

ECE 555

Control of Stochastic Systems

Spring 2011

About Midterm I

Prof. Sean Meyn, meyn@illinois.edu

Tues. & Thurs., 3:30-5:00, Room 241 EL

Content The exam will cover all of the material up to the lecture of Tuesday, March 29th.

If you understand the four homework assignments perfectly your performance on the exam will be outstanding. In particular, you should understand the following concepts:

1. Markov models, and examples such as the single server queue and linear models
2. Potential matrix, fundamental matrix, and resolvents; Irreducibility and small functions
3. Lyapunov theory and Poisson's equation
4. Optimality equations for discounted and average-cost optimal control.

Practical matters The exam will be held on Wednesday eve., April 6th, *7:00-8:30 p.m.*

Location: [241 Everitt Lab](#).

You may bring one sheet of notes, double-sided. No calculators are permitted.

Office hours: Dayu will hold his usual office hours from 4-5:30pm each Wednesday.

Sean Meyn will hold office hours on Tuesday April 5th after lecture, in class ([241 EL](#)).

He will also be available to answer questions after lecture on Tues. & Thurs. this week