

Course Title:	Algebra 2A	
CCSS for Mathematics: Traditional Pathway Algebra 2		
Unit 1	Functions and Polynomials	
Unit objectives	<div>1. Students will be able to interpret the relationship between the independent and dependent variable in the function equation and graph including the absolute value functions.</div> <div>2. Students will be able to explain the relationship between a function and its inverse.</div> <div>3. Students will be able to define the domain and the range of a function.</div> <div>4. Students will be able to transform or shift a graph by making changes to the parent function.</div>	
Standards	Assignment	Description
A-APR-1 A-CED.1 A–CED.4 A-CED.2 A-REI.1 F-BF.4a F-BF.1c F-BF.4d F-IF 1: F-IF 2: F-IF 4: F-IF.5: F-IF.6-	1.1 - 1.7 Lesson Quizzes	Quiz
	1.2 Domain and Range	Assignment
	1.3 Sketching Graphs	Assignment
	1.7 Sketching the Inverse Function	Assignment
	Unit 1 End of Unit Discussion - What is a Function?	Discussion
	Unit 1 Discussion-Based Assessment	Discussion Based Assignment
	Unit 1 Test	Test
Unit 2: Systems of Equations and Inequalities		
Unit Objectives	<div>1. Student will be able to find solutions to the system of equations by selecting the correct method and justifying their solutions.</div> <div>2. Student will be able to apply the system to solve real-world related problems.</div>	
Standards	Assignment	Description
A-CED.2 A-CED.3	2.1-2.7 Lesson Quizzes	Quiz

A-REI.6 A-REI.7 A-REI.D.11 F-IF.7.a	2.3 Graphing the System of Equations	Assignment
	2.6 Sketching the System of Inequalities	Assignment
	2.3 Systems of Equations Discussion	Discussion
	Unit 2 Discussion-Based Assessment	Discussion Based Assignment
	Unit 2 Test	Unit Test
Unit 3	Ancient Greek, Etruscan, & Roman Art	
Unit Objectives	<ol style="list-style-type: none"> 1. Students will be able to find solutions to a quadratic equation by factoring or using the quadratic formula. 2. Students will be able to relate quadratic equations to the features of the graphs. 3. Students will be able to relate quadratic equations to the situations described in real-world scenarios to solve for the unknowns. 	
Standards	Assignment	Description
A-CED.2 A-REI 4a A- REI 4b A-REI 10 A-SSE 2 A-SSE 3a F-IF.4 F-IF.5 F-IF 7C F-IF 8a F-IF.9 F-IF.6	3.1-3.5 Lesson Quizzes	Quiz
	3.2 Quadratic Equations and Graphs Discussion	Discussion
	Unit 3 Discussion-Based Assessment	Discussion Based Assignment
	Unit 3 Test	Unit Test
Unit 4	Conic Sections	
Unit Objectives	1.	
Standards	Assignment	Description
F-BF.3	4.1 - 4.4 Lesson Quizzes	Quiz

F-IF.4- G-GPE 1 G-GPE 2 G-GPE 3		
	Unit 4 Project - Conic Sections Demonstration and Discussion	Project
	Unit 4 End of Unit Discussion - Conic Sections and Foci	Discussion
	Unit 4 Discussion-Based Assessment	Discussion Based Assignment
	Unit 4 Test	Unit Test
Unit 5	Radicals and Complex Numbers	
Unit Objectives	<ol style="list-style-type: none"> 1. Student will be able to operate mathematically on the radical expressions to determine the domain and range, solve for x, and simplify it by using the imaginary number. 2. Student will be able to operate mathematically on the complex numbers to combine and subtract sets of complex numbers. 3. Student will be able to solve the complex polynomials by applying the concept of the complex number. 	
Standards	Assignment	Description
A.APR.1 A-REI.1 (Algebra 1) A-REI.2 A-REI 4b (Algebra 1) A-SSE.1a F-BF.1b F-IF 2 N-CN 1 N-CN.2 N-CN.7	5.1 - 5.5 Lesson Quizzes	Quiz
	5.4 The Powers of i Discussion	Discussion
	5.4 Graphing Complex Numbers	Assignment
	Unit 5 Discussion-Based Assessment	Discussion Based Assignment
	Unit 5 Test	Unit Test