

POLITICAL SCIENCE 2399: RESEARCH METHODS

NORTHEASTERN UNIVERSITY, SPRING 2020

Instructor: Mr. Justin Haner
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Office: 225L Renaissance Park
Class Times: Monday, Wednesday, Thursday: 9:15 AM – 10:20 AM
Classroom: 238 Forsyth

Office hours: Wednesdays 10:30 am – 12:30 pm; and by appointment at:
<https://justinkhaner.youcanbook.me/>

Course Attributes: NU Core and NU Path Writing Intensive in Major, 4 Credit Hours.

Course Prerequisites: Prior completion of at least two of the following courses: POLS 1150, POLS 1155, and/or POLS 1160.

Required Course Materials: Political Science Research Methods, 9th Edition, by Janet Johnson, H.T. Reynolds and Jason Mycoff. Available new and used in paperback and for e-readers from: Sage Publishing, Amazon, and the Northeastern University Bookstore.

I. Course Overview and Learning Objectives:

Course Overview: In this course, we will examine a wide variety of traditional and cutting-edge research methodologies and designs based on applying the logic of social scientific inquiry. Students will **learn how we know what we know** and gain an in-depth understanding of how to assess empirical political science research. Students will also **learn how to design, plan, conduct, interpret, and present research effectively**. Some of the topics we will cover include: research topic formulation and planning, establishing causality, geospatial analysis, research ethics and protecting participants, experimental research, case studies, conducting interviews, survey design, archival research, content analysis, process tracing, basic quantitative techniques, computational social science, data visualization, and effective use of mixed methodologies.

Learning Objectives:

By the end of this course, you will be able to:

- Demonstrate understanding of the primary research methods used in the study of political science, including the strengths and weaknesses of each.
- Design, plan, conduct, interpret the findings of rigorous, empirical social science research.
- Critically assess and effectively communicate research findings in written and virtual presentation formats.
- Add the following basic research skills to your resume:
 - Grant Writing
 - Survey Design (in Google Forms and/or Qualtrics)
 - At least one other methodological specialization of your choosing (ArcGIS, NVivo, SPSS, Stata, etc.)

II. Course Expectations and Grading:

Professor and Student Responsibilities: Both the professor and students have responsibilities in this course. My responsibilities include sharing expertise and facilitating understanding of course concepts; training students to think critically; and treating students equally, fairly, and respectfully. Students' responsibilities include fully preparing themselves for each class; treating each other with respect and dignity; participating and being fully present when in the classroom or during online discussions/activities; and maintaining an openness to consider new opinions and ideas.

Understanding of Research Methods: 60%

- **Participation (20%)*:** You will be graded for your attendance and participation in classroom discussions, presentations, and the group project. Students are expected to come prepared to discuss the assigned readings listed for each class period. Participation in class is important because the readings are assigned for students to familiarize themselves with the course material, while classroom lecture and discussion is designed to get you beyond concept familiarity and towards in-depth understanding of political science research methods. Although not preferred, I reserve the right to give a pop quiz (graded on a pass/fail basis) on the day's main concepts, if needed, to enforce classroom preparation.
 - ***I reserve the right to reward participation and effort beyond 20 points** for students who experience difficulty with tests or assignments but consistently demonstrate effort and willingness to learn the course material.
- **Midterm Exam (20%):** The midterm exam will take place in class on February 27th. It will cover key topics from Chapters 2 – 6, 8, 10 and any other assigned materials from Blackboard. The midterm will consist of multiple-choice and short-answer questions, as well as four methodological critiques of your classmates' "Best X" presentations. The methodological critiques section will take place prior to the exam during the "Best X" presentations in class on February 26th.
- **Final Exam (20%):** The final exam will take place in class during finals week (TBA). The exam will draw on the cumulative methodological knowledge gained during the semester and will cover topics from the entire course, including key concepts from Chapters 2 - 14, and any other assigned materials from Blackboard. The final will consist of multiple-choice and short-answer questions, one essay, and a series of methodological critiques of your classmate's Individual Research Project Proposal presentations. The methodological critique section will take place prior to the exam during the presentations in class on April 8th and 9th.

Application of Research Methods: 40%

- **Best "X" on Campus Group Project (15%):** As part of an assigned research team (4 – 5 per group), students will design and conduct a short research project to determine the best "X" on campus, with "X" being a construct of their choosing. Previous students have chosen topics such as the best lunch, best study location, best artwork, best classroom, best dining facility, etc. The purpose of this project is for students to apply the concepts learned during the first half of the semester, including: research topic selection, operationalization of variables, selecting an appropriate research design, considering the potential ethical implications of their research, and effectively presenting their findings. This assignment is

intended to be a messy “first take” designing and conducting research - the flaws and shortcomings of which will help the entire class learn just as much as perfect empirical work might. This assignment is due on Blackboard by 5pm on February 24th. See the Best X Guide on Blackboard for more detailed information.

- **Individual Research Project Proposal (25%):** Each student will complete an in-depth research project proposal on a significant contemporary topic of their choosing. Students are encouraged to choose a topic and methodology that they are passionate about or intrigued to learn more about. The purpose of this assignment is to demonstrate your understanding of the key components of empirical research design learned throughout the course as well as to develop an in-depth understanding of a specific methodology of your choosing. This research proposal should incorporate all aspects of empirical research design, except the actual data collection component. While you will not be expected to carry out the proposed research during this semester, completion of this proposal will result in the creation of a significant piece of high-quality writing that could be used to actually carry out original research, secure an [internal or external grant](#), apply for a [PEAK Award](#), setup your Senior Capstone project, lead to a presentation at the [NU Rise Expo](#), or simply added to your writing sample portfolio for Co-op or graduate school applications. The rough draft is due on Blackboard by 5pm on March 16th and the final version is due on Blackboard by 5pm on April 17th. See the Individual Research Project Proposal Guide on Blackboard for more detailed information.

Final grades will be determined using the standard Northeastern University percentage scale, which is as follows: A = 100 – 93, A- = 92 – 90, B+ = 89 – 87, B = 86 – 83, B- = 82 – 80, C+ = 79 – 77, C = 76 – 73, C- = 72 – 70, D+ = 69 – 67, D = 66 – 63, D- = 62 – 60, F = < 60.

III. Course Schedule:

Date	Topic	Reading	Assignment/Notes
1/6	Welcome & Introductions	Syllabus (BB)	
1/8	20 Research Methods in 60 Minutes		Come prepared to discuss 3 potential “Best X” ideas
1/9	ArcGIS Online Training in Snell Library, Room 422		Laptops permitted
1/13	The Science of Political Science	Johnson et al. Ch. 2	
1/15	Scientific Theory and Application	Johnson et al. Ch. 2	
1/16	Operationalizing Concepts	Johnson et al. Ch. 3	Summer course registration opens (1/18)
1/20	No Class, Martin Luther King Jr. Day Observed		
1/22	Research Topics, Questions, and Problem Statements	Johnson et al. Ch. 3	Come prepared to discuss 3 potential research topics

Date	Topic	Reading	Assignment/Notes
1/23	Literature Reviews, Efficient Research Techniques, and Citation Management	Johnson et al. Ch. 3	Come prepared to discuss 3 potential research questions. Laptops permitted
1/27	Variables and Hypotheses	Johnson et al. Ch. 4	
1/29	Measurements	Johnson et al. Ch. 4	
1/30	Establishing Causality and Controlled Experiments	Johnson et al. Ch. 6	Best X on Campus proposals due, NU Rise Expo information session (noon).
2/3	Project Planning and Management Skills	(BB)	Bring a list of your other course assignments. Laptops permitted.
2/5	Ethical Research, IRB, and Protecting Participants	(BB)	
2/6	Interviews and Ethnography	Johnson et al. Ch. 8	
2/10	Sampling	Johnson et al. Ch. 5	
2/12	Types of Surveys	Johnson et al. Ch. 10, Pages: 196 - 202	
2/13	Survey Design	Johnson et al. Ch. 10, Pages: 196 - 202	
2/17	Presidents' Day, no classes.		
2/19	Content Analysis	Johnson et al. Ch. 10, Pages: 193 - 196	Laptops permitted.
2/20	Effective Writing and Presentation Skills	(BB)	
2/24	Midterm Recap and Review		Best X on Campus due
2/26	Best X on Campus Presentations		Graded methodological critiques (25% of midterm)
2/27	Midterm Exam	Chapters: 2 - 6, 8, 10	Multiple choice, short answer sections (75% of midterm)
3/2-3/6	No classes, Enjoy Spring Break!		
3/9	Comparative Case Studies	Johnson et al. Ch. 7	
3/11	Process Tracing and Archival Research	Johnson et al. Ch. 7	

Date	Topic	Reading	Assignment/Notes
3/12	Natural Experiments	Johnson et al. Ch. 9, Pages: 169 - 182	
3/16	Quantitative Techniques Overview	Johnson et al. Ch. 9, Pages: 182 - 190	Individual Research Project Proposal rough drafts due
3/18	Data Management and Descriptive Statistics	Johnson et al. Ch. 11, Pages: 211 - 226	Laptops permitted.
3/19	Graphs, Charts, and Exploratory Data Visualization	Johnson et al. Ch. 11, Pages 226 - 238	
3/23	Statistical Significance, Confidence Intervals, and Error	Johnson et al. Ch. 12	
3/25	Analyzing Categorical Data	Johnson et al. Ch. 13	
3/26	OLS Regression	Johnson et al. Ch. 14, Pages: 307 - 324	
3/30	Logistic Regression	Johnson et al. Ch. 14, Pages: 324 - 329	
4/1	Computational Social Science	(BB)	
4/2	Data Visualization	(BB)	
4/6	Mixed Methodologies	(BB)	Fall course registration opens
4/8	Final Project Presentations		Graded methodological critiques (25% of final)
4/9	Final Project Presentations		Graded methodological critiques (25% of final), NU Rise Expo
4/13	Course Wrap-up and Final Review		
TBA	Final Exam		Multiple choice, short answer, and essay sections (75% of final)
4/17	Research Proposals Due by 5pm (online)		

All readings listed as (BB) will be on Blackboard in the folder with labeled with that class topic.

IV. Course Policies:

Life Happens Clause and Late Assignments: Each student is permitted to invoke the “Life Happens Clause” one time during the semester to receive a three-day extension on an individual assignment (not including the midterm or final exam). No explanation required, just let me know you are invoking this clause. Late assignments, excluding use of the Life Happens Clause, will be penalized 10% of the total points per day.

Attendance: Attendance at all lectures (and/or online activities) is required and participation points may be lost for repeated absences. Please inform me before class if you are unable to attend for any reason and we can arrange a time during office hours or by appointment to ensure you get caught up on class material. Attendance for scheduled exams and presentations is particularly important. Make-up exams may only be scheduled with advance notice.

Email Policy: I will typically respond to all emails within twenty-four hours. Emails received on the weekend, holidays, or during the evenings will typically be answered on the next business day.

Laptop and Cellphone Use: Use of electronics such as laptops, tablets, or cellphones is not permitted as their use has been shown to be distracting to fellow classmates and detrimental to both the learning of students using them and those around them (Carter et al., 2017; Mueller & Oppenheimer, 2014; Sana et al., 2013). Exceptions to this policy will, of course, be allowed on a case to case basis. Some classes will require use of computers and students will be made aware of these classes ahead of time.

V. Student Resources:

The Writing Center at Northeastern is an excellent resource for students experiencing trouble communicating their ideas effectively in written assignments and may be particularly helpful for students for whom English is not their primary language. To make an appointment, or to find out more information, please visit: <https://cssh.northeastern.edu/writingcenter/>

We Care at Northeastern is a great place to find resources and assistance if you are having financial, academic, social, extended leave of absence, or health-related issues that are impacting your academic studies. For more information, please visit: <https://studentlife.northeastern.edu/we-care/faq/students/>

VI. University and Department Policies:

Accommodations for students with disability: Northeastern is fully committed to creating a community characterized by inclusion and diversity. As part of this commitment, it upholds the American with Disabilities Act (ADA). The ADA requires Northeastern to provide reasonable accommodations to students with disabilities unless doing so would create an undue hardship, compromise the health and safety of members of the university community, or fundamentally alter the nature of the university’s employment mission. If you are a student who requires accommodations in compliance with the ADA, it is your responsibility to inform me at the beginning of the semester and provide me with the appropriate authorization forms from Northeastern’s Disability Resource

Center (which has amazing and friendly staff by the way!). If you have any issues regarding delayed authorizations or are experiencing any impediments to learning in our classroom, please come see me and we will find a way to make it work! Students seeking information regarding ADA accommodations should review the University's ADA Information and Resources Procedure available here:

<https://provost.northeastern.edu/oidi/resources/ada/>

Academic Honesty: Citations are not an afterthought or triviality, rather they are a demonstration of the depth of understanding and the level of research conducted by the author. The Department of Political Science takes very seriously the issue of academic honesty, and as set forth the following policy: "Any student who appears to violate the University's Academic Honesty and Integrity Policy (see www.osccr.neu.edu/policy.html) may be referred to the University's Office of Student Conduct and Conflict Resolution. If a proven violation involves an exam or course assignment, the student shall receive a failing grade for the assignment, in addition to sanctions imposed by the Office of Student Conduct and Conflict Resolution. Individual faculty, with the support of the Department, can impose harsher penalties as they deem necessary. The Academic Honesty and Integrity Policy includes cheating, fabrication, plagiarism, and other types of dishonest activities. Plagiarism is defined broadly as taking ideas, concepts, or actual words of another person and passing them off as your own work. Of particular note in recent years is the increase in cut-and-paste plagiarism, which involves downloading phrases from websites or other Internet sources. Your instructor will clarify specific guidelines on fair use of material for this class, but you should regard this as your official warning." Visit the OSCCR website for more information: <http://www.northeastern.edu/osccr/academic-integrity-policy/>

Title IX: Northeastern is committed to providing equal opportunity to its students and employees, and to eliminating discrimination when it occurs. In furtherance of this commitment, the University strictly prohibits discrimination or harassment on the basis of race, color, religion, religious creed, genetic information, sex, gender identity, sexual orientation, age, national origin, ancestry, veteran, or disability status. The Northeastern University Title IX policy articulates how the University will respond to reported allegations of sexual harassment involving students, including sexual assault, and provides a consolidated statement of the rights and responsibilities under University policies and Title IX, as amended by the Violence Against Women Reauthorization Act of 2013. For more information, please visit: <https://www.northeastern.edu/ouec/title-ix-policy-2/>

VII. Works Cited:

- Carter, S. P., Greenberg, K., & Walker, M. S. (2017). The impact of computer usage on academic performance: Evidence from a randomized trial at the United States Military Academy. *Economics of Education Review*. <https://doi.org/10.1016/j.econedurev.2016.12.005>
- Mueller, P. A., & Oppenheimer, D. M. (2014). The Pen Is Mightier Than the Keyboard. *Psychological Science*. <https://doi.org/10.1177/0956797614524581>
- Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. *Computers and Education*. <https://doi.org/10.1016/j.compedu.2012.10.003>

If you happen to find any typos, errors, non-functioning links, or would like to share a new resource with current and future students, [please let me know!](#)

GROUP RESEARCH PROJECT: BEST “X” ON CAMPUS
RESEARCH METHODS, NORTHEASTERN UNIVERSITY, SPRING 2021
Instructor: Justin Haner

As part of an assigned research team (4 – 5 per group), students will design and conduct a short research project to determine the best “X” on campus, with “X” being a construct of their choosing. The purpose of this project is for students to apply the concepts learned during the first half of the semester, including: research topic selection, operationalization of variables, survey design, considering the potential ethical implications of their research, and effectively presenting their findings. This assignment is intended to be a messy “first take” at designing and conducting research, the flaws and shortcomings of which will help the entire class learn just as much as perfect empirical work might. This assignment, including your group’s presentation, is due on Canvas by 5pm on **March 19th**. Preliminary group project proposals are due, on Canvas, by 5pm **February 19th**.

Examples topics for best “X”:

- Best study location on campus
- Best lunch on campus
- Best view on campus
- Best classroom on campus
- Best artwork on campus

This assignment has eight components, several of which will be completed in class:

1. First, establish the core aspects of your research design. How do you define and operationalize “best”, “campus” and your “X”? Ensure to consider how these concepts can be measured on an empirical, observable basis, paying particular attention to their construct validity.
2. Create a map of campus in accordance with your operationalization of our “campus”.
 - a. Extra credit (+1 for all group members): Using ArcGIS Online and the tools learned during your GIS training session, create a map of campus in accordance with your operationalization of our “campus”.
3. Construct a small literature review on your topic, including at least six sources. Begin this search using the research tools and techniques discussed in class, including use of ScholarOne. While it is not expected that you will find sufficient peer-reviewed research on your topic, ensure to justify the rationale or basis you used for selection of the six sources. Ensure to include any relevant information concerning how these articles or sources justified their methodology or findings.
 - a. For example, if you are attempting to determine the “best lunch on campus”, have others studied this before at Northeastern, on other campuses, in Boston, or elsewhere? Who did they determine to be the winner and how did they justify their selection or rankings?
4. Automatically create an APA-style bibliography containing all six sources from your literature review (plus any other works cited, as needed) using any of the citation management software programs discussed in class (Mendeley, Zotero, Endnote, etc.).

5. Design your survey in accordance with your research question and the principles of sound survey design discussed in class. Include a copy of your survey as an appendix with your final report (this does not count towards the page requirement).
6. Describe how your survey will be carried out and why you chose the specific questions and question order that you did. Discuss how many respondents you would like to reach and what kind of a response rate you would hope to have. What are the limitations of your methodology?
7. Assess the applicable risks and ethical considerations of your chosen research. What considerations are there for IRB? How will you protect your participants? Your group will also be submitting an IRB form during Module 7.
 - a. For example, if you are attempting to determine the “best graffiti on campus”, could your study draw unwanted attention to the artist? Could putting a spotlight on the graffiti end with its removal by campus authorities? How might its removal affect the Northeastern community?
8. Finally, conduct your research and write up your results. What did you find? Are you confident in the results of your research? How did your actual respondents differ from your ideal sampling frame? Prepare a short presentation (10ish minutes) which outlines your process and findings. This presentation must be recorded and uploaded to Canvas (just one submission per group).

The final written product should integrate these seven components and be between 10 and 15 double-spaced pages in length, not including the bibliography, with 12pt Times New Roman font, 1-inch margins, numbered pages, and APA-style in-text citations. Designate one group member to submit your project on behalf of the group.

If you have questions while working on this project, please do not hesitate to contact me. I am here to help and want to empower you to create the best possible project in line with your interests.

INDIVIDUAL RESEARCH PROJECT PROPOSAL
RESEARCH METHODS, NORTHEASTERN UNIVERSITY, SPRING 2021
Instructor: Justin Haner

Each student will complete an in-depth research project proposal on a significant contemporary topic of their choosing. Students are encouraged to choose a topic and methodology that they are passionate about or intrigued to learn more about. Your research proposal should be between 15 and 20 double-spaced pages in length, not including the bibliography, with 12pt Times New Roman font, 1-inch margins, numbered pages, and APA-style in-text citations. The rough draft is due on Canvas by 5pm on March 26th and the final version is due on Canvas by 5pm on April 27th.

The purpose of this assignment is to demonstrate your understanding of the key components of empirical research design learned throughout the course as well as to develop an in-depth understanding of a specific methodology of your choosing. This research proposal should incorporate all aspects of empirical research design (outlined below), except the actual data collection component. While you will not be expected to carry out the proposed research during this semester, completion of this proposal will result in the creation of a significant piece of high-quality writing that could be used to actually carry out original research, secure an [internal or external grant](#), apply for a [PEAK Award](#), setup your Senior Capstone project, lead to a presentation at the [NU Rise Expo](#), or simply added to your writing sample portfolio for Co-op or graduate school applications. With this purpose in mind, this proposal should be written as if it will be submitted to a major grant issuing authority, in accordance with the principles of effective grant writing that we will cover in class.

Your research project proposal must include or address the following components of empirical research design (as applicable for your chosen research design):

- **Overview of your proposed project** (1-2 pages), including:
 - A problem statement explaining the general context for your proposal, helping to generate interest in your topic, and explaining the importance of conducting this research.
 - Your research question(s).
 - The explicit hypotheses you are testing.
 - A brief statement on the methodology you have chosen and why you have determined it to be the best approach for answering your research question(s).
 - The potential implications: What do you expect to learn from this research? How will it help inform political science or policy makers?
- **Literature review and your explanatory theory** (4-5 pages):
 - Outline and briefly assess the major existing theories about your topic as well as the primary methodologies that have been used before to answer this or similar questions.
 - Identify the “gap” in the literature that your proposed research may help fill.
 - Briefly explain the theory behind your hypothesis and why this theory may prove the best explanation for the phenomena you are seeking to understand.
 - Must include at least 8 peer-reviewed sources, 4 of which must have been written in the last 10 years.

- **In-depth explanation of your proposed methodology and research design** (8-10 pages, the specific components and length of each sub-section will vary significantly depending on your chosen methodology):
 - **Data collection and analysis:**
 - Describe in detail the data you plan to collect, how you plan to collect it, and why this is the best collection method.
 - Example: If you are conducting a survey, what will your sampling frame be? Will it be an online survey, MTurk, phone survey, mail, or in-person? What questions would you include? How would you order them and why?
 - Justify your proposed data analysis technique.
 - Quantitative example: If you are using quantitative techniques, will you use OLS regression, ANOVA, or logit? Why is this the most efficient technique for your specific data?
 - Qualitative example: If you are using a process tracing technique, what specific evidence are you looking for? Will you conduct a hoop-test, smoking gun test, or doubly decisive test? Why would finding this evidence help prove your theory?
 - What are the advantages of using this technique over others for this research question?
 - Make sure to assess your choices in terms of causal inference, as well as internal and external validity.
 - **Variables:**
 - What are your key independent, dependent, and control variables?
 - How are your variables precisely defined and operationalized?
 - Outline any existing data on your topic:
 - If you are planning to incorporate this data, explain, in detail, how it was collected, coded, and/or compiled and how it will help test your hypothesis. Assess the reliability and validity of this data.
 - If you are not using this data, very briefly explain why not. Assess any reliability, validity, and/or availability shortcomings.
 - Address what level of measurement your variables are.
 - **Case selection justification:**
 - Why did you choose these cases?
 - What time period(s) did you choose and why?
 - How will these specific cases help us test your hypotheses?
 - What impact does your choice of cases have internal validity and generalizability?
 - **Risk assessment and ethical considerations** of your project:
 - What considerations are there for IRB?
 - How will you protect your participants?
 - How will you ensure the privacy of the data you gather?
 - How will you ensure your data is not lost or stolen?
 - **Known limitations:**
 - Assess any known potential shortcomings of your methodology and justify why the research is still worth conducting despite them.

- **Budget** (1 page, if applicable):
 - Do you require funding to complete this project?
 - What are your estimated costs?
- **Conclusion with expanded potential implications** (1-2 pages):
 - Briefly speculate on what your findings might be if you were able to complete the research and collect all the data you needed. Be sure to comment on the implications of both a positive and negative outcome.
 - Expand on the potential implications for political scientists and/or policy makers and why your project is worthy of conducting and funding.
- **Bibliography:**
 - Automatically create an APA-style bibliography containing the sources from your literature review (plus all other works cited, as needed) using any of the citation management software programs discussed in class (Mendeley, Zotero, Endnote, etc.).

Students will deliver a brief presentation (5-8 minutes) of their individual research projects during the last week of the semester. The precise presentation schedule will be established several weeks in advance.

If you have questions while working on this project, please do not hesitate to contact me. I am here to help and want to empower you to create the best possible project in line with your interests.