COURSE TITLE: College Algebra
COURSE LENGTH: 1 year
COURSE CREDIT:

COURSE TYPE:
GRADE LEVEL: 12
PREREQUISITE: Pre-Calculus

COURSE GOALS:

1. Students will identify and solve linear, quadratic, and radical equations as well solving inequalities with and without absolute value.
2. Students will create graphs of lines and circles and identify different parts of the graph including intercepts, slope, and symmetry.
3. Students will define properties of graphs as well as look at different transformations and models of varying functions.
4. Students will classify linear and quadratic functions and their properties.
5. Students will solve polynomial and rational functions by graphing as well as finding the zeroes of the equation.
6. Students will identify logarithms by their properties and model exponential growth and decay on a graph.
7. Students will write the terms of a sequence by determining the pattern and rules of sequences that are arithmetic and geometric.

COURSE CONTENT:

1. Equations and Inequalities
2. Graphs, Lines, Circles
3. Functions and their Graphs
4. Linear and Quadratic Functions
5. Polynomial and Rational Functions
6. Exponential and Logarithmic Functions
7. Sequences, Induction, Binomial Theorem