

Name of School:

Name of Course: **Pre-Calculus**

Instructor Information

Name:
E-mail address:
School phone number:
Web page address:
Best times to be reached:

Course Description

This course is a study of trigonometric functions, geometric concepts from the analytic view of algebraic procedures, functions and calculus underpinnings. Technology will be used for applications and problem solving.

District Standards and Power Benchmarks

Algebra Standard: Understands and applies concepts of algebra and functions

- 1: Understands patterns, relations and functions.
- 3: Uses mathematical models to represent and understand quantitative relationships
- 4: Analyzes change in a variety of situations

Geometry Standard: Understands and applies concepts of geometry

- 1: Analyzes characteristics and properties of two- and three-dimensional geometric shapes and develops mathematical arguments about geometric relationships.
- 2: Specifies locations and describes spatial relationships using coordinate geometry and other representational systems
- 3: Applies transformations and uses symmetry to analyze mathematical situations.
- 4: Uses visualization, special reasoning, and geometric modeling to solve problems

Measurement Standard: Understand and apply concepts of measurement

- 2. Applies appropriate techniques, tools and formulas to determine measurements

Problem Solving Standard: Understands and applies problem solving strategies.

- 1: Uses a variety of strategies to solve problems

Course Information

Course length and credits: Two terms

Credits: 1

Prerequisite: Geometry and Algebra 2

Course Outline/Calendar

Term 1:

- Unit 1. Functions and Graphs (parametric optional)
- Unit 2. Polynomial, Power, and Rational Functions (omit Solving Inequalities)
- Unit 3. Exponential, Logistic, And Logarithmic Functions (Logistic optional)

Term 2:

- Unit 4. Trigonometric Functions
- Unit 5. Analytic Trigonometry
- Unit 6. Applications of Trigonometry (Polar only, Sections 4 and 5)
- Unit 8. Analytic Geometry in Two and Three Dimensions (Sections 1 – 3)
- Unit 9 Discrete Mathematics (Sections 1,2,4,5)
- Unit 7 Systems and Matrices (Sections 1,2,4,5) *Optional*

Text/Other Required Materials/Resources

Title: *Precalculus Graphical, Numerical, Algebraic*
Author: Demana, Waits, Foley, Kennedy
Publisher: Prentice Hall (2007)

Instructional Procedures & Support

Students are expected to bring all supplies to class every day including the textbook, a notebook, pencil and graphing calculator. Students are expected to participate in class discussions and in small group discussions. Written assignments will be given daily and should be completed before the next class period. Good attendance and punctuality are essential for success in this course.

Classroom Management Procedures

1. Students are expected to be in class and on time.
2. All tardies will result in a classroom consequence.
3. All unexcused absences will be dealt with according to the school attendance policy.
4. Students are responsible for completing make-up work in a timely manner.

Assessment Plan

Daily Practice/Projects/Spreadsheet - 10%
Quizzes/Tests - 70% (or Quizzes 30% and Tests 40%)
Final Exam - 20% Notes may **not** be used on the final.

Grading System

Grades will be determined by the DCSD Grading Scale.

100-90	A
89-80	B
79-70	C
69-60	D
59-0	F