

**POS 3713: Understanding Political Science Research**  
**(a.k.a. "Research Methods")**  
**[UPDATED WITH CORRECT DATES]**

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**Spring 2007**

TTh 3:35-4:50 PM

004 Bellamy Bldg.

Office Hours: W3:30-4:30,

F 2:00-3:30

**Course Description**

The primary purpose of this course is to introduce students to the methods and terminology used by social scientists. We will examine basic concepts used in research (such as theories, hypotheses, independent and dependent variables, reliability and validity, sampling, and generalizability). We will also examine basic statistical techniques that are used to examine data, with an emphasis on interpreting the results (ranging from descriptive statistics to crosstabs, correlation, and regression). Upon completion of this course, students should be able to understand and interpret most research published in political science journals, as well as public opinion polls, surveys, and research findings reported in the news. As a result, students who complete this course should be prepared for future coursework in the social sciences, as well as for a life as an educated and informed citizen.

Students are expected to finish the course readings before the class period for which they are assigned, attend class regularly (showing up to class on time and staying through the end), and participate actively in class discussion where relevant. The course will also require three exams (two midterms and a final) and six homework assignments (several of which will require the use of SPSS statistical software).

**Required Texts**

The following texts have been ordered through the FSU Bookstore and Bill's Bookstore; they may be cheaper online through such online sources as amazon.com, barnesandnoble.com, half.com, or powells.com:

- **FNLG:** Chava Frankfort-Nachmias and Anna Leon-Guerrero (2006). *Social Statistics for a Diverse Society*, 4th edition. Pine Forge Press. [ISBN 1-4129-1517-1] Note that some of the homework assignments will require the use of SPSS statistical software, which is installed in many FSU computer labs. If you are interested in getting your own copy of SPSS rather than depending on computer labs, you may order a package deal of this same textbook with the SPSS Student Version through online bookstores, for around \$30-40 more than the textbook alone [ISBN 1-4129-1793-X]. To save students money, I have only ordered the textbook alone through the campus bookstores.
- **J&R:** Janet Buttolph Johnson & H.T. Reynolds (2004). *Political Science Research Methods*, 5th edition. CQ Press. [ISBN 1-56802-874-1] Note that this book can also be purchased with an optional workbook entitled "Working with Political Science Research Methods: Problems and Exercises." We will not be using this workbook in class, but interested students may find that its problem sets and exercises offer useful material for reviewing material before exams. If you are

interested, you may order a package deal of this same textbook with the workbook through online bookstores, for around \$10 more than the textbook alone [ISBN 1-56802-929-2]. To save students money, I have only ordered the textbook alone through the campus bookstores.

• **JSTOR:** An academic journal service that FSU provides for us, which includes the full content of a number of major political science journals; some of the assigned readings in this course are available through JSTOR (<http://www.jstor.org>). Access is free from any FSU computer (e.g., in computer labs, dorms, or through FSU modem or DSL connections), and you can use a proxy login from any other computer. JSTOR allows you to search for individual articles by author or title, or browse by journal name and issue (<http://www.jstor.org/cgi-bin/jstor/listjournal>); the assigned JSTOR readings are all linked from the online syllabus for students' convenience.

### Course Requirements

(1) **Examinations:** Three (noncumulative) exams are required. The exams will involve a mixture of questions to measure understanding of the wide variety of material covered in this course, including some multiple choice, some short answer (primarily involving interpretation of results), and (for the second and third exams) some calculations. Each exam will be worth 25% of the total course grade.

(2) **Homework Assignments:** There is no better way to learn concepts than through hands-on experience. There will be six (6) homework assignments, which will each be handed out one week before the due date. Together, these assignments will be worth 25% of the total course grade; each student's lowest homework grade will be dropped.

Some of the homework assignments will give you practical experience in analyzing and interpreting data using SPSS, a widely used statistical software package. SPSS is available in a number of FSU computer labs (the Strozier lab even has it loaded on a few Macs; I believe the others all use the PC version), and a student version may be purchased online. The FNLG book provides an overview of how to use SPSS, and previous students at FSU have found the book's instructions very helpful. We may also try to schedule an optional lab "help session" to help you learn SPSS, depending on student interest and timing.

Note that the work that is turned in must be your own -- while students are allowed (and even encouraged) to organize study groups to review the material and prepare for exams, each student must do his or her own work on homework assignments, and failure to observe this requirement will be treated as a violation of FSU's Academic Honor Code (as discussed below).

(3) **Preparation and Attendance:** An important part of a course like this is making sure that students understand the concepts as the semester is moving along. The best way to do this is to attend class regularly, having done the assigned readings beforehand (trying to cram a month's worth of reading, or xeroxing a classmate's notes from the entire semester, a few days before an exam is rarely a good strategy). Class preparation and attendance will not be graded directly, but students are expected to prepare for class and attend regularly, and failure to do so will almost certainly be reflected in one's performance on exams and homework.

### Course Rules

(1) Make-up examinations are given only with **prior** instructor approval and with appropriate documentation, and take place only during final exam week. Note that the documentation must indicate why you could not be in class *at the exact time of the test*. (Also note that standard

Thagard notes explicitly state that they are not valid class excuses.)

(2) Failure to take any exam will result in a failing grade for the entire course; a passing grade requires completion of all course requirements. Note that no assignments, documentation, or other items will be accepted after the course's final exam.

(3) Students are required to keep graded, returned copies of all exams and writing assignments. Failure to do so will invalidate any potential question or protest about assignment or course grades.

(4) All students must treat both the instructor and the other students with respect. This includes showing respect for alternative opinions and points of view, listening when either the instructor or a fellow student is speaking to the class, and refraining from insulting language and gestures.

(5) All students must treat the classroom setting with respect. This includes arriving on time and staying for the entire class (or notifying the instructor in advance if this will not be possible), turning off cell phones and similar devices during class, and refraining from reading, passing notes, talking with friends, and any other potentially disruptive activities.

(6) Failure to abide by these policies will be dealt with in an appropriate manner, which may include a reduction in the course grade.

(7) Any exceptions to these rules are given at the instructor's discretion, only with **prior** approval where possible, and only under extraordinarily pressing and well-documented circumstances.

(8) The instructor's late paper policies, grading policies, and similar policies and expectations are available at <<http://garnet.acns.fsu.edu/~phensel/teaching.html>>. Failure to visit that web site does not constitute a valid excuse for ignorance of these policies.

### **Americans with Disabilities Act**

Students with disabilities needing academic accommodations must (1) register with and provide documentation to the Student Disability Resource Center (SDRC), and (2) bring a letter to the instructor from SDRC indicating that you need academic accommodations. This must be done within the first week of class.

### **FSU's Academic Honor Code**

*"The academic honor system of The Florida State University is based on the premise that each student has the responsibility: (1) To uphold the highest standards of academic integrity in the student's own work, (2) To refuse to tolerate violations of academic integrity in the University community, and (3) To foster a high sense of integrity and social responsibility on the part of the University community."*

Students must bring possible violations of this honor code to the attention of the instructor as soon as possible, so that the violations -- if any -- may be stopped quickly. Violations include (but are not limited to) the use of unauthorized information on course assignments or examinations, representing another's work or any part thereof (published or unpublished) as one's own, assisting another student in obtaining unauthorized information for

course assignments or examinations, and attempting to commit such an offense. A more complete listing of violations can be found in the FSU Student Handbook.

Violation of this honor code will be dealt with in an appropriate manner, consistent with FSU guidelines. Academic penalties may include (but shall not be limited to) a requirement of additional work to provide evidence that the student knows and understands the course material; a lower or failing grade on the assignment or examination in question; and a lower or failing grade for the course. The University may also enforce further disciplinary penalties, such as a formal reprimand, probation, or suspension or dismissal from the University.

### **Instructor's Web Site**

The instructor maintains a web site at <<http://garnet.acns.fsu.edu/~phensel/>> with -- among other things -- teaching policies, solutions to common writing problems, and numerous Internet resources for students of international relations. Students are strongly encouraged to become familiar with this web site during the semester. The on-line version of this syllabus can be found at <<http://garnet.acns.fsu.edu/~phensel/Teaching/pos3713.html>>.

### **Course Schedule**

*"There are three kinds of lies: lies, damn lies, and statistics." --Benjamin Disraeli/Mark Twain*  
*"If you want to inspire confidence, give plenty of statistics. It does not matter that they should be accurate, or even intelligible, as long as there is enough of them." --Lewis Carroll*

#### **1. Tuesday, Jan. 9: Overview of Course**

- Assigned Readings: None
- Overview: Introduction to the course and the instructor; no substantive lecture today.

#### **2. Thursday, Jan. 11: Studying Politics Scientifically I (scientific method)**

- Assigned Readings: FNLG ch. 1 (pp. 1-11); J&R ch. 1-2
- Overview: The first general topic will introduce students to the scientific study of politics. This lecture will discuss the scientific method, focusing on the goals of this approach and the steps that political scientists (like other scientists) take in pursuit of these goals.

#### **3. Tuesday, Jan. 16: Studying Politics Scientifically II (theories and hypotheses)**

- ***Homework #1: handed out and completed in class (survey)***
- Assigned Readings: J&R ch. 4  
--JSTOR: Paul F. Diehl and Jean Kingston (1987). "Messenger or Message?: Military Buildups and the Initiation of Conflict." *Journal of Politics* 49, 3. (August): 801-813.
- Overview: This lecture will discuss theories and hypotheses, which are important building blocks in the scientific approach. The Diehl and Kingston article offers a good effort to consider additional implications of several different theories that explain the same phenomenon (in this case, the apparent linkage between arms races and war).

#### **4. Thursday, Jan. 18: Studying Politics Scientifically III (research design)**

- Assigned Readings: J&R ch. 3  
--JSTOR: Donald T. Campbell and H. Laurence Ross (1968). "The Connecticut Crackdown on Speeding: Time-Series Data in Quasi-Experimental Analysis." *Law and Society Review* 3, 1: 33-54.

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

- Overview: This lecture will discuss research design issues, particularly relating to the ways that poli sci research differs from work in the "hard sciences." This will include the difference between correlation and causation (with possible approaches to solving this problem) and the lack of full experimental control in most poli sci applications (including quasi-experimental and other potential solutions). The Campbell and Ross reading is a classic application of quasi-experimental design, while the Ansolabehere et al. reading is an interesting application of a true experiment.

### **5. Tuesday, Jan. 23: Concepts, Variables, and Measurement I**

- **Homework #2 handed out (theories/hypotheses/research design)**

- Assigned Readings: J&R ch. 6; FNLG ch. 1 (pp. 11-16)

--JSTOR: Jeffery J. Mondak and Mitchell S. Sanders (2003). "Tolerance and Intolerance, 1976-1998." *American Journal of Political Science* 47, 3 (July): 492-502.

- Overview: The next general topic examines concepts and variables in poli sci research. This lecture will address the difference between concepts and indicators, the different types of variables that can be used in poli sci applications, and (if there is time) reliability and validity issues. The Mondak and Sanders article illustrates the measurement of the concept of tolerance, and highlights the difficulties inherent in measuring the concept accurately. We will also discuss other concepts such as militarized conflict, thinking about the relative advantages, disadvantages, and applications of a variety of measures.

### **6. Thursday, Jan. 25: Concepts, Variables, and Measurement II (data sources)**

- Assigned Readings: J&R ch. 7-8

- Overview: This lecture will consider where and how we get our data, with the various advantages and disadvantages of each approach.

### **7. Tuesday, Jan. 30: Concepts, Variables, and Measurement III (survey research)**

- **Homework #2 due**

- Assigned Readings: J&R ch. 10

- Overview: This lecture will consider survey research. We will discuss major surveys -- ANES, GSS, Gallup/Roper, election exit polls, etc., and maybe even things like the Nielsen ratings and college football polls. We will also consider examples of their application (everything from presidential election predictions to diversionary models), as well as some of the problems with these various surveys (such as the 1936 Literary Digest survey, 1996 Netanyahu/Peres exit polls, and 2000 US election).

### **8. Thursday, Feb. 1: Reading Political Science Research**

- Assigned Readings: J&R ch. 5

--Skim over the Diehl/Kingston and Campbell/Ross articles from earlier in the semester, focusing on how each article is organized. Be sure to bring both articles to class so that we can talk about the different elements that each includes.

- Overview: This lecture will finish up anything left over from the "scientific study" lectures, if needed. It will then address the outline of a typical poli sci journal article, and will address each

of the elements that go into such an article; the goal will be to familiarize the students with this article format to help them read journal articles more effectively.

**9. Tuesday, Feb. 6: MIDTERM EXAM #1**

**10. Thursday, Feb. 8: Basic Descriptive Statistics (frequency distributions)**

- *Homework #3 passed out (article summary)*
- Assigned Readings: FNLG ch. 2-3; J&R ch. 11 (pp. 305-321)
- Overview: The remainder of the course will examine specific methods and techniques that we use in the scientific study of politics. This first lecture will focus on the use of basic descriptive statistics to summarize data, such as percentages, proportions, and histograms.

**11. Tuesday, Feb. 13: Measures of Central Tendency**

- Assigned Readings: FNLG ch. 4; J&R ch. 11 (pp. 321-326)
- Overview: This lecture will focus on the use of measures of central tendency, such as mean, median, and mode.

**12. Thursday, Feb. 15: Measures of Dispersion**

- *Homework #3 due*
- Assigned Readings: FNLG ch. 5; J&R ch. 11 (pp. 326-329)
- Overview: This lecture will focus on the use of measures of dispersion (also called measures of variation/variability), such as range, variance, and standard deviation.

**13. Tuesday, Feb. 20: Sampling and Inferential Statistics I (probability & the normal curve)**

- *Homework #4 handed out (descriptive statistics; some computer work required)*
- Assigned Readings: FNLG ch. 9-10; J&R ch. 9, ch. 11 (pp. 329-332)
- Overview: This lecture will focus on probability and the normal curve/distribution in the quantitative study of politics.

**14. Thursday, Feb. 22: Sampling and Inferential Statistics II (sampling, confidence intervals)**

- Assigned Readings: FNLG ch. 11; J&R ch. 11 (pp. 332-336)
- Overview: This lecture will focus on issues related to statistical sampling, inference, and confidence intervals.

**15. Tuesday, Feb. 27 - Thursday, Mar. 1: Hypothesis Testing: one sample**

- *Homework #4 due Tuesday*
- Assigned Readings: FNLG ch. 12 (pp. 403-417)
- Overview: The next group of lectures will examine the process of hypothesis testing. We will begin with hypothesis tests using one sample, such as comparing the mean value of a variable between one group and the larger population from which it was drawn.

**16. Thursday, Mar. 1: NO CLASS (International Studies Association conference)**

**17-18. March 6-8: NO CLASS (Spring Break)**

**19-20. Tuesday, Mar. 13 - Thursday, Mar. 15: Hypothesis Testing: two samples**

- Assigned Readings: FNLG ch. 12 (pp. 417-432)
- Overview: The next two lectures will examine hypothesis testing using two samples. This includes applications like comparing the means of two different groups' salaries, years of education, or GPAs.

**21. Tuesday, Mar. 20: MIDTERM EXAM #2**

**22. Thursday, Mar. 22: Association between Nominal/Ordinal Variables I (crosstabs)**

- Assigned Readings: FNLG ch. 6; J&R ch. 12 (pp. 339-351)
- Overview: The next general topic will examine the use of crosstabulation to study the relationship between variables. The first lecture will focus on setting up and interpreting crosstabs, including marginal analysis.

**23. Tuesday, Mar. 27: Association between Nominal/Ordinal Variables II (chi-square)**

- *Homework #5 handed out (crosstabs/chi-square; some computer work required)*
- Assigned Readings: FNLG ch. 13; J&R ch. 12 (pp. 352-366)
- Overview: This lecture will begin considering statistical measures of association between crosstabulated variables, focusing on the calculation and application of the chi-square measure in its various forms.

**24. Thursday, Mar. 29: Association between Nominal/Ordinal Variables III (nominal)**

- Assigned Readings: FNLG ch. 7 (pp. 227-234)
- Overview: This lecture will focus on the calculation and interpretation of other measures of association between nominal variables, such as lambda.

**25. Tuesday, Apr. 3: Association between Nominal/Ordinal Variables IV (ordinal)**

- *Homework #5 due*
- Assigned Readings: FNLG ch. 7 (pp. 234-249)
- Overview: The fourth lecture in this topic will focus on the calculation and interpretation of other measures of association between ordinal variables, such as gamma.

**26. Thursday, Apr. 5: Analysis of Variance (ANOVA)**

- Assigned Readings: FNLG ch. 14; J&R ch. 12 (pp. 366-372)
- Overview: This lecture will examine the calculation and usage of analysis of variance (ANOVA), as sort of a bridge between nominal/ordinal and interval variables.

**27-28. Tuesday, Apr. 10 - Thursday, Apr. 12: Correlation and Regression**

- *Homework #6 handed out Thursday (correlation/regression; some computer work required)*
- Assigned Readings: FNLG ch. 8; J&R ch. 12 (pp. 372-399)
- Overview: The last three lectures of the semester will examine how we study associations between interval variables. The first lecture on the topic considers graphical techniques such as scattergrams, and begins considering the calculation and interpretation of calculation coefficients. The second lecture on this topic finishes up correlation coefficients (if needed), and moves on to bivariate regression analysis.

**29. Tuesday, Apr. 17: Multivariate Analysis (multiple regression, logit/probit)**

- Assigned Readings: J&R ch. 13
- Overview: The third and final lecture on this topic finishes bivariate regression analysis (if needed), and expands to consider multiple regression analysis. If there is time, we will briefly consider the interpretation (but not calculation) of more advanced techniques such as logistic regression, as an indication of some of the other types of analyses that are possible.

**30. Thursday, Apr. 19: Course Wrapup and Review**

- *Homework #6 due*
- Assigned Readings: None
- Overview: Conclusion to the course. This is where we finish covering any topics that might have fallen behind schedule, reexamine the goals that we discussed at the beginning of the course, and briefly review for the final exam.

**31. Tuesday, April 24: FINAL EXAM, 5:30-7:30 PM (in the regular classroom)**