

BIOS 695 (08-09)

Analysis of Categorical Data

Instructor: Peter Song. Office: M4140 SPH II; Phone: 734-764-9328;
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Time and Place: TTH 1:00-2:30pm, 1170 SPH II

**NOTE THAT THERE WILL BE NO CLASSES ON OCT 21 (FALL BREAK)
AND NOV. 26 (THANKSGIVING).**

Office Hours: Tue 2:30-4:00pm; or by appointment

Text : Classes will be mainly based on *Categorical Data Analysis (2nd Ed.)* by Alan Agresti, Wiley.

Course Webpage: Has been created under CTools, where I will post course related announcements, homeworks, solutions and so on.

Grading:

Source	Weight	Note
7 assignments	5% each	No late assignments accepted
1 midterm	25%	Oct 23 (In Class)
Final exam	40%	Schedule TBA

Software: SAS, R, SPSS or others.

Course Outline: The course is intended to provide students an arsenal of statistical methods for dealing with various practical problems involving categorical response or dependent variables. Topics include:

- Contingency table analysis
- Logistic regression models
- Log-linear regression models
- Proportional odds models
- Models for match pairs.

WARNING: I won't follow exactly the order of the text. Students are required to read more material related to my lectures from the text after class.

Supplementary References: Agresti, A., *An Introduction to Categorical Data Analysis*, Wiley, 1996. This is a light version of the text, shorter, fewer topics, more examples, less theory.

Exams: All exams are closed book, except for the use of two formula sheets (double sided), on which students are only allowed to include hand-written formulas. Students will need a simple hand calculator for all your work.

SAS: Students will use SAS to work with your assignments extensively. All computing-related handouts of this course will be given based on SAS.