

SM332 Syllabus Spring 2005

Textbook: Steven R. Lay, Analysis with an Introduction to Proof, 3rd edition, Prentice Hall

The course will cover Chapters 6 – 9 on Differentiation, Integration, Infinite Series, and Sequences and Series of Functions.

There will be four hour exams, a capstone project, and a final exam.

Homework problems are not included on this syllabus; they will be assigned at the end of each class.

	Section	Topic	No. Classes
Ch. 6		Differentiation	14
	25	The Derivative	
	26	Mean Value Theorem	
	27	L'Hospital's Rule	
	28	Taylor's Theorem	
		Test 1	
Ch. 7		Integration	12
	29	Riemann Integral	
	30	Properties	
	31	Fundamental Theorem of Calculus	
		Test 2	
Ch. 8		Infinite Series	13
	32	Convergence of Series	
	33	Convergence Tests	
	34	Power Series	
		Test 3	
Ch. 9		Sequences and Series of Functions	13
	35	Pointwise and Uniform Convergence	
	36	Applications of Unif Conv	
	37	Unif Conv and Power Series	
		Test 4	
Capstones		Capstone Presentations	5
Review		Review for Final	2