

640:481-01

MATHEMATICAL THEORY OF STATISTICS

FALL 2007

Instructor: Professor Zieve
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Office hours: Tuesday and Thursday, 4:00–5:00. Feel free to email me questions that can be answered in a sentence or two; for questions requiring longer answers, come by my office hours or make an appointment.

Text: Miller and Miller, *John E. Freund's Mathematical Statistics, 7th Edition*. Upper Saddle River, Prentice Hall, 2004.

Prerequisite: Linear algebra (640:250) and mathematical probability (640:477); you can substitute probability (960:381) for 640:477 if you have also taken multivariable calculus (640:251).

General: The first seven chapters of Freund cover probability theory; most of this you have seen, but we will spend a couple of lectures reviewing this material and going over a few new probability distributions. We will then cover most or all of Chapters 8 and 10 through 14.

Homework: Homework problems will be assigned weekly. Only some of these will be collected and graded, but it is important to do them all. Homework to be graded is due at the beginning of the class period for which it is assigned, and late homework will usually not be accepted. Since answers to many problems are given in the back of the book, you must explain clearly how to get the answer in order to receive credit. **If you have trouble doing the homework, I urge you to come in during my office hours, or at some other time, and discuss it before it is due.**

You are strongly encouraged to discuss homework problems with me or with other students. On the other hand, after you have finished discussing a problem, **you must write your the solution independently, not in concert with others.** There are examples in the book to serve as models for presenting solutions.

Exams: There will be two in-class exams, on **October 11** and **November 13**; the final exam is on **December 18**. Make-up exams will be given only in the case of well-documented illness or major emergency or (only with permission in advance) of a major outside commitment.

Grading: Grading will be based on a weighted average of homework and exams:

Homework	20%
Class exams 20% each	40%
Final exam	40%