STAT 513: STATISTICAL INference: winter 1998

Instructor: Elizabeth Thompson, dept statistics, box 354322
Office: C-317 padelford; phone: 685-0108
Please use e-mail: thompson@stat.washington.edu.
Office hours: tues 2.30-3.45, fri 4-5.15, or by appt.

GSA/Grader: Moulinath Banerjee; Office: B-222 padelford
Email: mouli@stat.washington.edu. Office hours?

Class times: MWF 10.30-11.20; th. 10.30-11.20; Where ?????
The Thursday session is an integral part of the course.

Text: Statistical inference, by G. Casella and R. Berger. (C&B)

Other useful texts
Mathematical Statistics by S. F. Arnold.

Prerequisites: Stat 512; Most of the first five chapters of C&B should be familiar, and parts of chapters 6 and 7.

Homework: Weekly assignments, due each Monday in class unless otherwise stated.
You are welcome to discuss homework problems with others, but, for your own benefit, writing up solutions should be an individual effort. Please write legibly and logically. All (and only) required homework problems should be handed in; some may be assessed more thoroughly than others.

Grade: Homework 30%, midterm 25%, final 45%

E-mail: To facilitate communication, you are encouraged to use e-mail as much as possible. If you already subscribed to the stat512@ms email alias in Fall, you do NOT need to resubscribe to stat513@ms. If you do not have alternative computing resources, you are entitled to have an MSCC Stat513 class account; see me for this.

Overview: The course will assume knowledge of what was covered in Stat512.
We will first finish estimation by doing completeness. We will then do hypothesis testing (C&B chapter 8) and briefly consider confidence intervals (Chapter 9). Then we will go back to consider other inference criteria such as invariance, and the Bayesian approach (Chapter 7) in the context of a more general decision theoretic framework (Chapter 10). Chapters 11 and 12 of C&B are also useful, but the Stat and Biostat "Applied courses" and Biostat/Stat 533 are the primary sources for material on linear models.

Homework 1: Due January 12: Reading: Chapter 6.1.3, 6.1.4, and Chapter 7.3.3
Exercises: Chapter 6; 6.12, 6.13, 6.15, 6.18, 6.20, 6.22

Handouts: The notes for Stat513 are included in the Stat512-513 packet.
Any additional notes will also be made available at the copy center, B042 Communications.