

**Math 126: Calculus II**
**Fall 2000**

Aug 23	Introduction, Mathematica	
25	6.1 Inverse Functions	#1 p.454:2,4,6,C8,C14,C16,C30
28	6.2 Natural logarithms	#2 p.465:4,6,16,18,28,40,48,54,58,70,C89,C90
30	6.3 Exponential Function	#3 p.472:10,12,20,30,38,42,50,62,68,C70
Sep 1	6.4 $a^x$ and $\log_a x$	#4 p.481:12,14,34,40,44,48,56,62,C83,C84
4	6.5 Growth and Decay	#5 p.488:8,10,14,18,24,26
6	6.6 L'Hopital's Rule	#6 p.496:8,10,14,24,40,42,44,52,C70,C73
8	6.7 Relative Rates of Growth	#7 p.503:2–10even,18,C21
11	6.8 Inverse Trig Functions	#8 p.510:2,4,6,8,18,22,34,36,42,44
13	6.9 Derivatives/Integrals of Inverse Trig	#9 p.518:2,4,14,24,26,28,44,50,52,(C)87
15	6.10 Hyperbolic Functions	#10 p.525:6,10,12,14,16,18,26,28,68,70
18	6.11 First Order Differential Equations	#11 p.537:2,6,8,10,12,16,18,22,24,36,40,46
20	6.11 First Order Differential Equations	
22	7.1 Basic Integration Formulas	#12 p.560:2,8,20,24,26,40,44,50,56,58,82,84ab
25	7.2 Integration by Parts	#13 p.567:2–14even,22,28,30,32,C41
27	<i>Review</i>	
28	<i>Exam I</i> 8:00 A.M. HAGR 117	
29	7.3 Partial Fractions	#14 p.576:2,8,10,16,18,20,22,26,34,38
Oct 2	Partial Fractions	
4	7.4 Trig Substitutions	#15 p.582:2–12even,16,20,24,30
6	7.6 Improper Integrals	#16 p.603:2–12even,22,24,26,48,54,56,62
9	7.6 Limit Comparison Test	
11	8.1 Limits of Sequences	#17 p.619:2–12even,16,20,C56,C60
13	8.2 Theorems for Limits of Sequences	#18 p.628:2–16even,20,22,24,28,30,34,38,44
14–22	<i>Midsemester Break</i>	
23	8.3 Infinite Series	#19 p.638:2–20even,24,32,34,42,48
25	8.4 The Integral Test	#20 p.643:2,4,6,16,20,24,26,28,32,C33
27	8.5 Comparison Tests	#21 p.649:2–12even,18,20,24,26,28
30	8.6 The Ratio and Root Tests	#22 p.655:4–22even,32,40
Nov 1	8.7 Alternating, Absolute and Conditional	#23 p.661:2–20even,46,C50
3	Review series/convergence tests	
6	8.8 Power Series	#24 p.671:2–22even,34,36,38,46
8	<i>Review</i>	
9	<i>Exam II</i> 8:00 A.M. HAGR 117	
10	8.9 Taylor and Maclaurin Series	#25 p.677:2–28even,38
13	8.10 Covergence of Taylor Series	#26 p.686:2–18even,20,23,24
15	8.10 Covergence of Taylor Series	
17	8.11 Applications of Power Series	#27 p.697:2,4,6,18,22,37,38,43,44,48,50,56
20	8.11 Applications of Power Series	
22	9.4 Parametrizations of Plane Curves	#28 p.741:4,6,10,14,16,22,24,26,C44,C45,C47,C48
23–26	<i>Thanksgiving</i>	
27	9.5 Calculus with Parametrized Curves	#29 p.749:2–12even,18,26,C30,C55
29	9.6 Polar Coordinates	#30 p.755:4–12even,20,22,28,32,44,58,60
Dec 1	9.7 Graphing in Polar Coordinates	#31 p.763:21–24,30,34,40,45–47,48ace—use Mma
4	9.9 Integration in Polar Coordinates	(#32 p.775:2–12even,20,30)
6	<i>Review</i>	
7–8	<i>Study Days</i>	
Fri 15	<i>Final Exam</i> 1:45–3:45 TBA	