

*Montgomery College - Department of Mathematics
Takoma Park/Silver Spring Campus*

**MA105 - Introduction to Trigonometry
1 Semester Hour**

Description Right triangle trigonometry and applications. Graphs and equations involving sine, cosine, tangent, and related basic concepts.

MA105 meets for 2 hours each week for 7 weeks or 3 hours each week for 5 weeks.

Prerequisites Completion of or concurrent enrollment in MA 103, appropriate score on the mathematics assessment test, or consent of department.

Assessment levels: RD 120 or equivalent.

- Topics**
- I. Trigonometric functions of acute angles
 1. Trigonometric ratios
 2. Function values for some special angles
 3. Function values for acute angles
 4. Cofunctions and complements
 5. Solving right triangles
 - II. Applications of Right Triangles
 - III. Trigonometric Functions of Any Angle
 1. Angles, rotations, and degree measure
 2. Trigonometric functions of angles or rotations
 3. Standard position
 4. Function values for any angle
 - IV. Radian measure
 - V. Graphs of basic circular functions of $A \sin x$, $A \cos x$ and $A \tan x$
 - VI. Trigonometric Manipulations and Identities
 1. Using fundamental identities to simplify expressions involving trigonometric functions
 - VII. Trigonometric Equations
 1. Solving simple trigonometric equations by using a calculator
 2. Solving simple trigonometric equations by using algebraic techniques.

Text

Algebra & Trigonometry by Blitzer. Prentice Hall Publishing Company.