STAT 543: Theory of Probability and Statistics II  
All Sections, Spring 2007

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Assistant: Zhan Zhang  
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phone: (515) 294-2049  
Office hours: to be announced

Prerequisites: STAT 542: Theory of Probability and Statistics I

Lecture: MWF 9-9:50, Physics 3

Textbook: Statistical Inference - (2nd Edition) by G. Casella & R. L. Berger,  
Duxbury Press.

Other Useful References:  
1. Introduction to Probability and Mathematical Statistics  
   - by L. J. Bain & M. Engelhardt  
2. Mathematical Statistics - by K. Knight  
3. Mathematical Statistics: Basic ideas and selected topics  
   - by P. J. Bickel & K. A. Doksum

Course Description: The course will generally cover the following topics:

Theory of Point Estimation (Chapters 7 & 10)  
Data Reduction Principles (Chapter 6)  
Testing of Hypotheses (Chapter 8)  
Interval Estimation (Chapter 9)  
Special Topics [Nonparametric methods, bootstrap] (Time Permitting)

Course Information

Distance Education: This course will be given as a distance education course. Lectures on campus will be recorded using Camtasia and a Tablet Notebook PC. Lecture notes (PDF) and lecture recordings (in Flash format) will be made available on the course webpage for distance education students.

Exams: There will be two midterm exams and a final exam. For on-campus students, each midterm will most likely be administered at an evening time (e.g., 7-9 PM on a Wednesday). For distance education students, arrangements will be made
for the administration of exams. You may use a calculator and formula sheet for the exams (more details later). If you know that you have a conflict with an exam due to circumstances beyond your control, you must notify me before the scheduled exam. Make-up exams are permitted only at the instructor’s discretion.

**Homework:** Homework problems will be assigned throughout the semester to provide opportunities for practice and application. Both the homework problems and their solutions will be posted on the course website. You are welcome to discuss the homework problems with other students but everyone must independently write up and submit a homework assignment (do not copy the work of others). The lowest homework score will be dropped at the end of the semester.

For on-campus students, homework will be assigned on Fridays and due the following Friday by 5:00 PM at the TA’s office.

For distance education students, methods and timing for submitting homework assignments will be communicated. In most cases, homework will be due early in the week following the on-campus due date. The preferred method of submitting homework is via email to the teaching assistant (Zhan Zhang, imaries@iastate.edu). Homework can be typed in a word processing program or scanned into a computer for email purposes. If other arrangements are necessary, then these will be discussed with individual distance education students.

**Grading:** Grades will be based on the following criteria:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Tentative Date</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Exam 1*</td>
<td>25%</td>
<td>Wednesday, February 14, 7:00-9:00 PM</td>
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<tr>
<td>Exam 2*</td>
<td>25%</td>
<td>Wednesday, April 4, 7:00-9:00 PM</td>
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<tr>
<td>Final Exam</td>
<td>40%</td>
<td>Wednesday, May 2, 7:30-9:30 AM</td>
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* Please note that the dates for the midterm exams are tentative and may be changed based on the pace of the course. You will always be given sufficient notice of an exam. Locations of exams are to be announced.

**WebCT Gold:** Students can keep track of their grade scores through a WebCT page for STAT 543. To enter WebCT, go to “http://www.iastate.edu” and click on “WebCT”. Then click “WebCT Gold Login” and enter your ISU username and ISU password (you should have both if you have an ISU email address).

**Disability Access:** If a student has a disability that qualifies under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act and requires accommodations, he/she should contact the Disability Resources (DR) office for information on appropriate policies and procedures. DR is located on the main floor of the Student Services Building, Room 1076. Their phone number is 515-294-6624.