

Syllabus

USC, Department of Statistics, Fall 2020

Course STAT810/MATH710: Probability Theory I

- Class Time:** 10:05 am – 11:20 am Tuesday and Thursday (from Thursday, August 20 to Tuesday, November 24)
- Class Place:** Zoom meeting ID is posted on Blackboard
- Prerequisite:** [STAT511 & STAT512] or [MATH703]
- Instructor:** Dr. Dewei Wang
Associate Professor of Statistics
- Email:** deweiwang@stat.sc.edu
- Office Hours:** Email is the way.
- Course Website:** <http://people.stat.sc.edu/wang528/Stat%20810/STAT810.html>
- Textbook:** Resnick, S. I. (2014). *A Probability Path*.
- Important Days:** Do check the last day to drop/add without W or WF.

Topics Covered:

- Chapters 1–3: Sets, Classes of Sets, Events Probability Spaces, Random Variables, Induced Probability Measures, Extension Theorems
- Chapters 4–5, 10.1-10.3: Independence, Expectation, Conditional Expectation and Probability, Product Spaces and Measures
- Chapter 6: Basic Convergence Concepts (in distribution, in probability, almost sure, in L_p -mean, uniform integrability)

Attendance and Email:

Though we are meeting remotely, I expect you to attend every meeting.

Do not block my email. I will regularly send you announcements via email, so make sure to check your inbox before each class meeting. If you have questions, feel free to email me.

Homework:

Six (big) sets of homework will be assigned regularly. Two problems will be randomly selected and each will be graded out of 20 points. Late homework will receive at most 25 percent credit. You should write up your solutions neatly and scan them to me.

Exam:

We will have one midterm examination (after we finish Chapter 3) and one cumulative final examination. Exams are open book (only the textbook) and open notes (but discussion with others is not allowed). They will be assigned remotely (via Blackboard) at a given time and you have to turn it in before the due time. Late submission, less than 24 hours, will receive at most 25 percent credit. Late submission, more than 24 hours, will not be graded and receive 0 directly. You must follow the instruction provided in the exam to submit your solutions.

Grade Breakdown:

Your course grade will be determined by your performance, homework (25 percent) the midterm exam (35 percent each), and the final exam (40 percent).

I will post your grades on Blackboard timely. If you have any questions about grading, contact with me as soon as possible.

Final course grades will be assigned according to the following protocol,

A:	[90, 100]		
B:	[80, 85)	B+:	[85, 90)
C:	[70, 75)	C+:	[75, 80)
D:	[60, 65)	D+:	[65, 70)
F:	[0, 60)		

Recommended Study Habits:

- Read appropriate sections of the text/notes before class
- Attend every class and be on time
- Ask questions if you do not understand something or wish to know more
- Check email often for announcements
- Form small study groups to work on homework and to prepare for the exams
- Email me if you have any questions
- Make it your goal to understand everything we do

Academic Integrity:

Students are expected to follow the University of South Carolina Honor Code and should expect that every instance of a suspected violation will be reported. Students found responsible for violations of the Code will be subject to academic penalties under the Code in addition to whatever disciplinary sanctions are applied. Cheating on an exam or copying someone else's work, will result in a 0 for the work, possibly a grade of F in the course, and, in accordance with University policy, be referred to the University Committee for Academic Responsibility and may result in expulsion from the University.

Accommodating Disabilities:

If you need special attention with examinations or other aspects of the course. Please contact me no later than August 30, 2020.

Note that reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, contact the Office of Student Disability Services: 777-6142, email sasds@mailbox.sc.edu, or stop by LeConte College Room 112A. All accommodations must be approved through the Office of Student Disability Services.