APPLIED SOCIAL RESEARCH — 2

SOCIOLOGY 755

Tuesdays, 6:30 - 8:20 pm in KS 224

Charles F. Turner
E-Mail: Turner@troll.soc.qc.edu

Office Hours
Tues. 1:00 to 2:00pm and 8:20 to 9:20pm
Other times by appointment

The aim of this course is to provide students with a hands-on learning experience conducting multivariate statistical analyses of large-scale datasets. The course will emphasize the conduct and interpretation of data analyses for substantively important questions. While we do not intend to turn students into computer programmers, all students will be required to master the technical details required to use common statistical software. By the conclusion of the course, students should be sufficiently fluent in major tools of multivariate statistics to conduct independent analytic work.

Most of the analytic work in this class will use SPSS version 9 which is installed on the NT workstations in the department's graduate lab. Students will find this course easier if they have already obtained a good foundation in statistical theory — such as that provided by Soc 710. However, Soc 710 is not a formal prerequisite for registering for this course.

The only required text for this course is Marija Norusis, **SPSS Advanced Statistics, 6.1,** which is available for purchase at the bookstore**.** Occasional xeroxed readings will also be distributed in class.

DATASETS

Class exercises will draw from the following collection of datasets.

- 1972 - 1998 Cumulative General Social Survey Dataset
- 1992 National Health and Social Life Survey (NHSLS), also known as the University of Chicago Sex Survey
- 1979 - 1997 National Hospital Discharge Survey Dataset
- 1989 -1995 Marriage and Divorce Data from NCHS Vital Statistics System
- 1992 Cause of Death Dataset for the USA from NCHS Vital Statistics System
- 1996 Birth Data file for USA from NCHS Vital Statistics System

GRADING

Two exercises will be made during the course to test students' mastery of the material taught in class. These exercises will be designed to be completed in 2-3 hours and students will be given one week to turn them in. Performance on these assignments will count for 40 percent of the final grade. All students will also be required to submit one larger data analysis project at the end of the term (see below). This project will count for 60 percent of the final grade.

PROJECT. All students are required to submit a data analysis project that uses the techniques taught in this class to answer a substantively important research question. The analysis must use one of the class datasets. Before beginning work on this project, all students must meet with the instructor to discuss and receive approval for their proposed research topic. These meetings should be completed on or before March 14th.

CONTACTING THE INSTRUCTOR.
The best way to contact me is to send E-Mail to Turner@troll.soc.qc.edu. My office telephone is 718-997-2819. In an emergency, you may also call 202-728-2493.

COURSE TOPICS

Feb. 1 Overview of course. Introduction to hardware, software, and datasets. Discussion of substantive interests of class members.

Feb. 8 Exploring large datasets: First steps, formulating strategies, efficient data processing, and good programming hygiene.

Feb. 15. *No class. Classes follow Friday Schedule.*

ANALYSIS OF CATEGORICAL DATA

Feb. 22 Understanding the Logic of Tables

Feb 29 Elementary Models for Tabular Data: Independence and Quasi-Independence

March 7 Log-Linear Model for N-Way Tables
March 14 *Note. You must have an approved topic for your project by March 14th.*
March 21

March 28 Logistic Regression

ANALYSIS OF METRIC DATA

April 4 Basic Concepts and the Case of Two Metric Variables

April 11 Multiple Linear Regression
April 18

April 25 *Spring Recess*

May 2 Non-Linear Regression

May 9 Factor Analysis and Item Scaling Approaches

May 16 ***Final Class***: Special Topics

May 26 ***Last day to turn in Project Reports.***