Statistical Theory I

STAT 6801

1 Course Information

- Instructor:
  Dr. Yunzhang Zhu
  425 Cockins Hall
  zhu.219@osu.edu

- Lecture Time:

  08:50 A.M. - 10:05 A.M., M,W,F, Cunz Hall 160

- Textbook: **Statistical Inference, Casella and Berger, second edition.** As time permits, we will cover most materials in the first 6 chapters of the book. Topics covered include introduction to probability, random variables, distribution theory and principles of statistical inference.

- Office Hours: 425 Cockins Hall, Wed 10:15-11:45am and by appointment (via email).

- Prerequisites: Graduate standing in Statistics or Biostatistics, or permission from instructor. Not open to students with credit for 6301 (610) or 620.

2 Course website

A course website can be accessed through `http://www.stat.osu.edu/~zhu.219/classes/stat6801`. Homework solutions and grades are kept on Carmen `http://carmen.osu.edu`.

3 Homework

There will be 10-12 homework assignments each containing 8-10 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.

4   Evaluation

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

Individual Homework	20 %
Exam I	25 %
Exam II	25 %
Final Exam	30 %

4.1   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:

Exam I	Friday, Sept. 25 (lecture time)
Exam II	Friday, Oct. 30 (lecture time)
Final Exam	Monday, Dec. 14 (10:00am-11:45am)

5   Schedule

The *tentative* schedule for the course is:

Week	Sections
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	4.6-4.7
10	3.6-4.2
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

6   Academic Integrity

Cheating, plagiarism and be tolerated. Any violation will be prosecuted to the fullest extent as set out in University Rule 3335-5-487. 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/`.

7   Disability Statement

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; `http://www.ods.ohio-state.edu/`.

8   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.