

# Calculus mini curriculum for AP Physics C

	<b>Units</b> and cribsheets	Stewart (4 <sup>th</sup> ed.)	College Board
<b>Limits</b>			
1	1.1 Limit definitions	C p. 82 # 3, 6(a,b,c,d), 21 <b>HW</b> p. 82 # 15, 20, 23, 25, 31	ABBCCD = course description pp. 47 <i>et seq.</i> <b>HW</b> ABBCCD MC # 1
2	1.3 Calculating limits Rules/identities	C p. 91 # 1(a,h), 3 <b>HW</b> p. 91 # 2, 4, 51	
3	Direct substitution check	C p. 91 # 12, 11 <b>HW</b> p. 91 # 10, 13-27 (odd)	
4	[Squeeze theorem]	[ <b>HW</b> p. 91 # 31]	
<b>Derivatives</b>			
5	2.1 Derivatives (mainly polynomials and chain rule)	C p. 123 # 22 C p. 134 # 4, 8, 13, 19 <b>HW</b> p. 134 # 5, 7, 11, 14-18, 20-24 C p. 144 # 2, 4, 6 <b>HW</b> p. 144 # 1, 3, 5, 7-13, 30 C p. 156 # 2, 8, 12, 18 <b>HW</b> p. 156 # 1 – 39 (odd), 49, 51 C p. 183 # 1, 56 <b>HW</b> p. 183 # 3 – 45 (odd), 55, 57	<b>HW</b> ABBCCD MC # 4, 5, 18c
<b>Integrals</b>			
	3.1 Definite integrals and area 3.2 RAM 3.2.3 Integration table	C p. 322 # 2, 16 <b>HW</b> p. 322 # 1, 3 C p. 334 # 30, 32, 44 <b>HW</b> p. 334 29, 31-35 (odd), 43, 45	<b>HW</b> ABBCCD MC # 9, 12
<b>Fundamental theorem of Calculus</b>			
	3.3.1 Fundamental theorem of calculus 3.3.2 Fundamental theorem of calculus flashcard 3.3.3 Fundamental theorem of calculus keeping track	C p. 304 # 2, 4, 20 <b>HW</b> p. 304 # 1, 3 – 37 (odd), 39-43 (odd) C p. 344 # 6, 18 <b>HW</b> p. 344 # 5-15 (odd), 17-27 (odd) C p. 352 # 6, 24, 46, 50 <b>HW</b> p. 352 # 5-11 (odd), 15, 17-33 (odd), 39, 41, 45, 47 C p. 361 # 2, 14, 16, 32, 34 <b>HW</b> p. 361 # 3, 7-15 (odd), 29, 31, 33, 37, 43	<b>HW</b> ABBCCD MC # 20c  [ <b>HW</b> ] FRQs Calc AB 2004 Form B # 2 (c)
<b>Special functions</b>			
	2.2.1 Derivatives of circle functions intuitive	C p. 175 # 2, 4, 12 <b>HW</b> p. 175 # 1 – 19 (odd) C p. 345 # 32 <b>HW</b> p. 345 # 29-33 (odd), 44 C p. 353 # 14, 16 <b>HW</b> p. 353 # 13, 35, 37 <b>HW</b> p. 361 # 1, 17-27 (odd), 41	
	4.1 Derivatives inverse functions 4.2 Exponentials and logarithms	C p. 414 # 36 (parts b, c, and d only), 44 <b>HW</b> p. 414 # 35 and 37 (parts b, c, and d only), 39, 41, 43 C p. 426 # 30, 36, 52, 74 <b>HW</b> p. 426 # 23, 29, 35, 37, 41, 43, 45, 51, 55, 71, 73, 76 C p. 443 # 6, 8, 40 <b>HW</b> p. 443 # 3, 11, 15, 24, 39, 47, 65, 69, 73, 75	<b>HW</b> ABBCCD MC # 15 <b>HW</b> ABBCCD MC # 3, 10, 11