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. MnTC Goals (if any): NA

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.

B. DATE LAST REVISED (Month, year): March, 2015

C. 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
8. Application problems utilizing content areas 1-7

D. 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. Solve basic linear equations in one variable.
7. Apply basic right triangle trigonometry.
8. Solve application problems in all concept areas, including the reviewed areas.
9. Operate a scientific calculator, including the use of keys specific content areas such as fractions and trigonometry.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Tests
2. Quizzes
3. Homework
4. Cooperative group work

G. RCTC CORE OUTCOME(S) ADDRESSED:

☐ Communication
☒ Critical Thinking
☐ Global Awareness/Diversity
☐ Personal/Professional Accountability

H. SPECIAL INFORMATION (if any):
Scientific calculator is required