

High School Syllabus

Department: Math

Course #:40432H

Course Title: HONORS TRIGONOMETRY/ALGEBRA 3

DESCRIPTION OF COURSE: Students will learn about relations, functions, trigonometry, and graphing. Furthermore, they will know how to graph polynomial, exponential, logarithmic, and trigonometric functions manually and by using the appropriate technology. Students will understand how to interpret information that is expressed as a function or as a graph. These skills and this knowledge will be acquired by students working independently, with a partner, and in small groups. Achievement will be demonstrated through tests, quizzes, cooperative learning activities, oral demonstration of homework problems, and projects. Students are responsible for completing a summer assignment for this course before the school year begins. Students will take the Honors Trigonometry/Algebra 3 final exam at the end of the course.

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ELIGIBLE CONTENT
Prerequisites	14 days	CC.2.4.HS.B.3, A1.2.1.1.1, A1.2.1.1.2, A1.2.1.1.3, A1.2.1.1.1, A1.2.1.1.2, A1.2.1.1.3, A1.2.1.2.1, A1.2.1.2.2, A1.2.2.1.1, A1.2.2.1.2 CC.2.2.HS.C.1, CC.2.2.HS.C.2, CC.2.2.HS.C.3, CC.2.2.HS.C.4, CC.2.2.HS.C.5, CC.2.2.HS.C.6, A1.1.2.1.1, A1.2.1.1.1, A1.2.1.1.2, A1.2.1.1.3, A1.2.1.2.1, A1.2.1.2.2, A1.2.2.1.1, A1.2.2.1.2, A1.2.2.1.3, A1.2.2.1.4 A2.2.3.1.1
Functions and Graphs:	30 days	CC.2.2.HS.C.1,2,3,4, 6 ; CC.2.2.HS.D.1,2 CC.2.2.HS.D.7 CC.2.1.HS.F.5,6,7; CC.2.2.HS.C.6 A1.1.1.5.2; A1.1.1.1.2; A2.1.1.1.1,2 A2.2.3.1.1 APC.1
Polynomial, Power, and Rational Functions	30 days	CC.2.2.HS.D.1,2,3,5,6 CC.2.2.HS.C.4; A2.1.2.1.1,2,3; CC.2.1.HS.F.1,4 CC.2.2.HS.C.5; CC.2.2.HS.D.6 A2.1.1.2.1.1,2,3,4; A2.2.3.1.1 A2.2.2.1.1,2,3,4 A2.2.1.1.1,2,3; A2.1.2.1.1,4 APC.1
Exponential, Logistic, and Logarithmic Functions	25 days	CC.2.2.HS.C.1, CC.2.2.HS.C.2, CC.2.2.HS.C.3, CC.2.2.HS.C.5, CC.2.2.HS.D.2 CC.2.2.HS.C.4 A2.2.3.1.1 APC.1
Trigonometric Functions	35 days	CC.2.3.HS.A.3, CC.2.3.HS.A.7, CC.2.3.HS.A.14 G.1.2.1.1, G.1.2.1.2, G.1.2.1.3, G.1.2.1.4, G.1.2.1.5, G.1.3.2.1, G.2.2.1.1, G.2.2.1.2, G.2.2.2.1, G.2.2.2.2, G.2.2.2.3, G.2.2.2.4, A2.2.3.1.1 APC.1

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ELIGIBLE CONTENT
Analytic Trigonometry	30 days	CC.2.3.HS.A.3, CC.2.3.HS.A.7, CC.2.3.HS.A.14
Overview of limits, derivatives, and integrals (Optional)	16 days	APC.2

RESOURCES: Precalculus: graphical numerical, algebraic/ Demana, Waits, Foley, I K Lenney 7th Edition 2007, Pearson Education. Ti-84 Silver Edition Graphing Calculator.

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