NYU STERN
NEW YORK UNIVERSITY · LEONARD N. STERN SCHOOL OF BUSINESS

COURSE SYLLABUS B60.3221.01
ELEMENTARY STOCHASTIC PROCESSES

FALL 2004

Meetings: Friday, 10:00AM – 1:00PM, KMC 8-191.

Instructor: Dr. Gustavo Vulcano, KMC 8-76, 998-4018,
gvulcano@stern.nyu.edu

Office hours: Monday 12:00PM – 1:00PM,
Wednesday 9:15AM – 10:30AM, or by appointment.

References:

1. Sheldon Ross, Introduction to Probability Models, 8th edition, Academic Press, 2002.
2. Sheldon Ross, Stochastic Processes, 2nd edition, John Wiley & Sons, 1996.

Grading:

Homework	20%
Midterm	40%
Final	40%

Topics:

1. Review of probability: Conditional probabilities and conditional expectations
2. Discrete-time Markov chains
3. Introduction to point processes, renewal processes
4. Exponential distribution and the Poisson process
5. Continuous-time Markov chains
6. Renewal theory
7. Introduction to simulation and Brownian motion