	Days	Section#	# of pages						
Math 1172=Engineering Calculus Semester II: (5 semester credit hours) (corrected Dec 1, 2011)									
Textbook sections from J. Stewart:									
CALCULUS: Early Transcendentals, 6E									
Comment: This syllabus is the same as the one for 1152, except that here convergence tests have been replaced by multivariable differential calculus									
	Days	Section#	# of pages						
Week 1	3	6.1	5	5 Areas between Curves+Volumes					
		6.2	8	Volumes					
		6.3+6.4	6	Volume by Cylindrical Shells+Work					
Week 2	3	7.1	11	Integration by Parts					
		7.3	5	Trigonometric Substitutions					
		7.4	8	Integration of Rational Functions by Partial Fractions					
Week 3	3	7.8	7	Improper Integrals					
		Midterm 1							
		8.1	5	Arc Length					
Week 4	3	8.2	5	Area of Surface of Revolution					
		9.1	4	Modeling with Differential Equation					
		9.3	6	Separable Equations					
Week 5	3	9.4	7	Models for Population Growth					
		10.1	6	Curves Defined by Parametric Equations					
		10.2	6	Calculus with Parametric Curves					
Week 6	3	10.3	6	Polar Coordinates					
		10.4	3	Areas and Lengths in Polar Coordinates					
		½ 11.1	4	Sequences (Part 1)					
Week 7	3	½ 11.1	4	Sequences (Part 2)					
		11.2	6	Series					
		½ 11.10	6	Taylor and MacLaurin Series (Part 1)					
Week 8	3	½ 11.10	5	Taylor and MacLaurin Series (Part 2)					
		11.12	6	Applications of Taylor Polynomials					
		12.1	4	Three-Dimensional Coordinate Systems					
Week 9	3	12.2	7	Vectors					
		12.3	5	The Dot Product					
		12.4	6	The Cross Product					
Week 10	3	Midterm 2							
		12.5	7	Equations of Lines and Planes					
		12.6	6	Cylinders and Quadratic Surfaces					
Week 11	3	13.1	6	Vector Functions and Space Curves					
		13.2	4	Derivatives and Integrals of vector Functions					
		13.3	5	Arc Length and Curvature					
Week 12	3	13.4	8	Motion in Space: Velocity and Acceleration; Kepler's Laws of Planetary of Motion					
		14.1	9	Functions of Several Variables					
		14.2	7	Limits and Continuity					
Week 13	3	14.3	11	Partial Derivatives (1-D, 2-D, and Higher Order)					
		14.4	7	Tangent Planers and Linear Approximation					
		14.5	6	The Chain Rule					
Week 14	3	Midterm 3 to be given after Section 13.4							
		½ 14.6	5	Directional Derivative and the Gradient Vector (Part I: Dir-Derivative in 2-d)					
		½ 14.6	5	Directional Derivative and the Gradient Vector (Part II: Gradient in 3-d and its Meaning)					
			5.64	Average number of assigned pages/lecture					
			3.46	Average number of assigned pages/class					
Tot# of		which includes 3 midterms							
Lecture Days	42								
Rec. Days	28								
Grand Total	70								