

DATE	HW DUE	TOPIC
M 8.31 T 9.1 W 9.2 R 9.3		§1.1-1.2: Course introduction §1.2: Probability spaces §1.3: Elementary properties of probability spaces <i>Activity 1: Venn diagrams</i>
M 9.7 T 9.8 W 9.9 R 9.10	<i>No class - Labor Day</i> (1.6) 1-12	§1.4: Conditional probability and independence §1.5: Law of Total Probability and Bayes' Law <i>Activity 2: More Venn diagrams</i>
M 9.14 T 9.15 W 9.16 R 9.17	(1.6) 13-27	<i>Activity 3: Harder probability space exercises</i> §2.1-2.2: Discrete random variables §2.3: Combinations and permutations §2.3: More combinatorics; hypergeometric random variables
M 9.21 T 9.22 W 9.23 R 9.24	(1.6) 28-37 (2.6) 1-14	§2.4: Bernoulli processes and associated random variables §2.4: More on Bernoulli processes <i>Activity 4: Bernoulli processes</i> <i>Activity 5: Binomial r.v.s</i>
M 9.28 T 9.29 W 9.30 R 10.1	EXAM 1 (covers Chapters 1 and 2) (2.6) 16-27	§3.1: Continuous random variables §3.2: Distribution functions <i>Activity 6: Distribution functions</i>
M 10.5 T 10.6 W 10.7 R 10.8	(3.7) 1-5	§3.3: Transformations of real-valued random variables §3.4: Poisson processes and associated random variables §3.4: More on Poisson processes §3.5: Gamma distributions
M 10.12 T 10.13 W 10.14 R 10.15	(3.7) 6-13	<i>Activity 7: Poisson processes</i> §4.1: Discrete joint distributions §4.2: More on discrete joint distributions <i>Activity 8: Discrete joint distributions</i>
M 10.19 T 10.20 W 10.21 R 10.22	<i>No class - Fall Break</i> <i>No class - Fall Break</i> (3.7) 14-29	§4.3-4.4: Continuous joint distributions §4.5: Independence of random variables
M 10.26 T 10.27 W 10.28 R 10.29	(4.9) 1-11 (4.9) 12-22	<i>Activity 9: Continuous joint distributions</i> §4.6: Computations with joint distributions §4.7: Conditional densities <i>Activity 10: Computations with joint densities</i>
M 11.2 T 11.3 W 11.4 R 11.5	EXAM 2 (covers Chapters 3 and 4) (4.9) 23-30	§5.1: Expected value §5.2: Properties of expected value <i>Activity 11: Expected value</i>
M 11.9 T 11.10 W 11.12 R 11.13	(5.12) 1-7	§5.3: Variance §5.4-5.5: Covariance and correlation <i>Activity 12: Problems with expected value and variance</i> §5.6: Conditional expectation
M 11.16 T 11.17 W 11.18 R 11.19	(5.12) 8-26 (5.12) 27-36	§5.7: Probability generating functions §5.8: Moments and moment generating functions §5.9: Uniqueness of moment generating functions §5.10: Joint moment generating functions
M 11.23 T 11.24 W 11.25 R 11.26	(5.12) 37-56 <i>No class - Thanksgiving</i> <i>No class - Thanksgiving</i>	<i>Activity 13: Generating functions</i> §5.11: Markov and Chebyshev inequalities
M 11.30 T 12.1 W 12.2 R 12.3	(5.12) 57-65 (6.9) 1-5	§6.1: I.i.d. processes §6.2-6.3: Laws of Large Numbers §6.4: Normal random variables §6.5: Central Limit Theorem
M 12.7 T 12.8 W 12.9 R 12.10	<i>Activity 14: Applications of the Central Limit Theorem</i> EXAM 3 (covers Chapters 5 and 6) (6.9) 6-24	§6.6: Stirling's formula Review for Final Exam
T 12.13	FINAL EXAM (cumulative) 8-10 AM in STR 137	