

Biloxi Public Schools – Algebra 3
Pacing Guide by Term
2021-2022

TERM 1—46 days 8/4-10/7				
Unit	Topic	ACT standards	Total Instructional Days	Notes
1	Functions Part 1 <ul style="list-style-type: none"> ● Real Number System and Interval Notation Review ● Identify Functions ● Evaluate Functions (include values, expressions) ● State the Domain and Range ● Intercepts ● Extrema ● Symmetry ● Parent functions ● Transformations 	N 604 N 702 AF 303 A 505 A 506 F 501 F 503 F 506 AF 604 AF 702 AF 706	3 Intro days 10 Days	New Teacher 7/28-7/30 No students: PD#1,2: 8/2, 8/3 PD#3: 10/8 Labor Day: 9/6 Fall Break: 10/8, 10/11
2	Functions Part 2 <ul style="list-style-type: none"> ● Find the average rate of change using $f(a)-f(b)/a-b$ formula ● Function operations (state new domain) ● Compositions of functions ● Find the inverse of a function ● Identify 1 to 1 functions 	F 601 F 602 F 604 AF 704 F 708	10 days	
3	Exponential <ul style="list-style-type: none"> ● Graphing Exponential Functions ● The Natural Exponential Function ● Solving Exponential Equations ● Exponential Growth and Decay Applications 	F 702 F 707	9 days	
4	Logarithmic Functions <ul style="list-style-type: none"> ● Logarithms (Evaluating & Change of Base) ● Graphing Logarithmic Functions ● Natural Logarithms ● Properties of Logarithms ● Expanding & Condensing Logarithms ● Solving Logarithmic Equations ● Logistic Growth Function 	F 702 F 707	12 days	
CTA: October 10/6, 10/7			2 days	

Biloxi Public Schools – Algebra 3
Pacing Guide by Term
2021-2022

TERM 2—44 days 10/12-12/17				
Unit	Topic	ACT standards	Total Instructional Days	Notes
1	Polynomial Functions <ul style="list-style-type: none"> ● Power functions with Positive Integers ● Polynomial Functions ● Zeros and Turning Points ● Possible versus Real Zeros and Multiplicity ● Long Division ● Synthetic Division ● Remainder Theorem ● Factor Theorem ● Fundamental Theorem of Algebra 	A 505 A 507 A 508 F 508 F 509 AF 703 A 703	14 days	Thanksgiving Break 11/22-11/26 Christmas Break 12/20 - 12/31 PD#4 - 1/3
2	Rational Functions and Radical Functions <ul style="list-style-type: none"> ● Negative Exponents ● Rational Functions ● Vertical and Horizontal Asymptotes/ Holes ● Solve Rational Equations ● Fractional Exponents ● Radical Functions ● Solve Radical Functions ● Synthetic Division ● Remainder Theorem ● Factor Theorem ● Fundamental Theorem of Algebra 	N 605 A 509 A 510 F 508 F 510	15 days	
3	Piecewise Functions <ul style="list-style-type: none"> ● Evaluate ● Graphing ● Analyzing Key features ● Real world Context 	A 606	13 days	
CTA: 12/16 – 12/17			2 days	

Biloxi Public Schools – Algebra 3
Pacing Guide by Term
2021-2022

TERM 3—44 Days 1/4 -3/11				
Unit	Topic	ACT standards	Total Instructional Days	Notes
1	Solving Systems of Equations <ul style="list-style-type: none"> ● Linear Systems of Two-Variables Review: (substitution/elimination) ● Nonlinear Systems ● Three-Variable Systems 	A 601 A 604	9 days	PD#4 - 1/3 1/10 MLK 1/17 Mardi Gras Holiday: 2/28 - 3/3
2	Matrices <ul style="list-style-type: none"> ● Matrix Addition and Subtraction ● Scalar Multiplication ● Matrix Multiplication ● Determinant of a Matrix ● Inverse Matrices ● Augmented Systems ● Triangular Form for Linear Systems ● Gaussian Elimination (row-echelon form) ● Gauss-Jordan Elimination (reduced row-echelon form) ● Solving Systems with Cramer's Rule ● Solving Systems with Inverse Matrices 	N 406 N 505 N 607 N 705 N 706	14 days	PD#5 - 3/3
3	Trigonometric Functions <ul style="list-style-type: none"> ● Standard Form of an Angle ● Degrees & Radians; Coterminal Angles ● Arc Lengths & Area of Sectors ● Circular Motion (Linear and Angular Speed) ● Trigonometric Functions: sin, cos, tan ● Reciprocal Functions: csc, sec, cot ● Right Triangle Trigonometry ● Reference Angles & The Unit Circle ● Law of Sines and Law of Cosines 	F 704 G 509 G 604	15 days 3 end of term days	
CTA: 3/10 - 3/11			2 days	

Biloxi Public Schools – Algebra 3
Pacing Guide by Term
2021-2022

TERM 4—46 Days 3/14 - 5/26				
Unit	Topic	ACT standards	Total Instructional Days	Notes
1	Graphing of Trigonometric Functions <ul style="list-style-type: none"> ● Graphs of Sine and Cosine Functions ● Graphs of Tangent Functions ● Vertical and Phase Shifts of Trigonometric Functions 	F 705	10 Days	PD#6 4/14 Spring Break 4/18 - 4/22 Graduation 5/24 Last Day students 5/25 PD #7 - 5/26 State Testing usually begins last week of April
2	Graphing Trig Part 2 <ul style="list-style-type: none"> ● Graphs of Reciprocal Functions ● Graphs of Inverse Trigonometric Functions ● Compositions of Trigonometric Functions 	F 705	10 Days	
3	Trigonometric Identities <ul style="list-style-type: none"> ● Reciprocal and Quotient Identities ● Pythagorean Theorem Identities ● Cofunction Identities ● Odd-Even Identities ● Simplify Trigonometric Expressions using Identities ● Proving Trigonometric Identities 	F 706	10 Days	
4	Trigonometric Identities Part 2 <ul style="list-style-type: none"> ● Sum and Difference Identities ● Double-Angle and Half-Angle Identities ● Product-Sum Identities ● Solving Trigonometric Equations 		10 Days	
5	Sequences and Series <ul style="list-style-type: none"> ● Sequences (Recursive & Explicit) ● Series & Partial Sums ● Summation Notation ● Arithmetic Sequences and Series ● Geometric Sequence and Series ● Infinite Geometric Series 	F 502 F 603 F 703	4 Days	
	CTA: 5/24 - 5/25		2 Days	

Biloxi Public Schools – Algebra 3
Pacing Guide by Term
2021-2022