UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report
Course: MATH 1300
Academic Year: 2020-21

Due to Chair/Program Director and Faculty Assessment Chair by September 4

1. Name of course: <u>MATH 1300 Mathematical Reasoning</u>

2. Name of individual(s) compiling report: <u>Lana Riding</u>

3. Date of submission: <u>September 3, 2021</u>

4. Academic year: <u>2020-2021</u>

Course-Level Learning Outcomes

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

   SLO #1: Identifying problem-solving strategies and applying them to contemporary everyday problems, both in work and in personal lives.

   SLO# 2. Analyzing reports from media to determine completeness and accuracy noting assumptions both stated and unstated.

   SLO# 3. Critiquing public consumer and political information for better understanding, completeness, and accuracy.

2. ## Which CLOs were addressed for the academic year?

   All were addressed.

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

   All will be addressed in the coming year.

4. ## Explain the assessment cycle.

   Our assessment cycle is to administer a comprehensive final to all students at the end of the semester. Questions from the final exam are aligned with the CLOs. Instructors for the course then evaluate the results and make adjustments to the course according to our findings. We analyze the data for all students combined, as well as data for student success by instructor, by section, by modality, and by courses with and without co-requisite support.

5. What are the assessment methods? Are they direct or indirect?

We use direct assessment, using a two-hour comprehensive final exam. Students complete the final exam in MyLab, but also submit their written work to their instructor, through Blackboard.

Course level instructors developed the final exam, and selected the questions aligned to each course learning outcome.

6. What are the assessment goal(s), including benchmarks?

Our assessment goal is a 70% threshold met for each learning outcome.

7. What were the findings for the academic year?

For Fall 2020, findings for CLOs 1, 2, and 3, were 87.86%, 75.68%, and 84.36%, respectively. We found in the Spring semester all CLOs were met, at a rate of 93.03%, 77.01%, and 85.20% for CLOs 1, 2, and 3, respectively.

8. What is your analysis of the findings?

We are pleased to see improvement over the results of the previous academic year. For Fall 2019, findings for CLOs 1, 2, and 3, were 68.95%, 74.95%, and 77.78%, so there was improvement in every learning outcome. Those improvements were 18.91%, 0.73%, and 6.58%, respectively.

We found in the Spring 2021 results, compared to Spring 2020, all CLOs showed improvements, with an increase of 14.28%, 6.3%, and 13.3% for CLOs 1, 2, and 3, respectively. (Spring 2020 CLO 1, 2, and 3 results were 78.75%, 70.71% and 71.90%.) Some of this increase is most likely due to the pivot to remote which occurred during Spring 2020. We recognize that Spring 2020 was one of the most unusual situations higher education has ever faced. The pandemic caused disruptions to nearly every facet of life, and it would be expected that by Spring 2021 faculty and students alike were learning to teach and learn in the new normal. Students and instructors were more prepared and better equipped to work in a blended, on campus and remote environment. There were more on campus classes by Spring 2021, and the atmosphere on campus seemed almost back to pre-pandemic days. Instructors added extra practice on areas which were lower and continued to provide a midterm practice assignment to help reinforce skills from the beginning of the semester. Attendance was required for on-campus

or webinar classes, and instructors provided recordings of classes for students who were unable to attend.

	Fall 2020	Spring 2021	Combined
CLO 1	87.86%	93.03%	90.34%
CLO 2	75.68%	77.01%	76.31%
CLO 3	84.36%	85.20%	84.76%

2020-2021 Fall and Spring Combined CLO Results
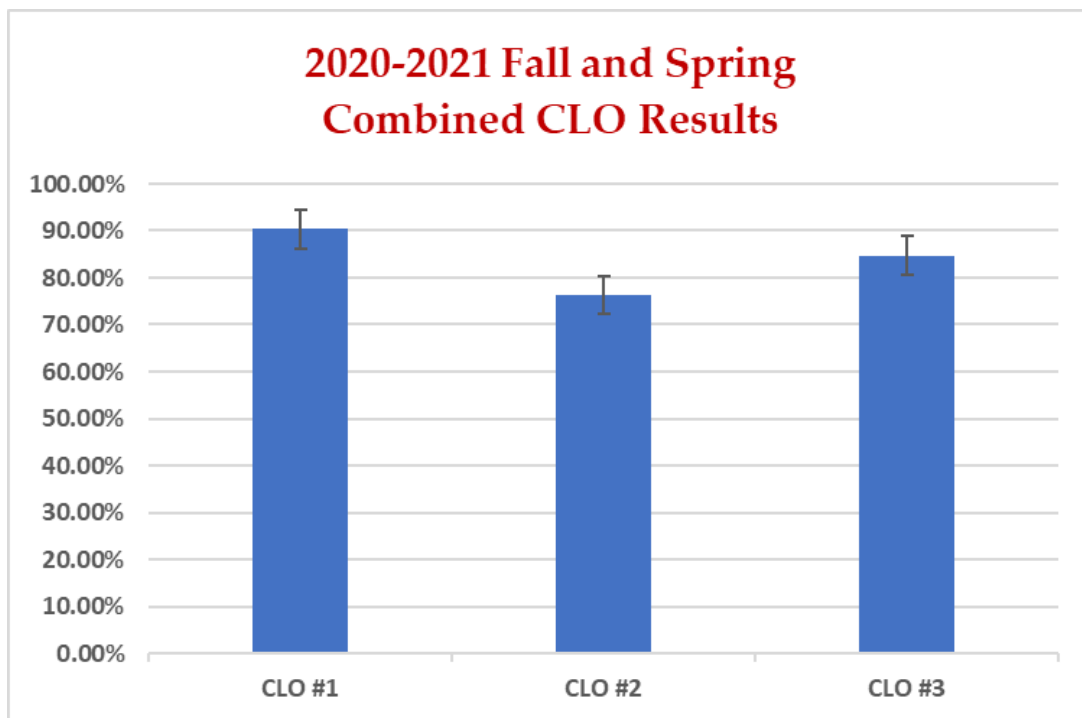
Results by Modality		All Sections	Online Only	All Support Sections	F-to-F Support Sections	Webinar Support Sections	F-to-F No Support
Fall 2020	CLO #1	87.86%	91.49%	74.68%	74.66%	74.79%	80.95%
	CLO #2	75.68%	82.55%	73.86%	74.05%	72.94%	85.71%
	CLO #3	84.36%	89.01%	82.67%	83.53%	78.43%	75.00%
Total Students		222	58	148	126	22	16
Students Taking Final		162	47	101	84	17	14
Success Rates		62.41%	75.86%	58.11%	57.94%	59.09%	81.25%
Spring 2021	CLO #1	93.03%	94.31%	79.26%	75.63%	83.67%	
	CLO #2	77.01%	77.07%	76.99%	69.80%	85.71%	
	CLO #3	85.20%	81.30%	81.00%	74.18%	89.29%	
Total Students		207	68	139	78	61	
Students Taking Final		134	41	93	51	42	
Success Rates		61.35%	61.76%	61.15%	55.13%	68.58%	
			Note: All Support Sections include F-to-F and Webinar				
Combined Fall and Spring for All Sections		CLO #1	90.34%				
		CLO #2	76.31%				
		CLO #3	84.76%				

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

MATH 1300 will continue with the Action Plan set forth in the previous year's CLO Report. Instructors are receiving Professional Development training on new technology, such as Mersive/Solstice, which provides cameras and microphones for classroom use and recording purposes. The HyFlex module we used in Fall 2020 needed to be adjusted for Spring 2021, when we discovered that too many students were failing to attend and were not able to be successful. We implemented an attendance grade, which still did not seem to solve this problem completely. There are still too many students who stop attending classes during the semester, and then stop responding to attempts to contact and reengage them in our classes. Instructors will be more diligent in utilizing Early Alerts and frequent communication with students to try to prevent students from disappearing during the semester.

Course level meetings are held during the semester, and continual improvement of teaching and learning is a primary focus of those meetings. We may adjust the way we teach the material, provide more examples, activities, or practice, or seek out ideas from colleagues from other institutions, or from sources such as the Dana Center at the University of Texas at Austin. The Dana Center has provided support in designing and improving the Math Pathways offerings at UAPTC and has offered excellent training opportunities. We will continue to leverage those opportunities.

Data from the pandemic and other current events will provide relevant applications for many of the topics in this course, and we will draw on those examples to help students stay engaged. Webinar sections showed the best success overall in 2020-21, so reflecting on the success from that modality may provide insights into improving success in other modalities.