Statistical Theory I

STAT 6801

Course Information

• Instructor:
  Yunzhang Zhu
  204B Cockins Hall
  zhu.219@osu.edu

• Grader:
  Renxiong Liu
  liu.6732@buckeyemail.osu.edu

• Lecture Time:
  08:50 A.M. - 10:05 A.M., M,W,F, Cockins Hall 228.

• Textbook: Statistical Inference, Casella and Berger, second edition. As time permits, we will cover most materials in the first 6 chapters of the book.

• Description: This course covers topics including basic probability theory, random variables, distribution theory and principles of statistical inference.

• Office Hours: 204B Cockins Hall, Wednesday and Friday 10:10am-11:10am and by appointment (via email).

• Prerequisites: Grad standing in Statistics or Biostatistics, or permission of instructor. Not open to students with credit for 6301 (610) or 620.

Course website

All course materials are kept on Canvas http://carmen.osu.edu.
Homework

There will be 9-11 homework assignments each containing 5-10 problems. All assignments are due by 12:00 noon on the date specified. NO late homework will be accepted. Instead, your lowest homework grade will be dropped from the final homework average. While the main purpose of homework is to be sure you understand the concepts and practice the techniques, homework will also be graded. It is your job to make your homework easy to grade. Problems that are out of order or with parts not clearly identified may not receive full credit. Homework you submit should be your own and should demonstrate your personal understanding of the problems, although I encourage you to work together in solving the problems. Feel free to ask me for help after you have made an attempt to solve the problems.

Evaluation

Your final grade for this course will be determined by your performance on homework, the midterm, and final exam. The weights for each are as follows:

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<table>
<thead>
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<tbody>
<tr>
<td>Individual Homework</td>
<td>15 %</td>
</tr>
<tr>
<td>Exam I</td>
<td>20 %</td>
</tr>
<tr>
<td>Exam II</td>
<td>20 %</td>
</tr>
<tr>
<td>Final Exam</td>
<td>45 %</td>
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Exam schedule

There will be three exams for this course. All are closed book and closed notes. You could bring a calculator to the exam, but no use of cell phones or other communication devices will be allowed. The exams are TENTATIVELY scheduled for:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date and Time</th>
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<tbody>
<tr>
<td>Exam I</td>
<td>Friday, Sept. 28 (lecture time)</td>
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<tr>
<td>Exam II</td>
<td>Friday, Nov. 2 (lecture time)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Monday, Dec. 10 (10:00am-11:45am)</td>
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Schedule

The tentative schedule for the course is:
Week  | Section*s  
---   | ---       
1     | 1.1-1.2   
2     | 1.3-1.6   
3     | 1.6-2.1   
4     | 2.2-2.4   
5     | 2.4-3.2   
6     | 3.2-3.3   
7     | 3.4-3.5   
8     | 3.6-4.2   
9     | 4.2-4.4   
10    | 4.4-4.5   
11    | 4.6-4.7   
12    | 5.1-5.3   
13    | 5.3-5.4   
14    | 5.4-5.5   
15    | 6.1-6.3   
16    | 6.3-6.4   

**Academic Integrity**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term academic misconduct includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct [http://studentlife.osu.edu/csc/](http://studentlife.osu.edu/csc/).

**Disability Statement**

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

**Disclaimer**

This syllabus should be taken as a fairly reliable guide for the course content. However, you cannot claim any rights from it and in particular I reserve the right to change due dates or the methods of assessment. Official announcements will ALWAYS be those made in class.