MCS Enhanced Advanced Algebra & AP Precalculus Subject Group Overview

Unit Name	Unit 1: AA Unit 1: Investigating Descriptive & Inferential Statistics (DOE Unit 1) AP PC Unit 1: Modeling Polynomial and Piecewise Functions(DOE Units 3 and 4)	Unit 2: Modeling Rational Functions (DOE Unit 4)	Unit 3: Modeling with Radical, Exponential, and Logarithmic Functions and Series (DOE Unit 2 and 8)	Unit 4: Modeling Trigonometry, the Unit Circle, and Polar Functions (DOE Units 5 and 6)	Unit 5: Functions Involving Parameters, Conics, Vectors, and Matrices (DOE Units 3, 6, and 7)	AP Exam Review
Time Frame	6 - 7 weeks	3 - 4 weeks	8 - 9 weeks	7 - 8 weeks	1 - 2 weeks	5-6 Weeks
Standards	AA.DSR.2 AP 1.1 - 1.6 AA.FGR.5 PC.FGR.2.1 - 2.4 PC.MP.1-8 PC.MM.1	AP 1.7 - 1.14 AA.FGR.8 PC.FGR.2.5 - 2.9 PC.MP.1-8 PC.MM.1	AP 2.1 - 2.15 AA.FGR.3 AA.FGR.4 PC.PAR.7 PC.MP.1-8 PC.MM.1	AP 3.1 - 3.15 AA.GSR.7 PC.FGR.3 PC.AGR.4 PC.GSR.5.3 - 5.5 PC.MP.1-8 PC.MM.1	AP 4.1 - 4.14 AA.PAR.6 PC.AGR.6 PC.GSR.5.1 - 5.2 PC.MP.1-8 PC.MM.1	AP 1.1 - 1.14 AP 2.1 - 2.15 AP 3.1 - 3.15
Content Specific Information	-Surveys and Studies -Population and Sample Distributions -The Normal Curve -Empirical Rule -Margin of Error and confidence intervals -Sampling Methods -Centers and Spread -Conceptual understanding of standard deviation **-Changes in Tandem** **-Rates of Change** **-Rates of Change in Linear and Quadratic Functions** **-Polynomial Functions and Rates of Change** **-Polynomial Functions and Complex Zeros** **-Polynomial Functions and End Behavior** **-Piecewise Functions and Rates of Change** **-Complex Numbers and Complex Conjugate** **-Modeling with Quadratics in Context**	**-Rational Functions and End Behavior** **-Rational Functions and Zeros** **-Rational Functions and Vertical Asymptotes** **-Rational Functions and Holes** **-Equivalent Representations of Polynomial and Rational Expressions** **-Transformations of Functions** **-Function Model Selection and Assumption Articulation** **-Function Model Construction and Application**	-**Change in Arithmetic and Geometric Sequences** **-Change in Linear and Exponential Functions** **-Exponential Functions** **-Exponential Function Manipulation** **-Exponential Function Context and Data Modeling** **-Completing Function Model Validation** **-Composition of Functions** **-Inverse Functions** **-Logarithmic Expressions** **-Inverses of Exponential Functions** **-Logarithmic Functions** **-Logarithmic Function Manipulation** **-Exponential and Logarithmic Equations and Inequalities** **-Logarithmic Function Context and Data Modeling** **-Semi-log Plots** -Create, interpret, and solve radical equations	**-Periodic Phenomena** **-Sine, Cosine, and Tangent** **-Sine and Cosine Function Values** **-Sine and Cosine Function Graphs** **-Sinusoidal Functions** **-Sinusoidal Function Transformations** **-Sinusoidal Function Context and Data Modeling** **-The Tangent Function** **-Inverse Trigonometric Functions** **-Trigonometric Equations and Inequalities** **-The Secant, Cosecant, and Cotangent Functions** **-Equivalent Representations of Trigonometric Functions** **-Trigonometry and Polar Coordinates** **-Polar Function Graphs** **-Rates of Change in Polar Functions**	-Parametric Functions -Parametric Functions Modeling Planar Motion -Parametric Functions and Rates of Change -Parametrically Defined Circles and Lines -Implicitly Defined Functions -Conic Sections -Parametrization of Implicitly Defined Functions -Vectors -Vector-Valued Functions -Matrices -The Inverse and Determinant of a Matrix -Linear Transformations and Matrices -Matrices as Functions -Matrices Modeling Contexts	All AP Topics **(in bold to the left)**
Common Assessments/ Performance Projects	Unit Quest - Factoring Unit Test - Statistics Unit Quiz - Polynomials Unit Test - Polynomials	Unit Test A - Rational Operations Unit Test B - Rationals	Unit Quiz Unit Test A - Exponentials Unit Quest - Radicals Unit Test B - Cumulative	Unit Test A & Unit Test B	Unit Test	Multiple Choice Practice FRQ Practice AP Released Questions
Differentiation For Tiered Learners	Marietta City Schools teachers provide specific differentiation of learning experiences for all students. Details for differentiation for learning experiences are included on the district unit planners.					

Published: 8,2025 Resources, materials, assessments not linked to SGO or unit planner will be reviewed at the local school level.