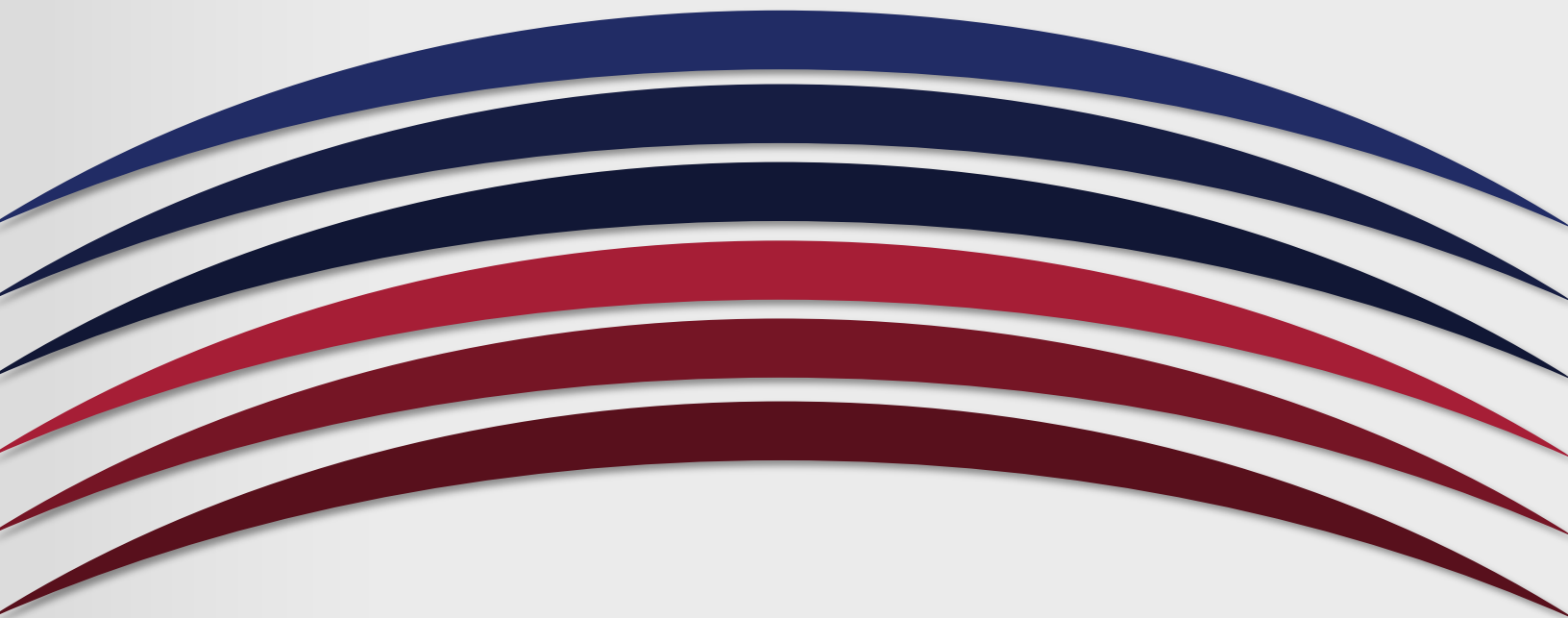


UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report
Course: MST 1204 Machining 1
Academic Year: 2021-2022

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



1. Name of course: Machining 1
2. Name of individual(s) compiling report: Douglas A. Ford
3. Date of submission: 30 Aug 2022
4. Academic year: 2021-2022

Course-Level Learning Outcomes

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

OBJECTIVES: Upon completion of this course the student should be able to:

1. Recognize safe and unsafe work practices in a lab.
2. Measure with dial calipers and a rule.
3. Indicate the head of a vertical milling machine.
4. Identify different types of cutting tools.
5. Identify basic parts of a vertical mill.
6. Determine cutting speeds and feeds.
7. Read a tap drill chart.
8. Set up and machine basic parts.

2. Which CLOs were addressed for the academic year?

All of the above.

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

All of the above.

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

(ILO link: <https://uaptc.edu/college-academics/resources/student-learning-outcomes>

PLO list will vary depending on your Program.)

List all supporting courses	Program Learning Outcomes				
	PLO #1	PLO #2	PLO #3	PLO #4	PLO #5
<i>Manufacturing Processes</i>				I	
<i>Printreading and Sketching</i>		I			
<i>CNC 1</i>	D	D	D		D
<i>Machining 1</i>	D	D	D		D
<i>Machining 2</i>	D	D	D		D
<i>Machining 3</i>	M	M	M		D
<i>Quality Control</i>	I				
<i>CNC 2</i>	M	M	M		D

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 across all sections completed a common set of projects. The projects require students to utilize each of the CLOs in order to successfully produce their projects. Measuring and scoring of the various features of the projects determines the students' proficiency.</i></p>	
<p>Were indirect assessment methods also used to assess students? If 'yes', please describe the method used.</p>		No

How do you define success for an individual student on the CLO assessment assignment or measure?	All students enrolled in MST 1204 (Machining I) must complete two individual class projects in the form of creating a two blocks of aluminum containing precisely located features using a manual vertical mill and industrial drawings provided by the instructor. Students will score 75% or higher on each of these projects.	
How do you define success for the course level outcome? What is the benchmark for the Course Level Outcome?	All students enrolled in MST 1204 (Machining I) must complete two individual class projects in the form of creating a two blocks of aluminum containing precisely located features using a manual vertical mill and industrial drawings provided by the instructor. 75% of students will score 75% or higher on each of these projects.	
How many students completed the assessment, and how many were successful?	Fall 13 students assessed 11 successful (85% success rate)	Spring 2 students assessed 1 successful (50% success rate)
Academic Year Total (add the numbers from Fall and Spring)	15 students assessed 12 successful (80% success rate)	
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?

Only the Fall semester successfully met the goal of 75% of students achieving a score of 75% or higher on all projects. However, the Spring class was exceptionally small with only two students and the failure resulted from an older first-time college student with no mechanical background which significantly hampered his ability to grasp the concepts taught in this class. When both semesters were added together, the goal was easily achieved.

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

This program is fairly mature and teaches a very mature technology. Little innovation has been made in manual machining over the last 50 years and those innovations, when they occur, are always incorporated into our instruction. I am constantly searching for a

new way to explain a concept to increase student comprehension and will continue to do so in the future.