## STAT 4202 Syllabus Introduction to Mathematical Statistics II Spring 2017

**Instructor:** Dr. Lo-Bin Chang **E-Mail:** chang.1539@osu.edu

Office: CH 440F

**Office Phone:** 614-292-8876

Class Times: MWF 3:00PM-3:55PM

**Class Location:** Jennings 155

Office Hours: MWF immediately after class

TA: Alex Wasielewski (email: wasielewski.5@osu.edu)

**Grader:** Natalia Kravtsova (email: kravtsova.2@osu.edu)

**Main Text:** John E. Freund's Mathematical Statistics with Applications (8th edition) by Irwin Miller and Marylees Miller

## **Tentative Topics:**

Chapter 10: Point Estimation (3 weeks)

Chapter 11: Interval Estimation (2 weeks)

Chapter 12: Hypothesis Testing (2 weeks)

Chapter 13: Hypothesis Testing Involving Means, Variances, and Proportions (3 weeks)

Chapter 16: Nonparametric Tests (2 weeks)

Chapter 14: Regression and Correlation (2 weeks)

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

**Website:** Homework and other relevant material will be posted on Carmen. Please check the website regularly.

**Grading:** The final course grade will be based on the following weighting of assessment components:

Homework quizzes (15%) Midterm I (25%) Midterm II (25%) Final Exam (35%)

**Homework quizzes:** Homework assignments will be posted on the course website or given in class, and there will be a short (20 minutes) quiz at the beginning of the following recitation. Homework will not be collected, and the quiz problem(s) will be taken directly from the homework. You are encouraged

to discuss homework problems with other students. Your lowest quiz score will be dropped at the end of the semester, so missed guizzes cannot be made up for any reason.

**Exams:** All exams will be closed-book. The final exam will be cumulative, but will emphasize more on the recent material. The two midterm exams will be in the same room Jennings 155; the location of the final exam will be posted later according to the university arrangement. The schedule is as follows:

Midterm I: 3:00pm~3:55pm, Monday February 13 Midterm II: 3:00pm~3:55pm, Monday March 27 Final Exam: TBA

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

**Special Accommodation:** Students with disabilities (including mental health, chronic or temporary medical conditions) may be eligible for reasonable accommodations. All accommodations are coordinated through the Office of Student Life Disability Services located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu; slds.osu.edu. Please contact the Office of Student Life Disability Services as early in the semester as possible.

**Remark:** Since we cover the fundamental topics in statistics with rigorous mathematical treatments and various applications, the course fulfills along with the latest faculty agreed upon General Education Goals and Expected Learning Outcomes of Data Analysis:

Goals: Students develop skills in drawing conclusions and critically evaluating results based on data

**Expected Learning Outcomes:** 

- 1. Students understand basic concepts of statistics and probability.
- 2. Students comprehend methods needed to analyze and critically evaluate statistical arguments.
- 3. Students recognize the importance of statistical ideas.

**Note:** The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.