



AP Calculus BC
Year at a Glance (YAG)
2024-2025



First Semester		Second Semester	
1 st Nine Weeks		3 rd Nine Weeks	
College Board Standard	Content <u>AP Calculus CED</u>	EU 2.3 EU 3.3 EU 3.5	Unit 9: Integration techniques, growth and decay (11 days) Students will use various integration techniques to solve various growth and decay problems.
EU 1.1, EU 1.2	<i>TEKS ARE LAYERED WITHIN THE FRAMEWORK OF CED LINKED ABOVE. Options for extended learning (GT) are also embedded in the CED linked above.</i> Unit 1: Limits (9 days) Students will determine limits algebraically, graphically, and tabularly.	EU 3.3, EU 1.1	Unit 10: Improper integrals and L'Hopitals Rule(10 days) Students will determine limits using L'Hopital's rule and then use those limits to evaluate improper integrals.
EU 2.1, EU 2.2	Unit 2: The Derivative and Derivative Rules (11 days) Students will explore the concept o the derivative and determine derivatives for a variety of functions.	EU 2.2, EU 2.3, EU 3.4	Unit 11:Polar, Parametric, and Vector Equations (12 days) Students will explore motion of objects in 2 dimensions, using vectors, parametric and polar functions.
EU 2.2 EU 2.3 EU 2.4	Unit 3: Derivative Applications and Analyzing f,f',f'' Relationships. (12 days) Students will analyze the relationships between a function and its derivative.	EU 4.1 EU 4.2	Unit 12: Series Convergence (12 days) Students will analyze various series using the various series convergence tests.
EU 2.3	Unit 4: Optimization and Related Rates (8 days) Students will apply derivatives in a variety of real world contexts.		
2 nd Nine Weeks		4 th Nine Weeks	
EU 3.1, EU 3.2, EU 3.3, EU 3.4	Unit 5: Riemann Sums, Antidifferentiation and Fundamental Theorem of Calculus (9 days) Students will explore the concept of the Fundamental Theorem of Calculus and integration.	EU 4.2	Unit 13: Taylor Series (15 days) Students will use the Taylor formula to represent a variety of functions as series and analyze the error of these series.
EU 3.3, EU 3.4	Unit 6: Application of the Fundamental Theorem of Calculus (7 day) Students will apply the F.T.C. in a variety of real world contexts.	ALL	Unit 14: AP Review Multiple Choice (13 days) Students will review all concepts presented in this class in order to prepare for the AP test.
EU 3.4	Unit 7: Area and Volume (10 days) Students will find the area and volume of various irregular figures.	ALL	Unit 15: AP Review Free Response (13 days) Students will review all concepts presented in this class in order to prepare for the AP test.
EU 3.5	Unit 8: Differential Equations (11 days) Students will solve and apply differential equations in a variety of contexts.		Semester Exam Review (4 days)
	Semester Exam/Review (3 days)		



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Resources

1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks