

COURSE DESCRIPTION ALGEBRA

Philosophy Statement: Mathematics instruction has four main functions. First, it equips students to function effectively in an ever-changing world by becoming proficient in computational and communication skills. Second, it enables students to understand and apply mathematical concepts in everyday life. Third, it develops higher-order thinking skills necessary to make a contribution in related fields of study, research, and technology. Finally, it clearly illustrates the order and structure of the world God created.

Objectives: Students will learn first-year algebra. They will use concepts learned on real-world applications with discipline and creative problem solving.

Textbook: Algebra: Concepts and Applications (Glencoe)

Units of Study:

- Chapter 1: The Language of Algebra
- Chapter 2: Integers
- Chapter 3: Addition and Subtraction Equations
- Chapter 4: Multiplication and Division Equations
- Chapter 5: Proportional Reasoning and Probability
- Chapter 6: Functions and Graphs
- Chapter 7: Linear Equations
- Chapter 8: Powers and Roots
- Chapter 9: Polynomials
- Chapter 10: Factoring
- Chapter 11: Quadratic and Exponential Functions
- Chapter 12: Inequalities
- Chapter 13: Systems of Equations and Inequalities
- Chapter 14: Radical Expressions
- Chapter 15: Rational Expressions and Equations

Areas to be Evaluated:

- Tests (Chapter)
- Quizzes (Mid-chapter, Occasional unexpected)
- Homework (Daily Bookwork, IXL (Interactive Internet Math Program))
- Classwork (Bellringers, Notes)