Math Analysis
2020

Course Description:

This course is a fourth-year mathematics course for students previously enrolled in the Algebra 1A, Algebra 1B and Geometry & Measurement mathematics sequence. Students are highly encouraged to enroll in a mathematics course all 4 years of high school, in order to be college/career ready upon graduation. This course will emphasize the application of foundational mathematical concepts especially trigonometric and statistical concepts. This course integrates previously taught algebraic and geometric concepts.

Big Ideas:

- Students will find trigonometric values of any angle
- Students will solve equations involving triangles.
- Students will interpret and apply rules of probability.
- Students will explore measures of Central Tendency

Essential Learning Objectives

ELO #	Essential Learner Outcome Description	Standards	Textbook
1	Identify and apply basic trigonometric functions to right triangles.	G.SRT.C	G 8.3-4
	● Find missing parts of right triangles ● Find reference angles in a right triangle. ● Find trigonometric values of any point		
2	Identify and apply basic trigonometric functions to oblique triangles	*	A2 14.4-5 G 8.5-6
	● Apply Law of Sine ● Apply Law of Cosine ● Apply area formulas		
3	Identify parts of a trigonometric equation	*	A2 13.1, 7
	● Amplitude ● Period ● Phase shift ● Vertical shift		
4	Identify and interpret measures of Central Tendency	A2.DS.A	A2 11.6-7 A1 12.3
	● Mean ● Median ● Mode		

	● Range ● Variance ● Standard Deviation		
5	Apply Rules of Probability	G.CP.A	A2 11.1-5 A1 12.6-8
	● Experimental, theoretical, conditional, compound ● Permutations/Combination ● Sampling ● Sets and Complements of sets ● Calculating probability using addition and multiplication rules		
6	Analyze and interpret statistical graphs	A1.DS.A	A2 11.6-7, 10 A1 12.2, 4 Buckle Down Unit 12

* Indicates topics that should be covered in a Post-Algebra 2 Mathematics Class.