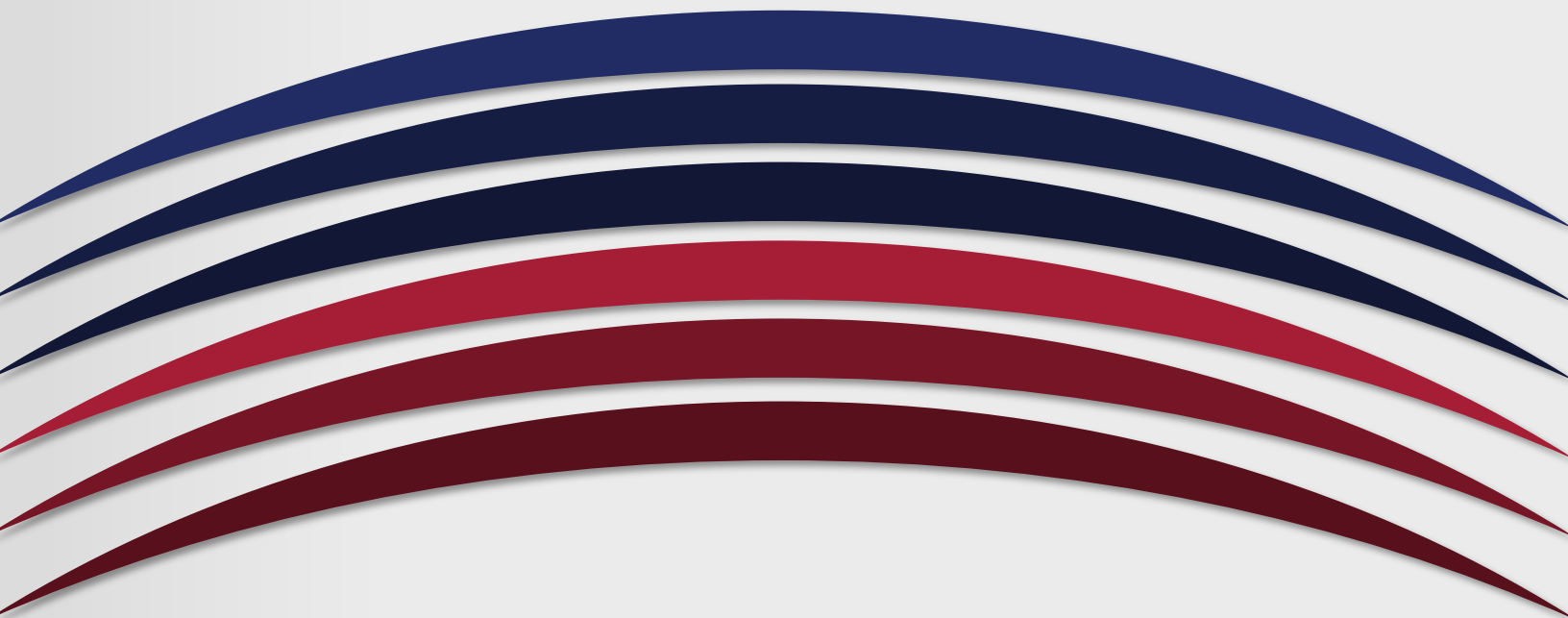# UNIVERSITY OF ARKANSAS PULASKI TECH

Course-Level Assessment Report
Course: MST 1404 Machining 3
Academic Year: 2021-2022

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

1. Name of course: _Machining 3_

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. Identify types of tool steels.
3. Know and apply correct heat treating procedures.
4. Know how to select proper grinding wheels.
5. True and dress grinding wheels.
6. Setup and operate surface grinders.
7. Become familiar with nontraditional machining processes.

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
Manufacturing Processes				I	
Printreading and Sketching		I			
CNC 1	D	D	D		D
Machining 1	D	D	D		D
Machining 2	D	D	D		D
Machining 3	M	M	M		D
Quality Control	I				
CNC 2	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.

Assessment Methods- How did you assess student learning (define direct assessment methods used) in relation to the course level outcome being reported? *Note: If more than one assessment method was used, you may insert an additional row.*	*Students across all sections completed a certain project. The project required students to utilize each of the CLOs in order to successfully produce it. Measuring and scoring of the various features of the project determined the students' proficiency.*
Were indirect assessment methods also used to assess students? If 'yes', please describe the method used.	*No*
How do you define **success for an individual student on the CLO assessment assignment or measure?**	All students enrolled in MST 1404 (Machining III) must complete a performance based project in the form of creating a 1-2-3 block from hardened tool steel using a manual vertical mill and a manual surface grinder. Students will score 75% or higher on the standardized evaluation rubric.
How do you define success **for the course level outcome? What is the**	All students enrolled in MST 1404 (Machining III) must complete a performance based project in the form of creating a 1-2-3 block from hardened tool steel using a manual vertical

benchmark for the Course Level Outcome?	mill and a manual surface grinder. 75% of students will score 75% or higher on the standardized evaluation rubric.	
How many students completed the assessment, and how many were successful?	*Fall* *2 students assessed* *2 successful* *(100% success rate)*	*Spring* *6 students assessed* *6 successful* *(100% success rate)*
Academic Year Total (add the numbers from Fall and Spring)	*8 students assessed* *8 successful* *(100% 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?

Both semesters met the course goal with 100% of students achieving 75% or greater on their projects.

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.