

Calculus 12 Course Timeline

Period	Topic	Section	Worksheets	Homework (Tentative)
1	Introduction and Administrivia			Texts handed out and calculators checked (TI-83 graphing and table features)
2	Lines	1.1	Best Fit Straight Lines	P7 5,9,13,17,21,27,31,39,40,47
3-4	Functions & Graphs	1.2		P17 6,15,19-21,29,33,37-40,43,63
5Q	Exponential Functions	1.3		P24 1-6,9,13,24,30,36,38
6	Parametric Equations	1.4		P30 1-4,7,13,19
7	Logarithms	1.5		P39 1-12,14,22,33,35,37,38,41,48
8	Trigonometric Functions	1.6		P48 1,2,9,11,19,25-27,31,34
9Q	Review/Flex			P52
10	Test – Chapter 1 (February 10)			
11-12	Rates of Change and Limits	2.1	Lab On Limits	P62 1-8,10,12,17-22,31,35,43,47,57
13-14	Limits Involving Infinity	2.2		P71 1-6,17-27(odd),29-32,40-42
15Q	Continuity	2.3		P80 1-15,19,23,25,27,43
16-17	Rates of Change and Tangent Lines	2.4	Analyzing Temperature Change	P87 1,3,6-9,11,14,15,17,25,27,30,34
18Q	Review/Flex			P91
19	Test – Chapter 2 (February 22)			
20-21	Derivative of a Function	3.1		P101 1-12,15,18,19,26

22	Differentiability	3.2	Lab - Zooming In	P111 1-17,19,21
23-25	Rules of Differentiation	3.3		P120 1-18,23,27,28,32,35
26Q-27	Velocity – Rates of Change	3.4		P129 2,3,8-10,12,13,16, 24,30
28-29	Derivatives of Trigonometric Functions	3.5		P140 1-12,19,21-24,31,33
30-32	Chain Rule	3.6	The Oscillating Pendulum	P146 1-50(odd),56,61,62
33Q-34	Implicit Differentiation	3.7		P155 1-30(odd),37,38,46
35	Derivative of Inverse Trigonometric Functions	3.8		P162 1-18(even),22
36-37	Derivative of Exponential and Logarithmic Functions	3.9		P170 1-40(odd),47
38Q-39	Review/Flex			P172
40	Test – Chapter 3 (March 31)			
41-43	Extreme Values of Functions	4.1		P184 1-41(odd), 49
44-45	Mean Value Theorem	4.2		P192 1-20,25-34,36,39-43

Exam Review during last week of classes

Mid-Term Exam (all material completed to date) ... **April 15**

49-52	Connecting f' and f'' to the graph of f	4.3	Investigating f , f' and f''	P203 1-28(even),31-33, 37,40,42,45,48
53Q-55	Modelling and Optimization	4.4	What Manufacturers say about max/min.	P214 1-3,6,7,10,11,14,15, 18,23,32,34,42,43
56-58	Linearization and Newton's Method	4.5		P229 1-21(odd),28,32,41
59-62	Related Rates	4.6		P237 1-4,7,8,11,13,16,18, 20,21,23-26,30
63Q-64	Review/Flex			P242
65	Test – Chapter 4 (May 11)			
66-67	Estimating Distance Travelled with Finite Sums	5.1		P254 1-4,8,11-13

68-70	Definite Integrals	5.2		P267 7,8,13,15,17,29,31,32, 39-42,47
71-73	Antiderivatives	5.3		P274 1,5,7-20,22,27,29,31, 36,40
74Q-76	Fundamental Theorem of Calculus	5.4		P286 1-17(odd),25-28,34, 37,39,43-46,54
77-79	Indefinite Integrals	6.1	Slope Fields	P312 1-30(odd),31-34,39, 42,43,53,55,58
80-82	Integration by Substitution	6.2		P321 1-8,9-25(odd), 32-36(even)
83-85	Integration by Parts	6.3		P328 1,7,9,11,15,17,19,20, 24,25
86Q-87	Review/Flex			P298 and 358
88	Test – Chapter 5&6 (June 7)			
89-90	Exponential Growth & Decay	6.4	Newton's Law of Cooling	P338 1-10,12,14,15-18, 20,21,24,26,27
91Q-92	Applications from Science & Statistics	7.1 & 5		P371 1-10,12-16,26,27 P407 1-5,27,28
93Q	Review/Flex			

Review for FINAL EXAM (all material completed)

EXAM – exams begin June 17th