ROCHESTER COMMUNITY AND TECHNICAL COLLEGE
COMMON COURSE OUTLINE

Course discipline/number/title: MATH 1016: Technical Math Essentials

A. CATALOG DESCRIPTION
1. Credits: 1
2. Hours/Week: 1
3. Prerequisites (Course discipline/number): MATH 0093
4. Other requirements: Prerequisite may be satisfied by equivalent Mathematics placement score
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course covers ratio/proportion, applied geometry, and basic right triangle trigonometry to support technical programs. In addition to lectures, cooperative learning is used to support student learning. Students use scientific calculators throughout the program areas. Emphasis is on problem solving with program specific application packets designed to interface course.

C. DATE LAST REVISED (Month, year): April, 2023

D. OUTLINE OF MAJOR CONTENT AREAS:
1. Proportions
2. Basic geometry of lines, angles, plane figures, and solids
3. Right triangle trigonometry

E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Perform operations with proportions.
2. Apply geometric principles of lines, angles, plane figures and solids (includes perimeter, area, and volume).
3. Apply basic right triangle trigonometry. (Sine, Cosine, Tangent, Pythagorean Theorem, and solving right triangles)
4. Solve application problems in all concept areas.

F. LEARNING OUTCOMES (MNTC): NA

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

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): None