MATH 1241 Syllabus(4 Tests) - CALCULUS I

IMPORTANT NOTE! **This course has a REQUIRED Common Final Exam. The date and location of this exam will be announced in class and posted on the registrar's website. Be sure you are available to take the exam.**

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

Lecture 1:	1.2, 1.3, 1.4	1.2	A Catalog of Essential Functions
		1.3	A Limit of a Function
Lecture 2:	1.4, 1.5	1.4	Calculating Limits
		1.5	Continuity
Lecture 3:	1.6, 2.1	1.6	Limits Involving Infinity
		2.1	Derivatives and Rates of Change
Lecture 4:	2.2	2.2	The Derivative of a Function
Lecture 5:	Review		
Lecture 6:	TEST I		
Lecture 7:	2.3, 2.4	2.3	Basic Differentiation Formulas
		2.4	Product and Quotient Rules
Lecture 8:	2.4, 2.5	2.5	Chain Rule
		2.6	Implicit Differentiation
Lecture 9:	2.5, 2.6	2.7	Related Rates
		2.8	Linear Approximations and Differentials
Lecture 10:	2.6, 2.7		
Lecture 11:	2.7		
Lecture 12:	2.7, 2.8		
Lecture 13:	Review		
Lecture 14:	TEST II	(All of Chapter 2)	
Lecture 15:	3.1, 3.2	3.1	Exponential functions
		3.2	Inverse Functions and Logarithms
		3.3	Derivatives of Logarithms and Exponential Functions
Lecture 16:	3.2, 3.3	3.4	Exponential Growth and Decay
		3.5	Inverse Trigonometric Functions
Lecture 17:	3.3, 3.4	3.7	Indeterminate Forms and L'Hospital's Rule
Lecture 18:	3.5, 3.7		
Lecture 19:	3.7, Review		
Lecture 20:	TEST III		
Lecture 21:	4.1, 4.2	4.1	Maximum and Minimum Values
		4.2	The Mean Value Theorem
Lecture 22:	4.2, 4.3	4.3	Derivatives and the Shapes of Graphs
		4.4	Curve Sketching
Lecture 23:	4.3, 4.4	4.5	Optimization Problem
		4.6	Newton's Method
Lecture 24:	4.5	4.7	Antiderivatives
Lecture 25	4.6, 4.7		
Lecture 26:	4.7, Review		
Lecture 27:	Test IV		
Lecture 28:	Review	Common Final Exam	