## SOC-5811 Week 1: Introduction

#### Nick Graetz

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9/3/2025





► Background





#### INTRODUCTION TO ME

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  - ► BS at Wisconsin (psychology and political science)



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  - ▶ 3 years post-doc at Princeton
  - 1 year here at Minnesota
- ▶ 12 years of coding/stats experience





#### Introduction to the course

► It's easy to feel totally overwhelmed and totally behind. Quantitative methods can seem like a huge list of rules that you just don't "get" - and have no hope of ever understanding. **This is not true.** 



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- ► I've been doing this for 12 years and still don't know things and get stuck. I will spend all day working on a problem and finish with the deflating feeling that I know that "shouldn't" have taken me all day.
- ▶ But, many things take me 15 minutes today that took me 3 hours last year, or all day three years ago.







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- People may have also had access to very different opportunities around math/stats up to this point - or very negative experiences.
- ► This course will be a space where it's very important to ask questions and be confused.







# HOW DO WE UNDERSTAND QUANTITATIVE METHODS?

► First principles — Heuristics



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- ► First principles Heuristics
- ► A critical skill is being able to know where your understanding is and where you want it to be.



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- ► First principles Heuristics
- ► A critical skill is being able to know where your understanding is and where you want it to be.
- ▶ It's very common to take a math/stats course that focuses a lot on first principles, say "why do I need to know this?", and give up on any level of understanding.



# WHY SHOULD WE UNDERSTAND QUANTITATIVE METHODS (AND CODING)?

▶ There is some inherent value. Quantitative methods can provide empirical, falsifiable facts about the social world (but not what those facts mean!); for example, how did different groups vote in 2024, and was this different from how those groups voted in 2020?



# Why should we understand quantitative methods (and coding)?

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- ▶ **They will be used in your field.** You will have to understand and critique quantitative studies, even if they are outside the methodology you use in your own research.
- Non-academic careers.
- Organizing/advocacy.





# STRUCTURE OF THE COURSE

► Lectures



# STRUCTURE OF THE COURSE

- ► Lectures
- ► Lab





# STRUCTURE OF THE COURSE

- ► Lectures
- ► Lab
- Grading





# **CODING**

Extensive use of R





# **CODING**

- ► Extensive use of R
- ▶ We will review in class and lab



8/8

### **CODING**

- ► Extensive use of R
- ▶ We will review in class and lab
- ► Make use of free resources



