Course Information

Time:  Tues 8:30 – 10:25 a.m. (per. 2–3)  Location: 230 FLO (Griffin-Floyd Hall)
       Thur 9:35 – 10:25 a.m. (per. 3)

Instructor: Dr. Brett Presnell
Office: 220 FLO  E-mail: presnell@stat.ufl.edu
Office Hours: See instructor’s web page.  Phone: 273-2989
Web Page: http://www.stat.ufl.edu/~presnell/


Prerequisites: STA 6327 and STA 6208, or permission of instructor.

Course Content and Objectives

This course will focus on the theory and application of generalized linear models and related statistical topics. Questions on this material appear on the PhD qualifying exam in statistics.

Generalized linear models (GLMs) are a broad family of statistical models. In a GLM, the response variable has a distribution in an exponential dispersion family and the mean response is related to covariates through a link function and a linear predictor. GLMs allow a unified theory for many of the models used in statistical practice, including normal theory regression and ANOVA models, loglinear models, logit and probit models for binary data, and models for gamma responses and survival data.

The core material for the course is covered in Chapters 2–9 of the course text. Other topics will be covered as time permits.

Grading

There will be two exams, tentatively scheduled for the weeks of February 15–19 and April 12–16. Homework will also be assigned periodically and graded. Homework assignments may involve data analysis and computations requiring the use of a statistical package and/or programming language.

At the end of the semester, students will be required to give a presentation on a topic/paper/project related to the course material, but not covered directly in class. The instructor will provide a list of potential topics and/or papers, but the student may also choose their own. Each student’s topic must be approved in advance by the instructor.

The exams will account for 50% of the course grade, homework for 25%, and the presentation for the remaining 25%.
Other References

Besides the course text, other possible sources for course materials include:


