

Department of Political Science
The Ohio State University

Political Science H585

Techniques of Political Analysis (Honors)

Professor: Dean Lacy
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Office: 2036 Derby Hall
Hours: Weds 2:00-3:00pm

Room: 0125 Derby Hall (Basement Computer Lab)
Note: No food or drinks allowed

Times: Tuesday and Thursday, 11:30am-1:18pm

Course Description

This course provides an introduction to the tools and methods of data analysis in political science. Topics covered include probability, sampling, measurement, description of data, and statistical inference. Students will develop a research project using real-world data, such as an election survey, roll call votes of members of Congress, trade among industrialized nations, the timing and duration of wars, or anything else that lends itself to quantitative research. Students may be called on to present their research in class.

Political Science H585 is intended for:

- (1) Anyone planning graduate work in political science and related fields,
- (2) Anyone planning to attend law or business school, where techniques of data analysis are becoming increasingly useful,
- (3) Anyone planning a career in government or industry,
- (4) Anyone who desires to learn more about data analysis and politics

Prerequisites

The course requires no prior experience with statistics, advanced mathematics, or computing.

Requirements and Grading

Computer exercises, homework, class participation	25% of grade
First Exam (Thursday, February 3, in class)	25%
Research Paper (Due Monday, March 14, 9:00am)	25%
Second Exam (Tuesday, March 8, in class)	25%

Required Books (available at University Bookstore, Long's, and SBX)

- Agresti, Alan, and Barbara Finlay. 1997. *Statistical Methods for the Social Sciences*, 3rd ed. Prentice Hall. (hereafter, AF)
- Huff, Darrell and Irving Geis. 1954. *How to Lie with Statistics*. New York: W. W. Norton.
- Achen, Christopher. 1982. *Interpreting and Using Regression*. Newbury Park: Sage.

Students with Disabilities

If you have any condition, such as a physical, psychiatric, medical, or learning disability, which will make it difficult for you to carry out the work required in this class, please notify me and the Office for Disability Services before the end of the first full week of class. Course materials are available in alternative formats upon request, and extra time may be allowed for exams in some cases. All information about your disability will remain confidential.

Academic Misconduct

All of the work you do in this course is expected to be your own unless otherwise specified by the instructor. Cases of cheating, plagiarism, or other academic misconduct will be reported to the university committee on academic misconduct and handled according to university policy. Penalties can include failing this class and/or expulsion from the university.

“Academic misconduct is defined as any activity which tends to compromise the academic integrity of the institution, or subvert the educational process. Examples of academic misconduct include, but are not limited to:

- A. violation of course rules as contained in the course syllabus or other information provided the student; violation of program regulations as established by departmental committees;
- B. providing or receiving information during quizzes and examinations such as course examinations and general examinations; or providing or using unauthorized assistance in the laboratory, at the computer terminal, or on field work;
- C. submitting plagiarized work for an academic requirement. Plagiarism is the representation of another's works or ideas as one's own; it includes the unacknowledged word for word use and/or paraphrasing of another person's work, and/or the inappropriate unacknowledged use of another person's ideas;
- D. falsification, fabrication, or dishonesty in reporting research results;
- E. serving as, or enlisting the assistance of, a "ringer" or substitute for a student in the taking of examinations;”

<http://www.osu.edu/offices/oa/procedures/1.0.html>

Course Outline

- 1. The Scientific Study of Politics**
AF, Chs. 1 & 2
Huff, Introduction. Chs. 1, 7, 9, 10
- 2. Descriptive Statistics**
AF, Ch. 3
Huff, Chs. 2
- 3. Graphical Presentation of Data**
Huff, Ch 5 & 6
- 4. Probability Distributions**
AF, Ch. 4
- 5. Statistical Inference: Estimation**
AF, Ch. 5
Huff, Ch. 8
- 6. Statistical Inference: Significance Tests**
AF, Ch. 6
Huff, Chs. 3 & 4
- 7. Comparison of Two Groups**
AF, Ch. 7
- 8. Association Between Categorical Variables**
AF, Ch. 8
- 9. Linear Regression and Correlation**
AF, Ch. 9
Achen, entire
- 10. Multivariate Relationships**
AF, Ch. 10 & 11