MATH 340- SPRING 2011

Week Dates	Section	Topic of the Class
Week 1 1/18 – 1/21	**1.1-1.2**	Taylor Polynomial, Errors in Taylor Polynomials
	1.2-1.3	Evaluating Polynomials
Week 2 1/24 – 1/28	▪	**LAB:**
	2.1-2.2	Floating Point Numbers
	2.3-2.4	Errors
Week 3 1/31 – 2/4	▪	**LAB:**
	3.1	**Root Finding:** Bisection Method
	3.2-3.3	Newton's Method, Secant Method
Week 4 2/7 – 2/11	▪	**LAB:**
	3.4-3.5	Fixed Point Iteration
	3.4-3.5	Ill-behaved Rootfinding Problems
Week 5 2/14 – 2/18	└▶	**REVIEW FOR MIDTERM EXAM**
	└▶	MIDTERM EXAM I: FEBRUARY 17, 2011
	4.1	**Interpolation:** Polynomial Interpolation
Week 6 2/21 – 2/25	▪	**LAB:**
	4.2	Polynomial Interpolation
	4.3	Spline Interpolation
Week 7 2/28 – 3/4	▪	**LAB:**
	5.1	**Numerical Integration:** Trapezoidal & Simpson's Rule
	5.2	Error Formulas
Week 8 3/7 – 3/11	▪	**LAB:**
	5.2	Error Formulas
	5.3	Gaussian Quadrature
Week 9 3/14 – 3/18	└▶	SPRING RECESS: MARCH 13-19, 2011

Week 10	▪	**LAB:**
3/21 – 3/25	**5.4**	Numerical Differentiation
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Week 11	∟▶	**LAST DAY TO WITHDRAW FROM THIS COURSE**
3/28 – 4/1	∟▶	**REVIEW FOR MIDTERM EXAM**
	∟▶	MIDTERM EXAM II: MARCH 31, 2011
	8.1-8.2	Review of ODE, Ordinary Differential Equations: Euler's Method
Week 12	▪	**LAB:**
4/4 – 4/8	**8.3**	Euler's Method
	8.3-8.4	Stability & Implicit methods
Week 13	▪	**LAB:**
4/11 – 4/15	**8.4-8.5**	Taylor and Runge-Kutta Methods
	8.7	Systems of Differential Equations
Week 14	▪	**LAB:**
4/18 – 4/22	**Ch.6**	Linear Algebra
	Ch.6	Eigenvalue Problems
4/22	∟▶	GOOD FRIDAY ~ NO CLASSES SCHEDULED
Week 15	▪	**LAB:**
4/26 – 4/30	**Ch.6**	Non-linear Systems
	∟▶	**REVIEW FOR MIDTERM EXAM**
Week 16	▪	**LAB:**
5/3 - 5/4	∟▶	**REVIEW FOR MIDTERM EXAM**
	∟▶	**TUES. MAY 3 CLASSES FOLLOW A FRIDAY SCHEDULE**
	∟▶	**5/4 READING DAY**
Finals		FINAL EXAM WEEK: MAY 5-11, 2011