

STAT583

Stochastic Processes I

Fall2013

Instructor: Nader Ebrahimi

Office Hours: 10-10:50 MW or by appointment

Office: 359 C DuSable

Text: Introduction to Probability Models by

Teaching Assistant: Mr. Dovoedo, Philip

S. Ross, 10th edition

This is an introductory stochastic process course designed for both graduate and senior undergraduate students in the Division of Statistics as well as from other disciplines. A stochastic process is a family of random variables indexed by time, (either discrete or continuous). Topics will include random walks and more general Markov processes, including classification of states and long term behaviors, Brownian Motion, Poisson processes, and Renewal processes. Application of stochastic processes to modeling phenomenon in the biological and physical sciences as well as in economics and engineering will be discussed.

Course Regulations:

1. Assignments are to be neat and presented logically on loose-leaf paper. If more than one sheet of paper is used, the assignment must be stapled together. You must show all your work.
2. Your final grade will be determined based on what you earn in the following components:
 - a. One exam worth 100 points.
 - b. Homework assignments worth a total of 50 points.
 - c. Final Exam worth 100 points.
3. With a total of 250 points possible, the cutpoints for letter grades A, A-, B+, B, B-, C+, C, C-, and D will not exceed 232,225,215,200,188,180,175, 160, and 135 points respectively.
4. If you believe that an error was made in grading an exam or assignment you have one week from the time the paper was handed back to request that the instructor look at the exam or assignment. If you wait longer than one week, no change will be made to the grade.
5. While there is no mandatory attendance policy, it is your responsibility to turn in your assignments on time. If you do not attend a lecture, it is also your responsibility to get announcements and course notes from other students in the class.
6. The policies of NIU regarding academic misconduct will be strictly enforced.
7. Americans with Disabilities Statement (available at: http://niu.edu/disability/accessibility_statement/index.shtml)
Northern Illinois University is committed to providing an accessible education environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or drc@niu.edu.

8. Academic Integrity Statement

Attendance Policies and Accessibility statement is available in a pdf document at http://www.niu.edu/stat/courses/pdfs/Accessibility_Statement.pdf.

9. Intended Learning Outcomes:

Upon completion of this course, the students will have the capacity to formulate problems that arises in the biological and physical sciences as well as in economics and engineering within statistical framework.