



UNIVERSITY OF ARKANSAS  
**PULASKI TECH**

**Assessment Report:**  
**2020-2021:**  
**Finite Mathematics**



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2. Date of submission: September 4, 2021

3. Is the assessment plan (*Check or highlight one*)

☐ an initial plan for the program

☒ a revision of an old plan

☐ unaltered from previous year

## Course-Level Learning Outcomes-

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

We use Student Learning Outcomes (SLOs).

SLO #1: Students will be able to perform matrix operations, matrix row reductions, find matrix inverses, and solve matrix equations.

SLO #2: Students will show understanding of simple logic techniques and set theory using Venn diagrams and counting principles.

SLO #3: Students will be able to demonstrate statistical understanding, including central tendency, dispersion, and normal curves, as well as calculate various probability, including Bayes', and be able to find expected values.

SLO #4: Students will be able to translate, interpret, optimize, and solve real-world financial scenarios using various methods, including linear systems, graphical and data analysis, simplex method, and game theory.

### 2. Which CLOs were addressed for this academic year? (2020-2021)

All Student Learning Outcomes were addressed during the academic year 2020 – 2021.

### 3. Which CLOs are being addressed in your assessment plan next academic year? (2021-2022)

All Student Learning Outcomes will be addressed during the academic year 2021 – 2022.

### 4. Explain the assessment cycle.

Students in the course are given a common final exam at the conclusion of each semester to ensure mastery of the student learning outcomes for the course. The results are tabulated and a discussion occurs with the course level instructors to analyze the results. Decisions are made only after thorough discussions and validity of results analyzed in more than one semester to ensure consistency.

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

The assessment for this course is a direct measure using a common final exam for all sections and students in the course during each semester. The final exam is a computer assessment given in a proctored environment to ensure the integrity of the assessment.

## 6. What are the assessment goal(s)?

To ensure mastery within the course, our goal is a 75% threshold for each student learning outcome. This may be raised in future semesters once we have established a baseline for the course.

## 7. What were the findings for this academic year? (2020-2021)

Over the three courses given during the Spring2021 and Summer2021 terms, it was found that three SLOs were over the 75% goal, the lowest being 85%. However, SLO #4 goal was not reached at 63%.

## 8. What is your analysis of the findings?

There was a significant change to the final exam course assessment from the previous academic year in response to MATH2301 being mainly an online course and the influence of COVID. Though the SLOs did not change, the assessment was reduced from 40 questions to 30 in an effort to be better concise and more in line with other MATH course assessments.

While the results for SLO#4 decreased by 13%, SLOs#1-3 results increased by an average of 10%. It should also be noted that both success and retention also increased by an average of 3% since last academic year.

## 9. What is the action plan for the next academic year? (2021-2022) Explain.

The final exam course assessment questions for SLO#4 will be redone to be more in keeping with 2019-2020 results. The current redesigned assessment questions for SLOs#1-3 will be kept.

After the 2021-2022 academic year, we will be able to begin to analyze more closely other possibilities, including comparisons of online and face-to-face as well as differences in instruction due to time comparisons.