

Syllabus

General Information

Instructor: Yili Hong, Professor of Statistics

Office: 213 Hutcheson Hall; Email: yilihong@vt.edu

Course Modality: Online with Synchronous Meetings.

Class time and Zoom link: TR 12:30PM–1:45PM.

Join Zoom Lecture: <https://virginiatech.zoom.us/j/86846704581>

Office hours via Zoom: TR 3:00PM–4:00PM, or by appointment.

Zoom link for office hours: <https://virginiatech.zoom.us/j/83305740799>

Resources

Course webpage: <https://canvas.vt.edu/>

Notes: Classes are based on lecture notes provided.

Reference Books: The following books are for your references.

Daniel and Cross (2013). *Biostatistics: A foundation for analysis in the health sciences*, 10th ed. Hoboken, NJ: J. Wiley & Sons. (ISBN 978 1118302798).

Zar, J.H. (2010). *Biostatistical Analysis*, 5th ed. Upper Saddle River, NJ: Pearson. (ISBN 978 0321656865)

Software: JMP, required. Purchase JMP directly from Software Distribution.

<https://itpals.vt.edu/softwarelicensingcenter/studentsoftware.html>

Description

This course is the second in a two-semester sequence (Stat 5605 and Stat 5606) of Biometry. The overall objective is the development of basic statistical literacy and skills in the analysis of biological and health data. The following topics are included: simple regression, multiple regression, analysis of variance, logistic regression, and Poisson regression; survival analysis if time permits.

Evaluation

- Letter grade will be given based on homework (50%), and final project (50%).
- Homework: There will be five homework. Students need to submit their homework online on Canvas.
- Final project: Students need to complete a course project in which they acquire and analyze a data set from biological and health areas, make a presentation of the analysis, and write a comprehensive report.

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.