

Algebra 2
2011 – 2012
Mr. Byrd

- **Class Description**

Algebra 2 emphasizes the power and beauty of mathematics through the development and application of extended algebraic concepts and skills with the use of technology or graphing calculators. Algebra 2 introduces the notion of functions in relation to linear and quadratic equation concepts. It also extends the study of functions to include polynomials functions and exponential functions. It also includes the study of geometric representation of equations of quadratic functions (parabolas) and systems of equations. All concepts will be emphasized as they would be used in mathematics, chemistry, business, genetics and physics.

- **Calendar**

<u>Chapter</u>	<u>Estimated Starting Dates</u>
1	August 18
2	September 6
3	October 13
4	November 14
EXAM #1	
5	
6	January 9
7	February 1
8	February 29
9	April 9
EXAM #2	

- **TESTS**

Tests will be given after each chapter; exams where indicated.

- **PROJECTS**

Projects may be assigned each semester which will involve math applications and possibly research.

- **CALCULATORS**

A graphing calculator is required for this course.

Suggested: TI-84 Plus, TI-84 Silver (If purchasing a new calculator, please turn in your UPC bar codes to me for school supplies)

Year End Objectives

Algebra 2

By the end of Algebra 2, the student should be able to:

1. Solve problems involving systems of equations in two variables, graphically, algebraically, and technologically and by using matrices.
2. Perform four fundamental operations on real numbers.
3. Factor or simplify rational expressions.
4. Use the relationship of the slopes and point to graph lines and solve equations.
5. To use scatter plots in predicting future outcomes with the assistance of technology.
6. Collect and analyze various sets of data.
7. Solve quadratic equations over the set of real numbers manually and with technology.
8. Sketch graphs of and find solutions for quadratic-linear or quadratic-quadratic systems of equations manually and with the aid of a graphing calculator.
9. Sketch graphs of polynomials and find roots, asymptotes, critical points, and other characteristics.
10. State equivalent exponential and logarithmic equations.
11. Apply exponential and logarithmic properties to solving problems.

Precalculus Placement

Minimum Entrance Requirements: A "B-" or better both semesters of Algebra 2.