Statistics 4202: Introduction to Mathematical Statistics - II

**Instructor:** Dr Karthik Bharath.
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**Office:** 329 Cockins Hall.
**Office Hours:** 9:30-10:30 am M T.
**Recitation session Instructor:** Zhiyu Liang (liang.131@buckyemail.osu.edu).

**Text:** *John E. Freund’s Mathematical Statistics with Applications, 8th edition*, by Irwin and Marylees Miller.

**Prerequisites:** Statistics 4201 (420), Math 4530 (530) or 5530 H (531 H)

**Course format:** Three 55-minute lectures— M W F from 11:30 am - 12:25 pm and one recitation session.

**Topics covered:** Chapter 9, 10, 11, 12, 13, 14 and few sections from chapters 15 and 16; they encompass topics in Decision Theory, Point Estimation, Interval Estimation, Hypothesis Testing, Regression and Correlation and Nonparametric tests.

**Website:** Homeworks and other relevant material will be posted on [http://www.carmen.osu.edu](http://www.carmen.osu.edu). Please check the website regularly.

**Grading scheme and policy:**

- Class participation - 5%
- Homework - 30%
- Midterm I - 20 % (Friday, Oct 4)
- Midterm II - 20 % (Friday, Nov 8)
- Final - 25% (Monday, Dec 9, 12:00 - 1:45 pm)

Homeworks will be due in the recitation session; **no late homeworks will be accepted.** For the two midterms you will be allowed to bring one standard size sheet (front and back) containing formulae, examples etc. and for the final exam you are allowed to bring two standard sized sheets (front and back). For the exams you are allowed the use of a scientific calculator. **No make-up exams will be administered.**

**Course Requirements:** This is not an easy course; primarily so, since we are obliged to cover a wide range of statistical methodologies. You will have to devote a lot of time for this course and spend sufficient amount of time outside of class lectures, homeworks and quizzes. If you feel you cannot dedicate the time required, please reconsider taking this course at this point. You are responsible for all material covered in class—I will present, in class, examples and problems not given in the textbook and they may appear on the quizzes or the exams. I will assume familiarity and a certain level of proficiency with multivariable calculus and material covered in the prerequisite courses.

**Academic Misconduct:** You are expected to produce independent work for homeworks and exams. Academic misconduct of any sort will not be tolerated. If students are caught indulging in dishonest activities during the quizzes or the exams, they will be reported immediately, without any exception. Please review OSU’s policies at [http://studentaffairs.osu.edu/csc/](http://studentaffairs.osu.edu/csc/).

**Remarks:** *Please come to class on time.* This is mandatory and I will not entertain late arrivals. Please refrain from using laptops and cell phones in class.