Statistics 157: Introduction to Mathematical Statistics Syllabus

Time: Tuesday/Thursday, 12:45p ~ 2:00p

Room: 2020 K 21

Instructor: Yinglei Lai, Assistant Professor of Statistics E-mail address: <u>ylai@gwu.edu</u> Office address: Room 106, 2140 Pennsylvania Ave. NW Office phone: (202) 994-6664 Office hours: Tuesday/Thursday, 2:00p ~ 3:00p.

Textbook: *Mathematical Statistics with Applications* by D. Wackerly, W. Mendenhall III and R. Scheaffer ©Wadsworth Group, 2002

Description: Basic concepts of probability theory, including random variables, independence, distribution theory, and sampling theory.

Prerequisite: Math 32 or equivalent.

Grading:

- Homework: 35%, *work independently*.
- Two Quizzes: 10%, *closed book*.
- Midterm Examination: 20%, *closed book*.
- Final Examination: 35%, *closed book*.

Statistics 157: Introduction to Mathematical Statistics Topics (tentative)

- Sep. 2: 1.1~1.6
- Sep. 7: 2.1~2.4
- Sep. 9: 2.5, 2.6
- Sep. 14: 2.7~2.9
- Sep. 16: 2.10~2.13
- Sep. 21: Quiz 1
- Sep. 23: 3.1~3.3
- Sep. 28: 3.4, 3.5
- Sep. 30: 3.7~3.9
- Oct. 5: 3.11, 3.12
- Oct. 7: **Review**
- Oct. 12: Midterm examination
- Oct. 14: 4.1~4.3
- Oct. 19: 4.4~4.6
- Oct. 21: 4.7~4.10, 4.12
- Oct. 26: 5.1, 5.2
- Oct. 28: 5.3, 5.4
- Nov. 2: 5.5~5.8
- Nov. 4: 5.9~5.12
- Nov. 9: **Review**
- Nov. 11: **Quiz 2**
- Nov. 16: 6.1~6.3
- Nov. 18: 6.4, 6.5
- Nov. 23: 6.7, 6.8
- Nov. 25: Thanksgiving break
- Nov. 30: 7.1~7.3
- Dec. 2: 7.5, 7.6
- Dec. 7: Review
- Dec. 9: Make-up class if necessary