COURSE: Advanced Algebra	SEMESTER: Fall 2015
TEACHER(S): Justin Johnson, Kristina Oldeen, & Matt Jones	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 1	Thursday, 8/6	Syllabus	First Day of School	Intro to class	
				Syllabus	
				Rules PowerPoint provided by BHS covering agenda pages	
	Friday, 8/7	Intro to Adv	Review of Analytic	Students will be given problems from the diagnostic test	
		Algebra	Geometry Concepts	located in the student assessment booklet in order to review	
				key concepts from Analytic Geometry	
				Focus should be on simplifying with I, quadratic equations,	
				factoring, and polynomials	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 2 SLO Pre-Tests This Week!	Monday, 8/10	SLO	Student Learning Objectives	 Begin class with algebraic warm up problems on solving equations SLO Pre-Test is given to students; should take them around 25-30 minutes to complete All tests, scantrons, & scratch paper is to be collected by each teacher to turn in 	
	Tuesday, 8/11	Complex Numbers Review	Simplifying Radicals & Using the imaginary number "i" to write complex numbers	 Warm up on basic simplification of radicals to gauge students' abilities Notes on simplifying basic radical expressions (square roots only) in both standard and fraction form Re-introduce complex numbers and the use of "i" to simplify radicals further Homework pg. 4 #1-33 odd & pg. 5 #1-33 odd from scanned Math II book pages 	MGSE9-12.N.CN.1
	Wednesday, 8/12	Complex Numbers Review	Operations With Complex Numbers	 Warm up of types of problems from previous lesson Review of Homework Notes on adding, subtracting, & multiplying complex numbers Powers of "i" – be sure to show how to break down only using i² and using rules of 4 Homework pg. 9 #6-27 mult of 3 & pg. 13 #6-26 even from Math II book pages 	MGSE9-12.N.CN.1 MGSE9-12.N.CN.2
	Thursday, 8/13	Complex Numbers Review	Dividing With Complex Numbers	 Warm up covering powers of "i" Review of Homework Notes on using conjugates to divide complex numbers Homework pg. 14 #4-38 even from Math II book pages 	MGSE9-12.N.CN.1 MGSE9-12.N.CN.2 MGSE9-12.N.CN.3
	Friday, 8/14	Complex Numbers Review	Assessment	Review any homework questions QUIZ – COMPLEX NUMBERS REVIEW	MGSE9-12.N.CN.1 MGSE9-12.N.CN.2 MGSE9-12.N.CN.

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 3	Monday, 8/17	3-1: Polynomials	Identify, evaluate, add, and subtract polynomials	Warm Up: warm up given in unit introduction Key Vocabulary: degree of monomial/polynomial, leading coefficient, polynomial function - Notes on identifying the degree of monomials and polynomials - Notes on classifying polynomials by degree, terms, and name - Adding/Subtracting polynomial examples Homework: pg. 80 #1-14, 19-30	MCC9-12.A.APR.1
	Tuesday, 8/18	3-2:Multiplying Polynomials	Multiply polynomials	Warm Up: Add/subtract polynomials - Notes/Examples of multiplying polynomials - Binomial x binomial, binomial x trinomial, & trinomial x trinomial Homework: pg. 88 #1-8, 10-13, 19-25 odd	MCC9-12.A.APR.1 MCC9-12.A.CED.1
	Wednesday, 8/19	3-1 &3-2: Polynomials	Identify, evaluate, add, subtract, and multiply polynomials	Warm Up: Multiply polynomials Group Activity to practice concepts from 3-1 and 3-2	MCC9-12.A.APR.1 MCC9-12.A.CED.1
	Thursday, 8/20	3-3: Binomial Distribution	Use binomial theorem to expand a binomial raised to a power	Warm Up: Evaluating expressions involving exponents Key Vocabulary: Binomial Theorem - Notes on Pascal's Triangle - Be sure to use higher powers to encourage Pascal's vs. writing out solution Homework: pg. 94-95 # 9-12, 17-20	MCC9- 12.A.APR.5(+)
	Friday, 8/21	Complex #s and 3.1-3.3 Review	Students will review complex numbers and concepts from 3.1-3.3	Students will work in groups to review complex numbers, binomial theorem, and adding, subtracting, and multiplying polynomials	MCC9-12.A.APR.1 MCC9-12.A.CED.1 MCC9- 12.A.APR.5(+)

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 4	Monday, 8/24	Complex #s and 3.1-3.3 Review	Students will review complex numbers and concepts from 3.1-3.3	Students will work in groups to review complex numbers, binomial theorem, and adding, subtracting, and multiplying polynomials	MCC9-12.A.APR.1 MCC9-12.A.CED.1 MCC9- 12.A.APR.5(+)
	Tuesday, 8/25	Complex #'s and 3.1-3.3 Test	Assessment	Complex #'s and 3.1-3.3 Test	MCC9-12.A.APR.1 MCC9-12.A.CED.1 MCC9- 12.A.APR.5(+)
	Wednesday, 8/26	3-4: Dividing Polynomials	Use long division to divide polynomials	Warm Up: Review of Multiplying polynomials - Notes/examples on using long division to divide polynomials - Classwork: pg. 102 #2-4, 13-18	MCC9-12.A.APR.6
	Thursday, 8/27	3-4: Dividing Polynomials	Use synthetic division to divide polynomials	Warm Up: Review of Long Division of Polynomials Key Vocabulary: Synthetic division - Notes/Examples on synthetic division - Examples of using synthetic substitution to solve polynomials for a given value Summary: Solve the same division problem using both long and synthetic division Homework: pg. 324 #5-11, 19-27 odd, 39-48 all	MCC.MP.8 MCC9-12.A.APR.2
	Friday, 8/28	3-4: Dividing Polynomials	Use long division and synthetic division to divide polynomials	Warm Up: Review of Synthetic Division of Polynomials Division Worksheet: Students will work together on a worksheet to practice both long division and synthetic division	MCC9-12.A.APR.6 MCC.MP.8 MCC9-12.A.APR.2

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 5	Monday, 8/31	Factoring Intro		Students will be given review items covering GCF, difference of squares, and basic factoring of trinomials in the form x²+bx+c.	
	Tuesday, 9/1	Factoring Intro		Students will move onto factoring multi-step expressions and problems involving grouping.	
	Wednesday, 9/2 Performance Essay English	Factoring Review		Students will work in groups to review all factoring methods learned so far.	
	Thursday, 9/3	Factoring Quiz		Students will take a quiz over factoring using GCF, difference of squares, basic trinomials, grouping, and multi-step.	
	Friday, 9/4 Early Release (1 st , 2 nd , 3 rd , 5 th)	Skill Building		Skill building activity to be determined based on quiz results and the perceived needs of students up to this point in the unit	
				This date will also be used to fill in any "gaps" in the curriculum calendar that may have been affected by time	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)			
Week 6	Monday, 9/7		LABOR DAY HOLIDAY					
	Tuesday, 9/8	3-5: Factoring Polynomials	Factor the sum and difference of two cubes. Factor trinomials.	Warm Up: Find problems most missed from factoring quiz and have students perform at least 2-3 as they walk in Key Vocabulary: polynomial, factor, grouping, perfect cubes - Notes on factoring trinomials with a>1 - Notes on factoring the sum or difference of two cubes Homework: pg. 109 #10-15, Worksheet on factoring trinomials with a>1	MCC9-12.A.SSE.2			
	Wednesday, 9/9	3-5: Factoring Polynomials	Factor binomials, trinomials, and the sum and difference of two cubes.	Warm Up: Review of factoring cubics Worksheet: Students will do a worksheet that involves a mix of factoring problems requiring students to know when and how to apply the different methods.	MCC9-12.A.SSE.2			
	Thursday, 9/10	3.4-3.5 Review	Students will review concepts from 3-4 and 3-5.	Test review-Group Activity	MCC9-12.A.APR.6 MCC.MP.8 MCC9-12.A.APR.2 MCC9-12.A.SSE.2			
	Friday, 9/11	3.4-3.5 Test	Assessment	3.4-3.5 Test	MCC9-12.A.APR.6 MCC.MP.8 MCC9-12.A.APR.2 MCC9-12.A.SSE.2			

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 7 Benchmark Week #1	Monday, 9/14	4-1: Finding Real Roots of Polynomial Equations	Find real roots of polynomial equations using factoring	Warm Up: Use warm up from teacher's edition - Notes on how to use factorization to solve polynomial equations - Discuss what the roots of equations represent when graphed Homework: 120 #2-7, 15-20	MCC9-12.A.APR.3 MCC9-12.A.CED.3
	Tuesday, 9/15	Benchmark Review	Benchmark Review Complex Numbers and Module 3	Group Activities to Review for Benchmark #1	
	Wednesday, 9/16 ENGLISH	Benchmark Review	Benchmark Review Complex Numbers and Module 3	Group Activities to Review for Benchmark #1	
	Thursday, 9/17 MATH	Benchmark		FALL BENCHMARK #1	
	Friday, 9/18 ELECTIVES	4-1: Finding Real Roots of Polynomial Equations	Find real roots of polynomial equations algebraically and using factoring and the quadratic formula.	Warm Up: Review solving polynomials by factoring Key Vocabulary: Quadratic Formula - Notes on how to solve polynomials algebraically - Notes on how to solve polynomials using the quadratic formula Homework: Worksheet on finding real roots of polynomial equations	MCC9-12.A.APR.3 MCC9-12.A.CED.3

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 8	Monday, 9/21	4-1: Finding Real	Identify the multiplicity	Warm Up: Solving polynomial equations with the quadratic	MCC9-12.A.APR.3
Benchmark	SCIENCE	Roots of	of roots	formula	MCC9-12.A.APR.2
Week #1		Polynomial	Use the rational root	Key Vocabulary: multiplicity	MCC9-12.A.CED.3
		Equations	theorem and irrational	- Discuss what the roots of equations represent when	
			root theorem to solve	graphed	
			polynomial equations	- Identify multiplicity of polynomials	
				- Definition of rational root theorem and use of	
				synthetic division/substitution to solve polynomials	
				Homework: 120 #8-9, 11-14, 21-22	
	Tuesday, 9/22	4-1: Finding Real	Identify the multiplicity	Warm Up: Use the rational root theorem and synthetic	MCC9-12.A.APR.3
	SOCIAL STUDIES	Roots of	of roots	division to solve polynomial equations	MCC9-12.A.APR.2
		Polynomial	Use the rational root	Review Homework	MCC9-12.A.CED.3
		Equations	theorem and irrational		
			root theorem to solve	Group Work: Students will work together on an activity to	
			polynomial equations	practice finding all real roots of a polynomial equation	
	Wednesday, 9/23	4-1 & 4-2: Finding	Identify all of the roots	Warm Up: Use warm-up from teachers' edition	MCC9-12.A.APR.3
		All Roots of	of a polynomial equation	Key Vocabulary: The Fundamental Theorem of Algebra	MCC9-12.A.APR.2
		Polynomial		 Discuss fundamental theorem of algebra and its 	MCC9-12.A.CED.3
		Equations		corollary	CC.9-12.N.CN.9
				 Notes on finding all roots of polynomial equations 	
				Homework: 127 #4-6, 14-19	
	Thursday, 9/24	4-1 & 4-2: Finding	Identify all of the roots	Warm Up: Finding all real solutions of a polynomial equation	MCC9-12.A.APR.3
		All Roots of	of a polynomial equation	Review Homework	MCC9-12.A.APR.2
		Polynomial			MCC9-12.A.CED.3
		Equations		Classwork: p. 127 #24-35	CC.9-12.N.CN.9
				Students will work on classwork with a partner. We will then	
				check answers together as a class	
	Friday, 9/25	4-1 & 4-2: Finding	Identify all of the roots	Warm Up: Finding all real solutions of a polynomial equation	MCC9-12.A.APR.3
		All Roots of	of a polynomial		MCC9-12.A.APR.2
		Polynomial	equation	Carousel Activity: Students will work with a partner to do a	MCC9-12.A.CED.3
		Equations		class activity that reviews all concepts from 4-1 and 4-2.	CC.9-12.N.CN.9

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 9	Monday, 9/28	4.1-4.2 Review	Students will review	Test Review-Group Activity	MCC9-12.A.APR.3
			concepts from 4-1 & 4-2		MCC9-12.A.APR.2
					MCC9-12.A.CED.3
					CC.9-12.N.CN.9
	Tuesday, 9/29	4.1-4.2 Test	Assessment	4.1-4.2 Test	MCC9-12.A.APR.3
					MCC9-12.A.APR.2
					MCC9-12.A.CED.3
					CC.9-12.N.CN.9
	Wednesday, 9/30	Performance		Math Performance Essay	
	Performance Essay	Essay		,	
	Math				
	Thursday, 10/1	4-2: Fundamental	Use the FTOA and its	Warm Up: Problem requiring students to recall the	MCC9-12.A.APR.3
		Theorem of	corollary to write a	fundamental theorem of algebra	MCC9-12.A.APR.2
		Algebra	polynomial equation of	 Notes on writing polynomial functions given zeros 	MCC9-12.A.CED.3
			least degree with given	Homework: pg. 127 #1-3, #11-13	MCC9-12.A.CED.1
			roots		MCC9-12.N.CN.9
	Friday, 10/2	4-2: Fundamental	Use the FTOA and its	Warm Up: Review of 4-2 Intro	MCC9-12.A.APR.3
		Theorem of	corollary to write a	 Discuss writing polynomial functions with complex 	MCC9-12.A.APR.2
		Algebra	polynomial equation of	zeros	MCC9-12.A.CED.3
			least degree with given	Homework: pg. 127 #20-22, 39-43 odd	MCC9-12.A.CED.1
			roots		MCC9-12.N.CN.9

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 10	Monday, 10/5	4-3: Investigating Graphs of Polynomial Functions	Use properties of end behavior to analyze, describe, and graph polynomial functions	Warm Up: Graph quadratics using transformations/factoring to find roots Key Vocabulary: end behavior, turning point, min/max, y-intercept, multiplicity - Notes/Examples of polynomial end behavior - Notes on min/ max, y-intercepts, and multiplicity Classwork: pg. 135 #2-9 Homework: pg. 135 #15-22, 32-35	MCC9-12.F.IF.4 MCC9-12.A.APR.3
	Tuesday, 10/6	4-3: Investigating Graphs of Polynomial Functions	Use properties of end behavior to analyze, describe, and graph polynomial functions	Warm Up: Fundamental Theorem of Algebra Problems - Examples on graphing polynomials using real zeros, x and y intercepts, x values from a table, end behavior Classwork/Homework: pg. 135 #10, 11, 23-26	MCC9-12.F.IF.4 MCC9-12.A.APR.3 MGSE9-12.F.IF.7 MGSE9-12.F.IF.7c
	Wednesday, 10/7 Performance Essay Social Studies	4-3: Investigating Graphs of Polynomial Functions	Use properties of end behavior to analyze, describe, and graph polynomial functions	Warm Up: Graphing polynomial functions Review Homework Key Vocabulary: Intervals of Increase/ Decrease - Examples on graphing polynomials using graphing calculators - Notes on finding interval of increase/ decrease Classwork/ Homework: Worksheet on graphing polynomial functions and identifying end behavior, min/ max, y-int, multiplicity, and intervals of increase and decrease	MCC9-12.F.IF.4 MCC9-12.A.APR.3 MGSE9-12.F.IF.7 MGSE9-12.F.IF.7c
	Thursday, 10/8	4.2-4.3 Quiz		Quiz 4.2-4.3	
	Friday, 10/9		FACULTY AND STAF	F PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 11	Monday, 10/12			FALL HOLIDAY!	
	Tuesday, 10/13	8-2: Inverses of	Graph and recognize	Warm Up: Warm Up from teacher's edition	MCC9-12.F.BF.4c
		Relations &	inverses of relations	Key Vocabulary: inverse relation, inverse function	MCC9-12.F.BF.4a
		Functions	and functions	 Notes on graphing inverse relations over the 	MCC9-12.A.CED.2
				line y=x	
				 Write inverses of functions using inverse 	
				operations	
				Homework: pg. 269 #2-13, 18,19	

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Wednesday, 10/14	8-2: Inverses of	Graph and recognize	Most classes will not meet today due to PSAT. Classes	MCC9-12.F.BF.4c
PSAT	Relations &	inverses of relations	that do meet will work on problems from p. 269	MCC9-12.F.BF.4a
ASVAB	Functions	and functions	involving finding/ graphing inverses.	MCC9-12.A.CED.2
College Fair				
Thursday, 10/15	8-2: Inverses of	Graph and recognize	Warm Up: Finding an inverse	MCC9-12.F.BF.4c
Early Release	Relations &	inverses of relations	 Notes on graphing functions and their 	MCC9-12.F.BF.4a
Professional	Functions	and functions	inverses	MCC9-12.A.CED.2
Learning			Homework: p. 269 # 14-16, 26-28	
(1 st , 2 nd , 3 rd , 5 th)				
Friday, 10/16	8-2: Inverses of	Graph and recognize	Warm Up: Finding an inverse	MCC9-12.F.BF.4c
Early Release	Relations &	inverses of relations	 Notes on graphing functions and their 	MCC9-12.F.BF.4a
Homecoming	Functions	and functions	inverses	MCC9-12.A.CED.2
(7 th , 6 th , 4 th , 5 th)			Homework: p. 269 # 14-16, 26-28	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 12	Monday, 10/19	8-2: Inverses of	Graph and recognize	Warm Up: Finding an inverse	MCC9-12.F.BF.4c
	,, ,	Relations &	inverses of relations and		MCC9-12.F.BF.4a
		Functions	functions	Students will complete problems assigned from the student workbook from section 8-2	MCC9-12.A.CED.2
	Tuesday, 10/20	4.2-4.3 & 8.2	Students will review	Test Review-Group Activity	MCC9-12.A.APR.3
	,, ,	Review	concepts from 4.2, 4.3,	,	MCC9-12.A.APR.2
			& 8.2		MCC9-12.A.CED.3
					MCC9-12.A.CED.1
					MCC9-12.N.CN.9
					MCC9-12.F.IF.4
					MGSE9-12.F.IF.7
					MGSE9-12.F.IF.7c
					MCC9-12.F.BF.4c
					MCC9-12.F.BF.4a
					MCC9-12.A.CED.2
	Wednesday, 10/21	4.2, 4.3, 8.2 Test	Assessment	Test (4.2, 4.3, 8.2)	MCC9-12.A.APR.3
					MCC9-12.A.APR.2
					MCC9-12.A.CED.3
					MCC9-12.A.CED.1
					MCC9-12.N.CN.9
					MCC9-12.F.IF.4
					MGSE9-12.F.IF.7
					MGSE9-12.F.IF.7c
					MCC9-12.F.BF.4c
					MCC9-12.F.BF.4a
					MCC9-12.A.CED.2
	Thursday, 10/22	6-1: Variation	Solve problems involving	Warm Up: Use warmup found on teacher PowerPoint CD	MCC.MP.1
		Functions	direct, inverse, joint, and	Key Vocabulary: constant of variation, direct, joint, inverse,	MCC9-12.A.CED.2
			combined variation	combined variation	MCC9-12.A.CED.3
				 Notes on writing and graphing direct variation 	MCC9-12.FLE.2
				- Inverse variation task as a class	
				 Notes on writing and graphing inverse variation 	
				Homework: pg. 183-185 (#5-8,17-19, 24-30)	

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Friday, 10/23	6-1: Variation	Solve problems involving	Warm Up: pg. 222 #1-2	MCC.MP.1
	Functions	direct, inverse, joint, and combined variation	Key Vocabulary: constant of variation, direct, joint, inverse, combined variation - Review homework - Notes on joint and combined variation - Mixed variation practice in collaborative groups - Summary: how do we identify the type of variation from a list of ordered pairs? Homework: pg. 184-185 (32-26, 40-41, 45-47)	MCC9-12.A.CED.3

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Week 13	Monday, 10/26	6-2: Multiplying & Dividing Rational Expressions	Simplify rational expressions Multiply and divide rational expressions	Warm Up: factoring review questions Key Vocabulary: rational expression Review homework Factoring trinomials race Notes on simplifying rational expressions (varied difficulty of factoring involved) Notes on multiplying rational expressions Summary: Discussion on how to divide fractions Homework: pg. 190-192 (18-27, 36, 37, 39)	MCC9-12.A.APR.6 MCC9-12.A.APR.7(+)
	Tuesday, 10/27	6-2: Multiplying & Dividing Rational Expressions	Simplify rational expressions Multiply and divide rational expressions	Warm Up: Use warmup on teacher PowerPoint CD Key Vocabulary: rational expression - Review homework - Students independently work on higher level dividing problems - Notes on solving simple rational equations - Summary: discussion on adding and subtracting basic fraction (stress common denominator) Homework: pg. 190-192 (28-35, 38, 40-42)	MCC9-12.A.APR.7(+) MCC9-12.A.REI.2
	Wednesday, 10/28 Performance Essay Science	6-2: Multiplying & Dividing Rational Expressions	Simplify rational expressions Multiply and divide rational expressions	Buffer Day to use to extend rational expression exercises. Based on student/class needs. Use student workbook to supplement	MCC9-12.A.APR.7(+) MCC9-12.A.REI.2
	Thursday, 10/29	6.1-6.2 Review	Students will review concepts from 6.1 and 6.2.	Test Review-Group Activity	MCC.MP.1 MCC9-12.A.CED.2 MCC9-12.A.CED.3 MCC9-12.FLE.2 MCC9-12.A.APR.6 MCC9-12.A.APR.7(+) MCC9-12.A.REI.2
	Friday, 10/30	6.1-6.2 Test	Assessment	6.1 & 6.2 Test	MCC.MP.1 MCC9-12.A.CED.2 MCC9-12.A.CED.3

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					MCC9-12.FLE.2 MCC9-12.A.APR.6
					MCC9-12.A.APR.7(+) MCC9-12.A.REI.2

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Week 14 Benchmark Week #2	Monday, 11/2	6-3: Adding & Subtracting Rational Expressions	Add and subtract rational expressions Simplify complex fractions	Warm Up: adding and subtracting fractions with unlike denominators Key Vocabulary: complex fraction Review homework Students are given a rational add/subtract problem with like denominators to assess knowledge Notes on finding least common multiple of polynomials Skill check on LCM Go through several examples of adding/subtracting with different denominators Homework: pg. 198-200 (17-27)	MCC9-12.A.APR.7+
	Tuesday, 11/3	6-3: Adding & Subtracting Rational Expressions	Add and subtract rational expressions Simplify complex fractions	Warm Up: pg. 198 #2-12 even Key Vocabulary: complex fraction - Review homework - Video on complex fractions - Complex fractions station activity - Summary: ticket out the door: one subtraction, one complex fraction problem Homework: pg. 198-200 (28-31, 39-41, 44)	MCC9-12.A.APR.7+
	Wednesday, 11/4 SCIENCE	6-3: Adding & Subtracting Rational Expressions	Add and subtract rational expressions Simplify complex fractions	Buffer Day to use to extend rational expression exercises. Based on student/class needs. Use student workbook to supplement	MCC9-12.A.APR.7+
	Thursday, 11/5 SOCIAL STUDIES	Benchmark Review		Review for Benchmark – Focus on Module 3 and complex numbers	
	Friday, 11/6 ELECTIVES	Benchmark Review		Review for Benchmark – Focus on Module 4	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 15 Benchmark	Monday, 11/9 ENGLISH	Benchmark Review		Review for Benchmark – Focus on 8.2 and 6.1-6.2	
Week #2	Tuesday, 11/10 MATH	Benchmark		BENCHMARK #2	
	Wednesday, 11/11	6-5: Solving Rational Equations & Inequalities	Solve rational equations and inequalities	Warm Up: Use warmup on teacher PowerPoint CD Key Vocabulary: rational equation, extraneous solution, rational inequality - Review homework - Notes on solving rational equations by multiplying the LCD (stress checking for extraneous solutions) - Partner work on real world applications (using ex. 3 and 4 in section, they complete the check it out problems) Homework: pg. 219-221 (19-28 evens, 38-43)	MCC9-12.A.REI.2 MCC9-12.A.CED.3 MCC9-12.A.CED.1
	Thursday, 11/12	6-5: Solving Rational Equations & Inequalities	Solve rational equations and inequalities	Warm Up: Describe how the solutions to an equation and inequality differ. Key Vocabulary: rational equation, extraneous solution, rational inequality - Review homework - Notes on solving rational inequalities algebraically-emphasize the difference between positive and negative LCD values - Independent practice on rational inequalities Homework: pg. 219-221 (33-36, 44-46, 60-61)	MCC9-12.A.REI.11 MCC9-12.A.REI.2
	Friday, 11/13	6-5: Solving Rational Equations & Inequalities	Solve rational equations and inequalities	Warm Up: Review solving inequalities Review Homework Classwork: Worksheet on solving rational equations and inequalities	MCC9-12.A.REI.2 MCC9-12.A.CED.3 MCC9-12.A.CED.1 MCC9-12.A.REI.11 MCC9-12.A.REI.2

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 16	Monday, 11/16	6-3 & 6-5 Review	Students will review concepts from 6-3 and 6-5.	Test Review-Group Activity	
	Tuesday, 11/17	6-3 & 6-5 Test	Assessment	6-3 & 6-5 Test	
	Wednesday, 11/18 Performance Essay Electives	14-1: Operations With Functions	Add, subtract, multiply and divide functions	Warm Up: Rational function/foil review - Notes on adding and subtracting functions - Notes on multiplying and dividing functions Classwork/Homework: pg. 438 #2-7 and 15-23	MCC9-12.F.BF.1b
	Thursday, 11/19	14-1: Operations With Functions	Write and evaluate composite functions	Warm Up: Use warm up on PowerPoint presentation CD Key Vocabulary: composition of functions - Notes on composition of functions - Evaluating and writing composite functions (use a variety of functions) Homework: pg. 438 #8-13, 24-32	MCC9-12.F.BC.1c(+)
	Friday, 11/20	14-1 Quiz		Quiz over 14-1	MCC9-12.F.BF.1b MCC9-12.F.BC.1c(+)
	THANKSGIVING BREAK! 11/23 → 11/27				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 17	Monday, 11/30	14-1: Operations With Functions	Add, subtract, multiply and divide functions	Warm Up: Adding and subtracting functions	MCC9-12.F.BF.1b MCC9-12.F.BC.1c(+)
			Write and evaluate composite functions	Classwork: Students will work on a worksheet to review concepts from 14.1 that we covered before the break. We will use problems most missed from the quiz.	
	Tuesday, 12/1	13-1: Transforming Polynomial Functions	Transform polynomial functions	 Warm Up: Review of transformations of functions Review of transformations from linear & quadratic functions previously learned Examples on translating polynomial functions Show how to reflect polynomial functions over the x and y axes Examples on how to compress and stretch polynomial functions Homework: pg. 407 #1-8 	MCC9-12.F.BF.3 MCC9-12.F.BF.1
	Wednesday, 12/2	13-1: Transforming Polynomial Functions	Transform polynomial functions	Warm Up: Warm up from teacher's edition Review Homework - Examples on combining transformations of functions Classwork/ Homework: p. 407 #9-12, Worksheet on transformations	MCC9-12.F.BF.3 MCC9-12.F.BF.1
	Thursday, 12/3	13-3: Transforming Functions	Transform functions Recognize transformations of functions	Warm Up: Use warm up on PowerPoint CD for section 13-3 - Notes on identifying the intercepts of multiple functions Homework: pg. 426 #5-6, 17-18	MCC9-12.F.BF.3
	Friday, 12/4	13-3: Transforming Functions	Transform functions	Warm Up: Finding intercepts of transformed functions Classwork/ Homework: p. 426 #3-4, 11-16, Worksheet on finding x and y intercepts and transforming functions	MCC9-12.F.BF.3

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			Recognize transformations of functions		

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 18	Monday, 12/7	13.1 & 13.3 Review	Students will review concepts from 13.1 and 13.3.	Students will work in groups to review transformations of functions and finding x and y intercepts.	MCC9-12.F.BF.3 MCC9-12.F.BF.1
	Tuesday, 12/8	14.1, 13.1, 13.3 Review	Students will review concepts from 14.1, 13.1, and 13.3.	Test Review- Group Activity	MCC9-12.F.BF.1b MCC9-12.F.BC.1c(+) MCC9-12.F.BF.3 MCC9-12.F.BF.1
	Wednesday, 12/9	14.1, 13.1, 13.3 Test	Assessment	14.1, 13.1, 13.3 Test	MCC9-12.F.BF.1b MCC9-12.F.BC.1c(+) MCC9-12.F.BF.3 MCC9-12.F.BF.1
	Thursday, 12/10	Exam Review		Exam Review – TBD	
	Friday, 12/11	Exam Review		Exam Review – TBD	

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 19	Monday, 12/14	Exam Review		Exam Review – TBD	
Benchmark	Tuesday, 12/15	Semester Exams (Benchmark #3) – 7 th Period			
Week #3	Wednesday, 12/16	Semester Exams (Benchmark #3) – 1 st & 2 nd Periods			
	Thursday, 12/17	Semester Exams (Benchmark #3) – 3 rd & 4 th Periods			
	Friday, 12/18		Semest	er Exams (Benchmark #3) – 5 th & 6 th Periods	

End 1st Semester

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 1	Monday, 1/4		FACULTY AND STA	FF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY	
	Tuesday, 1/5				
	Wednesday, 1/6				
	Thursday, 1/7				
	Friday, 1/8				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 2	Monday, 1/11				
	Tuesday, 1/12				
	Wednesday, 1/13				
	Thursday, 1/14				
	Friday, 1/15				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 3	Monday, 1/18			MLK HOLIDAY	
	Tuesday, 1/19				
	Wednesday, 1/20				
	Thursday, 1/21				
	Friday, 1/22				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 4	Monday, 1/25				
	Tuesday, 1/26				
	Wednesday, 1/27				
	Performance Essay				
	English				
	Thursday, 1/28				
	Friday, 1/29				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 5	Monday, 2/1				
	Tuesday, 2/2				
	Wednesday, 2/3				
	Thursday, 2/4				
	Friday, 2/5				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 6	Monday, 2/8				
Benchmark	ENGLISH				
Week #1	Tuesday, 2/9				
	MATH				
	Wednesday, 2/10				
	ELECTIVES				
	Thursday, 2/11				
	SCIENCE				
	Friday, 2/12				
	SOCIAL STUDIES				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)	
Week 7	Monday, 2/15					
	Tuesday, 2/16		Winter Holiday			
	Wednesday, 2/17					
	Thursday, 2/18		FACULTY AND STAFF PROFFSSIONAL LEADNING DAY / STUDENT HOUR AV			
	Friday, 2/19		FACULTY AND STAFF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY			

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 8	Monday, 2/22				
	Tuesday, 2/23				
	Wednesday, 2/24				
	Performance Essay				
	Math				
	Thursday, 2/25				
	Friday, 2/26				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 9	Monday, 2/29				
	Tuesday, 3/1				
	Wednesday, 3/2				
	Performance Essay				
	Social Studies				
	Thursday, 3/3				
	Friday, 3/4				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 10	Monday, 3/7				
	Tuesday, 3/8				
	Wednesday, 3/9				
	Thursday, 3/10				
	Friday, 3/11				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)		
Week 11	Monday, 3/14		FACULTY AND STAFF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY				
	Tuesday, 3/15						
	Wednesday, 3/16						
	Performance Essay						
	Science						
	Thursday, 3/17						
	Early Release						
	Professional						
	Learning						
	(1 st , 2 nd , 3 rd , 5 th)						
	Friday, 3/18						
	Early Release						
	Professional						
	Learning						
	(7 th , 6 th , 4 th , 5 th)						

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 12	Monday, 3/21				
	Tuesday, 3/22				
	Wednesday, 3/23				
	Thursday, 3/24				
	Friday, 3/25				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 13	Monday, 3/28				
	Tuesday, 3/29				
	Wednesday, 3/30				
	Performance				
	Essay				
	Electives				
	Thursday, 3/31				
	SPRING BREAK!				
	Friday, 4/1 → Friday, 4/8				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 14	Monday, 4/11				
Benchmark	Tuesday, 4/12				
Week #2	Wednesday, 4/13				
	SCIENCE				
	Thursday, 4/14				
	SOCIAL STUDIES				
	Friday, 4/15				
	ELECTIVES				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 15	Monday, 4/18				
Benchmark	ENGLISH				
Week #2	Tuesday, 4/19				
	MATH				
	Wednesday, 4/20				
	Thursday, 4/21				
	Friday, 4/22				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 16	Monday, 4/25				
	Tuesday, 4/26				
	Wednesday, 4/27				
	Thursday, 4/28				
	Friday, 4/29				

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 17	Monday, 5/2				
	Tuesday, 5/3				
	Wednesday, 5/4				
	Thursday, 5/5				
	Friday, 5/6				
AP Exams				Milestones	
Monday, 5/2 – AP Chem, AP Enviro Science, and AP Psych			า	To be determined.	
Tuesday, 5/3 – AP Spanish Language					
Wednesdays, 5/4 – AP English Literature					
Thursday, 5/5 – AP Calculus					
Friday, 5/6 –	AP US History, AP Stud	dio Art			

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 18	Monday, 5/9				
	Tuesday, 5/10				
	Wednesday, 5/11				
	Thursday, 5/12				
	Friday, 5/13				
AP Exams				Milestones	
Monday, May 9 – AP Biology and AP Music Theory				To be determined.	
Tuesday, May 10 – AP Government					
Wednesday, May 11– AP English Language and AP Macroeconomics					
Thursday, May 12 – AP World History and AP Statistics					
Friday, May	13 – AP Human Geogra	phy			

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WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 19	Monday, 5/16				
	Tuesday, 5/17				
	Wednesday, 5/18				
	Thursday, 5/19				
	Friday, 5/20				

COURSE: Advanced Algebra SEMESTER: Fall 2015

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)		
Week 20	Monday, 5/23		Senior Exams (Benchmark #3 – 5 th , 6 th , & 7 th)				
Benchmark	Tuesday, 5/24		Senior Exams (Benchmark #3 – 1 st , 2 nd , 3 rd , & 4 th) / Semester Exams (Benchmark #3 – 7 th)				
Week #3	Wednesday, 5/25		Semester Exams (Benchmark #3 – 1 st & 2 nd)				
	Thursday, 5/26		Semester Exams (Benchmark #3 – 3 rd & 4 th)				
	Friday, 5/27		Sen	nester Exams (Benchmark #3 – 5 th & 6 th)			