Instructor: Firdevs Ulus
Email: fulus@princeton.edu
Office: TBA
Office hours: TBA
Lectures:

- Wednesday 8:40 - 11:30 am (FENS L045)
- Thursday 11:40 am - 2:30 pm (FENS L045)
- Friday 8:40 - 10:30 am (FASS G022)

Recitations: Thursday 5:40 - 7:30 pm, Friday 1:40 - 3:30 pm
Textbook: Sheldon M. Ross: Introduction to Probability models
Supplementary Text: Erhan Çınlar: Introduction to Stochastic Processes,
Dover Books on Mathematics

Grading: Midterms each 30%, Final Exam 40%.

- Midterm I: Saturday, July 19, 10:00-12:30
- Midterm II: Saturday, August 2, 10:00-12:30
- Final date will be announced later.
- You will be given ONLY one make-up exam for the midterms so you cannot get make-up exam for both of the midterms.
- If you miss the final, you need to notify the instructor (preferably via email) within 48 hours after the exam. A make-up exam will be offered ONLY IF the student provides a valid excuse endorsed by substantial evidence like hospital or the University Health Center reports.
- It is strongly recommended that you do NOT miss the Final exam. The make-up exam tends to be much more difficult.
- If you miss two or more exams your grade will be NA, and you will NOT be able to take the retake exam.
Course Outline

- Review of Probability Theory
  - Random variables
  - Conditional Probability and Conditional Expectation
- Exponential Distribution and Poisson Processes
- The theory of Markov chains and applications
- The theory of Markov processes and applications
- Markovian queueing models
- Markovian decision processes and applications
- Overview of all the material

IMPORTANT NOTES:

- **Attendance to the lectures is strongly recommended.** Note that during the lectures, most of the material will be presented on the board.

- There will be reading assignments every week, which corresponds to the topics covered in the lectures. Some of them will be from the textbook, while additional material will be available on SuCourse.

- There will be suggested problem sets each week. Problems will be from the textbook; and some of them will be discussed during the recitation sessions.

- It is highly recommended to work on the problem sets each week; and use office hours and recitations to understand the solutions to them.