

Calendar

COURSE HOME	LEC #	TOPICS	KEY DATES
SYLLABUS	1	Introduction and probability review	
	2	More review; the Bernoulli process	
CALENDAR	3	Laws of large numbers, convergence	Problem set 1 due
	4	Poisson (the perfect arrival process)	
COURSE NOTES	5	Poisson combining and splitting	Problem set 2 due
	6	From Poisson to Markov	
VIDEO LECTURES	7	Finite-state Markov chains; the matrix approach	Problem set 3 due
	8	Markov eigenvalues and eigenvectors	
ASSIGNMENTS	9	Markov rewards and dynamic programming	Problem set 4 due
	10	Renewals and the strong law of large numbers (SLLN)	
EXAMS	11	Renewals: strong law and rewards	Problem set 5 due
	12	Renewal rewards, stopping trials, and Wald's equality	
DOWNLOAD COURSE MATERIALS	13	Little, M/G/1, ensemble averages	Problem set 6 due
	14	Review	
	15	The last renewal	Problem set 7 due
		Quiz	
	16	Renewals and countable state Markov	
	17	Countable-state Markov chains	
	18	Countable-state Markov chains and processes	Problem set 8 due
	19	Countable-state Markov processes	Problem set 9 due
	20	Markov processes and random walks	
	21	Hypothesis testing and random walks	Problem set 10 due
	22	Random walks and thresholds	
	23	Martingales (plain, sub and super)	Problem set 11 due
	24	Martingales: stopping and converging	
	25	Putting it all together	

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