

Syllabus

General Information

Instructor: Yili Hong, PhD

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

Class time and place: TR 8:00am-9:15am; Seitz 300.

Office hours: TR 9:30am-11:00am, or by appointment.

Resources

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

Notes: Classes are based on lecture notes provided.

References: The following books are for your references.

Daniel, W. W. (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 at the Torgersen end of Torgersen Bridge.

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; longitudinal data analysis and 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. Turn them in at the beginning of the class on the date it is due. NO late homework will be accepted.
- Final project: Students are expected to complete a project in which they acquire and analyze a data set from biological and health areas, 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.