

# **Bartow High School 2007-2008**

## **Class Syllabus: Algebra 1A - Mr. Burkey**

### **Course Content:**

This course is designed to build upon the student's prior knowledge of numerical expressions, mathematical calculations, and graphing in order to gain a deeper knowledge of these concepts along with the concepts critical to an understanding of algebra. Topics covered will include:

#### **Tools of Algebra**

- Using Variables
- Exponents and Order of Operations
- Exploring Real Numbers
- Adding Real Numbers
- Subtracting Real Numbers
- Multiplying and Dividing Real Numbers
- The Distributive Property
- Properties of Real Numbers
- Graphing Data on the Coordinate Plane

#### **Solving Equations**

- Solving One-Step Equations
- Solving Two-Step Equations
- Solving Multi-Step Equations
- Equations with Variables on Both Sides
- Equations and Problem Solving
- Formulas
- Using Measures of Central Tendency

#### **Solving Inequalities**

- Inequalities and Their Graphs
- Solving Inequalities Using Addition and Subtraction
- Solving Inequalities Using Multiplication and Division
- Solving Multi-Step Inequalities
- Compound Inequalities
- Absolute Value Equations and Inequalities

#### **Solving and applying Proportions**

- Ratio and Proportions
- Proportions and Similar Figures
- Proportions and Percent Equations
- Percent of Change
- Applying Ratios to Probability
- Probability of Compound Events

## **Graphs and Functions**

- Relating Graphs to events
- Relations and Functions
- Function Rules, Tables, and Graphs
- Writing a Function Rule
- Direct Variation
- Describing Number Patterns

## **Linear Equations and Their Graphs**

- Rate of Change and Slope
- Slope-Intercept Form
- Standard Form
- Point-Slope Form and Writing Linear Equations
- Parallel and Perpendicular Lines
- Scatter Plots and Equations of Lines
- Graphing Absolute Value Equations

## **Classroom Procedures:**

On the top left corner of the board each day you will find the date. Daily bell work will be located below the date. On the top center of the board is my name; if you forget it you can always look there to find it. On the top right corner of the board will be the day's objective and the page number in the book where your assignment can be found.

Because I am a slow learner, each student will be assigned a seat. Until I have learned all your names we will sit alphabetically. Once all of your names have been learned, the seating assignments may be altered. Please be sure that you remove all of your personal belongings and any trash you may have created before you are dismissed so the person who occupies your seat in the next period will have a clean area in which to work.

Students are expected to attend class daily unless they have illness, doctor or dentist appointments, or court dates. We will be doing work every day and if you miss a day it is your responsibility to ask for make up work before or after class. Tests must be made up before or after school, never during class time.

Monday through Thursday we will be doing bell work, reviewing the previous day's homework, receiving direct instruction, completing guided practice, and working on independent practice. On Fridays we will evaluate the week's learning with a test.

Your grade will be calculated as follows:

Test Average	70%
Class work	15%
Home work	15%

Because there are many students in our school (not just you), it is expected that students treat each other with respect. This respect involves leaving other people's property alone; if it does not belong to you don't touch it. It involves being civil to everyone, even people

you don't like. Most of all, it involves respecting the other student's right to an education. Talking and other disruptive behaviors makes it difficult if not impossible for others to learn and the reason for coming to school is to learn.

All the rules in the student code of conduct will be enforced. Students are expected to be in class when the bell rings, move to their seats quickly and quietly, and begin their bell work. They will remain seated until directed to move or are dismissed.