

Course Overview	AP Calculus AB/BC Course Overview by College Board
Course Standards	AP Calculus AB/BC Course and Exam Description (CED)
Instructional Materials	Math Medic-IDEA Mathematics Curriculum Redesign (MCR) on Curriculum Corner

Scope & Sequence

Units & Instructional Days	Assessments & Scanning Deadlines	Standards
Unit 00: Foundations 5 Days		
Unit 1: Intro to Calculus 13 Days	Unit 1 Exam TX_MAT_APCalculusAB_F26_UE1 <u>Scanning Deadline:</u> September 17, 2026	1.1 Introducing Calculus: Can Change Occur at an Instant? LO CHA-1.A 1.2 Defining Limits and Using Limit Notation LO LIM-1.A, LIM-1.B 1.3 Estimating Limit Values from Graphs LO LIM-1.C 1.4 Estimating Limit Values from Tables LO LIM-1.C 1.5 Determining Limits Using Algebraic Properties of Limits LO LIM-1.D 1.6 Determining Limits Using Algebraic Manipulation LO LIM-1.E 1.7 Selecting Procedures for Determining Limits 1.8 Determining Limits Using the Squeeze Theorem LO LIM-1.E 1.9 Connecting Multiple Representations of Limits 1.10 Exploring Types of Discontinuities LO LIM-2.A 1.11 Defining Continuity at a Point LO LIM-2.A 1.12 Confirming Continuity over an Interval LO LIM-2.B 1.13 Removing Discontinuities LO LIM-2.C 1.14 Connecting Infinite Limits and Vertical Asymptotes LO LIM-2.D 1.15 Connecting Limits at Infinity and Horizontal Asymptotes LO LIM-2.D 1.16 Working with the Intermediate Value Theorem (IVT) LO FUN-1.A

Unit 2: Differentiation 14 Days	<p>Unit 2 Exam TX_MAT_APCalculusAB_F26_UE2 <u>Scanning Deadline:</u> October 8, 2026</p>	<p>2.1 Defining Average and Instantaneous Rates of Change at a Point LO CHA-2.A, CHA-2.B</p> <p>2.2 Defining the Derivative of a Function and Using Derivative Notation LO CHA-2.B, CHA-2.C</p> <p>2.3 Estimating Derivatives of a Function at a Point LO CHA-2.D</p> <p>2.4 Connecting Differentiability and Continuity: Determining When Derivatives Do and Do Not Exist LO FUN-2.A</p> <p>2.5 Applying the Power Rule LO FUN-3.A</p> <p>2.6 Derivative Rules: Constant, Sum, Difference, and Constant Multiple LO FUN-3.A</p> <p>2.7 Derivatives of $\cos x$, $\sin x$, e^x, and $\ln x$ LO FUN-3.A, LIM-3.A</p> <p>2.8 The Product Rule LO FUN-3.B</p> <p>2.9 The Quotient Rule LO FUN-3.B</p> <p>2.10 Finding the Derivatives of Tangent, Cotangent, Secant, and/or Cosecant Functions LO FUN-3.B</p>
Unit 3: Differentiating Composite, Implicit, And Inverse Functions 10 Days	<p>Unit 3 Exam TX_MAT_APCalculusAB_F26_UE3 <u>Scanning Deadline:</u> October 29, 2026</p>	<p>3.1 The Chain Rule LO FUN-3.C</p> <p>3.2 Implicit Differentiation LO FUN-3.D</p> <p>3.3 Differentiating Inverse Functions LO FUN-3.E</p> <p>3.4 Differentiating Inverse Trigonometric Functions LO FUN-3.E</p> <p>3.5 Selecting Procedures for Calculating Derivatives</p> <p>3.6 Calculating Higher-Order Derivatives LO FUN-3.F</p>
Unit 4: Contextual Applications of Differentiation 11 Days	<p>Unit 4 Exam TX_MAT_APCalculusAB_F26_UE4 <u>Scanning Deadline:</u> November 12, 2026</p>	<p>4.1 Interpreting the Meaning of the Derivative in Context LO CHA-3.A</p> <p>4.2 Straight-Line Motion: Connecting Position, Velocity, and Acceleration LO CHA-3.B</p> <p>4.3 Rates of Change in Applied Contexts Other Than Motion LO CHA-3.C</p> <p>4.4 Introduction to Related Rates LO CHA-3.D</p> <p>4.5 Solving Related Rates Problems LO CHA-3.E</p> <p>4.6 Approximating Values of a Function Using Local Linearity and Linearization LO CHA-3.F</p> <p>4.7 Using L'Hospital's Rule for Determining Limits of Indeterminate Forms LO LIM-4.A</p>

<p>Unit 5: Analytical Applications of Derivatives and Semester Exam Review 18 Days</p>	<p>No scan deadline due to close proximity of the Semester Exam</p>	<p>5.1 Using the Mean Value Theorem LO FUN-1.C</p> <p>5.2 Extreme Value Theorem, Global Versus Local Extrema, and Critical Points LO FUN-4.A</p> <p>5.3 Determining Intervals on Which a Function Is Increasing or Decreasing LO FUN-4.A</p> <p>5.4 Using the First Derivative Test to Determine Relative (Local) Extrema LO FUN-4.A</p> <p>5.5 Using the Candidates Test to Determine Absolute (Global) Extrema LO FUN-4.A</p> <p>5.6 Determining Concavity of Functions over Their Domains LO FUN-4.A</p> <p>5.7 Using the Second Derivative Test to Determine Extrema LO FUN-4.A</p> <p>5.8 Sketching Graphs of Functions and Their Derivatives LO FUN-4.A</p> <p>5.9 Connecting a Function, Its First Derivative, and Its Second Derivative LO FUN-4.A</p> <p>5.10 Introduction to Optimization Problems LO FUN-4.B</p> <p>5.11 Solving Optimization Problems LO FUN-4.C</p> <p>5.12 Exploring Behaviors of Implicit Relations LO FUN-4.D, FUN-4.E</p>
<p>Semester Exam Window: Dec 7-18, 2026 Scanning Deadline: Jan TBD, 2027</p>		
<p>Unit 6: Integration and Accumulation of Change 18 Days</p>	<p>Unit 6 Exam <i>TX_MAT_APCalculusAB_S27_UE6</i> <u>Scanning Deadline:</u> February 11, 2027</p>	<p>6.1 Exploring Accumulations of Change LO CHA-4.A</p> <p>6.2 Approximating Areas with Riemann Sums LO LIM-5.A</p> <p>6.3 Riemann Sums, Summation Notation, and Definite Integral Notation LO LIM-5.B, LIM-5.C</p> <p>6.4 The Fundamental Theorem of Calculus and Accumulation Functions LO FUN-5.A</p> <p>6.5 Interpreting the Behavior of Accumulation Functions Involving Area LO FUN-5.A</p> <p>6.6 Applying Properties of Definite Integrals LO FUN-6.A</p> <p>6.7 The Fundamental Theorem of Calculus and Definite Integrals LO FUN-6.B</p> <p>6.8 Finding Antiderivatives and Indefinite Integrals: Basic Rules and Notation LO FUN-6.B</p> <p>6.9 Integrating Using Substitution LO FUN-6.D</p> <p>6.10 Integrating Functions Using Long Division and Completing the Square LO FUN-6.D</p> <p>6.14 Selecting Techniques for Antidifferentiation</p>
<p>Unit 7: Differential Equations 14 Days</p>	<p>Unit 7 Exam <i>TX_MAT_APCalculusAB_S27_UE7</i> <u>Scanning Deadline:</u> February 25, 2027</p>	<p>7.1 Modeling Situations with Differential Equations LO FUN-7.A</p> <p>7.2 Verifying Solutions for Differential Equations LO FUN-7.B</p> <p>7.3 Sketching Slope Fields LO FUN-7.C</p> <p>7.4 Reasoning Using Slope Fields LO FUN-7.C</p> <p>7.6 Finding General Solutions Using Separation of Variables LO FUN-7.D</p> <p>7.7 Finding Particular Solutions Using Initial Conditions and Separation of Variables LO FUN-7.E</p> <p>7.8 Exponential Models with Differential Equations LO FUN-7.F, FUN-7.G</p>

Unit 8: Applications of Integration 9 Days	No scan deadline due to close proximity of the Mock Exam	8.1 Finding the Average Value of a Function on an Interval LO CHA-4.B 8.2 Connecting Position, Velocity, and Acceleration of Functions Using Integrals LO CHA-4.C 8.3 Using Accumulation Functions and Definite Integrals in Applied Contexts LO CHA-4.D, CHA-4.E 8.4 Finding the Area Between Curves Expressed as Functions of x LO CHA-5.A 8.5 Finding the Area Between Curves Expressed as Functions of y LO CHA-5.A 8.6 Finding the Area Between Curves That Intersect at More Than Two Points LO CHA-5.A 8.7 Volumes with Cross Sections: Squares and Rectangles LO CHA-5.B 8.8 Volumes with Cross Sections: Triangles and Semicircles LO CHA-5.B 8.9 Volume with Disc Method: Revolving Around the x - or y -Axis LO CHA-5.C 8.10 Volume with Disc Method: Revolving Around Other Axes LO CHA-5.C 8.11 Volume with Washer Method: Revolving Around the x - or y -Axis LO CHA-5.C 8.12 Volume with Washer Method: Revolving Around Other Axes LO CHA-5.C
Mock Exam Window: Mar 22-Apr 2, 2027 Scanning Deadline: Apr TBD, 2027		
AP Success Unit 10 Days		All Topics
AP Exam: May TBD, 2027		
Post-AP Enrichment 8 Days		

TEKS Alignment

Instruction in this course is aligned to the Texas Essential Knowledge and Skills (TEKS) as adopted by the State Board of Education and implemented in accordance with Texas Education Code Chapter 28.

Instructional Materials

Primary Texts (if applicable)

Supplemental instructional materials may be used to support instruction. Supplemental materials do not replace board-approved core instructional materials.

Additional information regarding instructional programs, assessments, and parent access to instructional materials is available on the district website.

Instructional Expectations

Instruction is delivered using board-approved instructional materials and aligned to the scope and sequence outlined above. Teachers are expected to ensure all required standards are taught within the course timeframe.

Assessment Overview

Student learning is monitored through formative and summative assessments aligned to course standards. Assessment results are used to inform instruction and student supports. Students participate in required state assessments when applicable.