Statistics

In Statistics, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of variability and statistical processes. Students will study sampling and experimentation, categorical and quantitative data, probability and random variables, inference, and bivariate data. Students will connect data and statistical processes to real-world situations. In addition, students will extend their knowledge of data analysis.

Pre-Calculus

Pre-Calculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Pre-Calculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems.

Calculus I & II

Calculus I is taken in the fall semester and II in the spring. This is a course that receives concurrent credit through TVCC. Calculus is a prerequisite and building block for college majors such as architecture, business, science, mathematics, medicine, and engineering.

MATH FACULTY BACKGROUND

Samantha Harris – graduated from Stephen F. Austin State University in 2015. This will be her 2nd year teaching Algebra II & Math Models as well as coaching volleyball & basketball. Samantha enjoys spending time with friends and family and playing sports.

Ashley Moulton – graduated from The University of Texas at Austin in 2011. This is her 5th year of teaching. Ashley is the head of the math department and will be teaching Algebra 2 and Pre-Calculus, along with having the concurrent college courses of College Pre-Cal, College Algebra, and Calculus I & II. She is also the Student Council Sponsor and will be coaching UIL academic events. Ashley enjoys working out, sports, and spending time with her family.

Amanda Planeta – graduated from UNT in 2010. This is her 7th year of teaching and will be teaching Algebra I, Statistics, and coaching UIL and cheerleading. Amanda enjoys shopping, working out, and spending time with her family.

Kimberly Skinner – graduated from Texas A&M Commerce. She has 11 years experience in education and will be teaching EOC Math. Kimberly enjoys watching her son play sports, reading, and crafts.

Nickole Traughber – graduated from Texas State University in 2008. This is her 7th year of teaching. She will be teaching Geometry and Statistics as well as coaching UIL academic events. Nickole enjoys working out, concerts, and spending time with her family.

Eustace High School
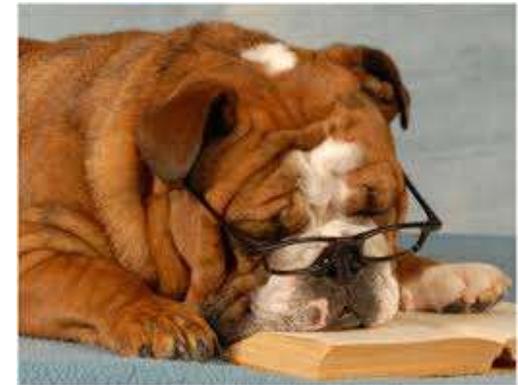
The Department of Mathematics

Samantha Harris
Ashley Moulton
Amanda Planeta
Kimberly Skinner
Nickole Traughber
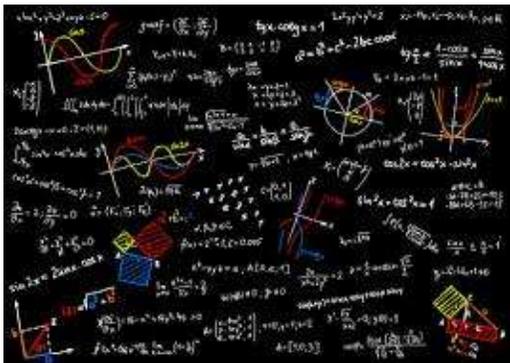
Algebra I

In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Geometry

In Geometry, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I to strengthen their mathematical reasoning skills in geometric contexts. Within the course, students will begin to focus on more precise terminology, symbolic representations, and the development of proofs. Students will explore concepts covering coordinate and transformational geometry; logical argument and constructions; proof and congruence; similarity, proof, and trigonometry; two- and three-dimensional figures; circles; and probability. Students will connect previous knowledge from Algebra I to Geometry through the coordinate and transformational geometry strand.

Math Models

Mathematical Models with Applications is designed to build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. This mathematics course provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; and paper and pencil and from methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.

Algebra II

In Algebra II, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I. Students will broaden their knowledge of quadratic functions, exponential functions, and systems of equations. Students will study logarithmic, square root, cubic, cube root, absolute value, rational functions, and their related equations. Students will connect functions to their inverses and associated equations and solutions in both mathematical and real-world situations. In addition, students will extend their knowledge of data analysis and numeric and algebraic methods.