MATH 112- SPRING 2011

Week Dates	Section & Topic		Lecture, Page & Homework Assignments		
Week 1 1/18 – 1/21	6.1:	Volumes Using Cross-Sections	1	p.371:	5,9,15,17,21,28,31,32,35
	6.1:	Volumes Using Cross-Sections (cont.)	2	p.371:	39,43,45,47,49,51,53,57
	6.2:	Volumes Using Cylindrical Shells	3	p.379:	3,5,9,11,17,19,21,25,29,33
Week 2 1/24 - 1/28	6.3:	Arc Length	4	p.386:	1,3,5,7,9,21,31
	6.4:	Areas of Surfaces of Revolution	5	p.391:	9,13,15,17,19,21,24
	6.5:	Work	6	p.398:	3,5,6,7,9,13,15,17,18
Week 3 1/31 – 2/4	7.3:	Hyperbolic Functions	7	p.441:	1,7,9,15,17,21,23,41,45,47,49,53, 55,57,81
	8.1:	Integration by Parts	8	p.459:	4,5,11,13,23,27,29,31,33,35,45,47,53
	8.2:	Trigonometric Integrals	9	p.466:	5,9,11,13,19,21,27,31,35,37,39,45,67,71
Week 4 2/7 – 2/11	└▶	**REVIEW FOR EXAM #1**	10	└▶	**STUDY FOR EXAM #1**
	└▶	MIDTERM EXAM I: WEDNESDAY ~ FEBRUARY 9, 2011			
	8.3:	Trigonometric Substitution	11	p.470:	1,3,5,7,15,17,19,21
	└▶	GO OVER EXAM 1			
	8.3:	Trigonometric Substitution (cont.)	12	p.470:	23,25,29,31,35,37,39,43,53
Week 5 2/14 – 2/18	8.4:	Integration of Rational Functions by Partial Fractions	13	p.479:	3,5,7,9,13,14,17,19
	8.4:	Integration of Rational Functions by Partial Fractions (cont.)	14	p.479:	23,25,27,29,35,37,39,45,55
	└▶	**MATLAB 1**		└▶	**DUE ON 3/3/11**

	8.6:	Numerical Integration	15	p.493:	3,7,13,17,21,28
Week 6 2/21 – 2/25	8.7:	Improper Integrals	16	p.505:	1,4,6,7,9,11,13,17,21,23,25,31
	8.7:	Improper Integrals (cont.)	17	p.505:	35,39,41,47,53,55,59,61,63,67,69
	10.1:	Sequences	18	p.559:	3,7,9,15,17,21,23,25,31,35,37,41, 45,49,51
Week 7 2/28 – 3/4	10.1: 10.2:	Sequences (cont.) and Infinite Series	19	p.559:	**53,61,67,69,73,79,81,87,89,99 and MATLAB 1 is due**
	10.2:	Infinite Series	20	p.569:	3,5,7,13,25,29,31,37,41,43,53,55, 59,61,65,69,71
	10.3:	The Integral Test	21	p.575:	4,6,9,13,17,19,23,25,27,29,33,35, 49,51
Week 8 3/7 – 3/11	↳	**REVIEW FOR EXAM #2~ 3/9/2011**	22	↳	**STUDY FOR EXAM #2**
	↳	MIDTERM EXAM II: WEDNESDAY ~ MARCH 9, 2011			
	10.4:	Comparison Tests	23	p.580:	1,3,5,19,21,25,27
	↳	GO OVER EXAM 2			
	10.4: 10.5:	Comparison Tests (cont.) and The Ratio and Root Tests	24	p.580:	23,28,31,32,34,35,37,41,47,51
Week 9 3/14 – 3/18	↳	SPRING RECESS: MARCH 13-19, 2011			
Week 10 3/21 – 3/25	10.5:	The Ratio and Root Tests (cont.)	25	p.585:	1,7,9,13,18,19,24,25,31,35,42,45, 55,57
	10.6:	Alternating Series, Absolute and Conditional Convergence	26	p.591:	1,7,9,10,11,13,15,19,21,23,25
	10.6:	Alternating Series, Absolute and Conditional Convergence (cont.)	27	p.591:	27,34,35,37,39,44,47,51,53
Week 11 3/28 – 4/1	↳	**MARCH 28, 2011: (M) LAST DAY TO WITHDRAW FROM THIS COURSE**			
	10.7:	Power Series	28	p.600:	3,5,9,11,15,19,21,23,27

	10.7:	Power Series (cont.)	29	p.600:	31,37,41,43,47,49
	10.8:	Taylor and Maclaurin Series	30	p.606:	1,3,8,9,11,15,18,25,27,31,35
	↳	**MATLAB 2**		↳	**DUE ON 4/8/11**
Week 12 4/4 – 4/8	10.9:	Convergence of Taylor Series	31	p.613:	1,9,10,11,13,19,21,25
	10.9: 10:10:	Convergence of Taylor Series (cont.) and The Binomial Series and Applications of Taylor Series	32	p.613:	29,35,37,39,41,43
	10.10:	The Binomial Series and Applications of Taylor Series (cont.)	33	p.620:	1,3,5,13,23,25,29,31,35,39,45,49, 55 and **MATLAB 2 is due**
Week 13 4/11 – 4/15	↳	**REVIEW FOR EXAM #3 ~ 4/13/2011**	34		**STUDY FOR EXAM #3**
	↳	MIDTERM EXAM III: WEDNESDAY ~ APRIL 13, 2011			
	11.1:	Parametrizations of Plane Curves	35	p.634:	1,3,5,7,9,16
	↳	GO OVER EXAM 3			
	11.1: 11.2:	Parametrizations of Plane Curves (cont.) and Calculus with Parametric Curves	36	p.634:	20,21,25,27,31,33,39
Week 14 4/18 – 4/22	11.2:	Calculus with Parametric Curves (cont.)	37	p.643:	7,9,12,13,15,21,26,28,29,31,33,35
	11.3:	Polar Coordinates	38	p.648:	1,5,7,13,17,23,27,32,37,47,51,59, 60,61
4/22	↳	**GOOD FRIDAY** ~ NO CLASSES SCHEDULED			
Week 15 4/25 – 4/29	11.4:	Graphing in Polar Coordinates	39	p.652:	1,7,9,13,17,19,25,27
	11.5:	Areas and Lengths in Polar Coordinates	40	p.656:	1,7,11,13,15,17

	11.5:	Areas and Lengths in Polar Coordinates (cont.)	41	p.656:	21,23,27,28
Week 16 5/2- 5-4	↳	**REVIEW FOR FINAL EXAM**	42	↳	**STUDY FOR FINAL EXAM**
	↳	TUE **MAY 3** CLASSES FOLLOW A **FRIDAY** SCHEDULE			
	↳	**5/4** READING DAY			
Finals	FINAL EXAM WEEK: MAY 5-11, 2011				