Course Outline

Course Number: MTH-080
Title: Technical Mathematics II
Date Approved: 1/18/2019

Credits: 3
Length of Course: 33
For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Grading Method: A-F or Pass/No Pass
Prerequisites: MTH-050 with a C or better
Co-requisites: None
Recommended: None
Required: None

This course does not include accessible General Education outcomes.

Related Instruction Area: Computation
Uses Library Resources: No

Department: Mathematics
Outline Developed by: Stefan Baratto
Course Approved as: Developmental Education

Course Description:
This course is the second in a sequence designed for career-technical students. The topics focus on critical thinking, problem solving, and mathematical communication using applications in arithmetic, algebra, geometry, and trigonometry.

Student Learning Outcomes:
Upon successful completion of this course, students should be able to:
1. Demonstrate rigorous and analytical thinking by reading, writing, and utilizing the technical and logical language and symbolism necessary to do mathematics and be effective problem solvers;
2. read, comprehend, and communicate technical information;
3. translate English phrases into algebraic expressions;
4. solve a linear equation in one variable;
5. use linear equations to model and solve applications;
6. define and use trigonometric functions in the context of right triangles;
7. use right-triangle trigonometry to model and solve problems and applications.

Major Topic Outline:
1. Introduction to Algebra.
2. Applications of Algebra in One Variable.
3. Right-Triangle Trigonometry.