EPPS 6324
Data Management for Social Science Research
Fall 2016

Professor:
Harold D. Clarke
Asbel Smith Professor Office: GR 3.808

Office Hours:
Wed: 11 AM -1 PM and
by Appointment

Course Objectives:
This is a course designed to teach students how to use widely available general and specialized computer software packages for constructing, managing and analyzing cross-sectional and time-series data sets. The course features numerous applications and extensive examples to help graduate students to develop and conduct their research projects successfully. Students from all EPPS programs, Psychology, School of Management and elsewhere are welcome.

Grading:
2 class assignments @ 10% each = 20%
class attendance and participation = 20%
term paper* on research topic of student interest = 60%

* - the content and structure of the term papers will be discussed in class; students will do presentations based on their term papers in the last two class sessions.

Textbooks:

There are no required textbooks; various useful readings will be discussed each week in class. The following suggested texts should prove helpful:

Alan Acock. *A Gentle Introduction to Stata*. College Station, TX: Stata Press, 4th edition, 2014.

Sean Becketti. 2013. *Introduction to Time Series Using Stata*. College Station, TX: Stata Press.

James F. Monagan. 2016. *Political Analysis Using R*. New York: Springer.

Topics

1. SPSS: Data Management

2. SPSS: Data Analysis - Descriptive statistics and cross-tabulation

3. SPSS: Data Analysis - OLS regression - interpretation - including interactions

4. Stata: Data Management

5. Stata: Data Analysis - Binomial logit and probit, ordinal logit and probit, multinomial logit

6. Stata: Interpreting Results of Nonlinear models - Clarify, Margins and interactions

7. MPLUS and NLOGIT: Setting Up and Analyzing Mixture Models

8. R: Data Management, Analysis and Graphics - (includes a short course by Bill Jacoby - editor of the *American Journal of Political Science* and former Director of the ICPSR Research Methods Summer Program)

9. R: Linear and nonlinear models

10. EVIEWS, RATS (and Stata) - introduction to specialized software for time series analysis

11. Introduction to Bayesian MCMC Analysis with Winbugs and use of R2Winbugs for data entry to Winbugs. Example of state space form for Bayesian dynamic factor analysis.

12. Presentation of research papers in class.