

UNIVERSITY OF ARKANSAS PULASKI TECH

Assessment Report: 2018-2019 Due to Chair/Program Director and Assessment Coordinator by September 4th



Course-Level Learning Outcomes

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

a. Problem Solving Strategies Identifying problem-solving strategies and applying them to contemporary everyday problems, both in work and in personal lives.

b. Media Analyzing reports from media to determine completeness and accuracy noting assumptions both stated and unstated.

c. Information Critiquing public consumer and political information for better understanding, completeness, and accuracy.

2. Which CLOs were addressed for this academic year? (2018-2019)

All CLOs were addressed.

3. Which CLOs are being addressed in your assessment plan next academic year? (2019-2020)

All CLOs are being addressed in the assessment plan for next year.

4. Explain the assessment cycle.

Our assessment cycle is to administer a comprehensive final to all students at the end of the semester. Instructors for the course then evaluate the results and adjust the course according to our findings. We may teach the material in a different manner, provide more examples or practice, or determine that a question was unfairly worded, and may remove or edit that question.

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

We administer a two hour, multiple choice, comprehensive, paper/ pencil final exam. It is direct.



Return to Top of Document



6. What are the assessment goal(s)?

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

7. What were the findings for this academic year? (2018-2019)

For the Problem Solving Strategies outcome, the fall results were very close to 70%, at 68.5%. In the spring the results improved to 81%.

For the Media outcome, fall results were higher, at 86%. Spring results dropped to 69%, which is just below our desired threshold.

For the Information outcome, fall and spring results exceeded the threshold at 87% and 86%, respectively.

8. What is your analysis of the findings?

Our analysis of the findings is that in our first year of teaching Mathematical Reasoning, students were generally successful with the desired outcomes. The outcome for Media, on analyzing reports from media to determine completeness and accuracy noting assumptions both stated and unstated, is an area where we need to improve student learning. This is taught early in the semester, so it needs to continually be reinforced as the semester progresses. We noted that early in the semester, students are learning to navigate so many different and new things (Blackboard, MyLabsPlus, being a first-time college student), they may be more successful seeing this again later in the course. We can reteach the material during the chapter on statistics, and reinforce the concept to help solidify understanding.

9. What is the action plan for the next academic year? (2019-2020) Explain.

For the **Problem Solving Strategies CLO**, instructors will continue to provide realworld problem solving situations for students to apply mathematical reasoning skills. Beginning in Fall 2019, any online sections will be assessed using the same instrument as the face-to-face sections. For Spring 2019, the assessment for our one online section was completed by the instructor using a different method. To improve our results for all sections during AY2019-2020, we included additional emphasis in the homework for students to have more practice with the compound interest formula. They will use the formula to calculate credit card interest and also the future value of a savings account.





We will assess these skills earlier in the semester on chapter quizzes and tests, and review them again prior to the Final Exam. Because Fall 2018 was the first semester of Mathematical Reasoning at UA-PTC, we will continue to refine and revise the way we teach this course, based on the results of our assessments each semester. We have discussed changing our assessment method for this outcome to a project in 2019-2020, as this may be a more valid assessment method for problem solving strategies. Being part of the Arkansas Math Pathways allows us to collaborate with colleagues from across the state to identify projects that will better assess student learning.

For the **Media CLO**, instructors will continue to work with students to provide opportunities to apply mathematical reasoning skills to media reports. We will emphasize students being able to understand the claims being made, and evaluate the reliability of the source as well as the accuracy of the information provided. Instructors will add more opportunities for students to become proficient at analysis of media reports by providing more real-world examples. Students will have opportunities to identify logical fallacies, which will aid in recognition of misleading or false claims.

For the **Information CLO**, we will continue to place an emphasis on critiquing public consumer and political information to ensure students can determine completeness and accuracy. Students will learn to recognize bias in reporting, and use fact checking websites to verify reports. We are including additional material from Chapter 1, Section A to help students continue to meet this CLO. The threshold was met, based on the four questions from the Final Exam tied to this CLO during AY2018-19, and we will continue to improve student learning in this area. Course level meetings are being held regularly to ensure we are helping students meet this goal each semester. Students also complete a project on buying a car which helps them learn to analyze consumer information. In future semesters, we may assess this CLO using this project, or a similar one, instead of assessing it on the Final Exam.