

# AP Calculus BC

## Course Overview:

The purpose of this course is to prepare students for the Calculus BC examination. AP Calculus BC is roughly equivalent to both first and second semester college courses and extends the content learned in Calculus AB. Please see the College Board AP Calculus BC Course Description for more information. A graphing calculator is required for this course. This course meets NCAA eligibility requirements. A weighted grading scale will be applied. Participation in the AP exam is a requirement of the course and an exam cost of approximately \$90.00 is the responsibility of each enrolled student. Free and reduced lunch students may apply for fee waivers for the AP exam. See your counselor for more information.

## Text Books:

## Assessments:

A variety of assessments will be given, with many modeling the AP exam in order to prepare students for successful completion of the exam.

## First Quarter:

### Standards/Learning Goals:

- Unit 1: A Review of Functions, Intro to Polar and Parametric Functions
- Unit 2: Limits and Continuity
- Unit 3: Introduction to Differentiation

## Second Quarter:

### Standards/Learning Goals:

- Unit 3: Introduction to Differentiation
- Unit 4: Applications of Differentiation (Including Parametric Functions)
- Unit 5: Integration (Includes more techniques than the AB course)

### Third Quarter:

#### Standards/Learning Goals:

- Unit 6: Areas and Volumes (Including Polar Functions and Parametric Applications)
- Unit 7: Differential Equations (Including Euler's Method)
- Unit 8: Infinite Series

### Fourth Quarter:

#### Standards/Learning Goals:

- Unit 8: Infinite Series
- AP Exam Review
- Further Study