

# POL 226: Approaches to Political Science and International Relations

<https://pol226.fall24.equezadallanes.com/>

9:30 AM – 10:20 AM MWF

Buttrick Hall, Room 211

Fall 2024

## Instructor

Enrique Quezada-Llanes

Email: [equzada@agnesscott.edu](mailto:equzada@agnesscott.edu)

Office: Buttrick Hall 315

Office hours: Thursdays 10 am - 12 pm

## Course Overview

From consulting firms and social media to public policy and the social sciences, data analysis has become a central tool for how we get answers to our questions of interest. The same is true in political science, where scholars collect and analyze data to predict and explain a variety of political phenomena such as how people vote or the degree to which public policy is influenced by interest groups. In this course, you will learn the necessary programming skills and statistical inference principles to help you think critically about politics and answer important questions. Fortunately, the skills you will learn are also in demand in many industries so they may be useful in your career beyond the classroom.

## Learning Outcomes

- Read and understand quantitative research and data
- Estimate and interpret the appropriate quantities of interest to answer political science questions
- Communicate results from data analysis in a clear manner
- Understand and explain fundamental concepts of statistical inference and the limitations of quantitative methods

## Required Textbook

- Llaudet, Elena and Kosuke Imai. 2022. [Data Analysis for Social Science: A Friendly and Practical Introduction](#). United States: Princeton University Press.

## Software

1. R: <http://www.r-project.org>
2. RStudio: <https://posit.co/>

## Work and Assessment

### Course Expectations

Students are expected to attend class and participate in class discussions and exercises. I expected you will have completed all readings prior to class and will come prepared with questions.

### Course Workload

This is a 4-credit hour course, meaning that you are expected to spend 12 hours of work each week (including the 3 hours spent in the classroom). This roughly means that you will spend about 2 hours on readings for each class period, and 3 hours each week working on the different assignments (pace yourself!).

### Assignments and grades

Final course grades will be assigned as follows:

| Grade | Range   | Grade | Range  |
|-------|---------|-------|--------|
| A     | 93–100% | C     | 73–76% |
| A–    | 90–92%  | C–    | 70–72% |
| B+    | 87–89%  | D+    | 67–69% |
| B     | 83–86%  | D     | 63–66% |
| B–    | 80–82%  | D–    | 60–62% |
| C+    | 77–79%  | F     | < 60%  |

Final grades will be calculated based on the following components:

**Participation (10%):** All students are expected to be active participants in the class. The participation score will be determined through in-class quizzes and exercises.

- *Attendance policy:*

Attendance is part of your participation grade, and while there is no separate grade for attendance it is a prerequisite for in-class participation. That said, to accommodate unforeseeable circumstances, you have two *unexcused* absences that will not affect your participation grade. Please let the instructor know about any excused absences you anticipate during the semester. It is important to keep up with class material as each portion of the course builds on previous sections.

**Problem Sets (40%):** You will complete nine problem sets throughout the semester. These problem sets will help you practice the concepts and data analysis skills we learn in class. You will have about a week to complete each problem set. I encourage you to work together with other students, but the final product should be your own work. Problem sets are due at the beginning of the class period indicated on the schedule.

**Midterm and Final Exam (25% each):** The midterm and final exam will be similar in structure to the weekly problem sets. For these exams, you will be working with some popular survey data that social scientists collect with regularity, such as the General Social Survey and American National Election Study datasets. No collaboration is permitted for the exams. However, students are allowed to use a single letter-sized sheet of hand-written notes (two-sided). Both midterm and final exams will be administered via Canvas.

**Extra Credit Opportunity:** There is an additional problem set you can complete for extra credit. This can add a maximum of 3.5 percentage points to your final grade.

## Collaboration Policy

Learning how to analyze data can be challenging but it may be easier if you work together. In fact, I encourage you to talk with your peers about the course materials and assignments. That said, each student should do and submit their own work. Collaboration does not mean you end up with the exact same code or answer.

## Communication Policy

If you have questions about class in general or about a specific assignment, you can email me or come by my office. You can expect a response within 24 hours (unless you email me on Friday). Students are also more than welcome to attend office hours, as this is time set aside specifically for you. In addition, if my office door is open, feel free to stop by. Please note that I will not be “pre-grading” assignments, but I am happy to answer clarifying questions about them either via email or, preferably, during office hours.

## Regrading Policy

If a student wishes to appeal a grade, they must do so in writing within one week of receiving their graded assignment back. The student must indicate clearly what part of the assignment’s grading they disagree with, making sure to respond to the instructor’s comments in that section and making their case for why they should not have been deducted points. These requests should be done via email and the subject name should read “POL 226 Regrading request - [Name of assignment].”

## Honor Code

Students are expected to do their own work and cite sources appropriately. Plagiarism will not be tolerated. In other words, students will be held to the standards of the Agnes Scott Honor System to which they agreed when enrolling at this institution. The Agnes

Scott College honor code embodies an ideal of character, conduct, and citizenship, and is an important part of the College's mission and core identity. This applies especially to academic honesty and integrity. Passing off someone else's work (or Chat GPT's) as your own represents intellectual fraud and theft and violates the core values of our academic community. To be honorable, you should understand not only what counts as academic dishonesty, but also how to avoid engaging in these practices.

You are responsible for the content of any work submitted for this course. The use of artificial intelligence (AI) to generate a first draft of text or code is permitted, but you must review and revise any AI-generated text or code before submission. AI text generators can be useful tools but they are often prone to factual errors, incorrect or fabricated citations, and misinterpretations of abstract concepts. I neither encourage nor discourage their use, but utilize them with caution.

## **Course Accessibility and Academic Accommodations**

Agnes Scott College views disabilities as an integral part of the rich diversity of our community and strives to make all learning experiences as accessible as possible. If you are a student who receives academic accommodations through the Office of Accessible Education, please schedule a meeting with me within the first two weeks of classes to discuss how your accommodations will be implemented for this course. During this meeting, you are not expected to disclose any details concerning your disability, though you may discuss these details at your discretion.

If you are a student with a disability—physical, medical, psychological, or learning-specific—and have not connected with Accessible Education to discuss your accessibility needs, please visit the [main Office of Accessible Education webpage](#) to learn more about accommodations, helpful resources and support, available through the Office of Accessible Education. Students who register for accommodations during the semester should schedule a meeting with me after accommodations have been approved by the Office of Accessible Education.

## **Wellbeing and Mental Health**

The wellbeing and mental health of students is important; if you are having trouble completing your coursework, please reach out to the [Wellness Center](#). Agnes Scott College provides cost-free mental health services to help you manage personal challenges that threaten your personal or academic well-being. If you believe you are experiencing unusual amounts of stress, sadness, or anxiety, please contact the Wellness Center and ask about their [Counseling and Psychological Services](#).

## **Title IX**

Agnes Scott is here to help you if you have experienced any form of sexual harassment or violence, dating or domestic violence, or stalking. Please talk to any faculty or staff member with whom you feel comfortable. Faculty and staff members want to support you and have been trained to help. They will also inform the Title IX office so that you learn about

options available to you. If you do not want college administrators to know what you have experienced, you may talk to the chaplain, as well as nurses or counselors in the Wellness Center with complete confidentiality. They will not tell anyone what you share with them unless you give your express permission. You may contact the Title IX Coordinator directly at [T9Coordinator@agnesscott.edu](mailto:T9Coordinator@agnesscott.edu).

## Diversity and Inclusion

Agnes Scott is a diverse and inclusive community. As one of the most diverse colleges in the nation, ASC is ideally positioned to be the model of a diverse and inclusive community that society can aspire to be. Such diversity raises the intellectual quality of the classroom experience, creating a unique environment for learning to understand and navigate the challenges of our times. By studying, living, and playing together, Agnes Scott College's remarkably diverse student body hones the habits of mind, skills, and knowledge essential to ethical and innovative leadership in our increasingly heterogeneous and global society. As such, this course adheres to the principles of diversity and inclusion as integral to the Agnes Scott community and respects people from all backgrounds. As a first step, this course affirms people's decisions about gender expression and identity and will use each other's preferred names and gender pronouns at all times.

## Syllabus Change Policy

This syllabus is only a guide for the course and is subject to change with advanced notice.

## Schedule

### Week 1 - Introduction to Scientific Inquiry

During the first week, we will discuss the syllabus and talk about what it means for political science (or any social science, for that matter) to be a *science*.

#### Wednesday, August 28

- [Syllabus](#)
- *Data Analysis for Social Science* (from now on DASS). Chapter 1: pp. 1-6. 📖 available on Canvas, only for the first chapter.

#### Friday, August 30



- Gary King, Robert O. Keohane, and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press. Chapter 1: pp 3-19 (stop at section 1.2.2). 📖

## Week 2 - Philosophy of Science

### Monday, September 2

NO CLASS. Labor Day Holiday.

### Wednesday, September 4

- Russell, Bertrand. 1912 [2001]. “On Induction.” In *Philosophy of Science: Contemporary Readings*, eds. Yuri Balashov and Alex Rosenberg, 289-93. London/New York: Routledge.  available on Canvas.
- Popper, Karl. 1963 [2001]. “Science: Conjectures and Refutations.” In *Philosophy of Science: Contemporary Readings*, eds. Yuri Balashov and Alex Rosenberg, 294-301. London/New York: Routledge.  available on Canvas.

### Friday, September 6

- Install R (in class)
- *DASS*. Chapter 1: pp. 7-14 (stop when you reach section 1.7).

## Week 3 - R 101 and Data Structure

### Monday, September 9

- *DASS*. Chapter 1: pp. 14-21 (stop when you reach section 1.8).

### Wednesday, September 11

- *DASS*. Chapter 1: pp. 21-26.

### Friday, September 13

- No reading.

 Deadline

Problem Set 1 due Friday, September 13, at 11:59 pm on Canvas

## Week 4 - How Experiments Work

### Monday, September 16

- *DASS*. Chapter 2: pp. 27-38.

### Wednesday, September 18

- *DASS*. Chapter 2: pp. 39-50.

## Friday, September 20

- No reading.

! Deadline

Problem Set 2 due Friday, September 20, at 11:59 pm (updated) on Canvas

## Week 5 - Working with Survey Data

### Monday, September 23

- *DASS*. Chapter 3: pp. 51-54.

### Wednesday, September 25

- *DASS*. Chapter 3: pp. 55-66.

### Friday, September 27

- No reading

! Deadline

Problem Set 3 due Friday, September 27, at 11:59 pm (updated) on Canvas

## Week 6 - Working with Survey Data (cont.)

### Monday, September 30

- *DASS*. Chapter 3: pp. 66-76.

### Wednesday, October 2

- *DASS*. Chapter 3: pp. 76-97.

### Friday, October 4

- No reading

! Deadline

Problem Set 4 due Friday, October 4, at 11:59 pm (updated) on Canvas

## Week 7 - Midterm Exam

### Monday, October 7

- Bring questions for midterm review

### Wednesday, October 9

- Midterm exam online. We will start in class.

### Friday, October 11

- NO CLASS. Tentatively

## Week 8 - Making Predictions with Linear Regression

### Monday, October 14

NO CLASS. Fall Break.

### Wednesday, October 16

- *DASS*. Chapter 4: pp. 98-107.

### Friday, October 18

NO CLASS. (I'll be out at a conference)

## Week 9 - Making Predictions with Linear Regression (cont.)

### Monday, October 21

- *DASS*. Chapter 4: pp. 107-116.

### Wednesday, October 23

- *DASS*. Chapter 4: pp. 116-23, 126-8.

### Friday, October 25

- No assigned reading.

! Deadline

Problem Set 5 due Friday, October 25, at 9:40 am on Canvas



## Week 10 - Observational Studies

Monday, October 28

- *DASS*. Chapter 5: pp. 129-134.

Wednesday, October 30

- *DASS*. Chapter 5: pp. 135-147.

Friday, November 1

- *DASS*. Chapter 5: pp. 147-161.

! Deadline

Problem Set 6 due Friday, October 25, at 9:40 am on Canvas

## Week 11 - Probability

Monday, November 4

- *DASS*. Chapter 6: pp. 162-169.

Wednesday, November 6

- *DASS*. Chapter 6: pp. 169-179.

Friday, November 8

- No assigned reading.

! Deadline

Problem Set 7 due Friday, November 8, at 9:40 am on Canvas

## Week 12 - Probability

Monday, November 11

- *DASS*. Chapter 6: pp. 179-183.

Wednesday, November 13

- *DASS*. Chapter 6: pp. 183-189.

## Friday, November 15

- No assigned reading

**!** Deadline

**Problem Set 8** due Friday, November 15, at 9:40 am on Canvas

## Week 13 - Dealing with Uncertainty

### Monday, November 18

- *DASS*. Chapter 7: pp. 196-203.

### Wednesday, November 20

- *DASS*. Chapter 7: pp. 202-211.

### Friday, November 22

- No assigned reading

**!** Deadline

**Problem Set 9** due Friday, November 15, at 9:40 am on Canvas

## Week 14 - Dealing with Uncertainty and Thanksgiving Break

### Monday, November 25

- *DASS*. Chapter 7: pp. 211-217.

### Wednesday, November 27 - Friday, November 29

NO CLASS. Thanksgiving break.

## Week 15 - Dealing with Uncertainty

### Monday, December 2

- *DASS*. Chapter 7: pp. 219-229.

### Wednesday, December 4

- No assigned reading.

**Friday, December 6**

! Deadline

[Extra Credit Problem Set](#) due Friday, December 6, at 9:40 am on Canvas

## **Week 16 - Review**

**Monday, December 9**

- No assigned reading.

**Wednesday, December 11**

- No assigned reading.

## **Week 17 - Final Exam**

Sometime between December 13 and 18.