

Statistics 861-2
Theory of Statistics and Probability I

Time: M-W-F, 1:50-2:40pm

Location: C316 Wells Hall

Instructor: Ping-Shou Zhong

Office Hours: M-W-F, 3:00-4:00pm at A418 Wells Hall and by appointment

E-mail: pszhong@stt.msu.edu

Textbook:

Stapleton, J. (2008), Models for Probability and Statistical Inference: Theory and Applications, Wiley.

Reference:

Casella, G. and Berger, R. (2001), Statistical Inference, Duxbury Press (2nd edition).

Prerequisite:

MATH 309: Linear Algebra and MTH 234: Multivariable Calculus or equivalent courses.

STT-861 is the first graduate course on probability theory. The objective of this course is to understand the fundamental probability concepts and theorems. We will cover Chapter 1 to 6 in Stapleton's book (If time allows, Chapter 9 will also be covered). Specific topics includes: probability models, conditional probability, independence, random variables, density and cumulative distribution functions, joint distributions, expected values and variance, moment generating functions, limit theorems.

We will use statistical software R (which can be downloaded from website: <http://www.r-project.org/>) to illustrate some of the theories and perform computations. No previous experience is necessary.

Your final score will be based on homework, two middle-term exams and final exam. The percentages of the three parts to the final score are listed below:

Homework	15%
Two Mid-Term Exams	25% each (Wed., Oct. 5 and Wed., Nov. 16)
Final Exam	35% (Mon., Dec. 12, 12:45-2:45pm)

4.0($\geq 90\%$), 3.5(80%-89%), 3.0(70%-79%), 2.5(60%-69%), 2($\leq 59\%$)

Homework will be due at the beginning of class on the specified date. No late homework will be accepted unless earlier notification. Some part of each homework may not be graded.

Important Dates:

August 31	First Day of Classes
September 5	Labor Day (University closed)
September 7	Open adds end
September 26	Last day to drop with refund
October 19	Last day to drop with no grade reported
October 19	Middle of the semester
November 24-25	Thanksgiving Day (University closed)
December 9	Last Day of Classes
December 12	Final Exam (12:45-2:45pm)

Accommodations for students with disabilities: students with disabilities should contact the Resource Center for People with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. If you are eligible for an accommodation, you will be issued a verified individual service accommodation (RISA) form. Please present this form to me at the start of the term or two weeks prior to the accommodation date.

The instructor reserves the right to make any changes that he deems academically advisable. These changes will be announced in class.