Political Science 585
Techniques of Political Analysis
Winter Quarter, 2007
Instructor: Todd Makse

Class: Tuesday and Thursday 3:30-5:18 in Derby 0125
Office Hours: Tuesday 2:00-3:20 and by appointment
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Course Description:

This course will give students an introduction to the techniques that political scientists use to understand political phenomena. The emphasis in this course is on issues in research design and conceptual understanding and application of statistical and non-statistical techniques of political analysis. Achieving basic competence in statistics *is* a primary goal of this course, and central to student evaluation in the course. However, this will be primarily achieved through application, rather than memorization, of mathematical formulae and proofs. That having been said, this is unlike other courses in political science; the material is abstract and involves the introduction of many new terms and concepts. And although this course satisfies a GEC requirement for some students, this is an upper-level course in political science and the material may be more rigorous than in other courses that satisfy the GEC requirements.

This course assumes no previous college-level mathematics or statistics courses; we will briefly review some high-school level math concepts such as graphing in Cartesian space and summation operations.

Course Objectives (University Mandated Language)
This course satisfies the GEC quantitative and logical skills requirement, described by the University as follows:

"Courses in quantitative and logical skills develop logical reasoning, including the ability to identify valid arguments, use mathematical models, and draw conclusions based on quantitative language.

Data Analysis. Students understand statistics and probability, comprehend mathematical methods needed to analyze statistical arguments, and recognize the importance of statistical ideas."

Textbooks and Computer Software

There are two texts for this class:

> *Empirical Political Analysis* by Jarol B. Manheim, Richard C. Rich, Lars Willnat and Craig Leonard Brians.
>
> *Elementary Statistics in Social Research: The Essentials*, by Jack Levin and James Alan Fox.
>
> Additional readings are available from JSTOR and electronic reserves (Carmen).

Hands-on experience with statistical techniques will be provided using the software package SPSS and some of the homework assignments will also be completed using SPSS. All the computers in our classroom are installed with SPSS, and you are free to use the lab when the room is available. If you have a personal computer, you may obtain a free copy of the software from the Office of Information Technology by bringing a blank CD-R to the OIT office in Baker Systems 512.

Finally, you are encouraged to bring a calculator to class and you may use one on the final exam. We will also use Microsoft Excel for some statistical calculations. Basic instruction in Excel commands will be provided; however, if you decide to use your own calculator instead, you will be expected to be familiar with its use.

Grading:

The specific grade breakdown is as follows:
Midterm Exam: 20%
Final Exam: 25%
Pop Quizzes: 10% (Four quizzes, 2.5% each)
Reaction papers: 10% (Two papers, 5% each)
Homework Assignments 20% (Four assignments, 5% each)
Participation (including leading class discussions) 15%

The grading scale will be no more difficult than the following:
93-100 A
90-92 A-
87-89 B+
83-86 B
80-82 B-
77-79 C+
73-76 C
70-72 C-
67-69 D+
60-66 D
59 and below E

More about grading criteria:

Midterm Exam: The midterm exam will cover material from the first four weeks of the course. It will be a closed-book, in-class exam, and will draw heavily from lecture material. The format of the exam may include multiple-choice questions, short answer questions, and/or essay questions. A practice exam will be distributed to class the week prior to the exam.

Final Exam: The final will be held during finals week, and will be an open-book, open-notes exam. The exam will focus primarily on the probability and statistics material from the second half of the course, but a few questions will require students to synthesize knowledge from the first half of the course with their understanding of statistical methods.

Pop Quizzes: There will be five quizzes throughout the quarter; you will be able to drop one. These quizzes will be graded pass/fail: you will either pass, and receive the full credit, or fail and receive no credit. These quizzes will consist of five short questions, which will be easy if you have done the reading, and will be conducted during the first ten minutes of class. Late and absent students will not be able to make up quizzes. On the second day of class, a practice pop quiz will be given so that students may gauge the extent to which their depth of reading matches my expectations.

Reaction Papers: During the first eight classes, there will be textbook and "application" readings each day. On the first day of class, you will choose two of these sessions to write a two-page (400-600 words) reaction paper to the "application" readings. Your reaction paper should not be a summary of the article; it should address the conceptual issues and/or research design in the article and tie them to the textbook reading for that class session. Papers are due in class on the day of the assigned reading.

Homework assignments: There will be four problem sets during the second half of the quarter. They may be completed in collaboration with other students; however, each student is responsible for completing his/her own write-up, showing all work as appropriate, and for expressing prose portions of the assignments in their own words.

NO LATE ASSIGNMENTS (Reaction papers or problem sets) WILL BE ACCEPTED.

Participation: The first part of the course will encourage you to develop your own perspectives on social science research, and thus class discussion will be a major component of each session. Your participation grade will be based mostly on the first four weeks of class, during which time the topic matter will be more suitable for discussion.

Participation (continued):
In particular, during the two sessions for which you have written reaction papers, you will be expected to be conversant and engaged with the readings. For example, you should have *prepared* answers to questions such as, "What is the main point of the article?"; "What are the independent and dependent variables in the theory?"; "What do you think of the research design?" and so forth. A large part of your participation grade will be based on these sessions; thus, failure to attend or contribute meaningfully on your assigned day may lead to a deduction of 5% or more of your final class grade.

The second part of the course is much more lecture-oriented, and for the most part, you will not be evaluated based on participation during this part of the course, although you are certainly encouraged to ask questions and engage the material as appropriate.

Attendance: Attendance is required throughout the entire course. You are permitted two absences, no questions asked, without penalty. Absences in excess of two will lead to a reduction in your participation grade. To avoid subjective judgments, I do not distinguish between "excused" and "unexcused" absences. Thus, it is not necessary to bring in notes for absences. If extreme circumstances arise which will force you to miss multiple classes, please let me know, and I will try to make fair accommodations.

Miscellaneous:

Makeup Exams: I am highly disinclined to offer makeup exams, except in **emergency** situations. If you have non-emergency reasons for missing an exam, please notify me at least one week ahead of time, preferably as soon as possible. If you have a genuine emergency (family or medical), please inform me as soon as you can. Please do not test my goodwill: I will hold class with a minor cold or a headache, and I expect you to take exams under such conditions as well. Also please note that the format of makeup exams may differ from the format of the regularly administered exam.

Availability: Students should feel free to contact me by email with any concerns about the class or course material. I will make every effort to respond to all messages within 24 hours. In addition, if my office hours are inconvenient for your schedule, email me and I will be happy to set up an appointment to the extent that my schedule allows.

Academic Misconduct:
Academic misconduct is defined by Ohio State University Rules as "any activity that tends to compromise the academic integrity of the institution, or subvert the educational process. (Rule 3335-31-02)." Examples include violation of program or course rules stated in the syllabus, cheating on tests, plagiarism, dishonesty in reporting research results, and alteration of grades or forms.

Disability Services:
Students with disabilities who feel they may need special assistance should inform me of their needs in a timely manner. These discussions will remain confidential. Course materials are available in alternative formats upon request. For such materials, please contact Mr. Wayne DeYoung, 2140 Derby Hall, 154 North Oval Mall, 292-2880.

Class Topics, Assignments, and Reading Schedule:

January 4: Introduction to the course; the scientific method

Readings: None

January 9: Scientific progress and social science; Identifying useful theories

Readings:

Manheim et al, Chapter 1 and 2

Fiorina, Morris and Ian Shapiro. 2000. "Political Scientists Debate Rational Choice." *New York Times*, February 26, 2000. http://phoenix.liu.edu/~uroy/eco54/histlist/pol-sci-rational.htm

January 11: Hypotheses, variables and measurement; Identifying good measures

Readings:

Levin and Fox, Chapter 1

Manheim et al, Chapter 5

Krasno, Jonathan S. and Donald P. Green. 1988. "Preempting Quality Challengers in House Elections." *Journal of Politics* 50(4): 920-936. (JSTOR)

January 16: Introduction to research design; case selection; research ethics

Readings:

Manheim et al, Chapter 6

Geddes, Barbara. 1990. "How the Cases You Choose Affect the Answers You Get: Selection Bias in Comparative Politics" *Political Analysis*, 1990, pp. 131-150. (ELECTRONIC RESERVE)

Crano, William D, and Marilynn B. Brewer. 2002. *Principles and Methods of Social Research*. Chapter 19, "Social Responsibility and Ethics in Social Research," pp. 344-357. (ELECTRONIC RESERVE)

January 18: The classic experimental model and experimental design techniques

Readings:

Manheim et al, Chapter 6, reread pp. 93-99

Gerber, Alan S. and Donald P. Green. 2000. "The Effect of a Nonpartisan Get-Out-the-Vote Drive: An Experimental Study of Leafletting." *The Journal of Politics* 62(3): pp. 846-857. (JSTOR)

Ansolabehere, Stephen, Shanto Iyengar, Adam Simon and Nicholas Valentino. 1994. "Does Attack Advertising Demobilize the Electorate?" *The American Political Science Review* 88(4): 829-838. (JSTOR)

January 23: Survey research methods

Readings:

Manheim et al, Chapters 7, 8

Kuklinski, James H., Paul M. Sniderman et al. 1997. "Racial Prejudice and Attitudes Toward Affirmative Action." *American Journal of Political Science*, pp. 402-419. (JSTOR)

January 25: Comparative research

Readings:

Manheim et al, Chapter 12

Lijphart, Arend. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. Chapters 1 and 5, pp. 1-8, 62-89. (ELECTRONIC RESERVE)

January 30: Qualitative research methods

Readings:

Manheim et al, Chapter 19 and 21.

Fenno, Richard. 1978. *Home Style: House Members in their Districts*. Introduction and Chapter 1, pp. 1-30. (ELECTRONIC RESERVE)

February 1: Midterm Exam

February 6: Introduction to descriptive statistics; introduction to SPSS

Readings: Levin and Fox, Chapters 2

February 8: Measures of central tendency and variability

Readings: Levin and Fox, Chapter 3 and 4

February 13: Descriptive statistics in Excel and SPSS; probability theory

Readings: Levin and Fox, Chapter 5

Homework #1 Due (to be distributed to class on February 8)

February 15: Introduction to inferential statistics; hypothesis testing

Readings: Levin and Fox, Chapter 6

February 20: Difference of means tests

Readings: Levin and Fox, Chapter 7

February 22: The Chi-Square test

Readings: Levin and Fox, Chapter 9

Homework #2 Due (to be distributed to class on February 13)

February 27: Correlation

Readings: Levin and Fox, Chapter 10

March 1: Regression analysis

Readings: Levin and Fox, Chapter 11

Homework #3 Due (to be distributed to class on February 22)

March 6: Multivariate regression

Readings: None

March 8: Nonparametric measures of association

Readings: Levin and Fox, Chapter 12

Homework #4 Due (to be distributed to class on March 1)

March 13: Final Exam (same time, same place as class)