

Course Objectives/Course Outline
Spokane Community College

Course Title: Shop Math

Prefix and Course Number: MACH 153

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Solve simple algebraic equations
- Solve geometry word problems
- Solve basic trigonometry equations
- Draw geometric constructions

Course Outline:

- I. Percentages
 - A. The Percentage of Numbers
 - B. Changing Percents to Decimals and Fractions
 - C. Practical Applications in Occupational Related Problems
- II. Fundamentals of Applied Algebra
 - A. Symbols and Terminology
 - B. Equations
 - C. Ratios and Proportion
 - D. Exponents
 - E. Radicals
 - F. Formulas and Complex Equations
 - G. Practical Applications in Occupational Related Problems
- III. Fundamentals of Applied Geometry
 - A. Lines, Angles, and Circles
 - B. Flat Shapes
 - C. Solid Shapes
 - D. Formulas Applied to Machine Shop Operations
- IV. Fundamentals of Applied Trigonometry
 - A. Right Triangle Trigonometry
 - B. Using Trigonometric Tables
 - C. Acute and Oblique Triangles
 - D. Formulas Applied to Machine Shop Operations