

**Techniques of Political Analysis
Political Science 585
Autumn 2001**

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Office Hours: MWF 10:00 a.m.-Noon
Class Meetings: MWF 8:00 a.m.-9:18 a.m.
Location: 150 Derby Hall

Course Description

This class is designed to introduce students to the basic elements associated with research design and statistical analysis in the social sciences. Toward that end, most of the class will be dedicated to understanding (both theoretically and mathematically) common techniques of statistical analysis employed in fields such as political science, economics, sociology, and psychology. Less time will be dedicated to issues surrounding research design. However, we will address these issues in class as they arise vis-à-vis particular research methods. In addition we will spend some time, early in the quarter, discussing the role research in the social sciences as well as larger, philosophy of science, issues.

Books and Readings

There are two required texts for this class. The main text for the class will be Levin and Fox's, *Elementary Statistics in Social Research*, 8th Ed. Occasionally there will be additional reading assignments (journal articles and/or book chapters) which may or may not appear on the schedule. In the latter case you will be given ample notice to complete the readings prior to the class in which they will be discussed. Both texts are available at SBX and most on-line bookstores.

- Levin, Jack and James Allan Fox. 2000. *Elementary Statistics in Social Research*, 8th Ed., Boston: Allyn and Bacon.
- Manheim, Jarol B. and Richard C. Rich. 1995. *Empirical Political Analysis: Research Methods in Political Science*, 4th Ed., New York: Longman Publishers.

Student Responsibilities

Students' grades will be based on class participation, seven (7) homework assignments, a midterm exam, and a comprehensive final exam.

Class Participation	10%
Homeworks (7)	35%
Midterm Exam	25%
Final Exam	30%

Statistical and mathematical knowledge is cumulative. Therefore, class attendance and participation is strongly recommended. A failure to attend class regularly and actively participate will seriously hamper students' ability to understand material presented later in the class, and ultimately to successfully complete the class.

Homework assignments will be due on Fridays at the end of the class period and late assignments will **not** be accepted. In all cases homework assignments are to be done *without the aid of other persons (excluding the instructor) or computer and statistical programs.*

The midterm exam will be scheduled for the fifth (5th) week of class. The final exam will be as scheduled by the university. Makeup examinations will generally **not** be allowed. Only in extraordinary cases (death in the family or hospitalization) will makeup exams be allowed. In either case, the decision to schedule a makeup exam is left up to the discretion of the instructor.

Grading

Final grades will be assigned according to the following scale:

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	60-66
E	Below 60

Students may also earn extra credit by participating in the Political Science Human Subject Pool. Students will receive one percentage point of extra credit for participating in an experiment. Students may participate in up to three experiments throughout the quarter — for a total of 3, possible, percentage points of extra credit. There may also be opportunities for extra credit on exams and homework assignments throughout the quarter.

Student Misconduct

The most common forms of student misconduct are plagiarism and cheating on examinations. **NO** form of student misconduct (defined according to the University's Code of Student Conduct) will be tolerated in this class. Any and all incidents will be reported to the University immediately.

Students with Disabilities

Any student with a physical, psychiatric, learning or medical condition which impedes their ability to complete the assignments required by this course should notify the instructor and the Office for Disability Services by the end of the first week of class. All information and documentation of disability is confidential.

Lecture & Reading Schedule

19 September Introduction

Research Design

21 September Overview of Social Science Research & Modelling
Levin & Fox, Chapter 1
Manheim & Rich, Chapters 1 & 19

24 & 26 September Generating Hypotheses: Induction & Deduction
Manheim & Rich, Chapter 2
Johnson & Joslyn, pp. 21-24, 45-53
Nachmias & Nachmias, pp. 59-71

28 September Operationalizing Concepts
Manheim & Rich, pp. 56-61
Johnson & Joslyn, pp. 39-45
Nachmias & Nachmias, pp. 25-35

1 October Data & Measurement
Nachmias & Nachmias, pp. 55-59, 153-164
Manheim & Rich, pp. 61-72
Johnson & Joslyn, pp. 77-81

3 October Reliability & Validity
Manheim & Rich, pp. 72-82
Johnson & Joslyn, pp. 67-77
Nachmias & Nachmias, pp. 165-174

5 & 8 October Types of Research Designs
Nachmias & Nachmias, Chapters 5 & 6
Manheim & Rich, pp. 72-82
Johnson & Joslyn, Chapter 5
Homework 1 due Friday, 5 October

Research Methods

10 October Organizing & Displaying Data
Levin & Fox, Chapter 2

12 October Measures of Central Tendency
Levin & Fox, Chapter 3
Homework 2 due Friday, 12 October

15 October Measures of Dispersion
Levin & Fox, Chapter 4

17 October Introduction to Probability
Levin & Fox, pp. 125-133

19 October **Midterm Examination**

22 October Probability Theory Cont'd

24 & 26 October	The Normal Distribution <i>Levin & Fox</i> , pp. 133-153 Homework 3 due Friday, 26 October
29 October	Sampling <i>Manheim & Rich</i> , Chapter 6 <i>Levin & Fox</i> , pp. 158-172
31 October & 2 November	Confidence Intervals & Hypothesis Tests <i>Levin & Fox</i> , pp. 173-190 <i>Nachmias & Nachmias</i> , pp. 478-488 Homework 4 due Friday, 2 November
5 & 7 November	Difference of Means <i>Levin & Fox</i> , Chapter 7
9 November	Non-Parametric Significance Tests <i>Levin & Fox</i> , Chapter 9 Homework 5 due Friday, 9 November
12 November	<i>Veterans' Day — No Class</i>
14 & 16 November	Analysis of Variance <i>Levin & Fox</i> , Chapter 8 Homework 6 due Friday, 16 November
19 & 21 November	Correlation <i>Levin & Fox</i> , Chapter 10
22 November	<i>Thanksgiving Day — No Class</i>
23 November	<i>Labor Day — No Class</i>
26 November	Non-Parametric Measures of Correlation <i>Levin & Fox</i> , Chapter 12 Homework 7 due Monday, 26 November
28 & 30 November	Regression <i>Levin & Fox</i> , Chapter 11
6 December	Final Examination