Math 280B, Probability Theory, Winter 2020

Lectures: 4:00-4:50 PM, Mondays, Wednesdays, and Fridays in AP&M 5402
Instructor: Jason Schweinsberg (jschwein@math.ucsd.edu)
Office Hours: Mondays 1:00-2:30 PM and Tuesdays 3:30-5:00 PM in AP&M 6157
other times by appointment
TA: Toni Gui (ttgui@ucsd.edu)
TA Office Hours: Tuesdays 12:00-2:00 PM in AP&M 1220

Overview of the course: Math 280B is a continuation of Math 280A. The main topics will be convergence in distribution, the Central Limit Theorem, conditional probability, and martingales. Math 280A is a prerequisite for Math 280B.

Other probability courses: Students planning to do research related to probability theory are encouraged to continue on to take Math 280C as well as Math 286 (Stochastic Differential Equations). Math 285 (Stochastic Processes), which is offered in the spring, is an introductory graduate-level course in stochastic processes which does not use measure theory.

Other textbooks: We will follow Durrett’s book somewhat more closely than in Math 280A. An alternative reference is A Probability Path by S. Resnick. The book A Modern Approach to Probability Theory by B. Fristedt and L. Gray has a more thorough treatment of conditional distributions than most other textbooks. Links to electronic versions of these three books, which work from the UCSD campus, are provided on the course web page.

Homework: Homework will be due in class each week, usually on Wednesdays. Late homework will not be accepted. Your course grade will be based on the total score that you get on the nine homework assignments.

Academic integrity: It is essential that all students adhere to the university’s policy on integrity of scholarship. For this course, you should work mostly independently on the homework. You may consult the instructor or other students while working on the homework, but you must acknowledge this help by making a note on your homework. Also, you must write your final solutions independently and may not copy or paraphrase homework solutions from other students or from any other source.