

General Education Objectives	Learning Outcomes	Measures
Demonstrate knowledge of mathematical notation and concepts	At the end of the course, students should be able to:	
	Solve a variety of equations including polynomial, exponential and logarithmic.	
	Operate on functions, including basic mathematical operations, composition and inversion.	
	Use the properties of logarithms.	
	Analyze functions by finding roots, turning points, and asymptotes.	
	Manipulate complex numbers and understand their relationship to the solutions of polynomial and rational equations.	
	Solve nonlinear inequalities.	
	Find the partial fraction decomposition of a rational expression.	
	Solve systems of equations using various methods including elimination, matrices, and determinants.	
	Compute values of the six trigonometric functions and their inverses.	
	Solve equations involving trigonometric functions and their inverses.	
	Use the Principle of Mathematical Induction and the Binomial Theorem.	
Apply mathematical concepts and operations in proper written or graphical format	Graph a variety of functions including logarithmic, polynomial, rational, and exponential functions.	
	Identify, obtain, and graph the equations of circles and parabolas.	
	Demonstrate the appropriate mathematical format and notation in solving problems.	
	Analyze and draw the graphs of the six trigonometric functions and their inverses.	
	Analyze and draw the graphs of parametric and polar equations and convert between Cartesian and polar coordinates.	
	Analyze and graph equations representing conic sections.	
Apply relevant mathematical skills in solving real-world problems	Use mathematical functions to model real-world phenomena.	
	Solve right and oblique triangles.	
	Perform operations with vectors and use vectors to solve real-world problems.	