

Statistics 150: Stochastic Processes

Spring 2001

Lectures TTh 12:30–2 in 70 Evans

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Office Hours Tuesday 11–12, Wednesday 11–12, except Jan. 17, when the office hour will be 10–11.

Required Text *An Introduction to Stochastic Modeling* by H. Taylor and S. Karlin.

The course will generally follow the Karlin and Taylor text, starting from section II.5. (You are expected to know already the material in chapters I and II.) A few sections will be left out later in the course, and a few extra topics added, depending on the time available. You are responsible for reading the text. Relevant sections will be announced in class each week.

Homework This will be assigned in class on Thursday. You should turn in your homework in class on the following Thursday. The lowest two homework scores will not be counted in your grade. There will be no acceptance of late homeworks, except in case of a prolonged serious illness or family crisis. Solutions will be posted in a glass case in the central corridor of the third floor of Evans Hall.

The book includes in each section “exercises” (fairly straightforward questions, with solutions in back), and “problems”, which are more involved. Assigned homework, to the extent that it is taken from the book, will be from the latter. You are responsible for making sure on your own that you know how to do the exercises.

Midterms There will be one midterm exam, in class, on Tuesday, March 20. You may bring a calculator and one double-sided page of notes to the exams. There will be no early or late exams.

Final exam The final will be 5–8 pm, Wednesday, May 16.

Grading Your grade will not be negatively affected by any other student's grade. In principle, every student could get an A, or everyone could fail. Preferably the former. Part of your grade will depend on a project, to be carried out in groups of three or four. These will involve a short paper, to be turned in at the end of the semester and a 15-minute presentation during the last week of class. You are, in any case, to be encouraged to get to know other students in the class, and to discuss homework with them. (You are not permitted, however, to copy someone else's homework. Each student is expected to write up solutions in his or her own words.)

You will receive a score of up to 15 points for the homework, 15 points for the final project, 25 points for the midterm, and 45 points for the final. Scores above 60 will receive A- or A, scores between 45 and 60 will receive B-, B, or B+, scores between 30 and 45 will receive C-, C, or C+. Scores below 30 will receive D or F.

Prerequisite One semester of probability (typically either Statistics 101 or 134). You should read through chapters I and II, whether or not you think you know the material, to familiarize yourself with this book's notation.