

UNIVERSITY OF ARKANSAS PULASKI TECH

Assessment Report: 2019-2020: MATH 0102 College Algebra Support



Assessment Report



1. Name of individual compiling rep	oort: <i>Eugene Rathfon</i>	
2. Date of submission:	<u>8/29/2020</u>	
3. Is the assessment plan (Check or hig	hlight 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)?

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? (2019-2020)

All CLO's were addressed this academic year as we implemented new learning outcomes and changed the MATH 0102 support assessment to offer a broader spectrum of results to test each learning outcome. The spring semester data may be altered from previous semesters due to the COVID-19 virus hitting mid-semester.



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3. Which CLOs are being addressed in your assessment plan next academic year? (2020-2021)

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? (2019-2020)

Overall, this year we did not have the upward trend we were hoping to see in success rates versus mastery of SLO's. We know that for the spring semester we could have been impacted by the COVID-19 virus but of concern would be the fall 2020 semester in which we only had 64% success rates and 64% pass rates. The spring semester had pass rates of 59% and 64% respectively. Of the students tested in the fall we had results on each SLO of:

SLO I: 78.85 SLO II: 84.43 SLO III: 81 SLO IV: 78 And those tested in the spring: SLO I: 68.7 SLO II: 62.5 SLO III: 71.2 SLO IV: 62.5

9. What is your analysis of the findings?

We are modifying the course to contain it within the college algebra master course. We believe that the separation of the two gave students difficulty in navigating the course and therefore impacting the overall success. It is noted that students who completed the course and took the assessment saw an increase in each SLO from the previous year. The coming fall we will implement a new learning environment that can be incorporated into blackboard and give the students a one stop location for all materials needed for the course. We are also strongly recommending all instructors place lecture videos and other useful information into each blackboard shell. The will help students in times when they are not able to attend each class.

10. What is the action plan for the next academic year? (2020-2021) Explain.

We were close to our goals this year and by making a few changes in our course we hope to cross over the 70% threshold we have set. One of our major changes is to put all coursework for the support material into the same shell as the college algebra coursework. We feel this will eliminate any confusion and therefore



better enable our students to succeed in the course. The support course will now count directly in the homework portion of the college algebra overall grade for the course. We also plan to have back up videos of every support lecture available in the event an instructor is unable to perform and to give students a back up option in the event of missing classes. Lastly we are going to have students directly added into our courses to remove any concerns of students not having access to homework on day one.

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