UA Rich Mountain
Assessing Student Learning
Course Outcomes Report
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1. **Purpose**
The Course Outcomes Report supplies information each semester regarding student learning on the course level. This report must be submitted to your division chair by the last day of the semester. Data from this report will be integrated into the annual Program Review. The Strategic Goals aligned with this report are Strategic Goal Three: Provide High Quality Education and Strategic Goal Four: Continuous Quality Improvement.

2. **Course Details**
Course Name: Trigonometry. Course #: MTH 213 ME1

3. **Assessed Outcome**
Course Outcome: The purpose of the Associate of Arts Program is to provide students with the knowledge and critical thinking skills that will enable students to analyze problems, arrive at intelligent conclusions, and make reasoned choices in their professional and personal lives.

- Students will demonstrate competency in mathematics, including analysis and applications..
- Students will apply technological skills to process information.

Students will be prepared academically upon transfer to a four-year instituti

Related Program Outcome: Upon successful completion of MTH 213 Plane Trigonometry, the student should be able to:

1. Use the six trigonometric functions of acute angles in right triangles to find missing side lengths and angles in a triangle, arc lengths, and areas of portions of a circle.
2. Use the calculator to apply approximate values (radian and/or degree mode) of trigonometric functions of an angle to find angular velocity in practical applications.
3. Graph the six trigonometric functions and various transformations of those functions.
4. Simplify expressions and verify equations involving fundamental trigonometric identities.
5. Solve conditional trigonometric equations by using inverse properties of functions and the techniques involved in solving quadratic equations.
6. Solve oblique triangles using the laws of sines and cosines.
7. Perform operations on complex numbers.
8. Convert polar coordinates to rectangular coordinates (and vice versa).
9. Plot points and sketch graphs in the polar coordinate system.

Related GELO category (choose one):

- ☑ Thinking critically
- ☑ Communicating effectively
- ☑ Using technology
- ☐ Conducting relevant research

4. Evidence of Student Learning

Describe the classroom activity/tools related to the **course** objective (project, discussion, essay, quiz, etc.): **Pre-test and post-test were given to the students before the semester and at the end of the semester, respectively. The data of 85% of students who got C or better were compared.**

5. Course Data

Number of students in your course(s) who met the course objective: 6

Total number of students in your course section(s): 6

Percent (%) of students achieving this course objective: 100%

6. Response to Data

Will you change how you teach as a result of this assessment?

- ☑ Change(s) needed. After careful consideration. I will be selective with the assigned problems..
- ☐ No change(s) needed. *Type explanation here.*

***Attach <u>anonymous</u> student samples of each activity along with the grading rubric/scale.**
****Attach any meeting minutes associated with this assessment.**