

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		UNIT 10 Infinite Sequences and Series BC ONLY	
AP EXAM WEIGHTING	N/A AB 11-12% BC	AP EXAM WEIGHTING	N/A AB 17-18% BC
CLASS PERIODS	N/A AB ~10-11 BC	CLASS PERIODS	N/A AB ~17-18 BC
CHA 2	9.1 Defining and Differentiating Parametric Equations	LIM 3	10.1 Defining Convergent and Divergent Infinite Series
CHA 1	9.2 Second Derivatives of Parametric Equations	LIM 3	10.2 Working with Geometric Series
CHA 1	9.3 Finding Arc Lengths of Curves Given by Parametric Equations	LIM 3	10.3 The n th Term Test for Divergence
CHA 1	9.4 Defining and Differentiating Vector-Valued Functions	LIM 3	10.4 Integral Test for Convergence
FUN 1	9.5 Integrating Vector-Valued Functions	LIM 3	10.5 Harmonic Series and p -Series
FUN 1	9.6 Solving Motion Problems Using Parametric and Vector-Valued Functions	LIM 3	10.6 Comparison Tests for Convergence
FUN 2	9.7 Defining Polar Coordinates and Differentiating in Polar Form	LIM 3	10.7 Alternating Series Test for Convergence
CHA 3	9.8 Find the Area of a Polar Region or the Area Bounded by a Single Polar Curve	LIM 3	10.8 Ratio Test for Convergence
CHA 3	9.9 Finding the Area of the Region Bounded by Two Polar Curves	LIM 3	10.9 Determining Absolute or Conditional Convergence
		LIM 1	10.10 Alternating Series Error Bound
		LIM 3	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