

Math 5652: Introduction to Stochastic Processes

Syllabus: Spring 2008

Class Times and Location: 4:40 pm – 6:35 pm TTh, 1701 Univ 206

Instructor: Mikhail Safonov, VinH 231, tel: 625-8571,

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Office Hours: MWF, 11:15 am – 12:05 pm, or by appointment

Textbook: *R. Durrett*, Essentials of Stochastic Processes.

Springer-Verlag, 1999

Tentative Course Outline

Review of probability: 1 week

Markov chains (Chapter 1): 4 weeks

Martingales (Chapter 2): 2 weeks

Poisson processes (Chapter 3): 2 weeks

Continuous time Markov processes (Chapter 4): 2 weeks

Other topics including Brownian motion

Midterm exams: Tuesday, February 19 (5th week)

Tuesday, April 1 (10th week)

Final exam: Tuesday, May 13, 4:40 pm – 6:40 pm

Homeworks: There will be 6 homeworks assigned in class

which will be due on Tuesdays:

February 5, 19; March 4, 25; April 15, 29

In general, late homeworks will not be accepted

Grading: Homeworks – 20% of total grade for 5 best (out of 6) ones

Each of 2 Midterms – 20%, Final exam – 40%

Missed exams: Make-up Final exams will be given to students who have a **valid** reason for missing an exam. Such students must notify their instructor prior to the exam, and the reason must be documented. There will be **no make-up Midterm exams**. A proportional part of the score for the Final exam will be used instead for students who have a valid documented reason for missing a Midterm exam.

Incompletes: The grade of **I** can be assigned only to students who have taken and passed one Midterm Exams and who have a **valid** excuse for being unable to take the Final Exam.