

## Algebra II Curriculum Map

Standards	Content	Skills/Practices	Materials/ Resources	Assessments (All) Daily/Weekly/ Benchmarks	Timeline (Months/Weeks /Days)
N-CN.7 A-APR.3 A-APR.6 A-REI.1 A-REI.2 A-REI.4b	Factoring Zeros of a function Remainder Thm	Factoring / Exponent Review Grouping (Split the Middle) Sum/Diff of Cubes Solve equations by factoring Completing the Square Quadratic formula Define the imaginary unit Relate zeros of a function to x-intercepts or non-intercepts Long Division Synthetic Division	Modules Graphing Calculators Teacher generated materials	Periodic (weekly) quizzes Unit tests Homework	1 Month

<p>A-APR.2  A-APR.3  A-REI.2  F-IF-7a  F-IF-7b  A-APR.7  F-IF.4</p>	<p>Curve Sketching  Inequalities  Systems  Rational  Expressions</p>	<p>Graphing  Polynomial  Functions from x  and y-int and  number line  Determine features  of the graphs:  max/min, inc/dec,  <math>f(x)&lt;0/f(x)&gt;0</math> and  end behaviors  Polynomial  Inequalities  Solving systems  algebraically  Solving systems  graphically  Rational equations  w/rational roots  Simplify Rational  Expressions  Multiply/Divide  Rational  Expressions</p>	<p>Modules  Graphing Calculators  Teacher generated  materials</p>	<p>Periodic (weekly) quizzes  Unit tests  Homework  Benchmark Test #1</p>	<p>1 Month</p>
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<p>A-APR.7  N-CN.7  A-REI.2  A-REI.4</p>	<p>Rational Expressions Cont.  Rational Equations  Rationalizing Denominators  Radical Equations</p>	<p>Add/Subtract Rational Expressions  Complex fractions  Radicals, simplify/operations  Define conjugate  Rationalizing irrational denominators  Solving Rational Equations w/irrational and imaginary roots  Solving Radical Equations</p>	<p>Modules  Graphing Calculators  Teacher generated materials</p>	<p>Periodic (weekly) quizzes  Unit tests  Homework</p>	<p>1 Month</p>
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<p>N-CN.1  N-CN.2  N-RN.1  N-RN.2  A-SSE.3  F-LE.4</p>	<p>Imaginary  Numbers  Exponents/Log  Properties  Solving Equations  involving logs and  Exponents</p>	<p>Powers of <math>i</math>  Operations with  complex numbers  Exponent  Properties  Fractional and  negative exponents  Equations involving  exponents with  variables in base  Exponential  equations by  changing base  Log  Form/Exponential  form  Log Rules  Exponential  equations solved  with logs</p>	<p>Modules  Graphing Calculators  Teacher generated  materials</p>	<p>Periodic (weekly) quizzes  Unit tests  Homework</p>	<p>1 Month</p>
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<p>A-CED.1  A-REI.11  F-IF.3  F-IF.4  F-IF.7e  F-IF.8b  F-BF.1  F-BF.2  F-BF.3  S-ID.6  F-LE.2  F-LE.5</p>	<p>Modeling  Exponential  Growth and Decay  Sequences and  Series</p>	<p>Exponential Growth  and Decay  Use exponent  properties to  determine different  rates of growth and  decay  Modeling  exponential growth  and decay functions  Graphing  Exponential and Log  Graphs as inverse  functions  Solve Systems  graphically involving  Logs and  Exponential  functions  Midterm Review  Writing Sequences  recursively and as a  general rule  Arithmetic  Sequences  Geometric  Sequence</p>	<p>Modules  Graphing Calculators  Teacher generated  materials</p>	<p>Periodic (weekly) quizzes  Unit tests  Homework  Midterm Exam  (Benchmark #2)</p>	<p>1 Month</p>
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<p>A-SSE.4  A-CED.1  S-ID.6  F-TF-.1  F-TF.2  F-TF.8  F-TF.3</p>	<p>Series Cont.  Trigonometry</p>	<p>Sigma Notation  Arithmetic Series  Geometric Series  Applications of  Series  Unit Circle Basics  Relationship of right  triangle trigonometry  to unit circle  Finding exact  trigonometry values  of (<math>^{\circ}</math>)(Radians)  Radian measure  Convert  Radians/Degrees  Use <math>\theta = s/r</math>  Reciprocal  trigonometry  functions  Exact value of  reciprocal  trigonometry  functions  Develop and use  reciprocal and  quotient identities  Develop and use  pythagorean  identities</p>	<p>Modules  Graphing Calculators  Teacher generated  materials</p>	<p>Periodic (weekly) quizzes  Unit tests  Homework</p>	<p>1 Month</p>
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<p>F-TF.5 N-Q.2 F-IF.7e F-IF.9 F-BF.3</p>	<p>Trigonometry Cont. Regents Review</p>	<p>Graphs of Sinx/Cosx/Tanx Define and apply concepts of Frequency, Amplitude, Period, Range and Vert/Horiz shifts for Sinx,Cosx and Tanx Application based problems for modeling periodic functions and solving systems graphically Determine solutions to systems (review of all functions covered to this point )graphically using graphing calculator. Begin Regents Skills Review</p>	<p>Modules Graphing Calculators Teacher generated materials Delta Math</p>	<p>Periodic (weekly) quizzes Unit tests Homework Delta Math Assignments</p>	<p>1 Month</p>
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<p>S-CP.1 S-CP.2 S-CP.3 S-CP.4 S-CP.5 S-CP.6 S-CP.7 S-ID.4 S-IC.1 S-IC.3 S-CP.1</p>	<p>Probability Statistics Regents Review</p>	<p>Define Probability and basic terms Venn Diagrams Adding Probabilities Mutually Exclusive Conditional Probabilities Independent and Dependent Events Multiplying Probabilities Two Way Frequency Charts and probability Application based probability models Statistics basics - Gathering Data Standard Deviation and Normal Dist Z-Scores Measures of central tendency Skewed Data Regents Skills Review</p>	<p>Modules Graphing Calculators Teacher generated materials Delta Math</p>	<p>Periodic (weekly) quizzes Unit tests Homework Delta Math Assignments</p>	<p>1 Month</p>
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<p>S-ID.6a S-IC.2 S-IC.4 S-IC.5 S-IC.6 G-GPE.2 F-IF.6 F-BF.4</p>	<p>Statistics Cont. Inverse Functions Average Rate of Change Regents Review</p>	<p>Regressions Analysis Define regression basics and correlation coefficient Utilize calculator to find regression equations (linear, exponential, power, log) Apply derived regression equations to predict future scenarios Focus and Directrix of a Parabola Inverse Functions Algebraically Average Rate of Change Regents Review</p>	<p>Modules Graphing Calculators Teacher generated materials Delta Math</p>	<p>Periodic (weekly) quizzes Unit tests Homework Delta Math Assignments</p>	<p>1 Month</p>
<p>All</p>	<p>Regents Review</p>	<p>Regents Review</p>	<p>Modules Graphing Calculators Teacher generated materials Delta Math</p>	<p>Periodic review quizzes Homework Delta Math Assignments</p>	<p>3 Weeks</p>