POS 6746 - QUANT METHODS IN POL RESEARCH

Section: 0001

College of Sciences

School of Politics, Security, and Intl Affairs

Course Information

Term: Fall 2025
Class Meeting Days: W
Class Meeting Time: 06:00PM - 08:50PM
Class Meeting Location: PSY 0110
Modality: P
Credit Hours: 3.00

Instructor Information

Name: Dr. Alexander Jensen
Title: Assistant Professor
Office Location: HPH 305E
Office Hours
Wednesdays from 2:00-5:00pm
Email: alexander.jensen@ucf.edu

Course Description

POS 6746 COS-POLS 3(3,0)Quantitative Methods in Political Research: PR: Admission to a graduate degree-seeking program or C.I. Methods of model building and research design, including conceptualization and measurement of political variables; techniques of data collection and quantitative analysis and computer usage. Occasional.

This course provides students with a graduate-level introduction to quantitative methods in social/political research. Emphasis is on developing skills for independent research, professional communication of results, and application of quantitative methods to pressing questions in political science.

Throughout the semester, the course examines several observational and experimental designs commonly used in the field of political science. After exploring the principles of research design, the course surveys these techniques of empirical political analysis. Students learn by doing in the course, engaging their own research interests, identifying data, and conducting their own original analyses using statistical software (Stata) that culminates in the final Research Paper for the course. At the conclusion of the course, students should be able to use multiple quantitative methods to undertake independent, original social/political research.

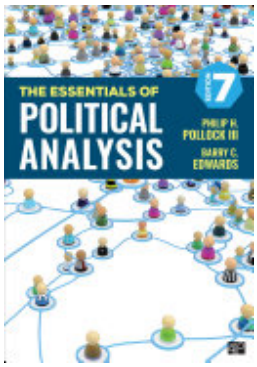
Student Learning Outcomes

After successful completion of this course, students will be able to:

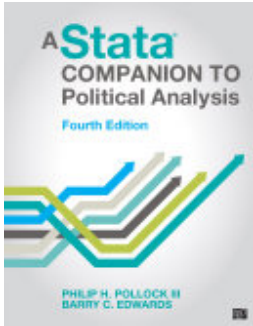
- Identify and explain commonly shared principles of research design in the discipline of political science.
- Analyze quantitative political research by identifying design choices, identification strategies, and inference challenges.
- Utilize newly learned methods and software to undertake original quantitative research by implementing models and analyzing political data.
- Communicate empirical findings in writing and oral presentation that meet professional disciplinary standards.
- Realize and apply newly developed skills in real-world career opportunities that are available to quantitative computational social scientists

Required Course Materials and Resources

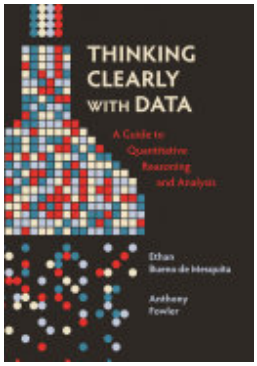
The Essentials of Political Analysis
ISBN: 9781071861493
Authors: Philip H. Pollock III, Barry C. Edwards
Publisher: CQ Press



Publication Date: 2024-12-20



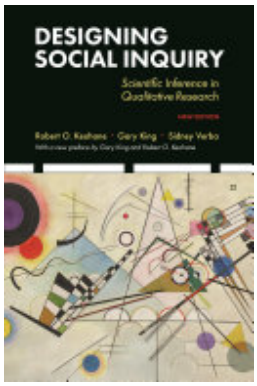
A Stata® Companion to Political Analysis
ISBN: 9781506379715
Authors: Philip H. Pollock III, Barry C. Edwards
Publisher: CQ Press
Publication Date: 2018-09-20

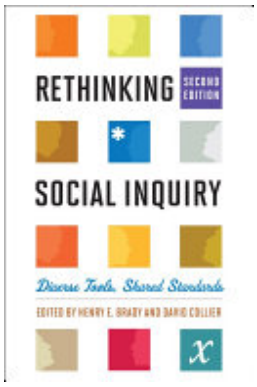


Thinking Clearly with Data
ISBN: 9780691215013
Authors: Ethan Bueno de Mesquita, Anthony Fowler
Publisher: Princeton University Press
Publication Date: 2021-11-16

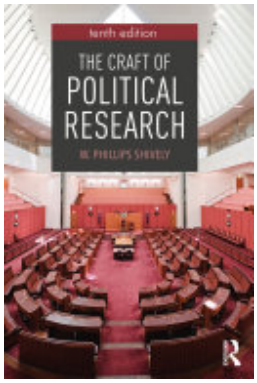
Recommended Course Materials

Title: Designing Social Inquiry
ISBN: 9780691224640
Authors: Gary King, Robert O. Keohane, Sidney Verba
Publisher: Princeton University Press
Publication Date: 2021-08-17





Title: Rethinking Social Inquiry
ISBN: 9781442203457
Authors: Henry E. Brady, David Collier
Publisher: Rowman & Littlefield Publishers
Publication Date: 2010-09-16



Title: The Craft of Political Research
ISBN: 9781351979412
Authors: W. Phillips Shively
Publisher: Routledge
Publication Date: 2017-06-14

Title: Case Studies and Theory Development in the Social Sciences
ISBN: 9780262572224
Authors: Alexander L. George, Andrew Bennett
Publisher: MIT Press
Publication Date: 2005-04-15

Course Assessment and Grading Procedure

Week 1 Required Academic Activity (1%)

During the first week of the course, you need to complete the Required Academic Activity in Webcourses/Canvas. As you may be aware, at UCF, student engagement in the course must be documented in Webcourses during the first week of classes to ensure that all eligible students receive their financial aid in a timely manner. By the end of the first week of the course (by Friday, August 22nd), students need to log in and submit the brief assignment.

Class Participation (9%)

Contributing to class discussions, asking questions about the material, actively listening to your classmates and professor, upholding classroom standards, and showing up to office hours are all forms of participation that I will take note of throughout the semester.

If you have questions that were not answered in class or need further help understanding a concept, please do not hesitate to show up to my office hours (Wednesdays from 2-5pm) to speak with me in person. If you are unable to attend office hours in person, I would be happy to schedule you in for a virtual office hours appointment. I ask that you send me an email (*alexander.jensen@ucf.edu*) and I will reply with a private Zoom link. If you are in another class during my office hours or have work responsibilities that prevent you from attending, you may request to make an appointment with me at another time during the week. I will do my best to accommodate such requests; however, if you break a scheduled office hours appointment without prior notice, this will count negatively toward your participation grade.

Weekly Reading Questions (10% - ten discussion board posts at 1% each)

Each week, you are required to submit 3 questions or puzzling observations about that week's readings (not 3 per reading, but 3 for the whole week's reading list). These reading questions are due by 2:00pm on Wednesday afternoons prior to our class session. These discussion boards can be located in the "Discussions" tab of the course's Canvas page.

I encourage you to bring these questions into the classroom as well! I will prepare to answer these questions during the following lecture. If your question is left unanswered, I invite you to reintroduce it during class discussion, so that we can continue to explore it collectively.

Homework Assignments (30% - six assignments at 5% each)

Throughout the course of the semester, you will complete a series of 6 homework assignments focused on different aspects of the research design process. These assignments will push you forward as you complete and refine certain components of your final paper, and help you grow your quantitative data analysis toolkit. Prompts for each assignment will be distributed at class and through Webcourses/Canvas.

Research Paper and Presentation (40% - see grade breakdown in description below)

Over the course of the semester, you will complete an original piece of quantitative research on a political topic of your choosing that culminates in a final research paper and in-class presentation. Due to data availability, I expect that you will all use existing data (like the General Social Survey, Cooperative Election Study, or the American National Election Study) to conduct your analyses. You will submit a brief research prospectus by Wednesday, September 17th at the start of class time. In the following weeks, I will provide you with feedback on your designs. The final paper is due by the start of our final class (6:00 pm) on Wednesday, November 19th. On that same day, Wednesday, November 19th, you will present your research at class during our final meeting with a 5-7 minute research presentation. ***The research prospectus is worth 5%, the final paper is worth 25%, and the presentation is worth 10% of your grade. Prompts for each individual assignment can be found in the "Prompts" module in our class' Webcourses/Canvas page.***

Final Exam (10%)

You will complete a final take-home exam during the University's finals period. This final examination is cumulative, testing you on principles of research design and data analysis. In doing so, this exam serves as a practice run at the types of questions you may encounter on the MA Comprehensive Exam in Methods. The exam will be distributed at the beginning of the finals

period (Monday, December 1) and due by the end of the finals period, Saturday, December 6th at 11:59pm. ***Late submissions will not be accepted for the final exam.***

Grading Scale

Letter Grade	Percentage
A	94-100%
A-	90-93%
B+	87-89%
B	84-86%
B-	80-83%
C+	77-79%
C	74-76%
C-	70-73%
D+	67-69%
D	64-66%
D-	61-63%
F	0-60%

Policies for Course Grade

Policy on Late Assignments

Students are expected to submit their assignments and weekly reading questions by the assigned due dates. Sometimes, however, life gets in our way. I am a reasonable man, and I understand that sometimes life throws wrenches at us that prevent us from meeting the deadlines that were originally set. If you encounter a situation where you find yourself unable to turn in an assignment by the deadline, please email me as soon as possible so that we can discuss an appropriate course of action. For those who communicate ahead of deadlines with legitimate extenuating circumstances, I may consider small extensions. However, if you do not communicate ahead of time or do not have a legitimate excuse as to why a deadline will be missed, your assignment is considered late. Late assignments will receive a 10% for each day

that they are submitted late. I will only accept late assignments for up to 9 days past the original deadline. The final paper cannot be turned in late.

Attendance

Simply put, you cannot afford to miss a graduate seminar because of the breadth and depth of the material we will cover week-to-week. It is expected that any student enrolling in the course is committed to attending every class session and completing course tasks. Excused absences apply to when a student experiences an emergency (e.g., hospitalization, family death, religious observance, military service, emergency medical provider visit)—any student in this category should contact the instructor as soon as possible to discuss a plan of action to catch up within the week. If you miss a class, you should borrow notes from classmates and book an Office Hours appointment to ensure you can catch back up before the next class.

A Note on Course Readings

Beyond the texts that I've required for the course (Pollock and Edwards' *The Essentials of Political Analysis + Stata Guide* and Bueno de Mesquita and Fowler's *Thinking Clearly with Data)*, all other course readings will be posted as PDFs in our course's Webcourses (Canvas) site. Please ensure that you have read the assigned texts before class. Plan to prepare for our discussions in class by taking notes as you are reading and jotting down questions you have as they arise - posting at least 3 questions in the corresponding Discussions tab by Wednesday afternoon prior to the start of that day's class.

Contacting Professor Jensen

Beyond contacting me in class or at office hours, feel free to send me your written questions anytime via email at alexander.jensen@ucf.edu. I strive to reply promptly to your emails, but sometimes situations will arise where I don't have the chance to get back to you on the same day. I ask that you give me 24 hours before following up during the week and 48 hours before following up on weekends. If you do not receive a response from me during those timeframes, please send a polite follow-up - I would never intentionally ignore your messages!

Changes to This Syllabus

I reserve the right to adjust this syllabus as I see fit throughout the course of the semester. Any adjustments to the syllabus will be announced in advance via email and Webcourses.

Artificial Intelligence (AI) Use Policy

Students may not use generative artificial intelligence (GenAI) such as ChatGPT or Copilot to generate any written part of the assignments submitted in this class. Any attempt to represent GenAI output inappropriately as your own written work will be treated as plagiarism. We will discuss responsible AI usage - specifically in how to use AI to assist your learning of the Stata software and to grow your coding toolkit - in class. Ultimately, students are responsible for the accuracy and veracity of submitted work, whether AI-generated or not.

Disability Access & Accommodations

The University of Central Florida is committed to providing equal access to all students with disabilities (ADHD, learning disabilities, Autism, chronic medical conditions, physical disabilities, etc.). To receive consideration for reasonable disability-related course accommodations, disabled students must contact Student Accessibility Services (SAS) and complete the steps required for SAS to review accommodation requests. More information can be found on the UCF Student Accessibility Services website under the Start Here tab or by contacting SAS directly (Ferrell Commons 185; sas@ucf.edu; Phone - 407-823-2371).

Approved accommodations are shared with course instructors via the SAS Course Accessibility Letter. Implementing certain accommodations may require discussion about specific considerations of the course design, course learning objectives, and the individual academic and course challenges experienced by the student. While students with disabilities or chronic health needs are also encouraged to discuss any course concerns with professors in addition to contacting SAS, professors are not required to facilitate disability-related adjustments to the course unless the professor has received a Course Accessibility Letter from SAS that outlines approved accommodations.

Academic Integrity

Students should familiarize themselves with UCF's Code of Conduct at Student Conduct and Integrity Office. According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

a. Academic misconduct is defined as any submitted work or behavior that obstructs the instructor of record's ability to accurately assess the student's understanding or completion of the course

materials or degree requirements (e.g., assignment, quiz, and/or exam). Examples of academic misconduct include but are not limited to: plagiarism, unauthorized assistance to complete an academic exercise; unauthorized communication with others during an examination, course assignment, or project; falsifying or misrepresenting academic work; providing misleading information to create a personal advantage to complete course/degree requirements; or multiple submission(s) of academic work without permission of the instructor of record.

b. Any student who knowingly helps another violate academic behavior standards is also in violation of the standards.

c. Commercial Use of Academic Material. Selling of course material to another person and/or uploading course material to a third-party vendor without authorization or without the express written permission of the University and the instructor of record. Course materials include but are not limited to class notes, the instructor of record's slide deck, tests, quizzes, labs, instruction sheets, homework, study guides, and handouts.

d. Soliciting assistance with academic coursework and/or degree requirements. The solicitation of assistance with an assignment, lab, quiz, test, paper, etc., without authorization of the instructor of record or designee is prohibited. This includes but is not limited to asking for answers to a quiz, trading answers, or offering to pay another to complete an assignment. It is considered Academic Misconduct to solicit assistance with academic coursework and/or degree requirements, even if the solicitation did not yield actual assistance (for example, if there was no response to the solicitation).

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, *The Golden Rule*. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and respond to academic misconduct when necessary. Penalties for violating rules, policies, and instructions within this course can range from a zero on the exercise to an "F" letter grade in the course. In addition, an Academic Misconduct report could be filed with the Office of Student Conduct and Academic Integrity, which could lead to disciplinary warning, disciplinary probation, or deferred suspension or separation from the University through suspension, dismissal, or expulsion with the addition of a "Z" designation on one's transcript.

Being found in violation of academic conduct standards could result in a student having to disclose such behavior on a graduate school application, being removed from a leadership position within a student organization, the recipient of scholarships, participation in University activities such as study abroad, internships, etc.

Let's avoid all of this by demonstrating values of honesty, trust, and integrity. No grade is worth compromising your integrity and moving your moral compass. Stay true to doing the right thing: take the zero, not a shortcut.

Title IX

Title IX prohibits sex discrimination, including sexual misconduct, sexual violence, sexual harassment, and retaliation. If you or someone you know has been harassed or assaulted, you can find resources available to support the victim, including confidential resources and information concerning reporting options at Let's Be Clear and UCF Cares.

For more information on access and community engagement, Title IX, accessibility, or UCF's complaint processes contact:

- Title IX – ONAC – Office of Nondiscrimination & Accommodations Compliance & askanadvocate@ucf.edu
- Disability Accommodation – Student Accessibility Services – Student Accessibility Services & sas@ucf.edu
- Access and Community Engagement (including the Ginsberg Center for Inclusion and Community Engagement, Military and Veteran Student Success, and HSI Initiatives)
- UCF Compliance and Ethics Office – Compliance, Ethics, and Risk Office & complianceandethics@ucf.edu
- The Ombuds Office is a safe place to discuss concerns.

Reporting an Incident or Issue

If you believe you have experienced discrimination by any faculty or staff member, contact the Office of Nondiscrimination & Accommodations Compliance via the ONAC website or at 407-823-1336. You can also choose to report using the UCF Integrity Line either anonymously or as yourself at 1-855-877-6049 or by using the online form. UCF cares about you and takes every report seriously. For more information see the Reporting an Incident or Issue Webpage.

Deployed Active-Duty Military Students

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

Campus Safety

At UCF Public Safety and Police, safety is the top priority. Emergencies on campus are rare, but if one should arise, it's important to be familiar with some basic safety and security concepts.

- In an emergency, always dial 911.
- Every UCF classroom has an **Emergency Procedure Guide** posted on a wall near the door, which will show you how to respond to a variety of situations. This guide can also be found online here.
- In the event of an active threat, remember **AVOID, DENY, DEFEND**. Choose the best course of action and act immediately. Watch the video here to learn more.
    - **AVOID**. Pay attention to your surroundings and have an exit plan. Get as much distance and as many barriers between you and the threat as quickly as possible.
    - **DENY.** When avoiding is difficult or impossible, deny the threat access to you and your space. Lockdown by creating barriers, turning the lights off and remaining quiet and out of sight. Make sure your cell phone is silenced, but do not turn it off.
    - **DEFEND.** When you are unable to put distance between yourself and the threat, be prepared to protect yourself. Commit to your actions, be aggressive and do not fight fairly. Do whatever it takes to survive.
- For emergencies on campus, UCF will utilize the UCF Alert system. All UCF students, faculty and staff are automatically enrolled to receive these email and text alerts, however, it's a good idea to frequently ensure your contact information is up to date.

Financial Aid Accountability

All instructors/faculty are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete this activity by the end of the first week of classes or as soon as possible after adding the course. Failure to do so may result in a delay in the disbursement of your financial aid.

Class Schedule

Week	Topic

Week	Topic
1	**Wednesday, August 20:** Introductions and Course Overview ***Complete Required Academic Activity by Friday, August 22nd at 12:00 pm noon*** *Ensure that you have purchased the required textbooks ahead of next week's class*
2	**Wednesday, August 27:** Concepts and Measurement Strategies Bueno de Mesquita and Fowler, Chapter 1 Pollock and Edwards (Essentials), Chapters 1 and 2 Pollock and Edwards (Stata Companion), Chapter 1 *Assignment 1 to be handed out in class today & due by the start of the next class on Wednesday, September 3*
3	**Wednesday, September 3:** Comparing Observational & Experimental Research Bueno de Mesquita and Fowler, Chapter 2 and 3 Pollock and Edwards (Essentials), Chapters 3 and 4 Pollock and Edwards (Stata Companion), Chapters 2 and 3 ***Assignment 1 due today by 6:00pm***

Week	Topic
4	**<u>Wednesday, September 10:</u>** <u>NO CLASS - Dr. Jensen is away presenting research</u> *While we do not have class this week due to the American Political Science Association conference, you should use this week to (1.) catch up or get ahead in your reading of Pollock and Edwards' textbooks, (2.) find a dataset with variables that fit with your research interests, and (3.) begin working in Stata to complete Assignment 2* *Assignment 2 to be sent out today and due by the start of the next class on Wednesday, September 17*
5	**<u>Wednesday, September 17:</u>** <u>Correlation</u> Bueno de Mesquita and Fowler, Chapters 4 and 5 Pollock and Edwards (Essentials), Chapters 5 and 6 Pollock and Edwards (Stata Companion), Chapters 4 and 7 ***Assignment 2 due today at 6:00pm*** *Research Prospectus is due by the start of the next class on Wednesday, September 24*

Week	Topic
6	**Wednesday, September 24:** From Correlation to Regression Bueno de Mesquita and Fowler, Chapters 6 and 7 Pollock and Edwards (Essentials), Chapters 7 and 8 Pollock and Edwards (Stata Companion), Chapters 5, 8. and 11 ***Research Prospectus due today at 6:00pm***
7	**Wednesday, October 1:** Using Regression in Practice, Conducting Original Research Bueno de Mesquita and Fowler, Chapter 8 Pollock and Edwards (Essentials), Chapter 10 Pollock and Edwards (Stata Companion), Chapters 12, 13, and 15 (read 15 first) *Assignment 3 to be sent out today and due by the start of the next class on Wednesday, October 8*
8	**Wednesday, October 8:** Dichotomous DVs and Logistic Regression Pollock and Edwards (Essentials), Chapter 9 Pollock and Edwards (Stata Companion), Chapter 14 ***Assignment 3 due today at 6:00pm*** *Assignment 4 to be sent out today and due by the start of the next class on Wednesday, October 15*

Week	Topic
9	**Wednesday, October 15:** Reinvestigating Causality Bueno de Mesquita and Fowler, Chapters 9 and 10 ***Assignment 4 due today at 6:00pm***
10	**Wednesday, October 22:** Using Experiments to Assert Causality Bueno de Mesquita and Fowler, Chapters 11 and 14 Pollock and Edwards (Essentials), Chapter 4 (again) Pollock and Edwards (Stata Companion), Chapters 6, 9, and 10 *Assignment 5 to be sent out today and due by the start of the next class on Wednesday, October 29*
11	**Wednesday, October 29:** Causality in the Absence of an Experiment: RDD and DiD Bueno de Mesquita and Fowler, Chapters 12 and 13 ***Assignment 5 due today at 6:00pm*** *Assignment 6 to be sent out today and due by the start of the next class on Wednesday, November 5*

Week	Topic
12	**Wednesday, November 5:** Project Workshop No readings assigned for today ***Assignment 6 due today at 6:00pm*** ***Bring 3 paper copies of your completed Assignment 6 to class today for the paper workshop***
13	**Wednesday, November 12:** Next Steps: Original Surveys, IRB, Research Ethics Bueno de Mesquita and Fowler, Chapters 15-17 *Final paper due by the start of next class*
14	**Wednesday, November 19:** Final Project Presentations ***Final Paper due today by 6:00pm*** ***PowerPoint Presentation due today by 6:00pm***
FINAL EXAM	**Take-home exam open from Monday, December 1, through Saturday, Dec. 6, at 11:59pm** ***Take Home Exam due by Saturday, December 6 at 11:59pm***