

Quant II

Lab 1

Sylvan Zheng

2024-01-30

Hi!

- Sylvan Zheng, 4th year PhD.

Hi!

- Sylvan Zheng, 4th year PhD.
- Fields: American Politics, Methods

Hi!

- Sylvan Zheng, 4th year PhD.
- Fields: American Politics, Methods
- Email: saz310@nyu.edu

Hi!

- Sylvan Zheng, 4th year PhD.
- Fields: American Politics, Methods
- Email: saz310@nyu.edu
- Office: 421

Logistics

- Lab materials will be posted on the lab's GitHub repo:
<https://github.com/squidgetx/quant2-labs-spring2025>
- Materials for future labs subject to change

The purpose of lab

- Build intuition for lecture material

The purpose of lab

- Build intuition for lecture material
- More simulation / empirical and less analytical

The purpose of lab

- Build intuition for lecture material
- More simulation / empirical and less analytical
- Get familiar with professional tools for conducting/communicating research (eg, R and RMarkdown)

The purpose of lab

- Build intuition for lecture material
- More simulation / empirical and less analytical
- Get familiar with professional tools for conducting/communicating research (eg, R and RMarkdown)
- Space to ask questions both conceptual and practical

Today's Lab

- **Getting set up with RMarkdown**

Today's Lab

- **Getting set up with RMarkdown**
- **Potential outcomes and ATES**

Today's Lab

- **Getting set up with RMarkdown**
- **Potential outcomes and ATES**
- **Sampling and Estimators**

Today's Lab

- **Getting set up with RMarkdown**
- **Potential outcomes and ATES**
- **Sampling and Estimators**
- ~~DAGs~~ (we will get more into DAGs in future sessions)

RMarkdown

- Tool that combines R, LaTeX, and Markdown

RMarkdown

- Tool that combines R, LaTeX, and Markdown
- Create **reproducible** documents

RMarkdown

- Tool that combines R, LaTeX, and Markdown
- Create **reproducible** documents
- Combine text, code, and analysis results

RMarkdown

- Tool that combines R, LaTeX, and Markdown
- Create **reproducible** documents
- Combine text, code, and analysis results
- Your homework must be prepared using RMarkdown or similar tools

Package: Here

- [KVR Example]

Package: Here

- [KVR Example]
- Use the Here package

Package: Here

- [KVR Example]
- Use the Here package
- Works either with `.Rproj` or `.herefile`

Demonstration/In-Lab Assignment

- [See the `lab1.Rmd/lab1.pdf` in the Github]