

Welcome to Gov 2003!

Fall 2021

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Gov 2003 (Harvard)

Why causal inference?

- Social science theories are almost always **causal** in nature.
- We should understand when our methods can have a causal interpretation.
- Manki: “data + assumptions = conclusions”
 - Causal inference is about making assumptions and conclusions more **transparent**.
- The old way was kitchen sink regression + causal weasel words:
 - “associated with”, “leads to”, “the [causal?] effect of”, “[in|decreases]”, “more likely”, “encourages”, “is linked to”, “correlated”, “predicts”
- Credibility/causal revolution: pick a causal estimand and a research design to identify it.

- Instructor: Matt Blackwell
- Teaching Fellow: Sooahn Shin

Teaching resources

- Lecture: general theoretical and practical issues.
 - Goal is to be recorded and uploaded fairly quickly.
- Section: more targeted examples with an eye toward assignments.
- Canvas site: place for all the course materials
 - Lecture notes, section materials, etc.
- Gradescope: submitting assignments.
- Ed Board: discussion of course material.
- Slack: logistical and social discussion, DMs for help/study groups
- Office Hours: ask even more questions.

- Responsibility = material covered in lectures.
- Good books that I'll draw upon:
 - Imbens & Rubin: fairly technical, but covers basics well.
 - Hernan & Robins: slightly less technical, more biostat influence.
 - Angrist & Pischke: most readable, opinionated, a bit narrow.
 - Morgan & Winship: good combo of potential outcomes and graphs.

- Problem sets (50%)
 - There will be 9 problem sets, you are only responsible for 8 (we'll drop the lowest score).
 - Mix of analytic review questions and empirical applications of methods.
 - Go out on Thursdays and due the following Wednesday, formatted nicely.
- Final collaborative project (40%)
 - short (< 20 pg) research paper either applying or extending a method from the class.
 - Milestones throughout term: find group by **Sept 17th** and submit half-page proposal by **Oct 10th**
- Participation (10%)
 - Asking questions in lecture, section, asking/answering questions on Ed/Slack.
 - Not really intended to hurt your final grade.