

AP Calculus Pacing Guide

Calculus is designed for students interested in STEM-based careers and builds on the concepts studied in precalculus. The study of calculus on the high school level includes a study of limits, derivatives, and an introduction to integrals.

Quarter 1

Limits of Functions

- Understand the concept of the limit of a function.

Behavior of Functions

- Describe the asymptotic and unbounded behavior of functions.

Continuity

- Develop an understanding of continuity as a property of functions.

Quarter 2

Understand the Concept of the Derivative

- Demonstrate an understanding of the derivative.
- Understand the derivative at a point.

Computing and Applying Derivatives

- Apply differentiation techniques.

Quarter 3

Computing and Applying Derivatives

- Use first and second derivatives to analyze a function.
- Apply derivatives to solve problems.

Understanding Integrals

- Demonstrate understanding of a definite integral.

Quarter 4

Understanding Integrals

- Understand and apply the Fundamental Theorem of Calculus.

Calculate and Apply Integrals

- Apply techniques of antidifferentiation.
- Apply integrals to solve problems.