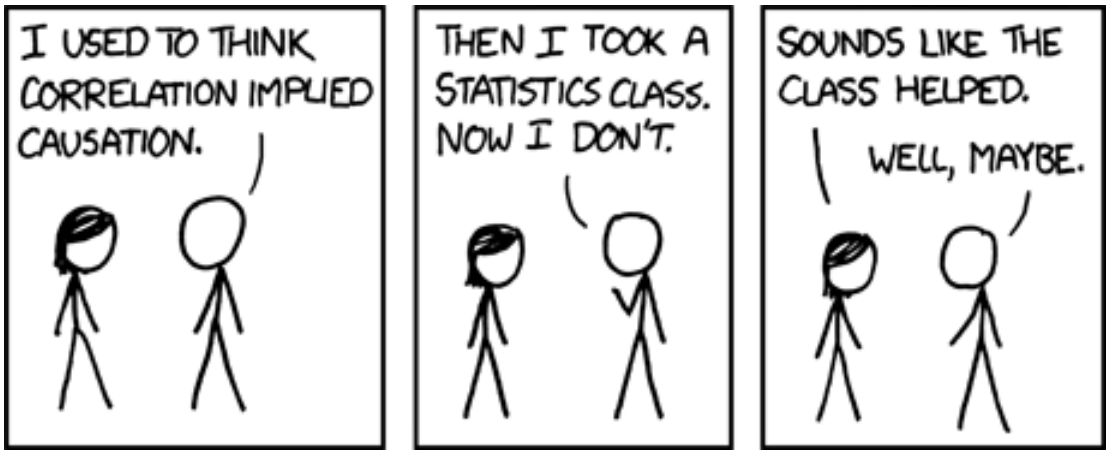
POLI 3000:0002: Analyzing Political Data
Tues & Thurs 2:00–3:15 pm
in Van Allen 469
Spring 2021



Course Information

Instructor: Dr. Menninga
Office: 311 Schaeffer Hall (and Zoom)
Office/Drop-In Hours: Wed 1:30–3:30 pm, or by appointment
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Class Website: `icon.uiowa.edu`

Course Description

This course is designed to achieve two objectives: (1) introduce you to research and quantitative analysis in political science, and (2) help you become critical (but not cynical) consumers of quantitative analysis used in political and policy-oriented reporting. We will tackle the challenge of what conclusions we can draw from statistical analyses, trying to disentangle cause and effect from observed correlations. To help our pursuit of these goals, we'll use statistical software (Stata), providing an introduction to statistical computing. Throughout the course we'll use what we've learned to think critically about the use of quantitative research and the inferences drawn from that research by analysts, reporters, politicians, and policy advocates. As such, not only will you be learning to do your own analysis this semester, but also learning to evaluate such information presented by others.

Course Materials

The required book is available at the Iowa Hawk Shop or from your favorite on-line retailer.

- Joseph F. Healey, *The Essentials of Statistics: A Tool for Social Research 4th Edition*. 2015. Cengage Learning. (Referred to as EoS)

Additionally, I recommend students who have no experience with statistical computing or know that the computing part of this course will be a challenge to purchase or borrow a Stata tutorial. Two such books are:

- Kyle C. Longest. *Using Stata for Quantitative Analysis, 2nd Edition*. 2015. Sage Press.
- Alan C. Acock. *A Gentle Introduction to Stata, 5th Edition.* 2016. Stata Press

The first book is a little cheaper and much smaller. It covers most of the introductory commands that will be used this semester. The second is a more comprehensive resource for students who expect to use Stata not only this semester but in future semesters as well. There are also many useful free online Stata resources.

Any other course materials will be available electronically on the course ICON page or through the library's on-line resources. Please check each week's ICON module for any readings/activities that need be completed **before** class.

Course Requirements and Grading

There are no prerequisites for this class, however, I will assume basic mathematical skills (mainly arithmetic). Your grade for the course will be determined by performance in four areas: class participation, problem sets, a data analysis project, and 2 exams.

Course Grade Breakdown

- Participation: 10%
- Problem Sets: 25%
- Data Analysis Project: 25%
- Midterm Exam: 20%
- Final Exam: 20%

Participation (10% of final grade)

Class time with be divided between lecture, discussion, and in-class activities. This class will include active learning opportunities frequently. Active involvement in activities is an easy way to boost your participation grade. Participation points are assigned based upon the quantity and quality of a student's contributions to the class. Quality is weighted significantly more heavily than quantity. While attendance will not be graded directly, absences will hurt your participation grade as you cannot participate if you are not in class.

In addition to improving your grade, participation in class can help you identify what you don't understand, ask questions, and deepen your understanding of the material. **Asking relevant or**

interesting questions counts as participation!

Presentation of Misleading Statistics: At the beginning of most classes, one (or two) of you will be responsible for presenting a news article, blog post, or video clip that includes misleading (or incorrect) use of quantitative analysis. This can be incorrect reporting of what a statistic means, drawing conclusions from poor samples, or any number of other ways data can be misinterpreted. The article should be recent (written within 6 months of your presentation) unless you get advanced permission to use an older article. The presentation should be a couple minutes long (no more than 3) highlighting any relevant context, but focusing mainly on how the article uses statistics misleadingly and what a more accurate/honest report would have been. You have substantial latitude here, so feel free to talk about a topic you find interesting or surprising in some way. You are welcome, but not required, to run your idea by me in advance. Please submit whatever materials you use in your presentation (powerpoint, links to articles, etc) to the ICON assignment for this presentation before your presentation.

Tips for selecting an article: Please pick an article from a reputable news outlet. You may use Huffington Post or other news aggregators to find interesting articles, but please cite the original article (not the link to the aggregator). Please avoid news outlets that are well-known to be strongly partisan such as Fox News and MSNBC; the goal is to show that misleading statistics are in our everyday news exposure and to begin looking for and assessing the methods/statistics that are used to support policy positions.

Focus on the use of quantitative analysis and be respectful in your presentation.

Note Taking Week: You'll sign up on ICON for a week to be an official note taker for the class. These notes will be shared with your classmates in case someone is sick or cannot attend class in person. More details are on ICON.

Problem Sets (25% of final grade)

Homework assignments will be assigned throughout the semester (approximately one every two weeks). The problem sets will be posted to ICON and are due at the beginning of class (2:00pm) on the due date. Homework assignments will be submitted through Dropbox on ICON. You do not have to type your assignments. You may hand-write answers and then scan your work in order to upload to ICON. If you'd like to type your homework, Word's equation editor makes typing math symbols and equations rather easy. You may hand-write answers to some questions and type answers to others. Ultimately, the only requirement is that the assignment is legible and uploaded to ICON. Photos of your assignment taken with your phone will **only** count if I can read your work. I cannot grade what I cannot read. It is your responsibility to ensure the assignment is legible and has been correctly uploaded into ICON on time. Double check after submission!

Late homework will result in a 10% penalty for each calendar day late. Late homework will no longer be accepted after the answer key is posted, typically about 5 days after the assignment is due.

Working together on the homework is not only allowed, but strongly encouraged. Working together is a great way to talk through tricky concepts and improve your understanding. The final

product, however, is expected to be written and understood by the student turning in the work.

Your lowest homework grade will be dropped at the end of the semester.

Exams (20% + 20% = 40% of final grade)

There will be one midterm and a final exam. Each is worth 20% of your final grade. Both exams will be closed-note, in-class exams. This work must be done on your own without consulting other students or friends. The final will be cumulative. Each exam will be a combination of short answer, definitions, and computational questions. The format of each exam will be discussed more completely in class when the exam date is closer.

You will need a calculator for both exams. You can purchase a simple one for about $10. You may **NOT** use a smartphone/tablet as your calculator.

Policy on Unexcused Absences and Exams: You are required to be present for all scheduled exams. The only allowable exception to this policy is a documented emergency. If at all possible you should contact the instructor before the exam to discuss the emergency, provide documentation, and schedule the make-up.

Data Analysis Project (25% of final grade)

Over the course of the semester, you will write a data analysis paper in which you will analyze data to evaluate a policy/political science hypothesis of interest to you. There are several deadlines throughout the semester related to this final paper. The purpose of these deadlines is to break up the project and provide opportunities for feedback before the final paper is due. Each is worth 5% of the final grade for the project. Failing to meet one of these deadlines will result in a 0 for that portion of the grade. Refer to the schedule below and the associated assignment on ICON for due dates and more details.

Note: all assignments are expected to be submitted by the date and time listed. Late submissions will result in a 10% penalty for each calendar day late. Exceptions will only be given for personal or medical emergencies and must be discussed with the instructor **before** the deadline whenever at all possible. You are responsible for making sure submissions have been uploaded to ICON correctly.

In-Class Paper Workshop

During the week of April 20, we'll have a paper workshop. The workshop will be via Zoom during scheduled class time. You will share your progress on the final paper with your group and use your peers to get advice/feedback/help. To do this most effectively, you'll circulate a draft of your paper to your group in advance (draft due April 5 at 5:00pm). Your assignment for the day of the workshop will be to read your groupmates' drafts, give your groupmates comments, and discuss your comments with them in class. I find that opportunities like this substantially improve the quality of the final work. Take advantage of this opportunity!

Project Deadlines

- Topic & Hypothesis Selected: **Friday, Feb. 26 at 5pm**
- Data & Analysis Plan: **Friday, Mar. 12 at 5pm**
- Draft of Paper Submitted to Group: **Thursday, Apr. 15 at 5pm**
- Feedback Submitted to Group: **Tuesday, Apr. 20 at 2pm**
- Final Paper Due: **Friday, April 30 at 5pm**

Grading Scale

The grading scale for the course is as follows. Note that grades of A+ are reserved for exceptional circumstances when a student demonstrates intellectual capacity and rigorous scholarship.

Letter Grade	Percentage
A+	99-100
A	93-98
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 or below

Expectations

Technology: Please turn your mobile phones off or to silent mode before class. On exam days your phones must be silent and put away. Laptops are permitted for class purposes only. If you are using your laptops for notes or readings, sign out of everything else so you can focus on mastering the material at hand. There are days in which we will be using statistical software in class. I will try to always give you advanced warning (typically through e-mail or ICON) so you can know to bring your laptops on those days.

Software: We will be using statistical software in this course as we learn how to implement/interpret different statistical tests. We will primarily use Stata to execute these analyses. If you happen to already know a different software that you prefer, that is fine, but I will only provide technical assistance for Stata. While you may purchase a Stata license if you wish, there are free alternatives as students at Iowa. In particular you can access Stata on your laptops through Iowa servers at `https://virtualdesktop.uiowa.edu/`. I strongly recommend becoming familiar with and using your H drive to make accessing your files on the virtual desktop (`https://its.uiowa.edu/support/article/104047`).

Additionally, the political science department has Technology TAs who are available to consult with students in Political Science courses regarding technology that may be required for their homework or research projects. This might include tips on accessing or entering data and doing statistical analyses. Yufan Yang (yufan-yang@uiowa.edu) and Jeongho Choi (jeongho-choi@uiowa.edu) are available to help you! Email them directly to schedule an appointment.

Email: Email is a useful way to ask quick questions. However, replying to long questions about the readings or lectures is highly inefficient for both you and me. If you want to talk about something you don't understand, come by my office hours. In general, while I respond to student emails, I prefer to talk in person. Come see me during office hours! If your question involved Stata, **include a screenshot** of the error message/output you want to discuss.

Contesting a Grade: If a student wishes to have a grade reconsidered, the student must submit a written statement to the instructor within 48 hours of having the graded assignment returned. The written statement must include the student's rational for why additional points should be given. The instructor will then review the written statement and the assignment. After review the instructor has the right to subtract points as well as add points if warranted.