

SM331 Syllabus Fall 2007

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Textbook: Steven R. Lay, Analysis with an Introduction to Proof, 4th edition, Prentice-Hall.

Review: Chapters 1 and 2 of the textbook contain material that you have already studied in SM291. Some time will be spent reviewing these chapters.

Assignments: Homework problems are not included on the syllabus and will be assigned in each class by your instructor.

Section	Topic	Number of Classes /Running Total
1 -10	Review of SM291	3/3
11	Ordered Fields	2/5
12	Completeness	4/9
	Review/Problems	2/11
	Test 1	1/12
13	Topology of the Reals	3/15
	Bolzano-Weierstrass Theorem	1/16
16	Convergence of Sequences	5/21
17	Limit Theorems	4/25
	Review/Problems	1/26
	Test 2	1/27
18	Monotone and Cauchy Sequences	4/31
19	Subsequences	3/34
20	Limits of Functions	5/39
	Review/Problems	2/41
	Test 3	1/42
21	Continuous Functions	4/46
22	Properties of Continuous Functions	3/49
23	Uniform Continuity	4/53
	Review/Problems	2/55
	Test 4	1/56
24	Functions from \mathbb{R}^2 into \mathbb{R}	optional
	Review for Final	2