

**STAT 6105 Measure and Probability**  
**Fall 2009**

**Course goals:**

- to develop probabilistic reasoning and problem-solving approaches
- to provide a rigorous mathematical basis for probability theory
- to examine several important results in the theory of probability

**Instructor:** Pang Du

**Email:** pangdu@vt.edu

**Office:** Hutcheson 417-A

**Office Hours:** Mon, Tue 11-noon

**Lectures:** Monday 7:00pm-10:00pm

**Room:** Hutcheson 207

**Textbook:**

- *Probability and Measure*, by Patrick Billingsley, (3rd ed., 1995), Wiley-Interscience, ISBN: 0471007102.

**Other references:**

- *Probability: Theory and Examples*, by Richard Durrett, (3rd ed., 2004), Duxbury Press, ISBN: 0534424414.
- *A Course in Probability Theory*, by Kai Lai Chung, (2nd ed., 2000), Academic Press, ISBN: 0121741516.

**Homework policy:** Discussion among students of the material presented in class and the homework questions is strongly encouraged. But students are expected to work on the preparation of homework solutions by themselves.

**Grading:** Homework assignments will be given approximately every 2 weeks. Each homework will worth 10% of the final grade. There will be a take-home final exam that takes the remaining percentage of the final grade.

**Topics to be covered**(approximate list and not necessarily in the order):

Chapter 1: Sections 1-8

Chapter 2: Sections 10-14

Chapter 3: Sections 15-19

Chapter 4: Sections 20-22 as time permitted