

DATE	HW DUE	TOPIC
M 8.31 T 9.1 W 9.2 R 9.3		1.1: Course introduction: what is probability? 1.2: Probability spaces 1.3: Basic properties of probability spaces <i>Activity: Review of functions and inequalities</i>
M 9.7 T 9.8 W 9.9 R 9.10	1-9	<i>No class - Labor Day</i> 1.3: Inclusion-exclusion problems 1.4: Conditional probability and independence 1.5: Law of Total Probability and Bayes' Law
M 9.14 T 9.15 W 9.16 R 9.17	10-25	2.1-2.2: Discrete random variables 2.3: Combinations and permutations 2.3: More combinatorics; hypergeometric random variables <i>Activity: Charts and pictures for I-E / Bayes style problems</i>
M 9.21 T 9.22 W 9.23 R 9.24 F 9.25	26-41	2.4: Bernoulli processes and associated random variables Review for Exam 1 3.1-3.2: Continuous random variables 3.3: Transformations of real-valued random variables I EXAM 1 (covers Chapters 1-2) due 11:59 PM
M 9.28 T 9.29 W 9.30 R 10.1	42-49	3.3: Transformations of real-valued random variables II <i>Activity: Review of series formulas</i> 3.4: The Poisson process and associated random variables 3.5: The gamma function
M 10.5 T 10.6 W 10.7 R 10.8 F 10.9	50-60 CRA	3.6: Normal distributions 3.7: Stirling's formula Review for Exam 2 4.1-4.2: Discrete joint distributions EXAM 2 (covers Chapter 3) due 11:59 PM
M 10.12 T 10.13 W 10.14 R 10.15	61-71	<i>Activity: Discrete joint distributions</i> 4.3-4.4: Transformations of discrete joint distributions 5.1: Continuous joint distributions I <i>Activity: Continuous joint distributions</i>
M 10.19 T 10.20 W 10.21 R 10.22	72-80	5.2: Continuous joint distributions II 5.3: Conditional densities 5.4: Transformations in higher-dimensions I 5.4: Transformations in higher-dimensions II
M 10.26 T 10.27 W 10.28 R 10.29 F 10.30	81-92 93-112	<i>Activity: Practicing transformation problems</i> Review for Exam 3 6.1: Expected value 6.1: Properties of expected value EXAM 3 (covers Chapters 4-5) due 11:59 PM

DATE	HW DUE	TOPIC
M 11.2 T 11.3 W 11.4 R 11.5	113-121	6.1: LOTUS 6.2: Variance and covariance 6.3: Conditional expectation <i>Activity: Medians, means, modes and quartiles</i>
M 11.9 T 11.10 W 11.11 R 11.12	MRA 122-141	7.1: Probability generating functions 7.2: Moments and moment-generating functions 7.2-7.3: Joint moment-generating functions 7.3: Bivariate normal distributions
M 11.16 T 11.17 W 11.18 R 11.19	142-158	8.1-8.2: Markov and Chebyshev inequalities; laws of large numbers 8.3: Central Limit Theorem: statement and proof 8.3: Central Limit Theorem: applications Review for Exam 4
F 11.20		EXAM 4 (covers Chapters 6-8) due 11:59 PM
M 11.23 T 11.24 W 11.25 R 11.26		<i>No class - Professor absent</i> <i>No class - Professor absent</i> <i>No class - Thanksgiving</i> <i>No class - Thanksgiving</i>
<i>No in-person class meetings after Thanksgiving</i>		
W 12.2	159-175	
T 12.15		FINAL EXAM (cumulative) due 11:59 PM