

<b>Course Title:</b>	<b>Algebra 2B</b>		
<a href="#">CCSS Mathematics Standards</a>			
<b>Unit 6 Big Idea:</b>	<b>Dividing and Solving Polynomials</b>		
<b>Essential Question</b>	We already know the properties of 1st and 2nd degree polynomials. What about polynomials of higher degree?		
<b>Standards</b>	<b>Assignment</b>	<b>Description</b>	
<ul style="list-style-type: none"> <li>• A-APR.6</li> <li>• A-SSE.3a, A-APR.2,</li> <li>• F-IF.7c, A-APR.3</li> <li>• F-IF.7c</li> <li>• A-APR.3, F-BF.3, F-IF.4, F-IF.7c,</li> <li>• A-APR.4</li> <li>• N-CN.9, N-CN.8</li> <li>• A-APR.5</li> </ul>	6.1	Quiz: Polynomial Division	
	6.2	Quiz: Factor and Remainder Theorem	
	6.3	Assignment: Ration Roots	
	6.4	Quiz: Solving Polynomials	
	6.5	Quiz: Graphing Polynomial Functions	
	6.5	Assignment: Graph the Polynomial	
	6.6	Quiz: Polynomial Identities	
	6.7	Quiz: Fundamental Theorem of Algebra	
	6.7	Discussion: Two Questions	
	6.8	Quiz: Binomial Theorem	
	Wrap Up	Unit 6 Discussion Based Assessment Unit 6 MC Test Unit 6 Written Test	
<b>Unit 7 Big Idea</b>	<b>Rational Expressions</b>		
<b>Essential Question</b>	How do rational functions generalize and extend what we know about rational numbers and polynomial functions?		
<b>Standards</b>	<b>Assignment</b>	<b>Description</b>	
<ul style="list-style-type: none"> <li>• A-APR.6</li> <li>• A-APR.7</li> <li>• A-APR.7</li> <li>• A-APR.6</li> <li>• F-IF.7d</li> <li>• F-IF.7d</li> <li>• F-IF.7e, F-IF.7d, A-CED.2</li> <li>• F-BF.4a, A-REI.2, A-REI.1, F-BF.3</li> </ul>	7.1	Quiz: Simplifying Rational Expressions	
	7.2	Quiz: Multiplying and Dividing Rational Expression	
	7.3	Quiz: Adding and Subtracting Rational Expressions	
	7.4	Quiz: Simplifying Complex Fractions	
	7.5	Quiz: Discontinuities of Rational Functions	
	7.6	Quiz: Asymptotes of Rational Functions	
	7.6	Assignment: Graph the Rational Expressions	
	7.7	Quiz: Solving Rational Expressions	
	7.8	Quiz: Applications of Rational Equations	
	7.8	Discussion: Graph the Formula	
	Wrap-Up	Unit 7 Discussion Based Assessment Unit 7 Test	

<b>Unit 8 Big Idea</b>	<b>Exponential and Logarithmic Functions</b>	
<b>Essential Question</b>	How can we describe and understand processes that grow exponentially?	
<b>Standards</b>	<b>Assignment</b>	<b>Description</b>
<ul style="list-style-type: none"> <li>• A-SSE.1b, F-BF.4, F-IF.8b, F-LE.2, F-LE.4</li> <li>• A-SSE.1b, F-LE.4</li> <li>• F-BF.3, F-BF.4, F-IF.6, F-IF.7e, F-LE.2, F-LE.4, F-LE.5</li> <li>• A-CED.1, F-IF.8b, F-LE.4</li> <li>• A-CED.1, F-IF.8b, F-LE.4</li> <li>• F-BF.1b, F-IF.7e, F-LE.4</li> <li>• A-CED.1, A-SSE.3c, F-IF.8b, F-LE.4</li> </ul>	8.1	Quiz: Exponential Equations and Logarithmic Form
	8.2	Quiz: Properties of Logarithms
	8.3	Assignment: Graph the Exponential and Logarithmic Function
	8.3	Assignment: What is the Formula?
	8.4	Quiz: Compound Interest with the Number e
	8.5	Quiz: Natural Logarithms
	8.6	Quiz: Solving Exponential and Logarithmic Equations
	8.7	Quiz: Applications of Exponential and Logarithmic Functions
	8.7	Discussion: Population Statistics
	Wrap-Up	Unit 8 Discussion Based Assessment Unit 8 Test
	Mid-Term	Mid-Term Project
<b>Unit 9 Big Idea</b>	<b>Sequences and Series</b>	
<b>Essential Question</b>	How can we describe, predict, and work with sequences of numbers that come in discrete intervals?	
<b>Standards</b>	<b>Assignment</b>	<b>Description</b>
<ul style="list-style-type: none"> <li>• F-IF 3,</li> <li>• F-IF 5</li> <li>• F-BF 2,</li> <li>• F-LE 2,</li> <li>• A-SSE.3c,</li> <li>• F-BF.1b</li> <li>• A-SSE.4</li> <li>• F-BF 1</li> <li>• F-BF 2,</li> <li>• F-IF3</li> </ul>	9.1	Quiz: Sequences
	9.2	Quiz: Arithmetic Sequences
	9.3	Quiz: Geometric Sequences
	9.3	Discussion: Real Life Sequences
	9.4	Quiz: Series and Sigma Notation
	9.5	Quiz: Arithmetic Series
	9.6	Quiz: Geometric Series
	9.7	Quiz: Infinite Geometric Series
	Wrap Up	Unit 9 Discussion Based Assessment Unit 9 Test Unit 9 Written Test

<b>Unit 10 Big Idea</b>	<b>Trigonometric Functions</b>		
<b>Essential Question</b>	How can we mathematically model phenomena that repeat cyclically?		
<b>Standards</b>			
<ul style="list-style-type: none"> <li>• F-TF.1 ,</li> <li>• F-TF.2</li> <li>• S-IC.5, S-IC.6,</li> <li>• S-ID.6a</li> <li>• F-TF.8</li> <li>• A-REI.11,</li> <li>• F-IF.4,</li> <li>• F-BF.3,</li> <li>• F-IF.6,</li> <li>• F-IF.7e,</li> <li>• F-IF.9,</li> <li>• F-TF.5, F-LE.4</li> </ul>	10.1	Quiz: Introduction to Unit Circles	
	10.2	Quiz: Unit Circle and Coordinate Plane	
	10.3	Quiz: Pythagorean Identity and Special Angles	
	10.4	Assignment: Modeling and Sketching Periodic Functions	
	10.4	Discussion: Real-Life Periodic Processes	
	10.5	Quiz: Solving Trigonometric Equations	
	Wrap-Up	Unit 10 Discussion Based Assessment Unit 10 Test	
<b>Unit 11 Big Idea</b>	<b>Probability and Statistics</b>		
<b>Essential Question</b>	How can we use probability and statistics to describe and make predictions about the world?		
<b>Standards</b>			
<ul style="list-style-type: none"> <li>• S-CP.1, S-CP.4,</li> <li>• S-MD.6</li> <li>• S-CP.2</li> <li>• S-CP.3, S-CP.5,</li> <li>• S-CP.6 , S-MD.6</li> <li>• S-ID.4</li> <li>• A-CED.4, S-MD.7</li> <li>• S-IC.2</li> <li>• S-IC.6, S-IC.1, S-IC.3,</li> <li>• S-IC.4, S-IC.5,</li> <li>• S-MD.7</li> </ul>	11.1	Quiz: Events, Outcomes, and Sample Space	
	11.2	Quiz: Compound Events and Independent Probabilities	
	11.3	Quiz: Conditional Probability	
	11.4	Quiz: Histograms and Probability Distributions	
	11.4	Assignment: Histograms	
	11.5	Quiz: Models of Population	
	11.6	Quiz: Surveys, Experiments and Simulations	
	Wrap-Up	Unit Project: Part 1. Proposal Unit Project: Part 2. Data Collection Unit Project Discussion: Part 3. Analysis and Presentation  Unit 11 Discussion Based Assessment Unit 11 Test	
		Final	Final Test

