Introduction

POSC 3410 – Quantitative Methods in Political Science

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Goal for Today

Familiarize students with the topic of the course and the instructor's expectations.

Evaluating Arguments in Political Science

How should we evaluate competing arguments in political science?

Arguments in Political Science

Our discipline is ever in pursuit of an "answer", but we have only *answers*.

- Why are Americans intolerant of political difference?
- Why do court justices vote the predictable way they do?
- Why do states fight wars?
- Are democracies really conducive to peace?
- Is a bourgeoisie necessary for democracy?

All these questions and more have competing answers.

- How do we evaluate them?

Quantifying Political Science

The most common method is through the use of inferential statistics.

- Inference about a population can be obtained from a sample of the population.
- Phenomena of interest can be quantified into variables of interest.
- Approriate statistical tools exist that can inform us of general tendency and cause-and-effect.

In short: knowledge is better obtained through quantification and inferential statistics, not hollow rhetoric.

Course Objectives

- Understand concepts and how we operationalize abstract concepts for the sake of testing.
- Delineate variables among various types, like nominal, ordinal and interval.
- Put together a formal research design to address questions of interest in the study of politics.
- Express why the logic of control is vital to any good research design.
- Understand important elements of data, like central tendency and spread.
- Become familiar with advanced topics like non-normal responses, Bayesian thinking, and post-estimation simulation.

Books

- Pollock III, Phillip H. 2012. *The Essentials of Political Analysis*. Washington DC: CQ Press, 4th edition
- Lynch, Scott M. 2013. *Using Statistics in Social Research: A Concise Approach*. New York, NY: Springer

Grading Policy and Important Dates

- Midterm: (September 24) [**20%**]
- Three problem sets: (due periodically through semester) [**20%**]
  - You also have a prospectus (October 8), which will be graded as a problem set.
- Research design paper: (due *before* December 4, 9 a.m.) [**20%**]
  - See syllabus for pertinent information.
- Final: (December 11, 11:30 a.m.) [**30%**]

Attendance and participation will be the final 10% of your grade.

Lab Policy

When you enroll in POSC 3410, you also have to enroll in POSC 3411 (the lab).

However, there is no "lab" portion of this class.

- There is homework, but this can be done on your laptop in your dorm/apartment.
- These are part of the 3410 grade, not 3411.

However, I welcome students who want free statistical consulting!

- If you're serious about applied statistics, let me know.
- Preference will be given to instruction in the R language.

The R Programming Language

Your homework will be done in the R programming language.

- It's a *free* and open source programming language preferred by statisticians.
- Download it from cran.r-project.org.
- **Recommended:** download and install Rstudio afterward, available for free at rstudio.com.

R scripts designed me should work with minimal maintenance.

- I'll make directions clear in the homework.

I will assume that not meeting with me means the student is fluent with the software.

- I put together a beginner's guide on the course website.

Course Policies

Read the syllabus. I'll reiterate the following:

- **Attendance**: Effectively mandatory. You get five unexcused absences.
- **Participation**: I may "cold-call" you to answer a question.
  - You should *at least* give a convincing partial answer.
  - If you don't (or are absent), you'll get a point deduction from your overall grade.
- **Make-up Exams**: Don't bother asking. The answer is no.
- **Cell phones, laptops, etc.**: Put them away.
- **Academic dishonesty**: Don't be that guy...
- **Disabilities**: let me know ASAP (privately) if you need accommodations
  - Student must initiate the process *each semester*.
  - Student must schedule room at testing center (if necessary).

My Contact Information

- *Name*: Steve Miller (as in the band)
- *E-mail*: svmille@clemson.edu
- *Office Hours*: Wednesday: 9-11:30 a.m.
- *Office*: 230A Brackett Hall
- *Website*: svmiller.com/teaching

Additional Course Materials

I don't like Blackboard. I only intend to use it for:

- Turnitin (and grading the Turnitin assignments)
- Classwide e-mails

I do like making lectures publicly available, though.

- Check course website at svmiller.com
- Check my Github repository (just in case): github.com/svmiller/posc3410

My Expectations

I come off as a bit cruel in my expectations.

- I expect a lot, and I expect a commitment from you.
- Otherwise, why bother? Your job is to become "pro-ready".

I also expect it to be a bit difficult for you.

- My philosophy: if you 100% understand something the first time you read it, you didn't learn anything.
- Read and re-read if necessary.
- Lectures should help, but they're not sufficient. You need to read.

I take seriously the "science" of political science.

- This may not be intuitive, but I'm also eager to help in-class or office hours.

I don't care for whom you'll vote or what you saw on TV. *Don't bring it up*.

Etiquette Concerns

In-class:

- Raise your hand and ask a question the *moment* something doesn't make sense.
  - I do have a bad habit of talking a bit fast.
- *Do the reading before class*. Seriously.
- Resist the urge to write down every word on a slide.
  - Listening is more important than reading in this context.

Etiquette Concerns

Outside class:

- **Resist the urge** to e-mail me if you missed a class (for which there wasn't an exam).
  - Short answer: you missed what was on the syllabus.
- Please use conventional e-mail etiquette.
  - This is a good professional exercise for you.
- I'm usually in my office Tuesday and Thursday mornings before class.
- Knock first, even when the door is open.
- You may not use my office supplies.
- I am not a study session. Come prepared with something specific to ask or discuss.

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