Political Science 401
Data Analysis I
Fall 2008
R. H. Bruhl

Syllabus

The objective of this course is to provide the student experience in the statistical analysis of social science data. This experience will be gained through the completion of small research projects in which the student collects and analyzes data appropriate for each of the statistical methods discussed in this course. In particular, those methods include:

- Descriptive Statistics;
- Comparison of Means;
- Correlation;
- Cross-tabulation of quantitative variables (Chi-Square);
- Analysis of Variance;
- Time series analysis;
- Bivariate regression; and
- Multivariate regression.

Though several exercises will require mathematical calculations, the majority of the project work will be accomplished using SPSS. The student is advised to have his or her computer services account activated for this course.

The text for this course is *Statistical Methods for the Social Sciences* by Agresti and Finlay. Course grades will be based on the successful completion of each of the assigned research projects, incidental homework assignments, and a final examination.

Any student with special instructional needs is requested to discuss those needs with me at the student's earliest convenience.

Tentative Lecture and Reading Assignment Schedule

Date	**Topic**	**Reference**
8/25	Descriptive statistics	A/F Chapters 1, 2, and 3
9/1	OFF	
9/8	Probability	A/F Chapters 4, 5, and 6
9/15	Comparison of means	A/F Chapter 7
9/22	Correlation	A/F Chapter 9
9/29	Cross-tabulation and Chi-square	A/F Chapter 8
10/6	Cross-tabulation and Chi-square	A/F Chapter 8
10/13	Analysis of Variance	A/F Chapter 12
10/20	Analysis of Variance	A/F Chapter 12
10/27	Time series regression	A/F Chapter 9
11/3	Time series regression	A/F Chapter 9
11/10	Bivariate regression	A/F Chapter 9

Date	Topic	Reference
11/17	Bivariate regression	A/F Chapter 9
11/24	Multivariate regression	A/F Chapter 11
12/1	Multivariate regression	A/F Chapter 11
12/8	FINAL	

Note: “A/F” denotes Agresti/Finlay textbook