

Master Syllabus

MAT 1110 - Math for Technologists

Division: Science, Mathematics and Engineering

Department: Mathematics

Credit Hour Total: 3.0

Lecture Hrs: 3.0

Prerequisite(s): OR DEV 0050 DEV 0024 OR DEV 0074

Other Prerequisite(s): AND Other With a grade of C or better or satisfactory score on Sinclair Community College mathematics placement test

Date Revised: October 2013

Course Description:

Compute with fractions, decimals, percentages and proportions to solve applications in technology; geometry; convert within and between metric and English systems of measurement; read and interpret measurement tools and gauges; simplify algebraic expressions, solve linear equations and graph linear equations.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving

Course Outcomes:

Mathematical Computation

Compute with fractions, decimals, percentages, ratios and proportions as needed for a variety of applications for the technologist.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exams

Geometric Properties of 2- and 3-Dimensional Objects

Calculate perimeter, area and volume of basic 2 and 3 dimensional geometric objects.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exams

Graphing Linear Equations

Demonstrate the ability to graph equations of lines.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exams

Solving Linear Equations

Demonstrate the ability to solve linear equations.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exams

Outline:

Compute with fractions, decimals, percentages, ratios and proportions as needed for related technology
Convert within and between metric and English systems of measurement
Use various measurement techniques involving shop measuring instruments
Compute various applications in technology involving measurements of length, area, volume, weight and temperature
Simplify algebraic expressions
Solve linear equations
Graph linear equations