Text; A First Course in Probability by Sheldon Ross
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Week by week syllabus.

Weeks 1 and 2. Combinatorics, Computing probabilities in simple situations involving counting.
Week 4. 5. Random variables and Discrete distributions. Expectation and variance. Binomial Poisson
Negative Binomial etc. (Monday of week 5 is a Holiday), Expectation, Variance, Generating functions, independent sums
Week 6. 7. Continuous probability distributions, Change of variables. Uniform, Normal, Gamma, Beta,
Cauchy etc, Mid Term on March 7.
Week 8 Spring Break.
Week 9,10,11. Multivariate distributions, change of variables Jacobians, Multivariate normal, Distribution
of sample mean, sample variance etc, conditional distributions,
Week 12 Limit Theorems, Law of large numbers, Central Limit Theorem
Week 13 Additional Topics, Markov Chains, Poisson Process
Week 14 Simulation, Catch up
Week 15 Revision
Week 16 Finals

Grading: 25% Homework, 25% Midterm, 50% Finals.