

Montgomery College - Department of Mathematics  
Rockville 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	<ul style="list-style-type: none"><li>I. Trigonometric functions of acute angles<ul style="list-style-type: none"><li>1. Trigonometric ratios</li><li>2. Function values for some special angles</li><li>3. Function values for acute angles</li><li>4. Cofunctions and complements</li><li>5. Solving right triangles</li></ul></li><li>II. Applications of Right Triangles</li><li>III. Trigonometric Functions of Any Angle<ul style="list-style-type: none"><li>1. Angles, rotations, and degree measure</li><li>2. Trigonometric functions of angles or rotations</li><li>3. Standard position</li><li>4. Function values for any angle</li></ul></li><li>IV. Radian measure</li><li>V. Graphs of basic circular functions of <math>A \sin x</math>, <math>A \cos x</math> and <math>A \tan x</math></li><li>VI. Trigonometric Manipulations and Identities<ul style="list-style-type: none"><li>1. Using fundamental identities to simplify expressions involving trigonometric functions</li></ul></li><li>VII. Trigonometric Equations<ul style="list-style-type: none"><li>1. Solving simple trigonometric equations by using a calculator</li><li>2. Solving simple trigonometric equations by using algebraic techniques.</li></ul></li></ul>
Text	<i>Trigonometry Updated</i> . Bittinger, M.L./ Beecher, J.A Addison-Wesley.