

UNIVERSITY OF ARKANSAS
PULASKI TECH

Assessment Report:
2020-2021

MATH 1404 Calculus I

**Due to Chair/Program Director and
Assessment Coordinator by
September 4th**



1. Name of course: MATH 1404 Calculus I
2. Name of individual(s) compiling report: Robert Habimana
3. Date of submission: Sept. 30, 2021
4. Academic year: 2020-2021

Course-Level Learning Outcomes

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

We use Student Learning Outcomes (SLOs).

SLO #1: Functions, including sketching, slopes, minimum, maximum, relative extrema, inflection points, asymptotes, and other analysis

SLO #2: Limits

SLO #3: Continuity

SLO #4: Differentiation

SLO #5: Implicit differentiation

SLO #6: Exponential, trigonometric, and logarithmic functions

SLO #7: Exponential Growth and Decay

SLO #8: Application of derivatives includes application of topics such as:

- Slope and rates of change
- Maximum and minimum values and optimum solutions to problems

SLO #9: Antiderivatives

SLO #10: Definite and indefinite integration, including the Fundamental Theorem of Calculus

SLO #11: Area between curves

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

All Student Learning Outcomes were addressed during the academic year 2019 – 2020.

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

All Student Learning Outcomes will be addressed in our assessment plan during the 2019 – 2020 academic year.

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?

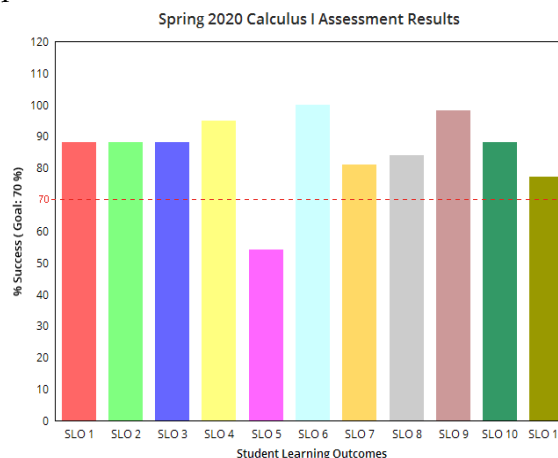
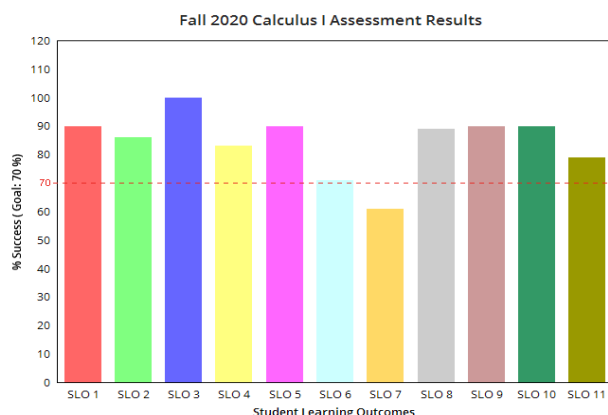
The assessment for this course is a direct measure using a common final exam for all sections and students in the course during each semester. The final exam is normally a paper/pencil assessment given in a proctored environment, but due to Covid – 19 pandemic which resulted in all sections of calculus being moved to virtual environment, the final exam was given in online platform.

6. What are the assessment goal(s)?

To ensure mastery within the course, our goal is a 70% 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)

All but SLO #7 Student Learning Outcomes were met in the fall 2020 semester. All student learning outcomes were met in the spring 2021 except SLO #5.



8. What is your analysis of the findings?

The results show that we met and exceeded our goal in the 2020 – 2021 academic year. We will continue to build upon our progress going into 2021 – 2022 academic year.

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

We are excited about our results from 2021 - 2022, we would like to build upon this success going forward by finding ways we can improve on.