

Pre-Calculus Subject Group Overview - Semester 1

Unit Name	Intro to Trigonometric Functions	Trigonometric Functions	Trigonometric Identities (DOE Unit 4)	Trigonometry Of General Triangles (DOE Unit 3)
Time Frame	4-5 weeks	4-5 weeks	4-5 weeks	3 weeks
Standards/ IB Topics	MGSE9-12.F.TF.1 MGSE9-12.F.TF.2 MGSE9-12.F.TF.8 *The following DOE Unit 1 standards are taught in Unit 2. MGSE9-12.F.IF.4, 7, 7e MGSE9-12.F.TF.5	MGSE9-12.F.BF.4, 4d MGSE9-12.F.TF.2 MGSE9-12.F.TF.3 MGSE9-12.F.TF.4 MGSE9-12.F.TF.5 * MGSE9-12.F.TF.6 MGSE9-12.F.TF.7 MGSE9-12.F.IF.4 * MGSE9-12.F.IF.7, 7e*	MGSE9-12.F.TF.9	MGSE9-12.G.SRT.9 MGSE.9-12.G.SRT.10 MGSE9-12.G.SRT.11
Content Specific Information	Measuring Angles in Standard Position What is a 'radian' Unit Circle Finding Measures of Angles on the Unit Circle	Parent Trig Graphs – Sine and Cosine Amplitude, Period, Midline Transformations of Trig Functions Parent Trig Graphs – Tangent and Cotangent Parent Trig Graphs – Secant and Cosecant Modeling Using Sinusoidal Functions Inverse Trig Functions	Basic Trig Identities – Reciprocal and Quotient Pythagorean Identities Simplifying Identities – Factoring, Multiplying, Rational Expressions Sum & Difference Identities Double Angle Identities Solving Basic Trig Equations Solving Trig Equations involving Identities	Area of a Triangle Law of Cosines Law of Sines Law of Sines Ambiguous Case
Common Assessments / Major Projects	Common Unit Quiz Common Unit Test	Common Unit Quiz Common Unit Test	Common Unit Quiz Common Unit Test	Common Unit Quiz Culminating Task (DOE) Common Unit Test
Resources	DOE Frameworks Pearson enVision	DOE Frameworks Pearson enVision	DOE Frameworks Pearson enVision	DOE Frameworks Pearson enVision

Pre-Calculus Subject Group Overview - Semester 2

Unit Name	Matrices	Conics	Vectors	Probability
Time Frame	3 Weeks	5 Weeks	4 Weeks	4 Weeks
Standards/ IB Topics	MGSE9-12.N.VM.6 MGSE9-12.N.VM.7 MGSE9-12.N.VM.8 MGSE9-12.N.VM.9 MGSE9-12.N.VM.10 MGSE9-12.N.VM.12 MGSE9-12.A.REI.8 MGSE9-12.A.REI.9	MGSE9-12.G.GPE.2 MGSE9-12.G.GPE.3 MGSE9-12.A.REI.7	MGSE9-12.N.CN.3 MGSE9-12.N.CN.4 MGSE9-12.N.CN.5 MGSE9-12.N.CN.6 MGSE9-12.N.VM.1 MGSE9-12.N.VM.2 MGSE9-12.N.VM.3 MGSE9-12.N.VM.4, 4a, 4b, 4c MGSE9-12.N.VM.5, 5a, 5b MGSE9-12.N.VM.11	MGSE9-12.S.CP.8 MGSE9-12.S.CP.9 MGSE9-12.S.MD.1 MGSE9-12.S.MD.2 MGSE9-12.S.MD.3 MGSE9-12.S.MD.4 MGSE9-12.S.MD.5, 5a, 5b MGSE9-12.S.MD.6 MGSE9-12.S.MD.7
Content Specific Information	Basic Operations with Matrices Multiplying Matrices Determinants and Inverse Matrices Solving Matrix Equations	Circles Parabolas Ellipses Hyperbolas Quadratic Systems	What is a Vector? Vector Operations & Form Applications of Vectors Complex Numbers and Polar Form	Permutations & Combinations Binomial Probability Expected Value Tree Diagrams/Conditional Probability Medical Testing Lottery Task
Common Assessments / Major Projects	Common Unit Quiz Common Unit Test	Common Unit Quiz Common Unit Test	Common Unit Quiz Common Unit Test	Common Unit Quiz Common Unit Test
Resources	DOE Framework Pearson enVision	DOE Frameworks Pearson enVision	DOE Frameworks	DOE Frameworks Pearson enVision
Course Levels	Marietta City Schools offers Enhanced, Honors, Accelerated, and AP classes to provide differentiated learning experiences for students.			