

Calculus I/II

“Calculus... is, by just about any standard, one of the greatest intellectual achievements of western civilization. The subject drips with power and beauty. It rendered thousand-year-old questions immediately transparent. Calculus is truly amazing...” – Uri Treisman, “Scientist of the Year,” The Harvard Foundation, 2006

"Calculus has its limits." – Mr. Ueland, “Subaru Test Driver of the Year,” 2006 with apologies to the 12,000 guys who said this first

COURSE DESCRIPTION: This is a fast-paced, intensive course designed for college-bound students who intends to take the Advanced Placement Calculus AB/BC exam in April. Topics covered include those traditionally offered in a first-year college calculus course: limits, continuity, derivatives and integrals of algebraic and transcendental functions, their applications and an introduction to elementary differential equations. Calculus II students will study additional topics including convergence testing, Taylor and Maclaurin series, and polar and parametric functions. At the completion of this course, students should have a better appreciation for the order and beauty of God’s universe and be prepared to take the appropriate AP Calculus exam.

PRE-REQUISITES:

- Successful completion of Pre-Calculus/Calculus I (with a B or better) or teacher permission.
- A desire to work hard in preparation for the AB/BC exam in April.

REQUIRED MATERIALS (please bring these everyday):

- A graphing calculator (minimum: TI-83, Casio FX-9750G or equivalent)
- Pencils and a quality eraser
- Textbook: *Calculus, Sixth Edition*, by Larson et al, 1998, Houghton Mifflin