

1st QTR	AP CALCULUS--AB	2007-08
	** NOTE: Use AP problems all year.	
Number of Blocks	Concept	Text Reference
	Review--Prepartaion For Calculus	
	Precalculus Review	Appendix D. 1 & D.2
	Trigonometry Review	Appendix D.3 & problem set
	Test Appledix D (Preview of Calculus)	1.1
	Limits & Their Properties	
		Chapter 1
	Finding limits graphically & numerically	1.2
	Evaluating limits analytically	1.3
	Continuity & one-sided limits	1.4
	Infinite limits & limits at infinity	1.5 & 3.5
	Review chapter 1 and sections 3.5	
	Test Chapter 1 & 3.5	
	Derivatives	
		Chapter 2
	The derivative & the tangent line problem	2.1
	Basic differentiation rules & rates of change	2.2
	Product & quotient rules & higher order derivatives	2.3
	The chain rule	2.4
	Implicit differentiation	2.5
	Review 2.4 & 2.5	2.4 & 2.5
	Related rates	2.6
	Review Chapter 2	
	Test Chapter 2	

2nd QTR	AP CALCULUS--AB	2006-07
	** NOTE: Use AP problems all years	
Number of Blocks	Concept	Text Reference
	Applications of Derivatives	Chapter 3
	Extrema on an interval	3.1
	Rolle's theorem & mean value theorem	3.2
	Increasing & decreasing functions; the first derivative test	3.3
	Concavity; the second derivative test	3.4
	A summary of curve sketching	3.6
	Optimization problems	3.7
	Calculator-active problem (if time permits)	3.8
	Business and economic applications (if time permits)	Appendix G
	Review Chapter 3	
	Test Chapter 3	
	Integration	Chapter 4
	Antiderivatives & indefinite integration	4.1
	Area	4.2
	Riemann sums & definite integrals	4.3
	The fundamental theorem of calculus	4.4
	Integration by substitution	4.5
	Numerical integration	4.6
	Review Chapter 4	
	Test Chapter 4	

3rd QTR	AP CALCULUS--AB	2007-2008
	** NOTE: Use AP problems all year.	
Number of Blocks	Concept	Text Reference
	Logarithmic & Exponential Functions	Chapter 5
	Natural logarithmic function: differentiation	5.1
	Integration with the natural logarithmic function	5.2
	Inverse functions	5.3
	Exponential functions: differentiation & integration	5.4
	Bases other than e and applicaions	5.5
	Inverse trigonometric functions: differentiation	5.6
	Integration with inverse trigonometric functions	5.7
	Review chapter 5	
	Test Chapter 5	
	Differential Equations	Chapter 6
	Slope fields (omit Euler's method)	6.1
	Differential equations: growth & decay	6.2
	Separation of variables (omit logistic equations)	6.3
	Review Chapter 6	
	Test Chapter 6	
	Area & Volume	Chapter 7
	Area of a region between two curves	7.1
	Volume: the disk method	7.2
	Review Chapter 7	
	Test Chapter 7	
	Practice old AP problems	

4th QTR	AP CALCULUS--AB	2007-08
	** NOTE: Use AP problems all year.	
Number of Blocks	Concept	Text Reference
	Review for AP Exam	
	Practice for the AP test	
	AP EXAM--MAY 9, 2007	
	Topics to cover as time permits after the AP exam	
	Shell method	7.3
	L'Hopital's rule	8.7
	Integration by parts	8.2

Suggestions
1. Students are given practice questions from AP tests--including multiple choice and free response throughout the year.
2. Try to allocate three weeks for AP review--including some timed AP review materials.
3. Prepare students for AP Calculus Exam by using assessments that: <ul style="list-style-type: none"> • contain both multiple choice and free response questions • are timed so that students learn how to work within time constraints • contain two parts: calculator & non-calculator sections *
* Note: Using colored paper for one section & white paper for the other section helps to ensure that students are using a calculator for the appropriate part.
4. Require students to write verbal justifications for answers and show all work.
5. Develop rubrics for grading problems. This helps to show students how important it is to show work and the format that it must be in to receive credit.
6. Two major emphases: Integral as accumulator & derivative as rate of change.
7. Position, velocity, acceleration and "total distance" vs. displacement $\int v(t) dt$
8. Students need practice with multiple choice questions with graphing calculator. (Very Concept Oriented Ones)
9. Emphasize multiple relationships of functions, analytical, numerical, graphical and verbal.
10. Emphasize characteristics of f(x) given f'(x) and f''(x) graphs.