

Math Course Descriptions

Coordinate Algebra is the first course in a sequence of three high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications and a bridge to the second course through coordinate geometric topics.

Analytic Geometry is the second course in a sequence of three high school courses designed to ensure career and college readiness. The course embodies a discrete study of geometry analyzed by means of algebraic operations with correlated probability/statistics applications and a bridge to the third course through algebraic topics.

Algebra II/ Advanced Algebra is the third course in a sequence of three high school courses designed to ensure career and college readiness. It is designed to prepare students for fourth course options relevant to their career pursuits.

Pre-Calculus is a fourth mathematics course option designed to follow the completion of Algebra II, Advanced Algebra, Accelerated Geometry B/Algebra II, or Accelerated Analytic Geometry B/Advanced Algebra, which prepares students for calculus and other higher-level mathematics courses.

Advanced Mathematical Decision Making is a fourth course option designed to follow the completion of Algebra II, Advanced Algebra, Accelerated Geometry B/Algebra II, or Accelerated Analytic Geometry B/Advanced Algebra, which offers further experiences with statistical information and summaries, methods of designing and conducting statistical studies, data modeling, basic financial decisions, and network models for making informed decisions.

Accelerated Coordinate Algebra/Analytic Geometry A is the first course in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school tenure, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

Accelerated Analytic Geometry B/Advanced Algebra is the second course in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school tenure, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

Accelerated Pre-Calculus is a the third course mathematics in a sequence of mathematics courses designed to ensure that students are prepared to take higher-level mathematics courses during their high school tenure, including Advanced Placement Calculus AB, Advanced Placement Calculus BC, and Advanced Placement Statistics.

Calculus is a fourth mathematics course option for students who have completed Pre-Calculus or Accelerated Pre-Calculus. The course includes problem solving, reasoning and estimation, functions, derivatives, application of the derivative, integrals, and application of the integral.

AP Stats is another option as a 4th or 5th course.

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses

Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-semester introductory college statistics course.