# OXFORD COLLEGE OF EMORY UNIVERSITY POLITICAL SCIENCE 308: POLITICAL SCIENCE METHODS

SPRING 2009 TU & TH 11:30A-12:45P (HUM HALL 206) LAB: FRIDAY\* 4:30-5:30PM (PIERCE 206)

PROFESSOR: KATIE VIGILANTE OFFICE: 214C SENEY HALL

OFFICE HOURS: M, TU, & TH 4-5PM (M & F BY APPT.)

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CLASS CONFERENCE: BLACKBOARD

# "You are entitled to your own opinions, but you are not entitled to your own facts"

-The Late Senator Daniel Patrick Moynahan NY

#### **COURSE DESCRIPTION & OBJECTIVES**

This is a course on social science research methods applied to political phenomena. POLS 308 is a <u>required course</u> for all students majoring in Political Science or International Studies at Emory University.

The course is designed to introduce students to:

- 1. The style of analytic thinking required for research in the social sciences (the scientific method).
- 2. The concepts and procedures used in the conduct of empirical research in political science (*statistics*).
- 3. The use of computers for analysis of quantitative social science data (stata software©).

Our objective is to give you a foundation in research design and empirical methods so you can become an informed student of public affairs and specifically, of research reported in major journals in political science. Additionally, we want to provide you practice in data analysis skills as a means of introduction to political science methods for your own research.

Our focus will be on quantitative analysis, which depends on a dreaded area for many students: statistics. That's right, if you want to analyze data you will need to know the variety of techniques used to understand and evaluate those data: **statistics**.

We focus on a variety of statistics, from simple descriptive statistics and graphs, to tests of bivariate association, to multivariate regression and logit and probit analysis (the latter is used often in political science research). You do not need any more math background than high school algebra. Moreover, we will have a math review session.

For statistical software, we will use *Stata*©, perhaps the most popular package among political scientists. It is installed in computers in Pierce 206 and Kaliedescope Lab; additionally, you can purchase it cheaply for home use as well.

#### STATISTICAL COMPUTING SUPPORT

We have a license agreement through Emory and Stata Corp. to run 20 stata sessions at a time (from either mac or pc) from any computer lab on campus. You can also purchase a personal copy; the program is relatively affordable, as these things go, and we have made provisions for you to purchase it at a discount if you wish to purchase it (less than \$100 for a one-year license). To obtain the discount, you must call the Stata Corporation at 800-782-8272, saying that you are part of the "GradPlan III" for Emory University, if you want to place an order; or go to <a href="http://www.stata.com/order/new/edu/gradplans/gp-campus.html">http://www.stata.com/order/new/edu/gradplans/gp-campus.html</a>. (You want "Stata/IC" rather than "Small Stata" or "Stata/SE.")

#### REQUIREMENTS

Grades in the course will be based on the following items:

%	Graded Item	Description
20	Homework	Weekly Problem Sets posted to Blackboard "Assisgnments"
25	Midterm exam	In-class FEB. 26
30	Final exam	May 6 (2-5pm)
25	Research Report	Due in-class by April 28

Note that we will be going over each HW/Problem Set in our Friday "lab session". You will be emailing these assisgnments to me by midnight on Thursday before the lab (no exceptions). **As a result, I cannot accept late homework**. Exceptions for serious illness or family emergency may be made but will require prior permission from the instructor.

## LAB SESSIONS (SEE SYLLABUS FOR SCHEDULED LABS)

Successful completion of this course requires not only that a student learn the substance of research methods and data analysis, but also that he or she learn associated practical skills. The midterm and final examinations will each include questions demanding knowledge of details of basic Stata commands and output. To this end, although the course's main meeting times are Tues and Thurs, we will often meet on Friday afternoons, as a whole class, to hold "lab sessions" as well. These Friday sessions will not generally have new material; instead, they are for review of the material of the week, homework assignments, computer programming questions, etc. Please set the Friday time slot aside for this course.

#### **READING MATERIALS**

There are two textbooks for this class:

- Janet Buttolph Johnson and H. T. Reynolds, with Jason D. Mycoff, *Political Science Research Methods*, 6<sup>th</sup> ed. (Washington, DC: CQ Press, 2008).
- Philip H. Pollock III, A Stata Companion to Political Analysis (Washington, DC: CQ Press, 2006).

These books are available in the bookstore.

## ALL OTHER ASSIGNED READINGS ARE STORED IN BLACKBOARD IN "COURSE DOCUMENTS"

## **COURSE OUTLINE**

Jan 15 (Th): FIRST MEETING: INTRODUCTION-----POLITICAL **SCIENCE**?

**→**BEGIN PROBLEM SET # 1 ("BLACKBOARD "ASSISGNMENTS")

Jan 20 (Tu): THE SCIENTIFIC METHOD AND THE STUDY OF POLITICS.
Johnson and Reynolds (herein J&R), CH. 1-2

Jan 22 (Th): INTRODUCTION TO STATISTICS/MATH REVIEW
Salkind CH. 1 (BLACKBOARD "COURSE DOCUMENTS"---LINK)
Review J&R Ch. 1 examples

## → PROBLEM SET #1 DUE!!!!!!!!! → BEGIN PROBLEM SET # 2

- Jan 23 (F): LAB SESSION ONE: INTRODUCTION TO STATA REVIEW PROBLEM SET #1 /STATA INTRO
- Jan 27 (Tu): BUILDING BLOCKS OF SOCIAL SCIETIFIC RESEARCH PART I: RESEARCH QUESTIONS, THEORIES, CONCEPTS, AND HYPOTHESES
  - J&R CH. 3
  - Examples from J&R CH. 1
  - POLLACK CH. 1 (MAKE SURE TO COPY DATA SETS TO DISK, EXTERNAL HARDDRIVE, FLASHDRIVE, ETC)
- Jan 29 (Th): BUILDING BLOCKS OF SOCIAL SCIETIFIC RESEARCH PART 2: MEASUREMENT
  - J&R CH. 4
  - Jeffrey A. Segal and Albert D. Cover, "Ideological Values and the Votes of US Supreme Court Justices," *American Political Science Review* 83 (June 1989), 557-564
  - POLLACK CH. 2 (INCLUDING EXERCISES)
  - → PROBLEM SET # 2 DUE!!!!!!!!!

    → BEGIN PROBLEM SET # 3 (BLACKBOARD "ASSIGNMENTS")
- Jan 30 (F): <u>LAB SESSION TWO</u>: INTRODUCTION TO THE DATASETS
  Refer to <u>How to Use a Codebook</u>
- Feb 3 (Tu): RESEARCH DESIGN III: NON-EXPERIMENTAL SMALL-N DESIGNS, CASE SELECTION AND INFERENCE
  - J&R CH. 5
  - Ashutosh Varshney, "Ethnic Conflict and Civil Society: India and Beyond," *World Politics* 53 (April 2001), 362-398, esp. 370-374
  - Alan S. Gerber and Donald P. Green, "Do Phone Calls Increase Voter Turnout? A Field Experiment," *Public Opinion Quarterly* 65 (Spring 2001), 75-85

Feb 5 (Th): THE LITERATURE REVIEW

- J&R CH. 6

- POLLACK CH. 3 (INCLUDING EXERCISES)

→PROBLEM SET # 3 DUE!!!!!!!!!!

**→**BEGIN PROBLEM SET #4 (BLACKBOARD "ASSIGNMENTS")

## Feb 6 (F): LAB SESSION THREE: REVIEWING POLLACK CH 1-3

Feb 10 (Tu): DATA COLLECTION: OBSERVATIONAL RESEARCH, ELITE INTERVIEWING, THE WRITTEN RECORD

- J&R CH 8-9

- Richard F. Fenno, Jr., "Observation, Context, and Sequence in the Study of Politics," *American Political Science Review* 80 (March 1986), 3-15

Feb 12 (Th): DATA COLLECTION: SURVEY RESEARCH & INTERVIEWING - J&R CH. 10

→PROBLEM SET # 4 DUE!!!!!!!!

**→**BEGIN PROBLEM SET #5 (BLACKBOARD ASSIGNMENTS)

Feb 13 (F): LAB SESSION FOUR---REVIEW & HELP

FEB 17 (Th): DESCRIPTIVE STATISTICS:

- J&R CH. 11 (pp. 351-383)

- POLLACK CH. 4

→PROBLEM SET #5 DUE!!!!!!!!

Feb 20 (F): LAB SESSION FIVE----REVIEW & HELP/OPTIONAL

Feb 24 (Tu) DATA TRANSFORMATIONS AND GRAPHING

J&R CH. 11 (from pp. 383-393)

POLLACK CH. 5

Feb 26 (Th) MIDTERM EXAM

→ BEGIN PROBLEM SET # 6 (BLACKBOARD ASSIGNMENTS)

Mar 3 (Tu) SAMPLING, SAMPLING DISTRIBUTIONS, THE PRINCIPLES OF INFERENCE AND INTERVAL ESTIMATION

- J&R CH. 7 and CH 11 (from pp. 393-425)

Mar 5 (Th): MORE ON THE PRINCIPLES OF INFERENCE AND HYPOTHESIS

TESTING; SAMPLE SIZE AND "POWER"

J&R CH. 11 REVIEW

#### →PROBLEM SET # 6 DUE!!!!!!!!!!

Mar 6 (F): NO LAB

MAR 9-13: SPRING BREAK

Mar 17 (Tu): BIVARIATE ANALYSIS I: COMPARING MEANS WITH T-TESTS

- J&R CH. 12 (pp. 426-431)

- POLLACK CH. 6

- Jeffrey J. Mondak, "Newspapers and Political Awareness," *American Journal of Political Science* 39 (May 1995), just pps. 523-525, for a two-sample t-test.

Mar 19 (Th): BIVARIATE ANALYSIS II: CROSSTABS AND THE CHI-SQUARED TEST

- J&R CH. 12 (pps. 431-462)

- POLLOCK, CH. 7

- Roy Licklider, "The Consequences of Negotiated Settlements in Civil Wars, 1945-1993," *American Political Science Review* 89 (September 1995), 681-690.

## **→**BEGIN PROBLEM SET # 7 (BLACKBOARD ASSIGNMENTS)

Mar 20 (F): LAB SESSION SIX: REVIEW POLLACK 6-7

Mar 24 (Tu): BIVARIATE ANALYSIS III: CORRELATION AND REGRESSION

- J&R CH. 12 (pps. 477-498)
- POLLOCK, CH. 8 (stop p. 147)
- Amy Caiazza, "Does Women's Representation in Elected Office Lead to Women-Friendly Policy?", Institute for Women's Policy Research Publication I910 (May 2002).
- -Take another look: Jeffrey A. Segal and Albert D. Cover, "Ideological Values and the Votes of US Supreme Court Justices," *American Political Science Review* 83 (June 1989), 557-564

Mar 26 (Th): MULTIVARIATE REGRESSION I: THEORY AND BASICS J&R CH. 13 (pp. 503-521) POLLOCK, CH. 8 (from p. 147)

### →PROBLEM SET #7 DUE!!!!!!!!

**→**BEGIN PROBLEM SET # 8 (BLACKBOARD ASSIGNMENTS)

Mar 27 (F): LAB SESSION SEVEN: REVIEW POLLACK CH. 8

Mar 31 (Tu): MULTIVARIATE REGRESSION II: ESTIMATION, INFERENCE, INTERPRETATION

J&R CH. 13 (pp. 521-526)

 Ebonya Washington, "Female Socialization: How Daughters Affect Their Legislator Fathers' Voting on Women's Issues," *American Economic Review*, forthcoming.

Apr 2 (Th): MULTIVARIATE REGRESSION IV: CATEGORICAL EXPLANATORY VARIABLES

- POLLOCK, CH. 9 THROUGH P. 164

#### → PROBLEM SET # 8 DUE!!!!!!!!!!!!

→ BEGIN PROBLEM SET # 9 (BLACKBOARD ASSIGNMENTS)

Apr 3 (F): LAB SESSION 8: REVIEW (POLLACK CH. 9)

Apr 7 (Tu): MULTIVARIATE REGRESSION V: INTERACTION TERMS

- POLLOCK, CH. 9 (pp.164-167)

- David Brule, "Congressional Opposition, the Economy, and US Dispute Initiation, 1946-2000," *Journal of Conflict Resolution* 50 (August 2006), 463-483.

**APR 9 (TH): PROFESSOR OUT** 

→ PROBLEM SET # 9 DUE!!!!!!!!!

→ BEGIN PROBLEM SET # 10 (BLACKBOARD ASSIGNMENTS)

APR 10 (F): NO LAB: PROFESSOR OUT

Apr 14 (Tu): LOGIT AND PROBIT MODELS I: REGRESSION USING DISCRETE

DEPENDENT VARIABLES - J&R CH. 13 (pp. 526-545)

- POLLOCK, CH. 10

Apr 16 (Th): LOGIT AND PROBIT MODELS II: APPLICATIONS AND VARIATIONS

 D. Sunshine Hillygus and Todd G. Shields, "Moral Issues and Voter Decision Making in the 2004 Presidential Election," PS (April 2005), 201-209.

## → PROBLEM SET # 10 DUE!!!!!!!!!!!!

Apr 17 (F): LAB SESSION EIGHT: REVIEW POLLACK AND PROBLEM SET 9-10

Apr 21 (TU): REGRESSION PROBLEMS I: MODEL SPECIFICATION & OMITTED VARIABLES

**READING TBA** 

Apr 23 (TH): REGRESSION PROBLEMS II: VIOLATIONS OF OTHER ASSUMPTIONS ENDOGENEITY AND SELECTION BIAS

**READING TBA** 

Apr 24 (F): LAB SESSION NINE: REVIEW/HELP

April 28 (TU): RECAP/REVIEW

→→REPORTS DUE

MAY 6 (W): FINAL EXAM (2-5PM)