Course-Specific Exam Information

AP Subject	Exam question(s) will only cover:	Exam question(s) will NOT cover:	Exam question type(s)	Exam Date #1	Exam Date #2
Calculus BC**	Units 1-8 + 5 topics in Unit 10 (10.2, 10.5, 10.7, 10.8, and 10.11)	Unit 9, Unit 10 (except Topics 10.2, 10.5, 10.7, 10.8, and 10.11)	*	*	*

UNIT 9 Parametric Equations, Polar Coordinates, and Vector-Valued Functions BC ONLY

AP EXAM WEIGHTING N/A AB 11–12% BC

CLASS PERIODS N/A AB ~10–11 BC

- CHA 2 — 9.1 Defining and Differentiating Parametric Equations
- CHA 1 — 9.2 Second Derivatives of Parametric Equations
- CHA 1 — 9.3 Finding Arc Lengths of Curves Given by Parametric Equations
- CHA 1 — 9.4 Defining and Differentiating Vector-Valued Functions
- FUN 1 — 9.5 Integrating Vector-Valued Functions
- FUN 1 — 9.6 Solving Motion Problems Using Parametric and Vector-Valued Functions
- FUN 2 — 9.7 Defining Polar Coordinates and Differentiating in Polar Form
- CHA 3 — 9.8 Find the Area of a Polar Region or the Area Bounded by a Single Polar Curve
- CHA 3 — 9.9 Finding the Area of the Region Bounded by Two Polar Curves

UNIT 10 Infinite Sequences and Series BC ONLY

AP EXAM WEIGHTING N/A AB 17–18% BC

CLASS PERIODS N/A AB ~17–18 BC

- LIM 3 — 10.1 Defining Convergent and Divergent Infinite Series
- LIM 3 — 10.2 Working with Geometric Series
- LIM 3 — 10.3 The *n*th Term Test for Divergence
- LIM 3 — 10.4 Integral Test for Convergence
- LIM 3 — 10.5 Harmonic Series and *p*-Series
- LIM 3 — 10.6 Comparison Tests for Convergence
- LIM 3 — 10.7 Alternating Series Test for Convergence
- LIM 3 — 10.8 Ratio Test for Convergence
- LIM 3 — 10.9 Determining Absolute or Conditional Convergence
- LIM 1 — 10.10 Alternating Series Error Bound
- LIM 3 2 — 10.11 Finding Taylor Polynomial Approximations of Functions
- LIM 1 — 10.12 Lagrange Error Bound
- LIM 2 — 10.13 Radius and Interval of Convergence of Power Series
- LIM 2 — 10.14 Finding Taylor or Maclaurin Series for a Function
- LIM 3 — 10.15 Representing Functions as Power Series

UNIT 6 Integration and Accumulation of Change

AP EXAM WEIGHTING: 17–20% AB 17–20% BC

CLASS PERIODS: ~18–20 AB ~15–16 BC

CHA 4	6.1	Exploring Accumulations of Change
LIM 1	6.2	Approximating Areas with Riemann Sums
LIM 2	6.3	Riemann Sums, Summation Notation, and Definite Integral Notation
FUN 1	6.4	The Fundamental Theorem of Calculus and Accumulation Functions
FUN 2	6.5	Interpreting the Behavior of Accumulation Functions Involving Area
FUN 3	6.6	Applying Properties of Definite Integrals
FUN 3	6.7	The Fundamental Theorem of Calculus and Definite Integrals
FUN 4	6.8	Finding Antiderivatives and Indefinite Integrals: Basic Rules and Notation
FUN 1	6.9	Integrating Using Substitution
FUN 1	6.10	Integrating Functions Using Long Division and Completing the Square
FUN 1	6.11	Integrating Using Integration by Parts BC ONLY
FUN 1	6.12	Using Linear Partial Fractions BC ONLY
LIM 1	6.13	Evaluating Improper Integrals BC ONLY
FUN 1	6.14	Selecting Techniques for Antidifferentiation

UNIT 7 Differential Equations

AP EXAM WEIGHTING: 6–12% AB 6–9% BC

CLASS PERIODS: ~8–9 AB ~9–10 BC

FUN 2	7.1	Modeling Situations with Differential Equations
FUN 3	7.2	Verifying Solutions for Differential Equations
FUN 2	7.3	Sketching Slope Fields
FUN 4	7.4	Reasoning Using Slope Fields
FUN 1	7.5	Approximating Solutions Using Euler's Method BC ONLY
FUN 1	7.6	Finding General Solutions Using Separation of Variables
FUN 1	7.7	Finding Particular Solutions Using Initial Conditions and Separation of Variables
FUN 3	7.8	Exponential Models with Differential Equations
FUN 3	7.9	Logistic Models with Differential Equations BC ONLY

UNIT 8 Applications of Integration

AP EXAM WEIGHTING: 10–15% AB 6–9% BC

CLASS PERIODS: ~19–20 AB ~13–14 BC

CHA 1	8.1	Finding the Average Value of a Function on an Interval
CHA 1	8.2	Connecting Position, Velocity, and Acceleration of Functions Using Integrals
CHA 3	8.3	Using Accumulation Functions and Definite Integrals in Applied Contexts
CHA 4	8.4	Finding the Area Between Curves Expressed as Functions of x
CHA 1	8.5	Finding the Area Between Curves Expressed as Functions of y
CHA 2	8.6	Finding the Area Between Curves That Intersect at More Than Two Points
CHA 3	8.7	Volumes with Cross Sections: Squares and Rectangles
CHA 3	8.8	Volumes with Cross Sections: Triangles and Semicircles
CHA 3	8.9	Volume with Disc Method: Revolving Around the x- or y-Axis
CHA 2	8.10	Volume with Disc Method: Revolving Around Other Axes
CHA 4	8.11	Volume with Washer Method: Revolving Around the x- or y-Axis
CHA 2	8.12	Volume with Washer Method: Revolving Around Other Axes
CHA 3	8.13	The Arc Length of a Smooth, Planar Curve and Distance Traveled BC ONLY

UNIT 3 Differentiation: Composite, Implicit, and Inverse Functions

AP EXAM WEIGHTING	9–13% AB 4–7% BC
CLASS PERIODS	~10–11 AB ~8–9 BC

- FUN 1 — 3.1 The Chain Rule
- FUN 1 — 3.2 Implicit Differentiation
- FUN 3 — 3.3 Differentiating Inverse Functions
- FUN 1 — 3.4 Differentiating Inverse Trigonometric Functions
- FUN 1 — 3.5 Selecting Procedures for Calculating Derivatives
- FUN 1 — 3.6 Calculating Higher-Order Derivatives

UNIT 4 Contextual Applications of Differentiation

AP EXAM WEIGHTING	10–15% AB 6–9% BC
CLASS PERIODS	~10–11 AB ~6–7 BC

- CHA 1 — 4.1 Interpreting the Meaning of the Derivative in Context
- CHA 1 — 4.2 Straight-Line Motion: Connecting Position, Velocity, and Acceleration
- CHA 2 — 4.3 Rates of Change in Applied Contexts Other Than Motion
- CHA 1 — 4.4 Introduction to Related Rates
- CHA 3 — 4.5 Solving Related Rates Problems
- CHA 1 — 4.6 Approximating Values of a Function Using Local Linearity and Linearization
- LIM 3 — 4.7 Using L'Hospital's Rule for Determining Limits of Indeterminate Forms

UNIT 5 Analytical Applications of Differentiation

AP EXAM WEIGHTING	15–18% AB 8–11% BC
CLASS PERIODS	~15–16 AB ~10–11 BC

- FUN 3 — 5.1 Using the Mean Value Theorem
- FUN 3 — 5.2 Extreme Value Theorem, Global Versus Local Extrema, and Critical Points
- FUN 2 — 5.3 Determining Intervals on Which a Function Is Increasing or Decreasing
- FUN 3 — 5.4 Using the First Derivative Test to Determine Relative (Local) Extrema
- FUN 1 — 5.5 Using the Candidates Test to Determine Absolute (Global) Extrema
- FUN 2 — 5.6 Determining Concavity of Functions over Their Domains
- FUN 3 — 5.7 Using the Second Derivative Test to Determine Extrema
- FUN 2 — 5.8 Sketching Graphs of Functions and Their Derivatives
- FUN 2 — 5.9 Connecting a Function, Its First Derivative, and Its Second Derivative
- FUN 2 — 5.10 Introduction to Optimization Problems
- FUN 3 — 5.11 Solving Optimization Problems
- FUN 1 3 — 5.12 Exploring Behaviors of Implicit Relations

UNIT 1 Limits and Continuity

AP EXAM WEIGHTING	10–12% AB 4–7% BC
CLASS PERIODS	~22–23 AB ~13–14 BC

CHA 2	1.1	Introducing Calculus: Can Change Occur at an Instant?
LIM 2	1.2	Defining Limits and Using Limit Notation
LIM 2	1.3	Estimating Limit Values from Graphs
LIM 2	1.4	Estimating Limit Values from Tables
LIM 1	1.5	Determining Limits Using Algebraic Properties of Limits
LIM 1	1.6	Determining Limits Using Algebraic Manipulation
LIM 1	1.7	Selecting Procedures for Determining Limits
LIM 3	1.8	Determining Limits Using the Squeeze Theorem
LIM 2	1.9	Connecting Multiple Representations of Limits
LIM 3	1.10	Exploring Types of Discontinuities
LIM 3	1.11	Defining Continuity at a Point
LIM 1	1.12	Confirming Continuity over an Interval
LIM 1	1.13	Removing Discontinuities
LIM 3	1.14	Connecting Infinite Limits and Vertical Asymptotes
LIM 2	1.15	Connecting Limits at Infinity and Horizontal Asymptotes
FUN 3	1.16	Working with the Intermediate Value Theorem (IVT)

UNIT 2 Differentiation: Definition and Basic Derivative Rules

AP EXAM WEIGHTING	10–12% AB 4–7% BC
CLASS PERIODS	~13–14 AB ~9–10 BC

CHA 2	2.1	Defining Average and Instantaneous Rates of Change at a Point
CHA 1 4	2.2	Defining the Derivative of a Function and Using Derivative Notation
CHA 1	2.3	Estimating Derivatives of a Function at a Point
FUN 3	2.4	Connecting Differentiability and Continuity: Determining When Derivatives Do and Do Not Exist
FUN 1	2.5	Applying the Power Rule
FUN 1	2.6	Derivative Rules: Constant, Sum, Difference, and Constant Multiple
FUN LIM 1	2.7	Derivatives of cos x, sin x, e^x, and ln x
FUN 1	2.8	The Product Rule
FUN 1	2.9	The Quotient Rule
FUN 1	2.10	Finding the Derivatives of Tangent, Cotangent, Secant, and/or Cosecant Functions