If 'yes', please describe the method used.</p>	<p>Yes</p> <p><i>Students were required to complete a series of hands on lab exercises. Success was determined by the instructor, taking</i></p>	<p>No</p>

	<i>in to consideration their efforts, and their results,</i>	
How do you define success for an individual student on the CLO assessment assignment or measure?	<i>Student scores should be above 60% to be considered passing in each one of these courses.</i>	
How do you define success for the course level outcome? What is the benchmark for the Course Level Outcome?	<i>70% of students in the course achieve success on the CLO assessment assignment or measure</i>	
How many students completed the assessment, and how many were successful?	Fall <i>7 students assessed, 7 students successful (100% success rate)</i>	Spring <i>14 students assessed 14 successful (100% success rate)</i>
Academic Year Total (add the numbers from Fall and Spring)	<i>21 students assessed 21 successful (100% success rate)</i>	
Was the benchmark/goal for this academic year met?	Yes	
Were standardized rubrics, tests, or checklists used?	yes	

5. What is your analysis of the findings?

Students in this class, the last two semesters were very motivated in class and in the lab exercises. This class is the first hands on work with tools. The students were all up to the task, and well-motivated as many of them saw this class as a path to work. They worked hard and did well.

6. What is the action plan for the upcoming academic year?
Explain.

Since most of the students seem to do well with labs. I will redouble my efforts to provide them with more opportunity to go into the lab and practice their craft. New technologies will need to be incorporated into this class, as the industry changes and upgrades.