

**Math 411B Introduction to Mathematical Statistics I**  
**Winter 2017 (Jan 4 - Mar 10)**  
**MWF 10 - 10:50am in BOUILLON 210**

**Instructor:** Dr. Sooie-Hoe Loke

**Office:** Bouillon 107B

**Phone:** (509) 963-2602

**E-mail:** lokes@cwu.edu

**Office Hours:** MW 9 - 9:50 AM, TTh 10 - 10:50 AM, and by appointment.

**Course Goals:** At the end of this course, students should understand some further topics in basic probability theory and beginning topics in mathematical statistics. Specifically, we will cover:

- Correlations, conditional distributions, and bivariate normal distributions.
- Distributions of functions of random variables, using the distribution function technique, transformation technique, and moment generating function technique.
- Limiting theorems and sampling distributions.
- Properties of point estimators and methods of choosing point estimators.

**Prerequisite:** Math 411A or permission.

**Text:** Hogg, Tanis, and Zimmerman, *Probability and Statistical Inference*, 9th Edition. This quarter we are planning to cover the remainder of Chapter 4 and Chapters 5 and 6.

**Evaluation:**

- Two in-class exams (35% total); tentative dates: Friday, Jan 27, and Friday, Feb 24.
- Comprehensive final exam (25%); given Friday, Mar 17, from 8 - 10AM.
- Homework (40%).

**Course Conduct:**

- **Required Materials:** The textbook is required. You will also want at least a scientific calculator. For those planning to take Exam P, I strongly recommend the TI-30X MultiView or TI-30XII.
- **Homework:** Weekly homework will be assigned in class. Due dates will be announced at the time of the assignment. Homework must be done neatly, stapled, and written on clean-edged paper. Your work should be clear, in a logical order, and provide sufficient explanation. Credit will not be given for late homework.
- **Exams:** Any changes to the tentative exam schedule will be announced in advance. Make-up arrangements must be made at least one day prior to an exam unless you can document an unexpected circumstance beyond your control that prevented you from taking the exam.
- **Other Information:** Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning, discuss your concerns with the instructor. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.