Section and problem numbers refer to *A First Course in Probability*, Sixth Edition, by Sheldon Ross.

Date	Sections	Topics
9/5	1.1–1.5	Combinatorics
9/10	1.6–2.1	Indistinguishable objects; axioms of probability
9/12	2.4, 2.5	Inclusion/exclusion formula; equally likely outcomes
9/17	2.5	More examples; Stirling's approximation
9/19	3.1–3.3	Conditional probability and Bayes' formula
9/24	3.4	Independent events
9/26	3.4, 3.5	Repeated independent trials
10/1	4.1–4.3	Random variables and distribution functions
10/3	4.4–4.6	Expectation and variance of discrete random variables
10/8	EXAM 1. Covers work on this syllabus through Section 4.3	
10/10	4.7, 4.9.1	Bernoulli, binomial, and geometric random variables
10/15	4.8, 4.9.2, 4.9.3	Poisson, negative binomial, and hypergeometric random variables
10/17	5.1, 5.2	Continuous random variables; expectation, variance
10/22	5.3–5.5	Uniform, exponential, and normal random variables
10/24	5.4.1	Normal approximation to binomial random variables
10/29	5.6.1, 5.7	Gamma random variable; functions of a random variable
10/31	6.1	Joint distributions of several random variables
11/5	6.2	Independent random variables
11/7	6.3	Sums of independent random variables
11/12	7.1–7.2	Linearity of expectation
11/14	EXAM 2. Covers work on this syllabus through Section 6.3	
11/19	7.3	Covariance and correlation
11/26	6.4, 6.5	Conditional distributions
11/28	7.4	Conditional expectation
12/3	7.6	Moment generating functions
12/5	8.1–8.2	Markov and Chebyshev inequalities; weak law of large numbers
12/10	8.3	The central limit theorem
12/12	8.3	Proof of the central limit theorem; examples.
12/17	FINAL EXAM, 8:00 A.M.–11:00 A.M. Room to be announced. The exam will be cumulative.	