

Fall 2014 Math 302.504: Discrete Mathematics

Lecture: MWF 10:20am–11:10am, CE 223

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Below is a list of the topics we intend to cover, along with a rough time outline. Actual schedule is subject to change without notice. Last updated November 1st, 2014.

Week	Topic	Chapters
9/1 – 9/5	Algorithms	3.1
	Function Growth	3.2
9/8 – 9/12	Propositional Logic	1.1,1.3
	Quantifiers	1.4
9/15 – 9/19	Nested Quantifiers	1.5
	Rules of Inference	1.6
	Introduction to Proofs	1.7
9/22 – 9/26	Introduction to Proofs	1.7
	Proof Strategies	1.8
9/29 – 10/3	Sets	2.1
	Review	
	Exam 1	
10/6 – 10/10	Go Over Exam	
	Sets Operations	2.2
	Functions	2.3
10/13 – 10/17	Sequences and Summations	2.4
	Induction	5.1-5.2
10/20 – 10/24	Induction	5.1-5.2
	Recursive Definitions	5.3
10/27 – 10/31	Recursive Algorithms	5.4
	Counting Methods	6.1
11/3 – 11/7	Permutations and Combinations	6.3
	Review	
	Exam 2	
11/10 – 11/14	Binomial Coefficients	6.4
	Generalized Permutations/Combinations	6.5
11/17 – 11/21	Inclusion-Exclusion	8.5
	Recurrence Relations	8.1
11/24 – 11/26	Solving Recurrence Relations	8.2
11/28	Thanksgiving Holiday (<i>no class</i>)	
12/1 – 12/5	Extra Topics	
12/8	Review	
12/16	Exam 3	