

Montgomery College - Department of Mathematics
Germantown 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">I. Trigonometric functions of acute angles<ul style="list-style-type: none">1. Trigonometric ratios2. Function values for some special angles3. Function values for acute angles4. Cofunctions and complements5. Solving right trianglesII. Applications of Right TrianglesIII. Trigonometric Functions of Any Angle<ul style="list-style-type: none">1. Angles, rotations, and degree measure2. Trigonometric functions of angles or rotations3. Standard position4. Function values for any angleIV. Radian measureV. Graphs of basic circular functions of $A \sin x$, $A \cos x$ and $A \tan x$VI. Trigonometric Manipulations and Identities<ul style="list-style-type: none">1. Using fundamental identities to simplify expressions involving trigonometric functionsVII. Trigonometric Equations<ul style="list-style-type: none">1. Solving simple trigonometric equations by using a calculator2. Solving simple trigonometric equations by using algebraic techniques.
Text	<i>Trigonometry Update</i> . Bittinger, M.L./ Beecher, J.A Addison-Wesley.