

Course Syllabus

Algebra 1

Teacher: Annette P. Williams

SYLLABUS

COURSE NUMBER: 1200370

COURSE DESCRIPTION: This course is to develop the algebraic concepts and processes that can be used to solve a variety of real-world and mathematical problems. This is the first of a two-year sequence of courses, Algebra 1a and Algebra 1b. Together, the two courses have the same requirements as Algebra, Course Number 1200310.

PREREQUISITES: Students should have successfully completed eighth grade/ Pre-Algebra.

COURSE OBJECTIVES: Students should be able to:

- 1) Demonstrate the ability to perform operations involving numbers, sets, and variables.
- 2) Demonstrate Knowledge of the basic properties of real numbers.
- 3) Demonstrate an understanding of methods for managing information by using the tools of data analysis.
- 4) Demonstrate the ability to solve and use first-degree equations and inequalities.
- 5) Demonstrate an understanding of functions, relations, and graphs.

COURSE OUTLINE:

- 1) Structure and properties of the real number system, with an emphasis on rational numbers. (1-1/1-5); Vocabulary; Quizzes (1-1/1-5); Test 1
- 2) Variables, algebraic expressions, varied means for analyzing and expressing patterns, relations, and functions, including words, tables, graphs, geometric formulas, and linear equations and inequalities. Vocabulary;(2-1/2-7); Quizzes, Test 2
- 3) Solution strategies for simple linear equations and inequalities in one variable (3-1/3-7); Vocabulary; Quizzes, Test 3
- 4) Relations expressed by ratios, rates, and proportion (4-1/4-6), Coordinate geometry and graphing of linear equations and inequalities, (5-1/5-5) ; Vocabulary; Quizzes, Test 4
- 5) Data analysis concepts and techniques appropriate to identify patterns and make predictions; Voc.; Quizzes, Test
- 6) Algebraic notation, selected from the following: exponents, square roots, radicals, absolute value, and scientific notation; ; Quizzes, Test 6

- 7) Systems of Equations/Inequalities (7); Exponents (8); Polynomials and Factoring(9); Quadratic Equations and Functions (10); Radical Expressions and Equations (11) and Rational Expressions and Functions (12)

COURSE REQUIREMENTS AND EVALUATION:

- I. Exams (class-tests, semester exams-2)
- II. Quizzes (section quizzes, vocabulary)
- III. Homework Assignments (Twice weekly)
- IV. Project (under **Course Outline**)
- V. Class Participation/worksheets/text
- VI. Comprehensive Final Exam
- VII. Task/Vocabulary/Reading/FCAT Training Sheets

TEXT AND OTHER RESOURCE MATERIAL:

Algebra 1A; Prentice Hall; Reading and Math Literary Masters; FCAT Transparency Warm-ups; Vocabulary Cartoons (Easy Memory Techniques).

Class Rules

- 1. Everyone is asked to respect others.
- 2. Students should be in their seats when the bell rings.
- 3. Students should their raise hand to respond/ask questions.
- 4. Dress code must be observed.
- 5. Homework should be handed in at the beginning of class.
- 6. Students should bring textbook, notebook, pencil, and calculator everyday.
- 7. Students can make-up work within three days of being absent.

Grade Scale-Students grade is calculated by total points from evaluation.

- A 90-100
- B 80-89
- C 70-79

D 60-69

F 0-59

Students needs 5-subject spiral notebooks, pencils, calculators.