MATH 1242 Syllabus

CALCULUS II

IMPORTANT NOTE! **This course has a REQUIRED Common Final exam. The location of this exam will be announced near the end of the semester. The date of the exam can be found at http://www.registrar.uncc.edu/calendars/exam.htm. Be sure you are available to take the exam.**

Text: Essential *Calculus: Early Transcendentals,* by James Stewart, 2nd edition

Week 1**:**	5.1	Areas and Distances
	5.2	The Definite Integral
	5.3	Evaluating Definite Integrals
Week 2:	5.4	The Fundamental Theorem of the Calculus (including the *Average Value of a Function* and the *Mean Value Theorem for Integrals*)
	5.5	The Substitution Rule
	6.1	Integration by Parts
Week 3:		*Catch up and Review*
	Test #1 (5.1-6.1)	
Week 4:	6.3	Partial Fractions (Omit Case IV*: Repeated irreducible quadratic factors*)
	6.4	Integration Using Tables and Computer Algebra Systems
Week 5:	6.5	Approximate Integration (including *Error Bounds*)
	6.6	Improper Integrals
Week 6:	**Test #2 (5.1-6.6 inclusive)**	
	7.1	Areas between Curves
	7.2	Volumes (Disks/Washers; Cross-Sections)
Week 7:	7.3	Volumes by Cylindrical Shells
	7.4	Arc Length
	7.6	Work
Week 8:	7.6	Moments and Centers of Mass (Omit *Hydrostatic Pressure and Force*)
		Catch up and Review
Week 9:	**Test #3**	
	8.1	Sequences
	8.2	Series
Week 10:	8.3	The Integral and Comparison Tests
	8.4	Other Convergence Tests
Week 11:	8.5	Power Series
	8.6	Representing Functions as Power Series
Week 12:	8.7	Taylor and Maclaurin Series (Omit *Multiplication and Division of Power Series*)
Week 13:		*Catch up and Review*
	Test #4	
Week 14:		*Review for the Common Final Exam*
	Common Final Exam	

This Syllabus is an outline. The exact timing and days for each section are at the discretion of the instructor. The number and dates of the exams are also at the discretion of the instructor.