

This is a tentative schedule, subject to change.

Lecture	Date	Topic	Reading	Due
1	Monday, 3/28/11	MDP		
2	Wednesday, 3/30/11	MDP		
3	Friday, 4/1/11	Brief overview, intro to renewal processes	1, 4.1	
4	Monday, 4/4/11	Limiting Distribution of Renewal Processes	4.2	
5	Wednesday, 4/6/11	Modes of Convergence		
6	Friday, 4/8/11	ERT and BRT	4.3, B.2	Hw 1
	Monday, 4/11/11	ARPs and Regenerative Processes	4.4	
	Wednesday, 4/13/11	KRT	4.5, A.1-2	
7	Friday, 4/15/11	KRT		Hw 2
8	Monday, 4/18/11	Recurrence Times and the Inspection Paradox	4.6-4.7	
9	Wednesday, 4/20/11	Renewal-Reward Processes	4.8	
10	Friday, 4/22/11	cancelled		Hw 3
11	Monday, 4/25/11	Random Walks	5.1-5.2	
12	Wednesday, 4/27/11	(longer.) Duality and Wiener-Hopf Factorization		
13	Friday, 4/29/11	W-H Factorization and M/M/1	5.3-5.4	Hwk 4
14	Monday, 5/2/11	Midterm (MDP, convergence, renewals), M/M/1 & G/M/1	5.5, B.3	Midterm: inclass + takehome
	Wednesday, 5/4/11	Martingales, Filtrations	6	
15	Friday, 5/6/11	Filtrations and Optional Stopping	C.1-C.2	
16	Monday, 5/9/11	Martingales and Optional Stopping		
17	Wednesday, 5/11/11	Optional Stopping		
18	Friday, 5/13/11	Exponential Martingales and Optional Stopping		
19	Monday, 5/16/11	Wald's equation, Optimal Stopping, Martingale Convergence		
20	Wednesday, 5/18/11	Semi-Markov Processes (SMPs)	7	
21	Friday, 5/20/11	SMPs II		
22	Monday, 5/23/11	Phase-type distributions	8	
	Wednesday, 5/25/11	Phase-type distributions		Final posted Th 5/26
24	Friday, 5/27/11	Brownian motion, Donsker's theorem		
25	Monday, 5/30/11	Memorial Day		
26	Wednesday, 6/1/11	SDEs, Brownian motion and PDEs		
27	Friday, 6/3/11	SDEs and PDEs		Final due