

**Math 166: Honors Calculus II**
**Syllabus**
**Spring 1995**

Jan. 18	5.1 1st Fund Thm	#1 p.208(5.5):2–10even,11–15,21,28
19	5.2–5.4 Primitive fns; 2nd Fund. Thm	
20	5.6–5.7 Int by substitution	#2 p.216(5.8):1–23 odd
23	5.9 Int by parts	#3 p.220(5.10):1,3,7,8,10–13('a' only)
25	6.1–6.5 Logs	#4 p.236(6.9) 1a,2–15
26	Quiz 1	
27	6.6–6.8 Log ints and derivs	#5 p.236(6.9):16–27
30	6.12–6.14 Exponential fn	#6 p.248(6.17):1–12
Feb. 1	6.15–6.16 Exp ints and derivs	#7 p.249(6.17):13–31odd,39,40
2	Quiz 2	
3	6.18 Hyperbolic fns	#8 p.251(6.19):1–8,14,21–23
6	6.20–6.21 Inverse fns	#9 p.256(6.22): 12–18even,26,29–39odd
8	6.21 Inverse trig fns	
9	Quiz 3	
10	6.23 Partial fractions	#10 p.267(6.25):1–12
13	6.24 P.F., Trig substitutions	#11 p.267(6.25):13–24
15	Trig subst.	#12 p.267(6.25):26,29,33,34,36,38,39
16	Quiz 4	
17	7.1–7.3 Taylor polynomials	
20	7.3 More Taylor Polynomials	#13 p.278(7.4) 1–10
22	7.5 Taylor's formula	
23	Quiz 5	
24	7.6 Error estimates	#14 p.284(7.8) 1–3,6–9
27	7.7 Lagrange form of the remainder	
Mar. 1	Review	
2	<b>Exam 1</b>	
3	7.9 Go over exam, $o$ -notation	#15 p. 290(7.11) 1–10
6	7.9 $o$ -notation	#16 p.291(7.11) 11–17,20,22,25,26
8	7.10 Indeterminate forms	
9	Quiz 6	
10	7.11 L'Hôpital's Rule	#17 p.295(7.13) 1–13
13–17	<b>Midsemester Break</b>	
20	7.14 $\pm\infty$ , L'Hôpital Extensions	#18 p.303(7.17) 1–10
22	7.15–7.16 Infinite limits	#19 p.303(7.17) 11–20
23	Quiz 7	
24	7.16 Infinite limits	#20 p.382(10.4) 1–10
27	10.1–10.2 Sequences	#21 p.382(10.4) 11–18,33,35
29	10.3 Monotonic sequences	
30	Quiz 8	
31	10.5–10.7 Infinite series, Telescoping series	#22 p.391(10.9) 1–10
Apr. 3	10.8 Geometric series	#23 p.391(10.9) 11–13,15–18,20,22,23
5	10.11–10.12 Convergence tests	#24 p.398(10.14) 1–10
6	Quiz 9	
7	10.13 Integral test	#25 p.399(10.14) 11–19
10	10.14 Root & ratio tests	#26 p.402(10.16) 1–14
12	10.17 Alternating series	#27 p.409(10.20) 1–3,5–18,22,24
13	10.18 Absolute & conditional convergence	
14	<i>Easter Holiday</i>	
17	<i>Easter Holiday</i>	
19	Review	
20	<b>Exam II</b>	
21	10.21 Rearrangement of series	
24	10.23 Improper integrals, 1st kind	#28 p.420(10.24) 1–1
26	10.23 Improper integrals, 2nd kind	
27	Quiz 10	
28	11.6 Power series; radius	#29 p.430(11.7) 1–12 (not collected)
May 1	11.8 Properties of power series	#30 p.438(11.13) 1–10 (not collected)
3	11.9 Taylor's series	
Tues. 9	<b>Final Exam</b> 1:45 P.M.	