



Williams College ECON 523:

Program Evaluation for International Development

**Lecture 0: Intro to the Course**

Professor: Pamela Jakiela

photo: Daniella Van Leggelo-Padilla / World Bank

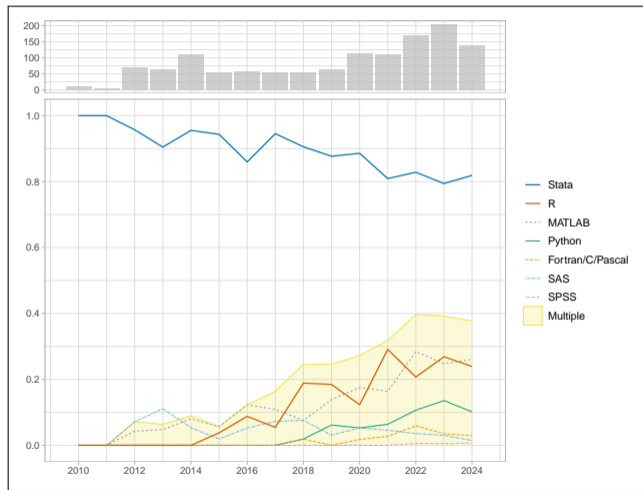
# What This Course Is About

- Framework: potential outcomes, selection bias, linear regression
- Identification strategies: RCTs, DD, IV, RD
- Randomized evaluations: implementation, power calculations, clustering, analysis, controls
- How to code for data analysis (transparent and reproducible social science)

# Course Logistics

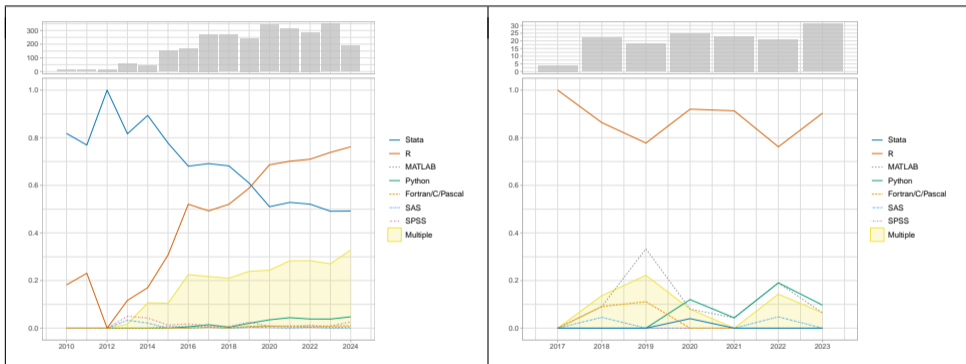
- Class meetings: Monday, Wednesday, Friday from 11:00 AM to 12:15 PM in 211 CDE
  - ▶ Mondays = lecture, Wednesdays = Stata lab, Fridays = R/Python lab\*
- Instructor: Professor Pamela Jakiela ([pj5@williams.edu](mailto:pj5@williams.edu))
  - ▶ Office hours: Fridays from 2:00 to 4:00 PM in 339 Schapiro or by appointment
- Teaching Assistant: Agustin Aliaga ([aa22@williams.edu](mailto:aa22@williams.edu))
  - ▶ Office hours: Sundays from 7:00 to 9:00 PM at the CDE (somewhere)
- Prerequisites: ECON 255, ECON 503, ECON 502 + 53, STAT 346
- Course websites:
  - ▶ <https://pjakiela.github.io/ECON523/> (course materials)
  - ▶ <https://www.gradescope.com/courses/977010> (submitting assignments)

# Stata vs. R vs. Python in Economics



Source: Cai, Jakiela, Ozier, Raman, Upton, Zimmerman (2025)

# Stata vs. R vs. Python in Statistics and Political Science



Source: Cai, Jakiela, Ozier, Raman, Upton, Zimmerman (2025)

# Getting Started in Stata, R, or Python

- Download Stata 18 from Williams OIT (if you haven't already)
  - ▶ Williams' Stata tutorials: <https://pjakiela.github.io/stata/>
- If you are interested in using R:
  - ▶ Download R and R Studio: <https://posit.co/download/rstudio-desktop/>
  - ▶ R is also available through google's colab (see below)
  - ▶ Hadley Wickham's R for Data Science (2e) is a good primer: <https://r4ds.hadley.nz/>
- If you are interested in using Python:
  - ▶ I recommend using Python through google colab: <https://colab.research.google.com/>
  - ▶ For Python on your computer:
    - ▶ Install Anaconda distribution (but not the navigator), run Python with Spyder

# Assignments, Grading, and Important Dates

<b>Assignment(s)</b>	<b>Date(s)</b>	<b>Points</b>
One-on-one coding assessments	Weeks of 3/17–3/21 and 5/12-5/16	30 points
Empirical exercises	Every week	25 points
Replication project	Due March 21*	12 points
Pre-analysis plan project	Due May 16*	12 points
Final exam	During the final exam period	12 points
In-class worksheets	March 10, April 28	4 points
Class participation	Every class meeting	4 points
Getting-to-know-you survey	Now	1 point

# To Do List

- Read the syllabus
- Complete the Getting to Know You Survey
- Readings for next week:
  - ▶ Mostly Harmless Econometrics, Chapter 1
  - ▶ Optional: *Impact Evaluation in Practice*, Chapter 3 (“Causal Inference and Counterfactuals”)
  - ▶ J-PAL: A Balancing Act
  - ▶ Optional: “Price Subsidies, Diagnostic Tests, and Targeting of Malaria Treatment: Evidence from a Randomized Controlled Trial” by Cohen, Dupas, and Schaner (AER, 2015)
- Make sure you are ready to work in Stata, R, or Python by Wednesday/Friday