Department: Mathematics
Course Name: Precalculus

Course Description:
Precalculus is a review and extension of topics from Algebra II including polynomial, rational, exponential, logarithmic, and trigonometric functions. A treatment of systems of equations and linear algebra is given as well. The second semester includes a complete course in trigonometry. Topics included are trigonometric functions and their inverse functions, the unit circle, graphs, verification, and solving trigonometric equations. In addition, the concept of a limit is introduced and then developed. An emphasis on critical thinking, complex communication, collaboration, creativity, and risk-taking while promoting a global perspective will prepare students for rigorous college work.

Content:
Functions and Graphs
Polynomial and Rational Functions
Systems of Equations and Inequalities
Matrices and Linear Algebra
Exponential and Logarithmic Functions
Analytic Trigonometry
Sequences & Series
Limits and an Introduction to Calculus

Skills:
Solve equations and inequalities in algebraic, graphical and in tabular formats
Gather information and discern relevance
Apply math skills to real world situations
Model real world events mathematically
Apply reason, logic and problem solving skills

Text and Materials:
Larson, Precalculus with Limits (Brooks/Cole Cengage Learning 3rd ed.,2014)

Methods of Instruction:
Lecture
EFFL Small group discussion
Worksheets
Videos
Desmos Activities

Methods of Evaluation:
Tests
Quizzes
Homework