

PSC 301  
Research Methods  
Spring 2007  
Section 1: MWF, 9:00  
209 Graham

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## Syllabus

This course is concerned with the basic methods and techniques used in the empirical analysis of political and social data. We will cover the various aspects of research in political science, including definition of the project, design of the research, collection of the data, and analysis of the data.

The focus of this course is on the logic behind the application of various methods, with the aim of improving your understanding of the principles of quantitative research. This course should increase your ability to interpret and evaluate such research, including both proposed research and completed studies. It also should improve your ability to conduct empirical research in political science.

This is not primarily a statistics course. It is a course in research methods. A substantial portion of this course is devoted to data analysis in political science. In covering this topic, we will cover applications of statistics to data analysis, but this course is not a substitute for a course in statistical theory. No statistical background is required for this course, but those with some exposure to statistics (e.g., STA 108) should benefit from that experience.

### Student Learning Objectives

As a result of taking this course, students should improve their ability to:

1. Develop researchable questions and hypotheses.
2. Evaluate research questions and hypotheses put forth by others.
3. Construct good measures of political and social data.
4. Conduct and assess data analyses that would be used in political science.

### Books

The following books are at the bookstore:

Janet Johnson and H. T. Reynolds, *Political Science Research Methods*, 5th ed. (CQ Press, 2005).  
Marija Norusis, *SPSS 14.0 Guide to Data Analysis* (Prentice-Hall, 2006).  
Robert Putnam, *Bowling Alone* (Simon and Schuster, 2002).

Most of the reading for this course is in the above books. For a couple of topics, there is inadequate coverage from the texts, so there is a small amount of reserve reading for this course. These items are identified in the syllabus as “(R)” and are available as e-reserves through Blackboard.

## **Course Requirements**

My philosophy is that students learn research methods best by active engagement, not by taking tests. Therefore, I have planned a set of four papers, each of which is intended to improve your research skills in some way. The first two papers have to do with the development of research questions and research designs, while the final two papers deal primarily with the analysis of data to answer research questions. The assignments and their contribution to the course grade are:

1. A paper on hypothesis construction, tentatively scheduled to be assigned on Jan. 17 and due on Feb. 2. This paper will count 15% toward the final course grade.
2. A paper on measurement, tentatively scheduled to be assigned on Feb. 5 and due on Feb. 28. This paper will count 20% toward the final course grade.
3. A paper on the analysis of survey data, tentatively scheduled to be assigned on Mar. 16 and due on April 9. This paper will count 25% toward the final course grade.
4. A paper on the analysis of aggregate data, tentatively scheduled to be assigned on April 13 and due on the final exam day (May 4). This paper will count 25% toward the final course grade.
5. Class participation, which will count 15% toward the course grade. This includes class attendance, participation in class discussions and group activities, and participation in computer lab work.

## **Course Policies and Expectations**

1. Class attendance and participation are extremely important in this course. You cannot expect to do well in this course if you do not attend class. Attendance will be taken, and your participation in class discussions and group activities will be noted. These factors will be count toward determining your final grade, as explained above.
2. Students are expected to come to class having read the assigned material and prepared to discuss the material in class. Many class sessions will involve group work or other exercises that involve applying the assigned readings to problems. If you are not prepared for these class sessions, you will not be able to participate effectively.
3. Students are expected to follow the UNCG Academic Integrity Policy for all work. The Academic Integrity Policy is available at <http://academicintegrity.uncg.edu/>.
4. Students are encouraged to discuss the course material with others and to otherwise work together to better understand the material. Of course, all written work that is submitted by a student must be that person's own work.
5. Late papers will be marked down unless you receive permission to submit your paper late. Such permission must be requested prior to the due date and will be granted only for legitimate reasons.

## Course Schedule and Reading Assignments

| <i>Topic</i>                               | <i>Dates</i> | <i>Reading Assignment</i>   |
|--|--------------|---|
| A. Formulating researchable questions      |              |   |
| 1. The aims of quantitative research       | 1/10-1/12    | Johnson and Reynolds, chpt. 1-2   |
| 2. Variables and hypotheses                | 1/17-1/29    | Johnson and Reynolds, chpt. 4<br>Putnam, chpts. 1, 10, 16   |
| B. Measurement and data collection         |              |   |
| 1. Principles of measurement               | 1/31-2/12    | Johnson and Reynolds, chpt. 6<br>Putnam, chpts. 2-5, 8  |
| 2. Data collection                         | 2/14-2/19    | Johnson and Reynolds, chpts. 7-8, 10  |
| 3. Sampling                                | 2/21         | Johnson and Reynolds, chpt. 9   |
| C. Research Design                         |              |   |
| 1. Types of research designs               | 2/23         | Johnson and Reynolds, chpt. 3   |
| 2. Inference from non-experimental designs | 2/26-3/2     | Putnam, chpts. 11-14, 18, 20  |
| <b>**SPRING BREAK**</b>                    |              |   |
| D. Describing and presenting data          | 3/12-3/14    | Johnson and Reynolds, chpt. 11<br>Norusis, chpts. 1-2, 4-5, 7   |
| E. Analyzing survey data                   |              |   |
| 1. Elementary survey analysis              | 3/16-3/19    | Johnson and Reynolds, chpt. 12 (pp. 339-366)<br>Norusis, chpt. 8  |
| 2. Advanced survey analysis                | 3/21-4/4     | Johnson and Reynolds, chpt. 13 (pp. 403-415)<br>Kay, <i>Analysis of Political Data</i> , chpt. 17 (R)<br>Norusis, chpts. 17, 19 |
| F. Inferential statistics                  | 4/9-4/11     | Norusis, chpts. 6, 10-12, 14  |
| G. Analyzing aggregate data                |              |   |
| 1. Bivariate regression analysis           | 4/13-4/18    | Johnson and Reynolds, chpt. 12 (pp. 372-402)<br>Moore, <i>Statistics</i> , chpts. 14-15 (R)<br>Norusis, chpts. 9, 20            |
| 2. Multiple regression analysis            | 4/20-5/1     | Johnson and Reynolds, chpt. 13 (pp. 415-451)<br>Norusis, chpt. 23   |