

Mathematics Department: Advanced Placement Courses



General Information for all Mathematics A.P. Courses:

- A.P. earns a quality point and is great for preparing and getting into college. You must pass the exam in May in order to earn college credit.
- College-Level Textbooks, regular HW assignments, challenging tests what will require studying
- Faster Pace in terms of covering chapters and testing.

11th or 12th Grade: AP Calculus

- Prerequisite: Pre-Calculus Honors
- Analytical course aimed at precise and correct answers without the aid of formula sheets

AP Calculus is a college-level course. – Students will understand the concepts of calculus and provide experience with its methods and applications. The courses emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Technology is used to reinforce relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. The course becomes a cohesive whole through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling.

11th or 12th Grade: Statistics

- Class on how one communicates mathematical principals relating to statistics and probability
- Focus is on displaying the process thus formula sheets and calculators are always allowed
- Students should be able to organize large amounts of data

AP Statistics is a college-level course. - Experiment and apply properties of statistics, probability, and the process of collecting, analyzing, presenting, and inferring data. Introduction to key concepts, including interpreting data, sampling populations, theoretical and experimental probabilities, patterns in data and research, and making inferences based on information. Use statistical analysis and research skills to create, execute, analyze, summarize, and prepare and evaluate presentations of each study.