

## Curriculum Map: AP Calculus AB

Course: AP CALCULUS AB Sub-topic: Calculus

Grade(s): 10 to 12

**Course Description:** AP Calculus is designed to prepare students to take the college placement test offered by the College Entrance Examination Board. It extends the material covered in Honors Calculus to include the topics of the AP Calculus AB Syllabus. Students completing this course will be prepared to take the AP Exam in Mathematics AB to obtain college credit. &nbsp; It is expected that students taking this course will take the AP Calculus AB exam in May.

### Unit: Chapter 4 Continued: Integration

Timeline: Week 4

#### Topic: Section 4.4: 2nd Fundamental Thm of Calculus

Minutes for Topic: 172

#### Topic: Section 4.5: u-Substitution in Integration

Minutes for Topic: 258

#### Topic: Section 4.6: Numerical Integration / Trapezoidal Method

Minutes for Topic: 172

#### Topic: Review: Chapter 4 - Basic Integration

Minutes for Topic: 86

#### Topic: Test: Chapter 4

Minutes for Topic: 86

### Unit: Chapter 5: Differentiation / Integration of Other Types of Equations

#### Topic: Section 5.1: The Natural Log Function (including differentiation)

Minutes for Topic: 172

#### Topic: Section 5.2: The Natural Logarithmic Function: Integration

Minutes for Topic: 258

#### Topic: Section 5.3: Inverse Functions

Minutes for Topic: 172

#### Topic: Section 5.4: Exponential Functions - Differentiation and Integration

Minutes for Topic: 258

#### Topic: Section 5.5: Bases Other than e and Applications

Minutes for Topic: 258

#### Topic: Review: Chapter 5

Minutes for Topic: 86

#### Topic: Test: Chapter 5

Minutes for Topic: 86

#### Topic: Section 5.6: Inverse Trigonometric Functions: Differentiation

Minutes for Topic: 172

#### Topic: Section 5.7 - Inverse Trigonometric Functions: Integration

Minutes for Topic: 172