STAT 461 (41008, 41009): Applied Probability Models (I) Fall 2019

Instructor: Cheng Ouyang Office: SEO 502 Office Hours: TBA Phone: (312)413-2153 Email: couyang@math.uic.edu Personal course webpage: http://www.math.uic.edu/~couyang/STAT461.html

Textbook: An Introduction to Stochastic Modeling, 4th edition, 2010, by Mark Pinsky, Samuel Karlin

Course Content:

Computing probabilities and expectations by conditioning, Markov chains, branching processes, Poisson processes and exponential distribution.

Prerequisite: Grade of C or better in STAT 401, or consent of instructor.

Course Requirements

1. Homework: Due on every Wednesday before class; half of the grade counts for completeness; half of the grade counts for correctness of one selected problem. Solutions (or hints) for difficult homework problems will be provided after each homework is collected.

Homework assignments and corresponding due dates for each week are posted on course webpage. No late homework will be accepted.

- 2. Quizzes: There is a 10-mins quiz every Friday except for the weeks with Midterms. Each quiz is based on homework problems and examples discussed in class in the previous week. No make-up quizzes.
- 3. Exams: There will be two midterm exams(in-class) and one final(in-class). All exam problems are based on homework assignments, quizzes and examples discussed in class. The dates are to be announced and will be available on the course webpage. No make-up exams.

Grading:

Grading: Homeworks 20%, Quiz 10%, Midterm 20% each, Final exam 30%. Grading Scale(graduate): $\geq 90\%$ A; $\geq 83\%$ B; $\geq 73\%$ C; $\geq 63\%$ D Grading Scale(undergraduate): $\geq 78\%$ A; $\geq 65\%$ B; $\geq 55\%$ C; $\geq 45\%$ D

Others: Check the course webpage regularly.