
Lecture:	Tuesdays 3:30-6:10 pm	Office:	318E Kimball Hall
Location:	25 W. 4 th St., Room C-1	Phone:	212-992-9407
Office Hours:	Tuesdays 2:30-3:30 pm, and by appointment	email:	marc.scott@nyu.edu
Webpage:	http://home.nyu.edu/~ms184		
Main text:	Stevens, <i>Applied Multivariate Statistics for the Social Sciences</i> (4 th Ed.)		
Optional Texts:	Tabachnick & Fidell, <i>Using Multivariate Statistics</i> (4 th Ed.)		
	Brian F. Manly, <i>Multivariate Statistical Methods, A Primer</i> (2 nd Ed.)		
	Everitt & Dunn, <i>Applied Multivariate Data Analysis</i> .		
	Chap T. Le, <i>Applied Categorical Data Analysis</i>		
Software:	SPSS version 12 or 13. This course will use Blackboard .		

COURSE OVERVIEW: This is a course on models for categorical data. Examples will come from health, social, and behavioral science.

COURSE REQUIREMENTS:

Participation:	10%	You are expected to attend class and participate in class discussions
Computer problems:	15%	There will be several assigned problems intended to give you practical experience using the statistical software.
Quizzes:	30%	There will be 2 non-comprehensive 1 hr. quizzes on selected topics.
Data Analysis Projects:	45%	There will be two data analysis projects (worth 22.5% each). The first of these will be an application of logistic regression. The second should use a methodology discussed in the course, but should come from an area of interest to the student. For example, thesis data from a pilot study.

COURSE READINGS: Handouts will be available on Blackboard by the Monday preceding class. It is the student's responsibility to print out and review the notes before coming to class. Readings in main text are given below; optional readings will be made available.

Late assignment policy: Assignments are to be handed in on time.

SCHEDULE

<i>Date</i>	<i>Topic</i>	<i>Assigned Reading</i>
Jan. 18	Intro to contingency tables (categorical data analysis)	Handouts
25	Screening tests; Inference for contingency tables; odds ratios; Higher dimensional tables; confounding & the Mantel-Haenszel Method	Handouts
Feb. 1	Meta-analysis; Standardization; Oaxaca decomposition	Handouts
8	Intro to loglinear modeling	Stevens ch.14
15	Quiz 1; Three-way models of association; Simpson's Paradox; building loglinear models	Stevens ch.14
22	Controls in loglinear models; parameter/model interpretation; model selection	Stevens ch.14
Mar. 1	Loglinear model examples	Stevens ch.14
8	Quiz 2; Intro to Logistic Regression	Stevens ch.3.17
15	Spring Break (no class)	
22	Logistic regression with multiple covariates	Handouts
29	Diagnostics (GOF) in logistic regression; Project 1 due;	Handouts
Apr. 5	Further Topics in Logistic Modeling (e.g., ordinal, multinomial)	Handouts
12	Survival Analysis I	Handouts
19	Survival Analysis II	Handouts
26	Survival Analysis III	Handouts
May 10	Final Project Due	Handouts