

DEPARTMENT: MATHEMATICS	COURSE TITLE: PARAMETER GRAPHING COURSE NUMBER: 304
GRADE(S): 9-12	PRE-REQUISITES (IF ANY):

UNIT	LENGTH	CONTENT	SKILLS	METHODS OF ASSESSMENT	FRAMEWORK STRAND(S) & STANDARD(S)
		<p>Class activities follow the sequence of labs, while homework assignments allow students to develop and practice skills that will be necessary for success in algebra.</p> <p>This course is self-paced. All students are required to finish at least Lab 5.</p>	Fractions and decimals appear in every unit.	Notebook 75% Lab summaries 40% Homework 25% Tests 10% Class Participation 25% Punctuality, preparation, on-task behavior	
Methods of Representing Linear Rules		<ul style="list-style-type: none"> The connections among the various methods of representation: Flowcharts/Tables/Graphs/Equations 	<ul style="list-style-type: none"> Reading expressions and writing accompanying flowcharts, with correct order of operations Setting up a table of values Making a graph from a table of values Looking at a table of values and figuring out a rule to fit the data Comparing two rules and finding when one expression equals another 	<ul style="list-style-type: none"> Lab summaries Homework assignments Class Participation 	
Graphing Calculators		<ul style="list-style-type: none"> Using the various features of a TI-83 to satisfy certain conditions of equations 	<ul style="list-style-type: none"> Keystrokes to enter rules Setting the window Setting the table Tracing 	<ul style="list-style-type: none"> Lab summaries Homework assignments Class Participation 	
Quadratic Graphs		<ul style="list-style-type: none"> Given vertex form, analyze the role of each parameter as it affects the graph Develop mastery of the parameters sufficient to satisfy certain conditions 	<ul style="list-style-type: none"> Fitting an equation to one, two, and three data points Maximum, minimum Line of symmetry 	<ul style="list-style-type: none"> Lab summaries Homework assignments Class Participation 	
Linear Graphs		<ul style="list-style-type: none"> Given slope-intercept form, analyze the role of each parameter as it affects the graph Develop mastery of the parameters sufficient to satisfy certain conditions 	<ul style="list-style-type: none"> Finding the equation between two points Identifying slope ratios 	<ul style="list-style-type: none"> Lab summaries Homework assignments Class Participation 	
Tricky Graphs		<ul style="list-style-type: none"> Analyze the role of each parameter as it affects the graph. Apply to sine waves, absolute value, cubic, etc., as time allows 	<ul style="list-style-type: none"> Amplitude Frequency Phase shift 	<ul style="list-style-type: none"> Lab summaries Homework assignments Class Participation 	