Teaching Textbooks Algebra

Class Description:
In this Algebra course, the student will utilize Teaching Textbooks Algebra to cover the standard topics, including: fractions, decimals, geometric concepts, algebraic equations, dealing with x, slope-intercept, order of operations, powers, scientific notation, graphing, inequalities, and more.

Learning Materials: Main Curriculum:
Teaching Textbook - Algebra Textbook
Teaching Textbook - Algebra Answer Key
Teaching Textbook - Algebra CD-ROM Set

Learning Goals/Performance Objectives: M1.1.C Solve problems that can be represented by a system of two linear equations or inequalities.
M1.2.C Evaluate f(x) at a (i.e., f(a)) and solve for x in the equation f(x) = b.
M1.3.A Write and solve linear equations and inequalities in one variable.
M1.3.C Identify and interpret the slope and intercepts of a linear function, including equations for parallel and perpendicular lines.
M1.3.H Determine the equation of a line in the coordinate plane that is described geometrically, including a line through two given points, a line through a given point parallel to a given line, and a line through a given point perpendicular to a given line.

Learning Activities: The student will complete lessons as per the timeline below, using the workbook and CD's. Each lesson consists of video instruction and new material practice. Quizzes are after every 7th lesson. Grades will be automatically calculated via the digital gradebook.
Teaching Textbooks Algebra
Chapter 1: Algebra Basics
Lesson 1—Advanced Arithmetic
Lesson 2—The Purpose of Algebra
Lesson 3—Undoing and the Golden Rule of Algebra
Lesson 4—Undoing Multiplication and Division
Lesson 5—Commutative Properties
Lesson 6—Algebra Notation
Lesson 7—Percent Problems
Lesson 8—Banking and Business
Lesson 9—Moon Vacation
Lesson 10—Extending the Concept of Speed
Chapter 2: Working with Integers
Lesson 11—Less than Zero
Lesson 12—Negatives in Action

Lesson 119—Inconsistent and Dependent Systems
Chapter 17: Inequalities and Radicals
Lesson 120—Inequalities
Lesson 121—Undoing Inequalities
Lesson 122—Undoing Inequalities in Reverse Order
Lesson 123—Multiplying Irrationals
Lesson 124—Dividing Irrationals
Lesson 125—Adding and Subtracting Irrationals
Lesson 126—Simplifying Irrationals
Lesson 127—Compound Inequalities
Lesson 128—Two-Variable Inequalities
Lesson 129—Graphing Two-Variable Inequalities
Lesson 130—Systems of Two-Variable Inequalities
Chapter 18: Absolute Value and the Function Concept
Lesson 131—Absolute Value
Lesson 132—Absolute Value Equations
Lesson 133—Solving Absolute Value Equations with Algebra
Lesson 134—Function Basics
Lesson 135—Working with Functions
Chapter 19: Statistics and Probability
Lesson 136—Statistics
Lesson 137—Measures of Dispersion
Lesson 138—More Measures of Dispersion
Lesson 139—Probability
Lesson 140—Probability Shortcuts
Chapter 20: Additional Topics
Lesson 141—The Quadratic Formula

Progress Criteria/Methods of Evaluation: For successful completion of this course, the student will complete at least 70% of the lessons/goals, at a minimum of 70% accuracy.

September Complete Lessons 1 – 14
September Complete Lessons 57 – 70
October Complete Lessons 15 – 28
November Complete Lessons 29 – 42
December Complete Lessons 43 – 56
January Complete Lessons 57 – 70
February Complete Lessons 71 – 84
March Complete Lessons 85 – 98
April Complete Lessons 99 – 112

May Complete Lessons 113 – 126
June Complete Lessons 127 – 141