Alexandria Technical and Community College

MATH 1453: Technical Math

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 3
Lab Hours/Week: **
OJT Hours/Week: **

Prerequisites:
This course requires any of these seven prerequisites
  - MATH 0322 - College Prep Technical Math (Minimum grade: 2.0 GPA Equivalent and Number of Years Valid: 5)
  - MATH 0429 - Beginning Algebra (Minimum grade: 2.0 GPA Equivalent and Number of Years Valid: 5)
  - ATCC Arithmetic
  - ATCC Mathematical Reasoning
  - Algebra College Level
  - ATCC Calculus-Level Placement
  - A score of 2 on test Arithmetic

Corequisites: None
MnTC Goals: None

This course teaches math concepts used in formulas geared for the construction industry. Emphasis is on practical applications. A scientific calculator is required. Prerequisite: College level score on math placement test or a minimum grade of "C" in MATH0322 (College Prep Tech Math).

B. COURSE EFFECTIVE DATES: 07/01/1999 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Solve whole number math problems.
2. Solve fraction math problems.
3. Solve math problems involving decimals.
4. Calculate area of various shapes.
5. Calculate board feet.
6. Calculate volumes of various shapes.
7. Estimate material for a wall system.
8. Estimate material for a floor system.
9. Estimate material for a foundation.
10. Estimate material for a roof system.
11. Estimate labor costs for construction.

D. LEARNING OUTCOMES (General)

1. The learner will add, subtract, multiply, and divide mathematical expressions, providing the answer in simplest form.
2. The learner will use formulas to solve application problems.
3. The learner will calculate appropriate estimates for building materials and costs.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted