Introductory Research Methods in Political Science

Semester: [SEMESTER YEAR]
Course Meetings: [DAYS TIME CLASSROOM]
Instructor: Prof. Stephanie Shady (she/her)
Email: [EMAIL]
Office Hours: [DAYS TIMES OFFICE BUILDING]

How do we study politics scientifically? In this course, you will be introduced to the scientific method in political science contexts, and you will study variety of approaches to gathering data and testing hypotheses. Among both quantitative and qualitative research approaches, there are trade-offs, and some methods are better suited to answering a specific question than others. You will learn to evaluate those research design courses in this class, both using existing political science studies and a project that we design as a class. In conjunction with our class-wide project, you will gain hands-on experience in data analysis in R and survey and interview methods. This course is intended to be an overview of research methods that introduces you to topics you may be interested in studying further. It is a pre-requisite for upper-level methods courses and a requirement if you intend to write a senior thesis [ADJUSTABLE TO DEPARTMENT-SPECIFIC CURRICULA REQUIREMENTS]. Even if you do not pursue upper-level methods courses/a thesis, this course will give you a foundation for understanding and evaluating research that you read about in news coverage or other forms of media.

Learning Objectives

Throughout this course, you will:

- Understand the basic principles of the scientific method and the trade-offs of research design choices in social science.
- Learn the utility, strengths, and weaknesses of a variety of quantitative and qualitative research methods.
- Develop a toolkit of quantitative and qualitative research skills, such as:
  - Descriptive and regression analyses in R.
  - Survey design and basic programming in Qualtrics.
  - Interview design and technique.
- Pursue scientific inquiry on topics that interest you.
- Establish a foundation on which to build in advanced research methods courses.

Important Note on Statistics and Programming

This course will cover a range of research methods, to include an introduction to statistical analysis and programming in R. I do NOT assume that you have a background in statistics or computer programming prior to this course, and am committed to giving you that foundation from wherever you're starting the semester. I understand that math and coding can feel

intimidating at first; I felt that way when I started out. Even if you didn't grow up thinking you were a "math person" or a "computer person," you CAN learn both. In general, but especially with respect to statistics and R, **please ask questions early and often.** No question is too simple, and your question is very likely to help other students learn as well.

Course Resources

Required book: Babbie, Earl R. 2021. *The Practice of Social Research*. 15th ed. Cengage Learning. https://www.cengage.com/c/the-practice-of-social-research-15e-babbie/9780357360767/ . We will read most of the chapters in this course, but this is a good reference book to keep for advanced methods courses as well as other political science courses that require research papers.

Additionally, we will make use of articles and book chapters throughout this course, PDFs of which can be found on the course website. You will also find detailed guidelines for the all assignments on the course website—check there first, then ask questions if you require further clarification on instructions.

Download R (https://www.r-project.org/) and RStudio (https://www.rstudio.com/products/rstudio/download/), both of which are free.

Course Requirements

- Complete all assigned readings by the date they are listed on the syllabus, and come to class prepared to discuss them.
- 2 memos on evaluating research methods.
- R practice assignments.
- Survey and interview assignments.
- Final exam.

Grade Breakdown

- Memos 30% (15% each)
- R practice assignments 15%
- Survey assignment 20%
- Interview assignment 20%
- Final exam 15%

Grading Scale

The grading scale below represents the final points at which I will round. To maintain fairness to all of your classmates, I will not arbitrarily negotiate final grades at the end of the semester. Grades are a tool, albeit an imperfect one, for assessing understanding and application of

course material. I am committed to assessing you fairly and providing feedback in order for you to learn.

A: 93.5 and above
A-: 93.4-89.5
B+: 89.4-86.5
B: 86.4-82.5
B-: 82.4-79.5
C+ 79.4-76.5
C: 76.4-72.5
C-: 72.4-69.5
D+: 69.4-66.5
D: 66.4-62.5
F: 62.5 and below

Expectations

1. **Attendance:** As adults, your education and other aspects of your life are your responsibility. As such, I do not grade attendance, but I will keep it in order to ensure that students are keeping up with course material. This is an advanced course, and the topics build upon one another. Moreover, you will both participate in and benefit from peer workshops throughout the course. It is therefore important that you attend class on a regular basis. However, I am aware that extenuating life circumstances can prevent attendance. **You do not owe me personal details in order to be excused from class, but please communicate so that I can offer you flexibility as appropriate.** And as we have learned from COVID-19, **if you are sick, do not come to class.**

2. **Participation:** You and your classmates will benefit from regular participation in class discussion and activities. This course is different from most of the other political science classes you will take and can feel abstract at first. You will better understand the concepts if you ask questions early and often. **There are no stupid questions. If you do not understand something, please ask so that I can explain it in another way until you do understand.** That is why I am here! Other students will benefit from your questions and insights as well.

3. **Electronics:** You will sometimes need a computer in class, especially when we are working in R. **If you do not have access to a laptop that you can bring to class, please let me know at the beginning of the semester so we can find a solution.** You may also bring electronic copies of the readings and assignments to class and use electronic devices to write notes (Note: You may not record audio or video of any part of the course without prior permission from me). Appropriate laptop use is required. Your education is your responsibility, and it is up to you to avoid using your electronics for non-class purposes. However, please respect your classmates and avoid distracting others. If electronic use becomes a problem, no electronics will be permitted outside of days we use R and work on the class research project.

4. **Office Hours:** Office hours are a resource that I encourage you to make use of in my class and in other classes. I encourage you to come to office hours early and often to ask questions about course material and assignments. Additionally, office hours are an opportunity to meet your instructors, discuss your career and other intellectual interests, etc. Particularly as you begin to apply for study abroad, internships, jobs, and graduate school and will need recommendation letters, the more you have cultivated relationships with your instructors, the more they will be able to help you in future endeavors. I can write you a much better recommendation if I know something more than the grades you earned in my class for one semester.

5. **Contact Policy:** Please remember that university emails should be written in a professional manner, which means a greeting, brief message, and closing. You may address me as Professor Shady or Dr. Shady. Emails should be used to make appointments **(You do NOT need to make an appointment to come to regularly scheduled office hours!)** or ask brief questions. If you have a longer question, please come to office hours so we can discuss it thoroughly. I am committed to responding to emails within 48 hours (at the latest) on days when the University is in session. If you have not heard from me within that timeframe, please feel free to send me a reminder.

University Resources
[ADD UNIVERSITY-SPECIFIC RESOURCES ON TITLE XI, MENTAL HEALTH, ACCESSIBILITY, HONOR CODE, ETC.]

Course Assignments

Submitting Assignments
You will submit all assignments on the course website by the beginning of class on the date listed on the syllabus**. All submissions (PDF or Word) should be labeled as follows: "Last Name, First Name_Assignment Title."** This makes organizing files smoother on your end and mine, and you will receive grades/feedback much more efficiently if you follow these instructions.

Research Memos
You will complete two memo-style papers that synthesize and critically reflect upon choices in political science research design. Each memo should be 1-2 pages maximum, single-spaced, with an extra space in between paragraphs (see course website for detailed instructions and an example). In the memos, you should refer to course readings, lectures, and discussions, as well as your own reflections on these themes.

Memo 1: What is the purpose of defining concepts, and how does this relate to measurement?
Concepts are the essential building blocks of a scientific theory. Reflect on the readings and course materials on conceptualization and measurement, and write a memo that covers the relationship between concepts and measurement, the challenges of measuring concepts

appropriately, and the importance of sound conceptualization and measurement to the research process. Provide a running example of a concept in which you define it, offer a possible way to measure it, and acknowledge how other definitions and measurements would affect the research process and/or outcome. In your conclusion, reflect on the overall importance of sound concept definition and measurement to political science.

Memo 2: What are the purposes of different case studies in political science research?
Case studies describe particular instances in time and space, yet they also serve several purposes at different stages of the research process. Reflect on the readings and course materials on case study research, and write a memo that covers types of case studies, their essential features, and the purposes each fulfills in the research process. Under what conditions would you choose a particular case study method? In your conclusion, reflect on the overall contribution of case study research to political science.

Research Skills Assignments
In addition to learning the assumptions, strengths, and weaknesses of a variety of research methods, you will have the opportunity to develop and practice a set of research skills as part of a collaborative class project. At the beginning of the semester, we will choose a research topic based on the class' interests, and each of you will contribute to multi-method approaches to studying this topic, including:

- R homework: You will complete a series of modules on:
    - Basic R setup and descriptive statistics
    - Linear/logistic regression using a sample dataset[1]
- A class survey:
    - Each student will design survey questions, and we will narrow down a final survey as a class.
    - You will learn how to program the survey into Qualtrics, and I will keep a master copy from which we will field a convenience sample (we'll talk about the trade-offs of sampling choices in class).
    - Each student will write *their own R code* to produce descriptive and regression analyses using the data from our survey. You should:
        - Show three interesting relationships and interpret your results.
        - Identify the dependent variable, key covariates, and controls for each model.
        - Justify why you have chosen each type of model.
        - Provide descriptive statistics for all variables you use.
- An interview:
    - You will design an interview questionnaire with five primary questions and anticipated follow-up questions based on one of the relationships you found interesting in your survey analysis.

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[1] For this introductory course, I will provide clean example datasets for you to work with. This means it will be in the correct format for the functions you are using and will not have missing or miscoded data. In advanced courses, you will build additional skills to clean these datasets yourself.

o You will interview two people outside of class using the questionnaire.[2] I encourage you to record the interviews, with your subjects' permission, to help you recall information and record quotations accurately. Whether you record or not, you will submit notes from your interviews and use them in your final presentation.

Research Presentation

Each of you will give a 4-5-minute oral presentation at the end of the semester. In the presentation, you will discuss one of the models from your survey analysis and the interview questions that you used to explore this relationship further. Your presentation should identify the following:

- Hypothesis with justification (theory)
- Model specifications: dependent variable, independent variable, controls, linear or logistic regression (and why)
- Model results and how these results led you to design an interview protocol to probe the relationship in new ways
- Conclusions from your interviews
- Significance of your findings from both the survey and interview analysis

Final Exam
We will take a final exam in the date listed in the Registrar's calendar. The exam is a cumulative evaluation of your understanding of the research methods and their applications covered over the semester. It will consist of multiple choice and short answer questions. You will NOT be directly tested on articles we read as example studies, but you may wish to refer to them as examples in your responses or use them to help you remember a concept or method. You will be tested on principles of quantitative research, but you will not need to know any R code for the exam (in real life application, coding is about problem-solving using available resources, not about memorizing code).

Course Schedule [ADJUST DATES FOR UNIVERSITY-SPECIFIC SCHEDULE; GENERAL TIMELINE LISTED BELOW]
You are expected to have completed all readings and assignments before class on the dates listed below. Always bring a copy of the readings and assignments to class (electronic is fine). On workshop days, please bring a computer for working on your project.

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[2] In general, you would conduct more than two interviews and if possible try to interview subjects who also filled out the survey in the approach we are taking. The number of subjects is limited to two to give you the opportunity to practice interviewing skills while reserving time to learn a range of methods at this course level.

NOTE: After we decide on a theme for your class research project, I will find some studies related to the theme to use as research design examples throughout the semester. I will update the syllabus with these readings—which I encourage you to skim ahead of class and review after we discuss in class—and re-upload it to the course website. *Please watch for this email and be sure that you have the updated syllabus.*

Date	Topic	Readings	Assignments
	Introduction	Syllabus	Bring your questions about the syllabus and the course to class.
	What is social science research?	Babbie Chapter 1 (Human Inquiry and Science)	
	Paradigms and approaches to science	Babbie Chapter 2 (Paradigms, Theory, and Research)	
	Asking research questions	Eidlin, Fred. 2011. "The Method of Problems versus the Method of Topics." *PS: Political Science and Politics 44*(4): 758-761.	Brainstorm some problems in political science you are interested in studying for our class project (jot down 2-3 ideas in your notes; you do not need to submit anything).
	Design for different purposes of social science research	Babbie Chapter 4 (Research Design)	
	From concept to theoretical mechanisms and hypotheses	Baglione, Lisa. 2007. *Writing a Research Paper in Political Science: A Practical Guide to Inquiry, Structure, and Methods*. Belmont, CA: Thomson Higher Education. Chapter 4 (Effectively Distilling the Argument: The Thesis or the Model and Hypothesis)	Vote in the survey for our class research theme by the beginning of class (link on course website and emailed to you).

	From concept to measurement	Babbie Chapter 5 (Conceptualization, Operation, and Measurement) Adcock, Robert, and David Collier. 2001. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review 95*(3): 529-546.	
	Ethics in political science research	Babbie Chapter 3 (The Ethics and Politics of Social Research)	
	Methods I: Surveys day 1	Babbie Chapter 7 (The Logic of Sampling)	Memo 1 due
	Methods I: Surveys day 2	Babbie Chapter 9 (Survey Research)	
	Methods I: Survey design workshop	Pasek, Josh, and Jon A. Krosnick. 2010. "Optimizing Survey Questionnaire Design in Political Science: Insights from Psychology," in Jan E. Leighley (ed.), *The Oxford Handbook of American Elections and Political Behavior*." Oxford University Press.	Using the reading as a guide for types of questions, prepare **five** survey questions related to our theme and that interest you. We will workshop them in class and make a combined questionnaire using some of your questions. (You do not need to write demographics questions; we will do those together).
	Methods I: Survey design and programming workshop	As you begin familiarizing yourself with the Qualtrics platform, skim this guide and save it for reference to use in class: https://www.qualtrics.com/support/survey-platform/survey-module/survey-module-overview/	Sign into Qualtrics using your student account [LINK TO UNIVERSITY'S ACCESS PAGE HERE] and begin

			familiarizing yourself with the platform. We will also walk through it together as you program our class survey during the workshop.
	Methods II: Statistical analysis principles day 1	Babbie Chapter 14 (Quantitative Data Analysis)	If you have not already done so, download R and RStudio (links in Course Resources above and on course website). If you have any difficulty with the downloads, please come to office hours for help. It is very important that everyone has the software downloaded *before* we work with it in class.
	Methods II: Statistical analysis principles day 2	Babbie Chapter 15 (The Logic of Multivariate Analysis) and Chapter 16 (Social Statistics)	
	Methods II: Introduction to R	ModernDive Chapter 1: https://moderndive.netlify.app/1-getting-started.html . Focus on sections 1.1 and 1.3; skim the rest of the chapter and save it for reference. ***It is OKAY if you do not understand it all right away! Just familiarize yourself with it; it will get easier when we talk through it and practice it in class** ☺	

Methods II: Introduction to modeling in R	ModernDive Chapter 5: https://moderndive.netlify.app/5-regression.html	
Methods II: More R practice	Review the ModernDive chapters above and your in-class/take-home assignments, and write down any questions you have so we can discuss and practice them more in class.	
Methods I/II: Survey analysis workshop	None	R descriptive statistics and modeling assignments due Download the class survey data from the course website. It is already cleaned and ready for analysis in today's workshop.
Methods III: Introduction to various qualitative field techniques and Interview research day 1	Babbie Chapter 10 (Qualitative Field Research) Mosley, Layna. 2013. "'Just Talk to People?' Interviews in Contemporary Political Science," in Layna Mosley, ed. *Interview Research in Political Science*. Cornell University Press.	Obtain consent from **two** people you will interview for 15-20 minutes, and make a plan for when you will record the interviews. (I advise you to use Zoom for ease of obtaining a transcription).
Methods III: Interview research day 2	MacLean, Lauren M. "The Power of the Interviewer," in Layna Mosley, ed. *Interview Research in Political Science*. Cornell University Press. Martin, Cathie Jo. "Crafting Interviews to Capture Cause and Effect," in Layna Mosley, ed. *Interview Research in Political Science*. Cornell University Press.	Survey analyses due Write **five** interview questions, with follow-ups as appropriate, and bring to class for discussion.

	Methods IV: Case study research 1	Gerring, John. 2004. "What Is a Case Study and What Is It Good For?" *American Political Science Review 98*(2): 341-354. Bennett, Andrew. *Case Study Research*. Chapter 2 (Case Study Methods: Design, Use, and Comparative Advantage) Levy, Jack. S. 2008. "Case Studies: Types, Designs, and Logics of Inference." *Conflict Management and Peace Science 25*: 1-18.	
	Methods IV: Case study research 2	Babbie Chapter 13 (Qualitative Data Analysis) Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science and Politics 44*(4): 823-830.	
	Presentations 1	None	Bring your prepared presentation on the date you are assigned.
	Presentations 2	None	Memo 2 due Bring your prepared presentation on the date you are assigned.
	Conclusions, review, and new horizons in research	None	Fill out the anonymous review survey (on course website and emailed to you) with questions about any topics we have covered this semester. I will structure our review based on your questions.
Reading Days			

Final exam period as scheduled by Registrar	Final exam

This syllabus is subject to any change I deem necessary throughout the course. If I need to update the syllabus, I will communicate changes via e-mail and upload an updated syllabus to the course website.