STT864 Applied Statistics Method II
Spring 2011

Instructor: Yuehua Cui
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Class Time: MW 4:10pm-5:30pm, C306 WH

Office Hours: M F 11:00-12:00 and by appointment.

Textbook: Generalized Linear Models and Extensions, 2nd Edition, 2007
By James W. Hardin and Joseph M. Hilbe, Stata Press
ISBN-10: 1-59718-014-9
ISBN-13: 978-1-59718-014-6

Prerequisite: STT861-2, STT863

Other References:
McCullagh, P. and Nelder, J.A. (1989). *Generalized Linear Models*, 2nd Edition. London: Chapman and Hall. The "bible" on generalized linear models, but aimed at more advanced statistics students.
Agresti, A. (2002). *Categorical Data Analysis*, 2nd Edition. New York: John Wiley and Sons. An excellent book on models for contingency tables.

Assignments: About 10 homework assignments will be given during the semester. These will be graded by the grader and you should check the grading carefully. I will look at anything that you think has been incorrectly graded or that you don't understand. Please do not worry about getting an extra half point here and there - it couldn't make any difference to your overall grade! Assignments will be due at the beginning of the lecture on the days indicated. Late homework is not accepted.

Exams: There will be a mid-term and a final exam. The midterm will be in class on March 2nd and the final will be on Monday May 2nd 5:45-7:45pm.

Grading:

Midterm	20%
Final	30%
Project	20%
Homework	30% (this is a learning exercise. Make your errors here!) (The actual grading of each homework assignment may be out of 20 or 30 points, but the total will be scaled to 30% of the grand total at the end of the course).

4.0(>=90%), 3.5(85%-89%), 3.0(80%-84%), 2.5(75%-79%), 2(<=74%)

Computing: R or SAS. You are encouraged to use other statistical software packages

Important Dates:

1/10	First day of class
1/14	Close of online adds
1/17	Martin Luther King Day (No Classes)
2/3	End of 100% Refund
3/2	Middle of the semester, last day to drop with no grade
3/7-11	Spring Break
4/29	Last day of Class
5/2	Final exam

Objectives: The main objective of the course is to learn advanced regression techniques for responses measured beyond a continuous scale. These are invaluable resource for applied statisticians and have practical implications in real data analysis. The course is also expected to equip students interested in theoretical and methodological research motivated by applications.

Tentative materials to be covered: We will try to cover chapters 1-18, but some of the chapters may be skipped. More will be announced as we move forward.

Academic Honesty:

The Department of Statistics and Probability adheres to the policies of academic honesty as specified in the General Student Regulations 1.0, Protection of Scholarship and Grades, and in the all-University of Integrity of Scholarship and Grades, which are included in Spartan Life: Student Handbook and Resource Guide. Students who plagiarize may receive a 0.0 on the assignment or fail the course.

To arrange for accommodation, students with disabilities should contact the Resource Center for People with Disabilities (353-9642).

The instructor reserves the right to make changes and additions that are academically advisable to any part of this syllabus. Such changes, if any, will be announced in class. Please note that it is your responsibility to attend the class and keep track of the proceedings.