

Syllabus for A.P.TM Calculus AB '09-10				
Chapter One PREREQUISITES for CALCULUS				
Note:	On A.P. probs, calculator allowed on #1,2,3; NO cal on #4,5,6			
Day #	Sections		Topic	In Class
1	1.1	p.9 QR#1-9, #3-36(3n,n€ I),	Lines (gp)	p11#57
2		p10 #37-41,44,45,54,56		p11#47-52
3	1.2	p.18 QR#1-12, p19#3-33(3n,n€ I),39,41	Functions & Graphs	
4		p19#1,2,4,22,26,28,34,42,43,45,48		p19#57-62
5		p20#51,55,56,67-72		BR55,56
6	1.3	p26 QR#1-9;#2-12(2n),13-21,23,26,27,29	Exponential Functions	
7		p27 #32,33,35,37,41-48		p29#1-4 BR47,48
8	1.5	Quiz on Sections 1-3;p43 QR#1-4,7-10	Functions & Logarithms	
9		p44#3-24(3n,n€ I)33,34,39,42,45,48		p44#43,52-57
10	1.6	p.52 QR#1-9; #3,6,9,11,15,18	Trig Functions	p54#50-55
11		p52#21,27-30,32-34,36,37,39,46		p55#1-4
12	Review	p.56#3,9,13,15-20,23,26,29,31,33-35,37,41,43,58,67-70		p44#45,51
13		Review for test		
14	Test	Chapter 1 Test; QR p65#1-10		
Chapter Two LIMITS and CONTINUITY				
15	2.1	p66#1-35 odds	Rates of Change, Limits	p66#42,44
16		p66#37-43 odds,45-49,51,54,59,60,63		p67#50,65-70
17		p68#55,57,61,64 ; p75QR#1-10		
18	2.2	p76#3-33(3n,n€I)	Limits Involving Infinity	p77#55,56,59-64 gc Eg8
19		p76#35-44,68,69 Quiz on Sect 1&2		p77 bott#1-4
20	2.3	p77 bottom#1-4 p84 QR#1-10; p.84#3-21(3n,n€ I)	Continuity	p85#1,2,19,37-39
21		p84#24,25,27,30,33-36,41-51		p85#56-59
22	2.4	p92 QR#1-10, #1-9 odds	Rates of Change and Tan.Lines	
23		p92#11-17 (odds),23		p93#19,21 p94#35-40
24		p92#28,30-32,35-40		
25	Review	p95#1-23 odds,25,33,34,37-41,43,47		p94bottom1-4
26		Review for test		p97#49,53
27	Test	Chapter 2 Test, p105 QR1-10,#1,2		

Chapter Three DERIVATIVES				
28	3.1	p.105#3-19(odds),14,16	Derivative of a Function	p107#33,35,43
29		p106#21-31(odds)		p108#36-41, 43
30	3.2	p.114 QR#1-10, #1-19(odds)	Differentiability	p115#47
31		p114#21-35(odds)		p115#40-45
32	3.3	p123 QR#1-10; p124#1-9 (odds)	Rules for Differentiation	p124#41,42 p125#53-58
33		p.124#11-39(odds),38,40,48		p126#1-4
34		p107#30,2003#4ac,6a,2005#3a		
35	3.4,Quiz	p.135 QR#1-10, #1-9(odds)	Velocity& Other rates of Change	p135#31,32
36		p136#10,14,15,16,18,19,21,24,25,27		p139#39
37		p139#34,36,38,40-46,48		
38	3.5	p146 QR#1-10; #1-11(odds)	Derivatives of Trig Functions	p146#33, '99#1ab 97AB2abc
39		p146#13-31(odds),37,40-42		p147#43
40		p147#44-49		2000#2ab;2000#3c
41	3.6	p153 QR#1-7, #3-21(3n,n€ I)	Chain Rule	96 AB6
42		p153#24-36(3n,n€ I),56,70,72,73+'96AB6		p155#62
43		p156#1,2,4;p162 QR#1-10		
44	3.7 Quiz	p162 #3-21(3n,n€ I) + quiz	Implicit Differentiation	p160Exp#1 95AB3
45		p162#24-42(3n,n€ I),54		05 FormB#5a
46		p164#59-61,63,64;p170 QR#1-10		
47	3.8	p170#3-27(3n,n€ I),	Deriv. of Inverse Trig Functions	p171#35-40,30
48	3.9	p178 QR#1-10, #3-21(3n,n€ I)	Deriv. of Log & Expon. Functions	
49		p178#24-39(3n,n€ I),45		00 #5
50		p179#51,56-62; p181#1-23odds	p179#52,53	p180#1-4
51	Review	p.181#31-39odds,45-47,59,61,62,65,71		
52		Review for test		
53	Test	Chapter 3 Test, p193 Ex#1-5,11		

Chapter Four APPLICATIONS of DERIVATIVES				
54	4.1	p193#7-17(odds)QR p193#1-12	Extreme Values of Functions	p194#31-34, 43
55		p194 #19-29(odds)		p195#51
56		p194 #35-41(odds),44-50		
57	4.2	p.202 QR#1-10; p202#1-11(odds)	Mean Value Theorem	
58	TRIMESTER ONE FINAL EXAM			
59		p202#12-14, 15-33(odds),37,43,45-47		p203#51-56
60	4.3	QR p214#1-10, p215#1-15(odds)	Connecting f' & f" w/ Graph of f	p216#47
61		p215#18-36(3n,n€ I),41,42,48		p216#47
62		p215#2,16,22,39,45-47,51,52,55-60		p216#53,54
63		QQp218#1-4(#4 to be handed in)		03#4abc 96#1abcd
64	4.4,Q	Quiz + QRp226#1-10		
65	4.4	p.226#2,8,20,27,31,36,40,41	Modeling & Optimization	
66		p.226#3,10,12,18,22,23,39		
67		p230 #47,49,50-56,61,62		01#2ac;'01#4all 06#6all;
68		AP problems practice		05#4abd(difficult)
69		AP problems practice		
70	4.5	p233 Expl#1;p242 QR#1-6 p242#3,5,7	Linearization	
71		p242#8,13,19,22,25,28,31		
72		p243#34-40 + p250 QR#1-6		
73	4.6	p.251#1,2,3-24(3n,n€ I)	Related Rates	'07#5b;'07#6 p254#42,47
74		p.253#8,11,13,29,34,36-40		p253 #35,42 02#5~#12 in 4.6
75		p255 QQ#2,3 + Work on AP problems		04#4
76	Review	p.256#1,3,5,13,17,23,27,31-35,49,57		06#6;p259#62*
77		Review for test		
78	Test	Ch 4 test; p267 Expl.1 w/ gr paper		

Chapter Five The DEFINITE INTEGRAL				
79	5.1	p269 QR#1-10;p270#1-8,10,13-15(typo#6)	Estimating w/ Finite Sums	
80		p271#16,18,20-22,24,25,30		
81		p272 #28,31-36;p282(QR)#1-10	Definite Integrals	p.279 Exp1#1-10 p282 Exp2
82	5.2	p282#1-35(odds)		p283#51-55
83		p283#36-50,p290 QR#1-10		p289 Exp2* b4#19
84	5.3	p290#1,3,4,6-8,10,11,14,15,18,19	Def.Integrals&Antiderivatives	p292#40,41
85		p290#22,23,27-36,45-51		p293 QQ#1-4(wo) 07#5 Relat rates
86	5.4	p302(QR)#1-7,p302#1-4		06#4ab Riemann
87		p302#6-30(3n,n€ I),	Fund.Theorem of Calculus!	
88		p303#33-51(3n,n€ I),57-69(odds),72-74		03#4 (did in 4.3)
89		p304#58-70(evens)FTC practice MC	FTC practice	04#1ab
90	5.5	p311 QR#1-10,p312#1,2,Trapez.WS	Trapezoidal Rule	
91		p312#4,7,9-11,31-36,39		00AB4
92		p312#10 (WO), p315(QQ)#1-3;p315#3,5,9		
93	Review	p.315#10,13-19,25,29,33,39,45,56,58-60		Ave Value 97#4abc,98#5a-d 05#2;'05#5
94		Review for test		
95	Test	Chapter 5 Test , p.327(QR)#1-11(odds)		05FmB#2,#4
Chapter Six DIFF.EQUAT.& MATH MODELING				
96	6.1	p.327#3-24(3n,n€ I),25-28	Slope Fields Finish 2001 #4	p327 QR evens p323Exp 1
97		p.328#29-32,35-40,49-52,55,56,59-64		p329#57,58
98	6.2	p.337 QR#1-10 p337#1-15(odds)	Antidiffer. by Substitution	'05Fm B AB#6
99		p337#18-26(evens),27-39(3n,n€ I),		p340#78,79
100		p.338#44,47-49,52,54,57,60,66,71-76		
101	omit 6.3	Cooperative problems+p346 QR#1-10		p329#57,58 p339#78,79
102	6.4	p.357 QR#1-10;p357#3-12 all	Exponential Growth & Decay	p360#49,50,57**

103		p357#15-42(3n,n€ l,omit#33)		02#2; '02#3
104		p360#49-52		03#2;'04 FrB#2 (Accum +motion)
105		Several essay questions		
106	6.5	QRp369#1-4, p369#1-4	Logistic Growth	
107		p369#5,12,13,15,16,19,20		05#6
108	Review	p.373#1-5,8,13,23,27,31,35-42,56,57		
109		Review for test		
110	Test	Chapter 6 Test , p.385(QR)#1-5		
Chapter Seven APP. of DEFINITE INTEGRALS				
111	7.1	QR p385#6-10; p386#1-11(odds)	Integral as Net Change	
112		p386#12-22,27,28		
113	7.2	p387#24,31-36;p395 QR#1-10;		p387#25,26,37*
114		Cooperative problems		
115		p391 Expl#1, p395#3-11(odds)	Areas in the Plane	p391 Exp#1
116		p396#12-42(3n,n€ l),46	Areas in the Plane	p397#53,54
117		p396#48,49; Essay questions		01#1ab(if no vol)
118	7.3	p.405(QR)#1-10;p406#1-11(odds)	Volumes	p409#63,64 05FmB AB1
119		p407#16,19,22,23,27,29,39-45(odds),49		p406#2-14 evens
120		p409#63-68,p411#1,3,4	MC practice	
121		MC Practice	MC practice + shell method	p411#2
122		Practice essay problems		
123		Practice essay problems		
124	Review	p430#1-21 odds, 53-55	#53-55 as write-outs	
125	Test	Chapter 7 Test (Sections 1-3)		
126	Review for AP test!	Review for AP test!		
127		<i>Review for AP test!</i>	<i>Review for AP test!</i>	<i>Review for AP test!</i>
128	Review for AP test!			
After AP test..... L'HOPITAL'S RULE; PARTIAL FRACTIONS				
	8.2	p.450#1-25 odds	L'Hopital's Rule	
	6.5	p.369#1-13 odds	Partial fractions	