Richmond Public Schools Pacing Chart Outline
Math Analysis

Marking Period and Estimated Classes	2017 SOL #	Objective	Timeline	Prerequisite/Connections (Review before each unit)
MP 1 (19 – Even 20 – Odd)	MA. 1	Unit 1: Function Types and Characteristics A. Function Families – Equations and Graphs B. Properties of Functions – Zeros, Upper/Lower Bounds, Y-intercepts, Symmetry, Asymptotes, Increasing/Decreasing Intervals, Maxima/Minima C. Properties and Graphs of Polynomial, Rational, Piecewise, and Step Functions (2016)	7 Blocks	Linear Equations Quadratic Equations Domain and Range Asymptotes Zeros Intercepts (Alg1/Alg2)
	MA. 5 (MA. 13 – 2016)	Unit 2: Sums of Finite and Infinite Convergent Series A. Sigma Notation and Formula B. Intuitive Limit C. Determine Sum of Finite and Infinite Convergent Series (2016)	5 Blocks	Patterns Algebraic/Geometric Sequences (Alg 2)
	MA. 2 (MA. 3 - 2016)	Unit 3: Composition of Functions and Inverses A. Apply Composition of Function to Real World Application B. Composition and Inverse of Functions Algebraically and Graphically C. Determine Domain/Range Algebraically and Graphically	5 Blocks	Simplifying Expressions Composition of Functions Inverse Functions (Alg 1/Alg 2)
	MA. 6 (MA. 14-2016)	Unit 4: Mathematical Induction A. Prove Formulas and Mathematical Statements Using Induction	4 Blocks	Justifying Steps Persuasion – (English)
	*Review, Reteach, and Cumulative Assessment			

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Quarter	2017 SOL #	Objective	Timeline	Prerequisite (Review before each unit)
MP 2 (25 – Even 23 – Odd)	MA. 9 MA. 2 (2016)	Unit 6: Exponential and Logarithmic Modeling A. Exponential and Logarithmic as Inverses B. Converting Equations C. Laws of Exponents D. Modeling Practical Problems	6 Blocks	Laws of Exponents (Alg 1/Alg 2)
	MA. 3 MA. 5 (2016)	Unit 7: Limits of Functions A. As x approaches a finite number B. As x approaches infinity C. Intuitive Reasoning, Algebraic Methods, Numerical Substitution, Graphing	5 Blocks	Substitution Convergent Series Continuity
	MA. 7 MA. 4 (2016)	Unit 8: Continuity of Functions A. Describe Continuity of functions using Graphs and Algebraic Methods	5 Blocks	Graph Characteristics Piecewise/Step Functions
	MA. 14 MA. 11 (2016)	Unit 9: Matrices A. Add, Subtract, Multiply Matrices B. Multiply Matrices by a Scalar C. Use Matrices to Solve Systems of Equations	5 Blocks	Solutions to Systems of Equations (Alg 1/Alg 2)
	*Review, Reteach, and Cumulative Assessment			

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Quarter	2017 SOL #	Objective	Timeline	Prerequisite (Review before each unit)
MP 3 (24 – Even 23 – Odd)	MA. 10 (MA. 9 – 2016)	Unit 9: Polar Equations A. Graph Characteristics B. Classification of Polar Equations C. Effects of Changes in the Parameters in Polar Equations D. Conversion of Complex Numbers from Rectangular to Polar Form and Vice Versa E. Intersection of the Graphs of Polar Equations	7 Blocks	Complex Numbers (Text - 2.4) (Alg 2/Geometry)
	MA. 11 (MA. 7 – 2016)	Unit 10: Trigonometry a. Identify, Create, and Solve Real-World Problems involving Triangles b. Using Trigonometric Functions c. Pythagorean Theorem d. Law of Sines e. Law of Cosines	8 Blocks	Trigonometric Functions SOHCAHTOA (Geometry)
	MA. 13 (MA. 8 – 2016)	Unit 11: Vectors A. Operations with Vectors (+, - , Scalar Mult, Dot Product) B. Norm of a Vector C. Unit Vector D. Graphing E. Properties F. Simple Proofs G. Complex Numbers (as Vectors) H. Perpendicular Components	6 Blocks	(Physics)
	*Review, Reteach, and Cumulative Assessment			

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Math Analysis

Quarter	2017 SOL #	Objective	Timeline	Prerequisite (Review before each unit)
MP 4 (18 – Even 19 – Odd)	MA. 12 (MA. 10 – 2016)	Unit 12: Parametric Equations A. Model and Solve Application Problems	7 Blocks	Modeling functions (Alg 2)
	MA. 8 (MA. 6 – 2016)	Unit 13: Conic Sections A. Characteristics of Equations in (h, k) and standard forms	7 Blocks	Quadratic Equations (Alg1/2) Circles (Geometry)
	MA. 4 (MA. 12 – 2016)	Unit 14: Binomial Expansion A. Binomial Theorem B. Combinations Formula C. Pascal's Triangle	6 Blocks	Combinations/Permutations (Alg 2)
	End of Year Project – Binomial Expansion			