

ALGEBRA 31

Teacher Name Room Number

School Year Period

Email

COURSE DESCRIPTION

Students in Algebra 31 should be highly motivated to work at an accelerated pace. Algebra 31 provides an in depth exploration of concepts of relation and functions, while additional topics include an advanced study of powers and roots, expansion, and application of systems of equations, probability, matrices, logarithmic and exponential functions, complex numbers, polynomial functions and their graphs, and quadratic relations and systems with an emphasis on problem solving and real-life applications. Additional units of study are sequences and series, linear programming, exponential growth, permutations, combinations, negative and fractional exponents, and the binomial theorem.

COURSE OBJECTIVES

Students should:

- understand and describe patterns and functional relationships.
- represent and analyze quantitative relationships in a variety of ways.
- use operations, properties, and algebraic symbols to determine equivalence and solve problems.
- understand that a variety of numerical representations can be used to describe quantitative relationships.
- use numbers and their properties to compute flexibly and fluently, and to reasonably estimate measures and quantities.
- collect, organize and display data using appropriate statistical and graphical methods.
- analyze data sets to form hypotheses and make predictions.
- understand and apply basic concepts of probability.

UNITS OF STUDY

- Algebraic Connections
- Algebraic Expressions, Equations and Inequalities
- Functions and Relations
- Graphing
- Exponents, Radicals, and Logarithms
- Polynomials

COURSE POLICIES AND REQUIREMENTS

GRADING

Summative Assessments: 90%

Tests, Quizzes, Projects

Formative Assessments:

Graded Homework and Assignments

5%

Homework and Participation

Behavioral Characteristics:

Insert Additional Grading Information Here

MATERIALS

EXPECTATIONS OF STUDENTS

Insert Course Expectations Here

EXTRA HELP

Insert Course Expectations Here

Insert Additional Information Here