Political Science Research Methods

Instructor: Alexandra G. Cockerham
9:30-10:45 am, Bellamy 004
Office Hours: T/TH 8:30-9:30 am
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Course Description

This course provides an overview of how to study politics scientifically. Rather than simply present you with political facts, you will learn to ask rigorous questions and think about the political world in a more scientific manner. The aim of this course is to introduce you to the scientific method and how it applies to political science. By learning introductory research methods, you will become a better consumer of information. This course will give you an appreciation for the fact that political science is in fact a science that uses applied statistics to answer questions about the political world. In this course, you will learn to: 1) discipline the way that you form questions and theory about politics, 2) assess the logical merits of arguments, and 3) how to analyze and understand the empirical evidence that we use to evaluate the theoretical claims we make.

This class will also introduce you to the program R. R is a programming environment that we will use to analyze the data that we observe and collect. I will use R periodically in class to demonstrate how data analysis is conducted practically. It also has a high probability of being useful for you later in life, as data analytics and R competency are skills in high demand.

I do not anticipate that this class will be easy. It will likely be one of the most challenging courses of your undergraduate career but it is arguably the most useful political science classes you will take, no matter what career path you choose.

Course Materials

The following book is required reading and is found at the FSU bookstore and online:

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

You will be responsible for obtaining this textbook before class starts. Also, be sure to get the 2nd edition. If you get the previous edition, you will be completely responsible for any differences in reading assignments, as the syllabus will include only the chapter readings from the 2nd edition.

Grades

Final grades will be assessed through various measures of your performance in the course. The final grade will be made up of 100 points.

Table 1: Grades

Task	Points
Midterm	25
Final Exam	35
Homework	30
Participation	10

Letter grades will be determined as follows:

Table 2: Letter Grades

Excellent	A 100-93	A- 92-90	
Above Average	B+ 89-87	B 86-83	B- 82-80
Average	C+ 79-77	C 76-73	C- 72-70
Below Average	D+ 69-67	D 66-63	D- 62-60
Unacceptable	F < 60		

Examinations

There will be two in class exams. The dates are scheduled in the syllabus. For each examination, students will be responsible for knowing the material covered in the course up to the point of the exam. The final exam will be cumulative. Exams will be based on the material covered in class as well as material from the assigned readings. Exams will consist of largely multiple-choice questions but may contain fill in the blank or short answer questions depending on the topic being assessed.

Students are expected to be present for all exams at the beginning of the exam period. Absences or late arrivals for exams will only be excused for University approved reasons. All make--up exams will be administered directly after the final exam on the last day of class.

Attendance and Participation

This course has no explicit attendance policy. There are two caveats to this: this is a required class, and the material covered in this course is some of the more difficult you will come across as a political science major. It is unlikely that you will do well without attending class. If you elect to come to class, be prepared to answer questions based on the assigned reading material. I wish to emphasize that questions are not a punishment; they help evaluate retention and allow for valuable student contribution. These questions are intended to help encourage comprehension and emphasize important information.

Participation will be evaluated through involvement in class discussion and in-class learning activities. Throughout the semester, we will do 10 in class activities based on the readings and lecture material. These questions will be open-book and students will receive credit for their participation as long as they are present and answer the questions. These questions will be asked

randomly throughout the semester. If a student misses class on the day of a reading question or activity, they will lose one point from their participation grade.

Class Discussion
I welcome and encourage class discussion. This subject material will be new to many of you, and will likely be challenging. I believe that there are no stupid questions, only stupid intentions. What is not acceptable is rude or disruptive comments or behavior. We will treat everyone with respect, and will not talk while someone else has the floor. Violations will affect the class participation grade.

Problem Sets

There will be five problems sets. These are homework assignments that give you practice applying concepts and doing some of the technical work in the course. The assignments will become available on the course page the Saturday before they are due. These five problem sets will count for 30% of your overall course grade, with each worth 6 points. Your problem set answers will include a word document with the substantive answer to the questions, and the R code used to obtain these answers. **All problem sets are to be emailed to me prior to class, and a copy is to be printed and handed in at the beginning of class.**

Late assignments that are turned in within 24 hours after class will receive half credit and any assignments turned in later than that will receive a zero (unless the student has a university approved excuse). With a university-approved excuse, homework must be turned in within 48 hours of the due date to receive credit. *Note:* There are no make-up homework assignments.

I understand that sometimes working in a group is the best way figure out the coding necessary to accomplish the problem sets. Therefore, you may work in groups no larger than five in order to get answers to questions. While your code may be similar, for the substantive questions, **all work must be your own**. Any copying of substantive answers (what is written in your word document) will result in a failure grade for all students that turn in homework with the same substantive answers as another student. You are required to indicate those with whom you worked with on each homework.

In addition, I understand that in a group setting, students may find that they have incentives to free ride on other members of the group. However you should remember that the exams will require individual knowledge of code and equations, and how to interpret them. Consequently, it is in your best interests to know the code and equations and what they mean and what they are used for.

Administrative Policy

Student Responsibilities
Students are responsible for planning ahead by checking the syllabus for upcoming readings and assignments. Students are responsible for all assigned readings. **Keep in mind that not all reading material will be covered in class.** Therefore it is imperative that students complete all readings and integrate them into the course as applicable. In addition, all students are responsible for contributing to a positive learning environment. This means that students are expected to demonstrate respectful behavior to other students and the instructor. The instructor retains the right to ask a student to leave the classroom if the student is negatively contributing to the learning environment and the right to lower a students' grade. Students are expected to mute their electronic devices at the beginning of each class and keep their phones and laptops put away as this would be considered a negative contribution to the learning environment.

Extra Credit
There will be at least one extra credit question on the exams. There will be no other extra credit offered.

Late Work
All assignments are to be turned in on the announced due date for full credit. Late assignments that are turned in within 24 hours after class will receive half credit and any assignments turned in later than that will receive a zero (unless the student has a university approved excuse). With a university-approved excuse, homework must be turned in within 48 hours of the due date to receive credit. All exams must be taken on the assigned date. No late exams will be given without a university-approved excuse. With a university-approved excuse, make up exams will be given directly after the last day of class unless otherwise agreed upon.

Academic Honor Code
All course work by students is to be done on an individual basis unless the instructor clearly states that an alternative is acceptable. Any reference materials used in the preparation of any assignment must be explicitly and properly cited. Students are responsible for policing themselves with respect to plagiarism. Any student engaging in academic dishonesty (plagiarism, cheating, academic misrepresentation, etc.) will receive a zero for the relevant assignment and will be reported to the proper university officials for further action. See the FSU handbook for more information on this.

Academic Accommodations
If you anticipate needing any type of an academic accommodation in this course or have questions about physical access, please discuss this with the instructor within the first week of class. Students with disabilities needing academic accommodations should: (1) Register with and provide documentation to the Student Disability Resource Center (SDRC) and (2) Bring a letter to the instructor from the SDRC indicating you need academic accommodations. This should be done within the first week of class. This syllabus and other class materials are available in alternative format upon request. If a student's accommodations change during the semester, the student will present an updated official letter from the SDRC outlining the specific modifications. See the FSU handbook for more information on this.

Syllabus Change Policy
Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Incomplete Grades
No incomplete grades will be given unless there is an agreement between the instructor and the student PRIOR TO the end of the course. The instructor retains the right to determine legitimate reasons for an incomplete grade.

Course Materials

R Software Environment
R is a free software platform for statistical computation. We will use it exclusively in this class. There are multiple ways to use R, but we will use R through an interface package called RStudio. You will be expected to learn and use R, and the problem sets will require the use of R, including your output. To help you in this process, several classes in Friday will act as a lab session where you will learn to use R.

Installation
To install, first go to http://cran.revolutionanalytics.com/ and download the default R package (it should be R v3.2.4). Run the default installer package and install R on your computer. After you have done this, go to http://www.rstudio.com/products/rstudio/download/ and download the latest RStudio package (it should be RStudio v 0.99.893). Again, doing the default install process, install RStudio on your computer.

Syllabus Change Policy: Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Course Schedule

Table 3: Course Schedule

Date	Topic	Reading Assignment
May 9	First Day Administrative Activities	
May 10	The Scientific Study of Politics	Chapter 1 pgs. 1-15
May 11	The Scientific Study of Politics	Chapter 1 pgs. 15-21
May 12	Theory Building	Chapter 2 pgs. 24-34
May 13	Lab Day: Introduction to R	
May 16	Theory Building	Chapter 2 pgs. 34-47
May 17	Evaluating Causal Relationships	Chapter 3 pgs. 51-61
May 18	Evaluating Causal Relationships	Chapter 3 pgs. 61-66
May 19	Research Design	Chapter 4 pgs. 69-82
May 20	Lab Day: Basic Functions in R	**Problem Set 1**
May 23	Research Design	Chapter 4 pgs. 82-90
May 24	Getting to Know your Data	Chapter 5 pgs. 92-109
May 25	Getting to Know your Data	Chapter 5 pgs. 109-124
May 26	Probability and Statistical Inference	Chapter 6 pgs. 129-139
May 27	Lab Day: Descriptive Statistics in R	**Problem Set 2**
May 30	Memorial Day	
May 31	Probability and Statistical Inference	Chapter 6 pgs. 139-143
June 1	Bivariate Hypothesis Testing	Chapter 7 pgs. 145-150
June 2	Bivariate Hypothesis Testing	Chapter 7 pgs. 150-167
June 3	Bivariate Hypothesis Testing in R	**Problem Set 3 due**
June 6	Review Day	
June 7	Midterm	
June 8	Bivariate Regression Models	Chapter 8 pgs. 171-189
June 9	Bivariate Regression Models	Chapter 8 pgs. 189-194
June 10	Multiple Regression: The Basics	Chapter 9 pgs. 197-207
		Problem Set 4 due
June 13	Multiple Regression: The Basics	Chapter 10 pgs. 207-218
June 14	Multiple Regression Model Specification	Chapter 10 pgs. 220-245
June 15	Limited Dependent Variables and Time-Series Data	Chapter 11 pgs. 247-270
June 16	Review Day	
June 17	Final Exam	**Problem Set 5 due**