Pre-Calculus Mathematics

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Learning Objectives

Upon successful completion of this course, students will:
1. Demonstrate and apply knowledge of properties of functions.
2. Recognize and apply algebraic and transcendental functions and solve related equations.
3. Apply graphing techniques to algebraic and transcendental functions.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
5. Prove trigonometric identities.
6. Solve right and oblique triangles.

Major Assignments/Exams

Three tests and a cumulative final exam.

Required Reading

Functions Modeling Change: A Preparation for Calculus, 4th Edition

Recommended Reading
List of discussion/lecture topics

1: Linear Functions and Change
2: Functions
3: Exponential Functions
4: Logarithmic Functions
5: Transformations of Functions and Their Graphs
6: Trigonometric Functions
7: Trigonometry
8: Compositions, Inverses, and Combinations of Functions
9: Polynomial and Rational Functions
10: Vectors
11: Sequences and Series
12: Parametric Equations and