UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report:
Course: MATH 1302/0102
College Algebra with Support
Academic Year: 2020-2021

1. Name of course: MATH 1302/0102 College Algebra with Support

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3. Date of submission: September 17, 2021

4. Academic year: 2020-2021

Course-Level Learning Outcomes-

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

SLO #1The ability to perform and solve basic function operations and algebraic problems using appropriate vocabulary

SLO #2Critical thinking to formulate decisions and problem solving based on reasoning and analysis

SLO #3The appropriate use of technology to supplement and enhance conceptual understanding, visualization, and inquiry

SLO #4The ability to synthesize information from a variety of sources to solve problems and interpret results

The student will demonstrate a basic understanding of functions including:

- Absolute values
- Quadratic
- Polynomial
- Rational
- Logarithmic
- Exponential
- Graphing of inequalities and quadratic inequalities

The student will demonstrate an understanding of the application of the following topics:

- Systems of equations
- Matrices

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

CLO's 2, 3, and 4 were addressed this academic year as we modified the course to enhance the material prior to the students taking the MATH 0102 support assessment. The course was modified to give students more practice with graphing equations, solving quadratic equations, and simplifying algebraic

expressions. We also focused on the students using technology to enhance the learning experience such as TI-84 usage and live zoom lectures

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

Due to data from the previous semesters we felt it necessary to address all of the SLO's for this course.

1. SLO #1The ability to perform and solve basic function operations and algebraic problems using appropriate vocabulary

2. SLO #2Critical thinking to formulate decisions and problem solving based on reasoning and analysis

3. SLO #3The appropriate use of technology to supplement and enhance conceptual understanding, visualization, and inquiry

4. SLO #4The ability to synthesize information from a variety of sources to solve problems and interpret results

5. Explain the assessment cycle.

The assessment is given twice a year at the completion of the fall semester and the spring semester. The assessment is given to all students requiring the college algebra with support course. The assessment is analyzed and acted upon at the completion of the spring semester.

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

The assessment is given in a direct method using the online mathlab software. The assessment consists of 10 multiple choice questions that cover all of the SLO's needed for the course.

7. What are the assessment goal(s)?

The goals of assessing college algebra support are to prepare the students for success in college algebra. To reach our goals we have set a 70% mastery of each

SLO. Through assessment we can determine where our students are deficient in each SLO and modify any course material to enhance the success of our students. We can also track success of students in college algebra that were required to take the college algebra with support course. We also use the assessment data to hold course level meetings to change or modify any current assessment tools being used by the department.

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

Overall, this year we did not have the upward trend we did see consistency with the prior year. We know that for the fall semester we could have been impacted by the COVID-19 social distancing policy. The fall SLO's above the threshold but of concern was the number of NC's given for the course. The spring semester bounced back with higher success for the course and the assessment results backed that up.
SLO I: 86
SLO II: 96
SLO III: 91
SLO IV: 75
And those tested in the spring:
SLO I: 81
SLO II: 93
SLO III: 86
SLO IV: 80

9. What is your analysis of the findings?

Our data was above our threshold of 70% for the year but we want to note that the fall semester was one of many changes. We implemented virtual-only classes and used hybrid learning due to social distancing policies. The fall semester had met the threshold, but we had a high dropout rate due to the class setups. The spring bounced back as students were now able to adjust to the different learning methods being offered. It is noted that students who completed the course and took the assessment stayed on par in each SLO from the previous year, except in the case of SLO IV. The support course lead instructor will be meeting with the college algebra course lead to streamline the support course and modify the material being assigned.

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

We have seen success in the number of students completing homework in the support course due to the combining of the courses in blackboard. The lead instructors of college algebra support and college algebra will be meeting to collaborate on changes needed in the support course. The course needs to flow more smoothly and not be burdensome and even hinder the college algebra portion of the class. This change we are hoping to implement by the spring 2022 semester. The department has also started using attendance/participation points to encourage more students attending our lab portions. Course level meetings will continue as a means of assessing the content and delivery of the support material. We will also start looking at several year averages of the data to see if we need to increase the difficulty or type of questions being assessed.