MCS AP Precalculus Subject Group Overview

Unit Name	Unit 1- Polynomial and Rational Functions	Unit 2- Exponential and Logarithmic Functions	Unit 3- Trigonometric and Polar Functions	Unit 4- Functions involving Parameters, Vectors, and Matrices & AP Review
Time Frame	8 weeks	8 weeks	12 weeks	3-4 weeks
Standards	1.1 - 1.14	2.1 - 2.15	3.1 - 3.15	4.8
Content Specific Information	1.1 Changes in Tandem 1.2 Rates of Change 1.3 Rates of Change in Linear and Quadratic Functions 1.4 Polynomial Functions and Rates of Change 1.5 Polynomial Functions and Complex Zeros 1.6 Polynomial Functions and End Behavior 1.7 Rational Functions and End Behavior 1.8 Rational Functions and Zeros 1.9 Rational Functions and Vertical Asymptotes 1.10 Rational Functions and Holes 1.11 Equivalent Representations of Polynomial and Rational Expressions 1.12 Transformations of Functions 1.13 Function Model Selection and Assumption Articulation 1.14 Function Model Construction and Application	2.1 Change in Arithmetic and Geometric Sequences 2.2 Change in Linear and Exponential Functions 2.3 Exponential Functions 2.4 Exponential Function Manipulation 2.5 Exponential Function Context and Data Modeling 2.6 Completing Function Model Validation 2.7 Composition of Functions 2.8 Inverse Functions 2.9 Logarithmic Expressions 2.10 Inverses of Exponential Functions 2.11 Logarithmic Functions 2.12 Logarithmic Function Manipulation 2.13 Exponential and Logarithmic Equations and Inequalities 2.14 Logarithmic Function Context and Data Modeling 2.15 Semi-log Plots	3.1 Periodic Phenomena 3.2 Sine, Cosine, and Tangent 3.3 Sine and Cosine Function Values 3.4 Sine and Cosine Function Graphs 3.5 Sinusoidal Functions 3.6 Sinusoidal Function Transformations 3.7 Sinusoidal Function Context and Data Modeling 3.8 The Tangent Function 3.9 Inverse Trigonometric Functions 3.10 Trigonometric Equations and Inequalities 3.11 The Secant, Cosecant, and Cotangent Functions 3.12 Equivalent Representations of Trigonometric Functions 3.13 Trigonometry and Polar Coordinates 3.14 Polar Function Graphs 3.15 Rates of Change in Polar Functions	4.8.A: Identify Characteristics of a vector. 4.8.B: Determine Sums and Products Involving vectors. 4.8.C: Determine a unit vector for a given vector. 4.8.D: Determine angle measures between vectors and magnitudes of vectors involved in vector addition. AP Exam Review - Review Topics Units 1 - 3
Common Assessment / Performance Projects	Common Quiz Common Unit 1 A Assessment (1.1 - 1.6) Common Unit 1 B Assessment (1.7- 1.14)	Common Quiz Common Unit 2 A Assessment (2.1 - 2.8) Common Unit 2 B Assessment (2.9 - 2.15)	Common Quiz Common Unit 3 A Assessment (3.1 - 3.3) Common Unit 3 B Assessment (3.4- 3.8) Common Unit 3 C Assessment (3.9 - 3.11) Common Unit 3 D Assessment (3.12 - 3. 15)	Common Unit 4 Assessment (4.8)
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.			