

# Mathematical Statistics I — Stat 6710, Section 001, Fall 2000

Instructor: Dr. Jürgen Symanzik  
Office: Lund 325  
Phone: 797-0696  
FAX: 797-1822  
e-mail: [symanzik@sunfs.math.usu.edu](mailto:symanzik@sunfs.math.usu.edu)  
WWW: <http://www.math.usu.edu/~symanzik/>  
[http://www.math.usu.edu/~symanzik/teaching/2000\\_stat6710/stat6710.html](http://www.math.usu.edu/~symanzik/teaching/2000_stat6710/stat6710.html)  
Office hours: To be announced (and by appointment).

Text: *An Introduction to Probability Theory and Mathematical Statistics*  
by Rohatgi, V. K. (1976), John Wiley and Sons, New York.

Classes: MWF 11:30am – 12:20pm (Mo, August 28 – Fr, December 8, 2000).

Room: **Geol 310**

Course Objectives:

- 1) This course and its sequel, Stat 6720, will work through Rohatgi fairly linearly (in Stat 6710, we will discuss Chapters 1 through 6 from Rohatgi). However, I reserve the right to skip around or bring in some outside material. Rohatgi will be the only textbook for this sequence.

Course Requirements:

- 0) **Prerequisite:** Although I will not insist on any specific course as a prerequisite, knowledge similar to “Theory of Probability and Introduction to Mathematical Statistics” (preferably at a strong enough level to pass the masters qualifying exam in probability and statistics) is highly desirable. Also valuable, but not required, are good backgrounds in linear algebra and advanced calculus. If you are concerned about your preparation, please contact me.
- 1) **Class Attendance:** You are responsible for all material assigned as required reading and/or presented in lecture.
- 2) **Lecture Notes:** Lecture notes have been prepared by the instructor. A “working” version will be handed out at the beginning of each Section (or Chapter). The “final” version will be provided after each Section (or Chapter).
- 3) **Lecture Preparation & In-Class Presentation:** Each student has to prepare and teach one (or two – depending on the number of students in this class) 50 min lectures during the course of the semester. This includes the preparation of a working version of the lecture notes (with an additional example not found in the old lecture notes or Rohatgi), teaching the lecture, and providing the final version of the lecture notes. A “final” version of a previous Stat 6710 lecture that contains the material to be discussed in class will be provided about 7 to 10 days before a lecture has to be taught by a student. This part is worth a total of 20% (200 points) of your course grade.

- 4) Homework:** Assignments will be handed out in class every 10 to 14 days. Homework will be collected in class about two weeks thereafter (the exact due date will be stated on each homework assignment). Homework mailed in, sent by FAX, or sent by e-mail by the due date will be accepted as well. In general, late homework will not be accepted. Homework assignments are worth a total of 20% (200 points) of your course grade. To obtain full credit, you must show your work leading to the correct answer. However, even if your answer is wrong, you will probably receive at least partial credit if you show your work, but not otherwise. If you like, you may work in groups on the homework assignments. In fact, you are encouraged to do so. However, each person must turn in an individual homework solution sheet. Photocopies are not permitted.
- 5) Software:** This course will not focus on any particular mathematical or statistical software package. You can use any statistical package you want for the homework assignments.
- 6) Midterm:** There will be a 3-day take-home midterm exam to be handed out on Friday 9/29/2000 worth a total of 25% (250 points) of your course grade.
- 7) Final:** There will be a 3-day take-home final exam to be handed out on Friday 12/1/2000 worth a total of 35% (350 points) of your course grade. Midterm and final will consist of problems like those in the homework assignments.
- 8) Disabilities:** If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center, preferably during the first week of the course. Any requests for special considerations relating to attendance, pedagogy, taking of examinations, etc. must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative formats — large print, audio, diskette or Braille.

Grading System:

Final	35%	350 pts
Midterm	25%	250 pts
Homework	20%	200 pts
Lecture(s)	20%	200 pts
 Total	 100%	 1000 pts

Course grades will be generally comparable (in terms of distribution) with grades assigned in other graduate statistics courses.

The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.