Statistics 251: Introduction to Mathematical Probability (Section 2) Schedule

Week	Topic	Section
1 Sept. 30, Oct. 2	Counting principles	1.1-1.5
	Set theory and probability spaces	2.1-2.3
2 Oct. 5, 7, 9	Probability and equal likelihood	2.4-2.5
HW 1 due Oct. 5	Conditional probability	3.1-3.2
	Bayes' rule and independence	3.3-3.5
3 Oct. 12, 14, 16	Discrete random variables	4.1-4.2
HW 2 due Oct. 12	Expectations	4.3-4.4
	Variance and standard deviation	4.5
4 Oct. 19, 21, 23	Binomial random variables	4.6
HW 3 due Oct. 19	Poisson random variables	4.7
	Other discrete random variables	4.8-4.10
5 Oct. 26, 28, 30	Midterm	
HW 4 due Oct. 26	Continuous random variables	5.1-5.3
	Gaussian distribution	5.4
6 Nov. 2, 4, 6	Exponential distribution	5.5
HW 5 due Nov. 2	Change of variables (univariate)	5.6-5.7
	Joint distributions	6.1-6.2
7 Nov. 9, 11, 13	Sums and conditional distributions	6.3-6.5
HW 6 due Nov. 9	Change of variables (multivariate)	6.7
	Expectations of sums	7.1-7.2
8 Nov. 16, 18, 20	Covariance and correlation	7.3-7.4
HW 7 due Nov. 16	Conditional expectation	7.5-7.6
	Weak law of large numbers	8.1-8.2
9 No class	Thanksgiving Break	
10 Nov. 30, Dec. 2, 4	Central limit theorem	8.3
HW 8 due Nov. 30	Strong law of large numbers	8.4
HW 9 due Dec. 4	Final Review Session	all
11 Dec. 9-11	Final exam, date and time TBA	