

FAYETTE COUNTY PUBLIC SCHOOLS
Pre-Calculus 2023-2024 Pacing Guide

August 2023					Standards	Topic	Assessments/Notes	Essential Questions & Additional Resources
		16	17	18	A.17 A.18	Prerequisites <ul style="list-style-type: none"> Solving Equations Interval Notation Solving Inequalities 		What skills do I need to be successful in Pre-Calculus? 180 Days of Pre-Calculus
21	22	23	24	X				
September					F.4 F.6 F.9	Functions and their Graphs <ul style="list-style-type: none"> Graphs and Their Properties Transformations Function Notation and Operations Inverse Functions Variation 		How do we graph functions and their inverses, and why are they important? Inverse Tattoos www.desmos.com/calculator
28	29	30	31	1				
X	5	6	7	8				
11	12	13	14	15	N.7 N.10 N.11 A.6 A.8 F.4 G.19 G.20	Polynomial Functions <ul style="list-style-type: none"> Quadratic, Complex Review Polynomials and their Properties Long/Synthetic Division, Zeros Right and Oblique Triangles Start Trig <ul style="list-style-type: none"> Law of Sines, Cosines, Area 		How can we use graph attributes to describe more complex relations? Conceptual Understanding: FAL: Representing Polynomials Graphically
18	19	20	21	22				
25	26	27	28	29				
October								
X	X	X	X	X				
9	10	11	12	13	F.4 F.9 F.10	Exponential and Logarithmic Functions <ul style="list-style-type: none"> Graphs and their Properties Evaluating (include base e) Transformations Properties Solving Equations Applications 	Optional: Can also do this unit "after" vectors in 2 nd semester.	How are exponential and log functions related, and how can we use them to describe growth and decay? Exponential Function Card Sort Mystery Function Puzzling with Properties
16	17	18	19	20				
23	24	25	26	27				
November								
30	31	1	2	3	F.4 F.6 F.9 F.15 F.16 F.17 F.18	Trigonometry <ul style="list-style-type: none"> Radian and Degree Measure Unit Circle Six Trig Functions Reference Angles Inverse Trig Functions Applications and Bearings 		How can we describe angles, and how can we use trig functions to solve problems? Conceptual Understanding: What is a Radian? And/Or Can you give me that in Twizzlers? FAL: Representing Trigonometric Functions
6	X	8	9	10				
13	14	15	16	17				
20	21	X	X	X				
December								
27	28	29	30	1				
4	5	6	7	8				
11	12	13	14	15	Review and Finals			

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January 2024					Standards	Topic	Assessments/Notes	Essential Questions & Additional Resources
X	2	3	4	5	F.19 F.20	Graphs and Translations then Analytic Trigonometry <ul style="list-style-type: none"> Verifying Trig Identities Solving Trig Equations Angle Formulas 		How can we use properties of trig functions to simplify expressions and solve equations? Solving Trigonometric Equations
8	9	10	11	12				
X	16	17	18	19				
22	23	24	25	26				
February					N.8 N.12 N.13 G.13 G.14	Additional Trig Topics <ul style="list-style-type: none"> Vectors and Dot Products Trig Form of Complex Numbers <p>If not taught in 1st Semester - Exponential and Logarithmic Functions</p>	-Graphs and their Properties -Evaluating (include base e) -Transformations -Properties -Solving Equations Applications	How can we solve oblique triangles and represent complex numbers in trig form? Derive Law of Sines Derive Law of Cosines Derive Area Formula with Sine Derive Herons Formula
29	30	31	1	2				
5	6	7	8	9				
12	13	14	15	16				
X	20	21	22	23				
March					A.10 A.11 F.4 C.2 C.4 C.5 C.6	Limits <ul style="list-style-type: none"> Evaluate Operations Infinity and Limits Rational Functions <ul style="list-style-type: none"> Properties Graphs Asymptotes with Limits Partial Fractions 		What are limits, and how do we use them to describe functions? Calc Medic Limits Unit Use days 1-4 and 14
26	27	28	29	1				
4	5	8	7	8				
11	12	13	14	X				
18	19	20	21	22				
April					N.8 F.4	Polar Coordinates and Equations <ul style="list-style-type: none"> Coordinates Point and Equation Conversions Graph Properties(zero, max, r-values, symmetry) Types of Graphs 		How can we use trig to graph and rewrite rectangular equations? Calc Medic Additional Trig Unit Use days 8 - 12
25	26	27	28	29				
8	9	10	11	12				
15	16	17	18	19				
22	23	24	25	26				
May								FAL: Representing Functions of Everyday Situations
29	30	1	2	3				
6	7	8	9	10				
13	X	15	16	17				
20	21	22	23	24				
						Review and Finals		