Doing Research in Political Science
POLI: 205
FALL 2014
EDUCATION CENTER 108
205–01: 9:25–10:40AM T R
205–02: 1:40–2:55PM T R

Instructor: Dr. Matthew Nowlin

Office: 114 Wentworth, #102

Office Hours: Mondays 2–5pm and by appointment

Contact: Please allow 24 hours for a response

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Course Description:

From the catalog:

> An introduction to the techniques and strategies researchers in politics use to study and
> understand the political world.

This is an undergraduate course in social science research methods and data analysis. It is designed
to introduce you to the use of political analysis, begin an exploration in the exciting worlds of
quantitative research methods, and help you practice basic analytical methods for understanding
political and social phenomena.

In addition and as stated in the Kellstedt and Whitten text, this course will help prepare you to
1) consume academic political science research in your other courses, 2) become a better consumer
of information, and 3) start you on the road to becoming a producer of scientific research. We
will cover a lot of material in this course, **therefore it is imperative that you come to class
having done the readings and prepared to participate**.

As we progress, we will spend part of the semester on the tools and techniques of quality research
design; the basic statistical skills that are designed to give you an understanding of the appropriate
uses and mis–uses of these tools and techniques; and on learning to do data analysis in R, a statistical
programming language.

In the first part of the course we will review the features of science, the scientific method, and core
concepts in empirical research. Topics include theory development, how to formulate hypotheses,
and how political scientists think about causality. The first section is intended to enhance your
critical and social scientific thinking skills while also helping you distinguish between scholarly and
non-scholarly research. The next section introduces students to the components of a research design.
We will cover the features of experimental and non-experimental designs, review the fundamentals

of statistical inference, and cover survey research. This section is intended to provide you with a working knowledge of the methods used by academic political scientists and help you design your own research. The third part of the course will focus on doing research and we will have several lab sessions where we will be performing data analysis using the statistical programming language R. Topics include the exploring and visualizing of data and examining relationships between two variables. Finally, we will discuss and learn how to apply Ordinary Least Squares regression, the workhorse of empirical social science research, to test hypotheses.

Course Goals and Learning Objectives

The goals for this course are to:

1. Identify and explain current academic research projects in politics.

2. Enhance critical and social scientific thinking skills to distinguish between scholarly and non–scholarly approaches.

3. Develop research questions that are answerable with a variety of methods.

4. Demonstrate some of the methods used by scholars of politics.

5. Develop skills in designing a research project.

Required Textbook

The following book is required and *additional readings will be provided on OAKS.*

KW: Kellstedt, Paul M. and Guy D. Whitten. 2013. *The Fundamentals of Political Science Research.* Cambridge University Press. 2nd Ed.

Required Software

You are also required to download R and RStudio on your home computer and/or laptop. Both programs are open-source and available at no cost and are available on the computers in the classroom. **Aside from the following software, you should have a thumb drive that you bring to class or cloud storage (e.g., Dropbox, Google Drive) that you can access in class for all class-related materials.**

R

R, as noted on its website, is a free software environment for statistical computing and graphics. It could be used and accessed on any operating system. R is a command based program, meaning that you will be creating and running R code (or scripts) for all the statistical analysis you will be performing. A significant portion of class time will be spent in R lab sessions. Click on the following links to download R:

For Windows http://cran.r-project.org/bin/windows/base/
For Mac http://cran.r-project.org/bin/macosx/

RStudio

`RStudio` is user interface program for `R`, and makes the use of `R` more straightforward. However, `R` does have a steep learning curve, but example code for all the types of analyses that you will be required to do will be provided. Click on the following link to download `RStudio` `http://www.rstudio.com/products/rstudio/download/` then select your operating system.

For help with (very likely) all of your `R` related questions click on the following link:
    Quick R `http://www.statmethods.net/`

Course Datasets

You will be performing your own data analysis and presenting the results both in writing and in group presentations. Three datasets will be provide to you and you will choose one to use for your original analysis. Each dataset is a public opinion survey conducted by the *Pew Research Center*. Two of the datasets are from a sample of the U.S. population, and the third is from samples of 21 different countries. Each survey contains questions about a range of political and social issues (e.g., climate change, abortion, immigration), a range of demographic information, and political affiliations (e.g., ideology, political party). These datasets will be on OAKS in `.csv` (comma-separated-values) files and their codebooks (which contain the questions and possible answers) will be provided as well. The `.csv` files can be easily loaded into `R` and opened and edited in Excel.

Course Requirements and Grading:

Performance in this course will be evaluated on the basis of three papers, ten reading questions, four in–class lab assignments, four homework assignments, a final exam, and a group presentation. Points will be distributed as follows:

Paper 1	50 points
Paper 2	100 points
Paper 3	250 points
10 Reading Quizzes (20 pts each)	200 points
4 In–class Lab Assignments (25 pts each)	100 points
4 Homework Assignments (25 pts each)	100 points
Final Exam	100 points
Group Presentation	100 points
Total	1000 points

There are 1000 possible points for this course. Grades will be allocated based on your earned points and calculated as a percentage of 1000.

A	93 to 100%
A-	90 to 92%
B+	87 to 89%
B	83 to 86%
B-	80 to 82%
C+	77 to 79%
C	73 to 76%
C-	70 to 72 %
D+	67 to 69%
D	63 to 67%
D-	60 to 62%
F	59% and below

Reading Quizzes: Given the amount of material we will cover in this course, it is imperative that you keep up with the readings. To help facilitate this, there will be 10 readings quizzes, roughly one for each chapter we will cover in the textbook. These quizzes will have 5 multiple choice questions taken from the readings. You will take the quizzes through OAKS and they will only be available for a short time and **can NOT be made up**. Once you begin you will have **15** minutes to complete each quiz.

In–class `R` *Lab Assignments*: Starting in the second half of the course, we will begin some lab session in class on using `R`. In these sessions, you will be required to complete several tasks using `R` *in class*. I will only accept these assignments in class on the day we do them and they **can NOT be made up**.

Homework Assignments: There are four homework assignments and these homework assignment are each related to your papers. For the first homework assignment, you will be required to read and summarize a peer–reviewed journal article about the topic you are interested in for your paper. The next three homework assignments will be based on using `R` for data analysis using data from the course dataset you chose. These three homework assignments will be incorporated into your final paper.

Group Presentation: You will be placed into one of six groups based on the research topic you have chosen. Your group will be required to present the research findings of each group member. These group presentations need to be well–organized and informative. Each group will be assigned a single grade. You will have 30 minutes for your group presentation.

Final Exam: There will be a comprehensive final exam during the scheduled exam time. It will have 50 questions with a combination of multiple choice, true–false, and short answer. You can bring one sheet of 8 1/2 by 11 paper (using both sides) with any information on it that you think will help you on the final.

Attendance

Attendance is expected and mandatory for this course and will be taken each class period. You are allowed to miss two classes without penalty. The penalties for missing 2 or more classes are as

follows:

Absences	Penalty
2	None
3	20 points
4	30 points (50 points total)
5	40 points (90 points total)
6	50 points (140 points total)

Papers

All papers will be double–spaced, with 1" margins, and 12-point Times New Roman font. I will expect well organized, clear, concise, and professional quality writing. Full and appropriate citations are expected, with any citation style (e.g., MLA, APA, Chicago) you prefer. If necessary, consider making use of the Writing Lab available on campus. For more information, `http://csl.cofc.edu/labs/writing-lab`. In brief, the requirements for each paper are:

Paper 1: In paper 1 you will state your research question, briefly describe the theory you wish to examine, and identify your dependent variable and **one** independent variable of interest. This paper will be **1 to 2 pages** in length.
Due: September 14th before 11:59pm

Paper 2: In paper 2 you will provide a literature review based on the research that has been done in your topic area of interest. In addition, you will also state one hypothesis that you are interested in testing. Information on how to do a literature review will be provided on OAKS and discussed in class. This paper will be **3 to 4 pages**.
Due: October 5th before 11:59pm

Paper 3: In paper 3 you will combine papers 1 and 2 and three of your homework assignments into a complete research paper. This paper will be **12 to 15 pages** of text not including figures, tables, and references, and have all of the following components:

- Introduction: *including research question*

- Literature Review: *including a discussion of theory*

- Statement of your hypothesis

- Data and Methods: *including description of data and analysis*

- Results

- Discussion and Conclusion

Due: December 1st by 11:59pm

LATE PAPERS WILL NOT BE ACCEPTED. ALL PAPERS MUST TO BE TURNED IN THROUGH THE DROPBOX IN OAKS, HARD COPIES OF PAPERS WILL NOT BE ACCEPTED.

Schedule

SUBJECT TO CHANGE

ALL ASSIGNMENTS ARE DUE BY 11:59pm ON THE DUE DATE

The *Science* of Political Science

Day/Week	Topic(s)	Assignments
August 19th	Course Introduction and the Scientific Method	
August 26th	Science and Theory (**NO CLASS 8–28**)	*Reading Quiz 1: KW Chapter 1 due August 25th*
September 2nd	Theory Building and Hypothesis Testing	*Reading Quiz 2: KW Chapter 2 due September 1st*
September 9th	Theory and Causality	*Reading Quiz 3: KW Chapter 3 due September 8th;* ***Paper 1 due September 14th***

Research Design:

Day/Week	Topic(s)	Assignments
September 16th	Designing Political Science Research	*Reading Quiz 4: KW Chapter 4 due September 15th;* ***Homework 1 due September 21st***
September 23rd	Measuring Variables and Introduction to `R`	*Reading Quiz 5: KW Chapter 5 due September 22nd*
September 30th	Populations and Samples and Survey Research	*Reading Quiz 6: KW Chapter 6 due September 29th;* ***Paper 2 due October 5th***

Data Management and Analysis:

Day/Week	Topic(s)	Assignments
October 7th	Exploring and Visualizing Data and R lab	**In–class Lab Assignment 1 October 9th**
October 14th	Association of Variables (**NO CLASS October 16th**)	*Reading Quiz 7: KW Chapter 7 due October 13th*
October 21st	Association of Variables and R lab	**In–class Lab Assignment 2 October 23rd; Homework 2 due October 26th**

Regression:

Day/Week	Topic(s)	Assignments
October 28th	Simple Regression and R lab	*Reading Quiz 8: KW Chapter 8 due October 27th;* **In–class Lab Assignment 3 October 30th; Homework 3 due November 2nd**
November 4th	(**FALL BREAK 11–4**) Multiple Regression	*Reading Quiz 9: KW Chapter 9 due November 5th*
November 11th	Multiple Regression and R lab	*Reading Quiz 10: KW Chapter 10 due November 10th* **In–class Lab Assignment 4 November 13th; Homework 4 due November 16th**
November 18th	**GROUP PRESENTATIONS**	
November 25th	**GROUP PRESENTATIONS**	
December 1st	**Paper 3 due**	
December 4th	**205-01 FINAL EXAM: 8–11am**	
December 9th	**205-02 FINAL EXAM: 12–3pm**	

Students with Disabilities:

The College will make reasonable accommodations for persons with documented disabilities. Students should apply at the Center for Disability Services located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me at least one week before any accommodation is needed.

Center for Student Learning:

I encourage you to utilize the Center for Student Learnings (CSL) academic support services for assistance in study strategies, speaking writing skills, and course content. They offer tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at `http://csl.cofc.edu` or call (843)953-5635.

Cheating or Plagiarism:

A grade of zero will be given to anyone cheating on any exam, homework assignment or committing plagiarism in a paper. As commonly defined, plagiarism consists of passing off as ones own ideas, the words, writings, music, graphs/charts, etc that were created by another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. It does not matter from where the material is borroweda book, article, material off the web, another students paperall constitute plagiarism unless the source of the work is fully identified and credited. Plagiarism is cheating and a violation of academic and personal integrity and will not be tolerated. It carries extremely serious consequences. To avoid plagiarism it is necessary when using a phrase, a distinctive idea, concept or sentence from another source to reference that source in your text, a footnote, or end-note. Please contact me if you need assistance in citing a source.

Religious Holiday Policy:

It is the policy of the College to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Please see me immediately if you will need to miss class any time during this semester.