



Carroll ISD AP Calculus AB

2025-2026 Year-At-A-Glance

	1 st Grading Period	2 nd Grading Period	3 rd Grading Period	4 th Grading Period
Process Standards	1.A-1.F, 2.A-2.E, 3.A-3.G, 4.A-4.E Math Practice Standards, how students understand and learn mathematics, are used throughout the course			
TEKS	Unit 1: Limits 1.1-1.7, 1.9-1.15 Unit 2: Derivatives 2.1-2.10, 3.1, 3.3-3.6, 4.6-4.7	Unit 3: Integrals 6.1-6.10, 6.14, 8.1 Unit 4: Particle Motion 4.2, 8.2	Unit 5: Curve Sketching 1.16, 5.1-5.9 Unit 6: Accumulating Rates 4.1, 4.3, 8.3	Unit 7: Area & Volume 8.4-8.12 Unit 8: Implicit Differentiation and Differential Equations 3.2, 4.4-4.5, 5.12, 7.1-7.4, 7.6-7.8
Topic Focus	Unit 1: <ul style="list-style-type: none"> Evaluating one-sided limits Evaluating limits from a graph Evaluating limits algebraically using direct substitution Evaluating limits at infinity Find the horizontal asymptotes of a function Find the vertical asymptotes of a function Connecting limits and horizontal asymptotes Connecting limits and vertical asymptotes 	Unit 3: <ul style="list-style-type: none"> Use basic antiderivative formulas to evaluate indefinite integrals Use Riemann sums or the Trapezoidal rule to approximate the value of a definite integral Use FTC to evaluate a definite integral Find the average value of a function Use U-Substitution to evaluate both indefinite and definite integrals Unit 4: <ul style="list-style-type: none"> Use derivatives to solve particle motion problems 	Unit 5: <ul style="list-style-type: none"> Applying the Intermediate Value Theorem to functions Apply Mean Value Theorem to functions Find an absolute extrema on a given interval Find intervals of increasing and decreasing for a function Find intervals of concave up and concave down for a function Find relative extrema for a function Find points of inflection for a function 	Unit 7: <ul style="list-style-type: none"> Find the area between two curves Find the volume of a solid with a known cross section Find the volume of a solid of rotation Unit 8: <ul style="list-style-type: none"> Use implicit differentiation to find the derivative of implicitly defined functions Use the process of differentiation to solve related rates problems

	<ul style="list-style-type: none"> ● Finding limits of composite functions ● Determining if a function is continuous at a point and finding the value of a constant that will make a function continuous <p>Unit 2:</p> <ul style="list-style-type: none"> ● Estimating the instantaneous rate of change of a function ● Find the average rate of change of a function over a given interval ● Use basic derivative formulas to find the derivative of functions ● Apply the product rule, quotient rule and chain rule to find derivatives of functions ● Write a tangent and normal line to a function at a given point ● Find a linear approximation for a function ● Use L'Hopital's Rule to evaluate limits of indeterminate form 	<ul style="list-style-type: none"> ● Use integrals to solve particle motion problems 	<ul style="list-style-type: none"> ● Identify characteristics of a function based on its derivative graph ● <p>Unit 6:</p> <ul style="list-style-type: none"> ● Interpret derivatives in the context of a problem situation ● Interpret integrals in the context of a problem situation ● Solve Rate In - Rate Out problems 	<ul style="list-style-type: none"> ● Draw a slope field for a given differential equation ● Find a general solution to a given differential equation ● Find a specific solution to a given differential equation ● Solve exponential growth problems
<p>Additional Resources</p>	<p>AP Classroom Khan Academy U-World Delta Math</p>			