

Math 285

Stochastic Processes

Spring 2009

This course is an introduction to Stochastic Processes for beginning mathematics graduate students and graduate students from other science and engineering disciplines. For mathematics graduate students the course will provide background and motivation for the more advanced year-long sequence Math 280ABC (measure-theoretic probability). Students from other disciplines will find that the course provides a theoretical basis for applied work in stochastic modeling. Topics to be covered include: Markov chains in discrete and continuous time; martingales; Brownian motion.

- We shall be using the text *Introduction to Stochastic Processes* (second edition) by G. Lawler. Some supplementary material on topics not covered by the text will also be provided.
- Lectures will be on Monday, Wednesday and Friday, from 11 to 11:50 AM, in APM' 5829.
- Your course grade will be based on weekly homework assignments.
- The official prerequisite for this course is Math 180A (an upper-division Introduction to Probability course).

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This handout and other course information is available on the World Wide Web at the URL

<http://math.ucsd.edu/~pfitz/spring09/285/>