UNIVERSITY OF ARKANSAS
PULASKI TECH

Assessment Report:
2019-2020:
MATH 1330
Technical Mathematics

1. Name of individual compiling report: *Denise Hammett*

2. Date of submission: *Sept.1,2020*

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)?

Student Learning Outcomes:

SLO #1: Students will demonstrate the ability to understand and use the basic properties of arithmetic of signed numbers, fractions and decimals as well as the fundamental operations of algebra.

SLO #2: Students will demonstrate the ability to understand and use the properties of solving elementary algebraic equations, manipulating formulas, ratios and proportions, and translating words into algebraic symbols.

SLO #3: Students will demonstrate the ability to understand and use the basic principles of geometry including formulas for calculating area and volume of polygons.

SLO #4: Students will demonstrate the ability to understand and use the basic properties of right-angle trigonometry and basic oblique triangles.

SLO #5: Students will demonstrate the ability to understand and convert measures in the metric system and the English system.

2. Which CLOs were addressed for this academic year? (2019-2020)

SLO #1: Students will demonstrate the ability to understand and use the basic properties of arithmetic of signed numbers, fractions and decimals as well as the fundamental operations of algebra.

SLO #2: Students will demonstrate the ability to understand and use the properties of solving elementary algebraic equations, manipulating formulas, ratios and proportions, and translating words into algebraic symbols.

SLO #5: Students will demonstrate the ability to understand and convert measures in the metric system and the English system.

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

All Student Learning Outcomes are planned to be addressed in our assessment plan during the 2021 – 2022 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. Discussions with the Technical Science instructors also occur periodically to ensure the course is meeting the needs of students within those disciplines as is the intention of the course.

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.

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? (2019-2020)

The findings were better in the spring for those students who completed the course. However, due to the shift off campus at midterm due to Covid-19, we lost the majority of the students. We have spent the summer (2020) revising the course to facilitate a better off campus (live streaming) environment.

8. What is your analysis of the findings?

It is consistent that students completing the course during the spring semesters, perform better on mastering the objectives. In discussion with some of the Technical Science Instructors we are revising the course for Fall 2019 to be more application based as well as project based to hopefully help students understand the need for the concepts they are learning.

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

Now, that we have monitored the course for the past two years, we have made some changed to the way the course will be implemented based upon the results and discussions from other instructors in the area where the students are implementing the concepts. The course will be more application and process based for the next two-year cycle.

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