

Mr. Anthony Algebra 2 Syllabus

<b>Unit Title</b>	<b>Unit #1 - Polynomials</b>
<b>Length of Unit</b>	11 Blocks – 3 Lessons With 1 Quiz (10 Instructional days for 3 Lessons)
<b>Summary/Overview</b>	Unit 1 standards will focus on reviewing the properties of quadratic functions- Students will learn to graph and solve quadratic equations and find the zeros of the function using more than one method.

<b>Unit Title</b>	<b>Unit #2: Rational &amp; Radical Expressions</b>
<b>Length of Unit</b>	10 Blocks – 3 Lessons With 2 Quizzes and 1 End-Of-Unit Exam (8 Instructional Days for 3 Lessons)
<b>Summary/Overview</b>	Unit 2 will focus on the similarities of arithmetic with rational and irrational numbers and expressions. Student's algebraic knowledge of linear and exponential functions will be extended to include rational and radical functions.

<b>Unit Title</b>	<b>Unit #3: Functions</b>
<b>Length of Unit</b>	16 Blocks – 6 Lessons With 2 Quiz and 1 End-Of-Unit Exam (13 Instructional Days for 6 Lessons)
<b>Summary/Overview</b>	Students will focus on determining the key features of a graph. This is explored through real world applications and relating those features to the context of the problem. Students will also explore the effects of transformations on graphs of functions and will include identifying an appropriate model for a given situation.

<b>Unit Title</b>	<b>Unit #4: Systems of Equations</b>
<b>Length of Unit</b>	5 Blocks – 1 Lesson With 1 Quiz (3 Instructional Days for 1 Lesson)
<b>Summary/Overview</b>	Unit 4 will extend student's knowledge of solving linear systems of equations to include systems of linear and quadratic equations.

<b>Unit Title</b>	<b>Unit #5: Logarithmic &amp; Exponential Functions</b>
<b>Length of Unit</b>	8 Blocks – 2 Lessons With 1 Quiz and 1 End-Of-Unit Exam (5 Instructional Days for 2 Lessons)
<b>Summary/Overview</b>	Unit 5 examines exponential and logarithmic expressions and determines equivalency. Real world application of exponential growth and decay are investigated.

<b>Unit Title</b>	<b>Unit #6: Trigonometric Functions</b>
<b>Length of Unit</b>	10 Blocks – 5 Lessons With 1 Quizzes and 1 End-Of-Unit Exam. (8 Instructional Days for 5 Lessons)
<b>Summary/Overview</b>	Unit 6 builds on the students' previous knowledge of functions, trigonometric ratios and circles in geometry to extend trigonometry to model periodic phenomena.

<b>Unit Title</b>	<b>Unit #7: Sequences &amp; Series</b>
<b>Length of Unit</b>	7 Blocks – 3 Lessons, 1 Quiz, 1 Project (3 Instructional Days for 2 Lessons)
<b>Summary/Overview</b>	Unit 7 will focus on arithmetic and geometric sequences and using the formula of a finite geometric sum to solve problems.

<b>Unit Title</b>	<b>Unit #8: Statistics</b>
<b>Length of Unit</b>	10 Blocks – 3 Lessons With 1 Quiz and 1 Project (7 Instructional Days for 3 Lessons)
<b>Summary/Overview</b>	Unit 8 will allow students to summarize, represent, and interpret data. Students will learn to make inferences and justify conclusions from sample surveys and experiments.

<b>Unit Title</b>	<b>Unit #9: Probability</b>
<b>Length of Unit</b>	7 Blocks – 2 Lessons With 1 Project (5 Instructional Days for 2 Lessons)