**Algebra II
Spring 2016**

**Course Overview**

Algebra II will extend upon the learning from Algebra I and Geometry. We will look at functions of various types (polynomial, rational, exponential, and logarithmic), systems of equations and inequalities, and polynomial equations with particular emphasis on quadratics. It is expected that students have proficiently passed Algebra 1 and Geometry.

The books for Math 500 are Algebra 2 (2007 edition) published by Prentice Hall. This book will rarely be required in class (you will be informed if you will need it in advance), but is necessary for homework and other practice. The outside reading for this course is Easy as Pi by Buchan.

Students are **required** to bring a graphing calculator to class daily. Recommended calculators include the TI-83, TI-84 (any edition), or the TI-nSpire (with an 84 keypad). Although we will learn the formulas to compute information by hand, modern uses of mathematics rely heavily on machine computation and the use of such devices will be mirrored in this course.

**Teaching Methods**

Students will often be asked to explain their reasoning in solving problems. This could be verbally or written in sentence form. Proper vocabulary and understanding of concepts are stressed in these explanations.

Lecture notes will drive much of the course. There will also be some inquiry learning where curious students will be asked to discover some new paths for solutions.

**Student Evaluation**

A student’s grade will be determined by total points. All of the grade will come from quizzes and tests. Although homework is not graded, it is *essential* for understanding and success in the course.

Refer to the Retake Policy sheet for more information.

**Materials Needed**

Students will need:

* Notebook for writing information
* Writing utensils
* TI-83 or TI-84 calculator