

CNEC Math Department – Course Descriptions for 2014-2015

	Course Name	Course Description and Notes	Course Prerequisites
Granite Ridge Intermediate	Math 7 Math 7 with Strategies	Math 7 focuses on four critical areas: 1. Developing understanding of and applying proportional relationships. 2. Developing understanding of operations with rational numbers and working with expressions and linear equations. 3. Solving problems involving scale drawings and informal geometric constructions, and working with two and three dimensional shapes to solve problems involving area, surface area, and volume. 4. Drawing inferences about populations based on samples.	
	Advanced Math 7	This is an accelerated Math 7 course which also covers Math 8 standards.	5 th grade CST Scores 7 th grade Math Placement Test Scores CNEC Math Department Rubric
	Math 8 Math 8 with Strategies	Math 8 focuses on three critical areas: 1. Formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations. 2. Grasping the concept of a function and using functions to describe quantitative relationships. 3. Analyzing two and three dimensional space and figures using distance, angle, similarity, and congruence and understanding and applying the Pythagorean Theorem.	Successful completion of Math 7
	Advanced Math 8	This is an accelerated Math 8 course which also covers Math 1 standards.	80% or higher final semester grade in Advanced Math 7
	Foundations of Algebra (9th grade only)	Foundations of Algebra is a course designed for students struggling with algebraic skills and concepts. This course will cover integer rules, number properties, solving equations and inequalities, linear graphs, functions and factoring. This course does not meet CUSD graduation requirement.	Teacher/Counselor Recommendation
	Math 1 (P)	The fundamental purpose of the Mathematics I course is to formalize and extend the mathematics that students learned in the middle grades. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability.	70% or higher in Math 8 Passing grade in Foundations of Algebra 1
	Math 2 (P)	The focus of the Mathematics II course is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics I. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability.	77% or higher in Adv. Math 8 (8 th grade) 70% or higher in Algebra 1 (9 th -11 th grades)
	Math 2 Honors (P)	Accelerated Math 2 Course	Placement Exam
	Algebra 1 (P) (11th & 12th grade only)	Algebra 1 is the foundation course for all higher mathematics courses. Topics include: operations with integers, solving equations and inequalities, exponents, operations with polynomials, graphing in two variables, systems of equations, rational algebraic expressions, radicals, and application problems.	Teacher/Counselor Recommendation
	Applied Geometry	This course is designed for students who require additional support to learn the basic concepts of geometry without formal methods of proof. This course meets the CUSD graduation requirement.	Teacher/Counselor Recommendation
Clovis North High School	Algebra 2 (P)	This course continues the study of algebra. It is highly rigorous and is designed to prepare students for college-level mathematics. Algebra 2 builds on the student's understanding of basic algebra by studying more complex problems at a higher level. New topics are explored which form a springboard into higher levels of math. Topics include advanced equations, systems of equations, polynomials, exponents, number systems,	85% or higher in Geometry (8 th grade) 70% or higher in Geometry (9 th -11 th grades)

		functions, radicals, sequences and series, probability, logarithms, and conic sections.	
	Algebra 2 Honors (P)	Algebra 2 Honors continues the study of algebra at a highly rigorous level. This course builds on the student's understanding of basic algebra by studying more complex problems at a higher level. Topics include advanced equations, systems of equations, functions, sequences and series, logarithms, conic sections, mathematical logic, probability and statistics. The fourth quarter studies will be devoted to advanced math topics in preparation for Advanced Math Analysis and AP Calculus AB and BC	Placement Exam
	Statistics and Probability AB (P)	Statistics and Probability provides college bound students with an introduction to the essential basics of statistical analysis and the theory of probability. This course will include applications to the fields of social science, psychology, education, business and medicine. Topics include: descriptive statistics, measures of central tendency and dispersion, correlation and regression analysis, probabilities of compound events, normal distribution and inferential statistics.	70-79% in Algebra 2
	Advanced Math	Advanced Mathematics provides a formal study of trigonometry and exposure to selected topics which provide a foundation for the first course in calculus. Scientific calculators will be used extensively. Topics include: vectors, the theory of equations, functions and limits.	70-79% in Algebra 2 Honors 80% or higher in Algebra 2
	Advanced Math Analysis	Advanced Math Analysis provides a formal study of trigonometry, limits, differential calculus, and selected topics which provide a foundation for Calculus BC	80% or higher in Algebra 2 Honors
	AP Statistics	AP Statistics covers the syllabus necessary for students to successfully pass the national or international exam in May for college credit. This is a highly rigorous course in descriptive statistics, inferential statistics, probability and experimental design.	90% or higher in Algebra 2 <u>with</u> Advanced Math 90% or higher in Statistics 80% or higher in Advanced Math
	AP Calculus AB (HP)	AP calculus AB covers the material necessary for students to successfully pass the national or international exam in May for college credit. Topics include limits, continuity, derivatives and their applications, methods of integration and their application.	80% or higher in Advanced Math 70% or higher in Advanced Math Analysis
	AP Calculus BC (HP)	AP Calculus BC covers the syllabus necessary for students to successfully pass the national or international exam in May for college credit. Topics include: limits, integrals, sequences, series, vectors, parametric equations and differential equations	85% or higher in AP Calculus AB 80% or higher in Advanced Math Analysis