ROCHESTER COMMUNITY AND TECHNICAL COLLEGE
COMMON COURSE OUTLINE

Course discipline/number/title: MATH 1015: Applied Technical Math

A. CATALOG DESCRIPTION
   1. Credits: 3
   2. Hours/Week: 3
   3. Prerequisites (Course discipline/number): None
   4. Other requirements: None
   5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION. This course covers a review of basic arithmetic skills, fractions, decimals, and percent. It covers ratio/proportion, geometry, measurement (conversions), basic algebraic expressions, linear equations, and basic right triangle trigonometry. Emphasis is on problem solving with specific application packets designed to interface with the student's core program. Cooperative learning activities and technology are used to support learning.

C. DATE LAST REVISED (Month, year): February, 2021

D. OUTLINE OF MAJOR CONTENT AREAS:
   1. Review the operations with whole numbers, fractions decimals and percent
   2. Ratios, proportions, and signed numbers
   3. US and Metric Measurement Systems
   4. Basic geometry of lines, angles, plane figures, and solids
   5. Algebraic Expressions
   6. Simple linear Equations
   7. Right triangle trigonometry

E. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Perform operations using order of operations.
   2. Round and properly label solutions to problems.
   3. Perform operations with ratios, proportions, US and metric measurements, and signed numbers.
   4. Apply geometric principles of lines, angles, plane figures and solids (includes perimeter, area, and volume).
   5. Simplify basic algebraic expressions. Solve basic linear equations in one variable.
   6. Apply basic right triangle trigonometry.
   7. Solve application problems in all concept areas, including the reviewed areas.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
   1. Homework
   2. Quizzes
   3. Tests
   4. Cooperative group work

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s):
   Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

I. SPECIAL INFORMATION (if any):
   1. Scientific calculator is required that includes fraction keys and trigonometric functions.