

Syllabus

General Information

Instructor: Yili Hong, PhD

Office: 213 Hutcheson Hall; Phone: 540-231-9710; Email: yilihong@vt.edu

Class time and place: TR 11:00am-12:15pm; Litton-Reaves 1760

Office hours: TR: 10:00am-10:50am, or by appointment.

TA: Ms. Yunnan Xu; Office: 408 Hutcheson Hall; Email: yunnan91@vt.edu

TA office hours and location: TBD.

Prereq: STAT 4105

Resources

Required Textbook: D. D. Wackerly, W. Mendenhall, III, R. L. Scheaffer (2008), *Mathematical Statistics with Applications*, 7th Edition, Thomson - Brooks/Cole.

Course webpage: canvas.vt.edu

Student Solutions Manual (optional): The use of the Student Solutions Manual by William J. Owen, with solutions to odd-numbered problems, is optional.

Description

This is primarily a theory course, covering sampling distribution; central limit theorem; methods of estimation; properties of estimators; hypothesis testing; convergence of sequences of random variables. Other topics such as linear models theory and Bayesian inference will also be covered if time permits.

Evaluation

- Letter grade will be given based on attendance (10%), homework (20%), the first mid-term (20%), the second mid-term (20%), and the final exam (30%).
- Attendance policy: attendance is required and will be checked on a random basis. Each student is allowed to miss four classes for various reasons (e.g., sickness, job interviews). After that each absence will result in a 2% deduction with a maximum of 10% deduction.
- Homework: on a regular basis. Turn them in at the beginning of the class on the date it is due. NO late homework will be accepted.
- First Mid-term: close-book, in-class, Thursday, February 21st.
- Second Mid-term: close-book, in-class, Thursday, April 18th.
- Final exam: close-book, comprehensive, scheduled for Wednesday, May 15th, 1:05pm-3:05pm.

- Exam policy: no make-up exams can be arranged. If one misses a midterm exam, the score will be imputed by the final exam score. Absence of the final exam will receive a zero score.

Academic Integrity

Students are expected to abide by Virginia Tech's Community Standard for all work for this course (<http://www.honorsystem.vt.edu/>). Violations of the Standard will result in a failing final grade for this course and will be reported to the Dean of Students for adjudication. Ignorance of what constitutes academic dishonesty is not a justifiable excuse for violations.

Special Accommodation

As supported by Virginia Tech's Principles of Community (<http://www.vt.edu/diversity/principles-of-community.html>), all students will be treated equally. Those with special needs can be accommodated and should refer to the website <http://www.ssd.vt.edu/> for specific questions.