

Course Outcome Guide (COG)

Course:	Math 105: Trigonometry	Credits:	2	Updated: February 19, 2020		
Course Description:	Prerequisite: "C" or higher in MATH 103, placement, or Instructor approval. Angle measure, trigonometric and inverse trigonometric functions, trigonometric identities and equations, parametric and polar coordinates, and general applications. Offered: Fall & Spring					
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes			
			Course	Program	Institutional	
<ul style="list-style-type: none"> • Angles • Angle measurements • Right angle trigonometry • Special values • Properties of trigonometry functions • Graphs of trigonometry functions • Amplitude • Period • Phase shift • Inverse trigonometry functions • Trigonometry identities • Addition formula • Subtraction formula • Double angle formula • Half angle formula • Product-sum formula • Law of sines • Law of cosines • Complex numbers • Polar coordinates • Vectors • Applications 	<ul style="list-style-type: none"> • Examine relationships between sides and angles of right triangles • Complete problems in both degree and radian measures • Apply prior knowledge of functions to circular functions • Determine the inverse of a trigonometric functions based on proven theories • Sketch a graph of a given function that has undergone transformations • Apply trigonometric formulas to complex angles measures • Solve triangles using trigonometric laws • Integrate prior knowledge of complex numbers in trigonometric problems 	<ul style="list-style-type: none"> • Complete textbook readings, questions, and problems demonstrating mastery of both concepts and process skills. • Complete examinations demonstrating mastery of both concepts and process skills. 	<ol style="list-style-type: none"> 1. Solve triangles when given limited but adequate information. 2. Use correct trigonometry procedures to solve problems. 3. Complete proofs using trigonometric identities. 	<ol style="list-style-type: none"> 1. Students will use reasoning skills to analyze and solve problems. 	<ol style="list-style-type: none"> 1. Students will use reasoning skills to analyze and solve problems. 	