

Course Title: Advanced Placement Calculus (AB)* 1202310(Y)

Prerequisite: A in Pre-Calculus or Teacher Approval.

Commonly described as the most difficult high school math course, calculus is the mathematics of motion and change, fundamental to advanced math with broad real-world application. For the first time, a high school student is asked to draw from every type of math training he/she has received, from arithmetic to pre-calculus. This course is designed to prepare students for the AP exam and consists of a full high school academic year of work in calculus that is comparable to one and one half semesters in college placement, or both, from institutions of higher learning. Specific topics are determined by the College Board Advanced Placement Program. Emphasis is placed on graphical, numerical, analytical and verbal ways topics can be explored. Students will be challenged to communicate mathematics both orally and written to explain solutions to problems. Essential to success in this course is a high level of expertise with the Texas Instruments TI-83 or TI-84 graphing calculator to include multiple operations, memory management, intermediate programming and visual interpretation. A graphing calculator is suggested for the AP exam, and students are expected to purchase his or her own. One year of experience with the TI-83 prior to this course is required. The TI-86/85/82 are acceptable, but will not be taught. Only the best math students with the strongest background should register for AP Calculus. TI-89 will not be used in this course.