Excel
HIGH SCHOOL

Algebra 2 - Course Syllabus

Description:
Providing further insight into advanced algebraic concepts, this two-semester course serves as an extension of Algebra I. Algebra II develops students' ability to manipulate and use matrices in various formats to determine data relationships and also delve into function types such as polynomial, logarithmic, quadratic, exponential, and rational and periodic. High school level students will have the skills needed for state standardized tests and national exit exams upon completion of the course.

Textbook: Algebra 2 – Excel Education Systems, Inc. 2019 ©

Course objectives:
Throughout the course, you will meet the following goals:
- Identify similarities between the real and complex number system.
- Recognize all functions as mappings between domain and range sets.
- Understand that linear and quadratic functions are a subset of polynomial functions.
- Model real-world problems using polynomial and transcendental functions.
- Apply advance probabilistic methods to make decisions, and perform statistical analysis.
- Incorporate technology in modeling and solving problems.

Contents:

Semester A
Unit 1: Introduction to Algebra
Unit 2: Linear Equations
Unit 3: Functions
Unit 4: Systems of Linear Equations/Inequalities
Unit 5: Matrices

Semester B
Unit 6: Quadratic Functions
Unit 7: Exponential/Logarithmic Functions
Unit 8: Polynomial Functions
Unit 9: Rational and Radical Functions
Unit 10: Conic Sections

Grading Scale
A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = under 59%

Grade Weighting
Unit Quizzes……………… 70%
Mid-Term/Final Exams… 30%
100%