

AP Calculus BC

SEPTEMBER	Limits Limits algebraically and graphically, IVT	10 days
SEPTEMBER	Derivatives The definition of a derivative, differentiation, chain rule, product and quotient rule, linear approximation, differentiability, Derivatives of a composition and Inverse, Implicit Differentiation	14 days
OCTOBER	Applications of Derivatives Relative extrema, concavity, absolute extrema, increasing/decreasing, Position, velocity, acceleration, MVT, speed, reading $f'(x)$ graphs, Related Rates	15 days
NOVEMBER	The Indefinite Integral U-Substitution, trig derivatives, trig integrals	8 days
November	Definite Integral and Riemann Sums Riemann Sum, properties of integrals, area under a curve, First and Second Fundamental Theorem of Calculus	11 days
December	Applications of Integration Area between curves, disc, washer, shell methods, cross-sections, Average Value, Arc Length	12 days
January	Logarithmic and Exponential Functions Derivatives and integrals involving logs	10 days
January - February	Differential Equations, Inverse Trig functions L'Hopital's rule, differential equations, derivatives and integrals of Inverse Trig functions	10 days
February	Techniques of Integration Integration by Parts, partial fractions, other techniques of integrations	6 days
February - March	Sequences and Series Improper Integrals, Convergence of Series, Methods of convergence	12-16 days
March	Power Series Interval of Convergence, Diff/Int a power series, Taylor's formula, Remainder	10 days
April	Vector Valued Functions, Polar Equations, & Final Projects Parametric and Vector Valued functions, Polar functions and Area	10 days
April - May	AP Exam Review 	14 days