



ALGEBRA 12

Insert Teacher Name

Insert Room Number

Insert Full Year/Semester

Insert Period

Insert Email Address

COURSE DESCRIPTION

This first course in algebra furthers the students' skills in operating with real numbers, variables and algebraic properties. Algebra 12 begins with the development of the function. Major topics include: solutions of linear and quadratic equations, graphing functions, data analysis, factoring, solutions of systems of linear equations. Throughout the course, there will be an integration of problem solving techniques, communication skills, computing and estimating, the use of technology, and real life applications.

COURSE OBJECTIVES

Students should:

- Reason quantitatively and use units to solve problems.
- Understand the concept of a function and use function notation.
- Interpret functions that arise in applications in terms of the context
- Analyze functions using different representations
- Construct and compare linear, quadratic, and exponential models and solve problems
- Build new functions from existing functions.
- Understand solving equations as a process of reasoning and explain the reasoning.
- Solve equations and inequalities in one variable.
- Represent and solve equations and inequalities graphically.
- Create equations that describe numbers or relationships.
- Solve systems of equations.
- Summarize, represent, and interpret data on two categorical and quantitative variables
- Interpret linear models.
- Solve quadratic equations with real coefficients that have complex solutions.
- Write expressions in equivalent forms to solve problems
- Summarize, represent, and interpret data on a single count or measurement variable.

UNITS OF STUDY

- Functions
- Linear Functions
- Solving One Variable Equations
- Solving Two Variable Equations
- Linear Modeling
- Quadratic Functions
- Quadratic Equations
- Statistics and Variation

COURSE POLICIES AND REQUIREMENTS

GRADING

Summative Assessments:	70% Total May Include: Individual Tests, Projects, Mid-Chapter Tests
Formative Assessments:	20% Total May Include: Quizzes, Class Presentations/Projects
Behavioral Characteristics:	10% Total May Include: Homework, Participation Quizzes

Insert Additional Grading Information Here

MATERIALS

Insert Course Materials Here (ie. Textbook, Binder, Calculator, Highlighters)

EXPECTATIONS OF STUDENTS

To be respectful to all other individuals and all property. To be prepared and on time with appropriate materials and assignments. To be responsible for any missed work and notes. To be motivated to learn and accept challenges

EXTRA HELP

Insert Course Expectations Here

Insert Additional Information Here