INTL4004: Data Analytics for International Policy
Instructor: Ishtiaque Fazlul
Semester: Fall 2025
Classroom and Time: Zell B Miller Learning Center 0207; 3:55 – 5:10 PM

Instructor Information

• Instructor: Ishtiaque Fazlul
• Office: Candler Hall 318
• Email: ifazlul@uga.edu
• Drop-in Hours: Tuesdays and Thursdays 12:00 to 1:00 PM

Course Description

This course will equip students with the skills to turn data into policy insights. It will provide students with the tools to critically examine, analyze, understand, and present policy-related data to a broad community. Although the focus is on data analytics, no background in statistics is expected or required. The course will provide an overview of using Stata, a leading statistical software package used by social scientists and policy scholars. At the end of the course, students will be able to claim a working knowledge of Stata, quantitative data analysis, causal inference, program evaluation, and survey methods.

Course Objectives

By the end of this course, students will be able to:

- Understand and apply basic causal inference techniques.
- Conduct data analysis using Stata.
- Design and analyze survey experiments.
- Utilize geospatial data and large datasets in policy context.
- Utilize administrative and archival data in policy analysis.
- Interpret and communicate analytical results effectively.

Required Texts and Materials

- Michael A. Bailey, Real Econometrics: The Right Tools to Answer Important Questions, Oxford University Press, 1st or 2nd edition.
- Access to Stata in class on a laptop computer (instruction in eLC).
- Access to eLC for articles, readings, problem sets, announcements and more.

Assessment

- Problem sets: 80%
- Pop quizzes: 10%
- Class attendance and participation: 10%

Course Components

Problem sets (80% of final assessment)

Starting from Week 2, you'll have an application problem set available every week or two. The tentative course schedule at the end of this syllabus has the exact due dates for each of these problem sets. The problem set will require you to apply the skills covered in the course materials, typically using Stata. All problem sets should be turned in at eLC. If you miss a

due date for a problem set, you can still turn these problem sets in late for a penalty according to the rubric. The following rubric will be used to assess the quality of your problem sets.

Rubric for Application Problem Set				
Components	Unacceptable	Acceptable	Good	Excellent
Problem Set Attempted (20%)	Problem set not turned in by the last class of the semester (Dec 2nd) 0%	An unfinished problem set turned in by the last class of the semester (Dec 2nd) 10%		The full problem set (each problem attempted) turned in by the last class of the semester (Dec 2nd) 20%
Problem Set Turned in on Time (20%)	Problem set not turned in by the due date listed on eLC 0%			Problem set turned in by the due date listed on eLC 20%
Analysis Itself (30%)	Analysis is incomplete or incorrect with no documentation (do file & log file) provided 0%	Analysis is incomplete or incorrect in some large part, but documentation (do file & log file) provided, shows some large issue with application and problem-solving 10%	Analysis is incomplete or incorrect in some small part, but documentation (do file & log file) provided, shows some minor issues with application and problem-solving 20%	Analysis is complete and correct; documentation (do file & log file) provided 30%
Analytical Write-Up (30%)	No attempt made to communicate analysis results and substantive meaning for policy 0%	An attempt is made to communicate analysis results and substantive meaning for policy, but serious errors remain, or discussion is incomplete 10%	A good attempt is made to communicate analysis results and substantive meaning for policy, some minor errors remain, or discussion is incomplete 20%	A complete analysis of the results is clearly communicated, and the substantive meaning of the results for policy is provided 30%

Note that grades are due soon after the end of the semester. As such, I will not accept submission of graded work after the last class of the semester (Dec 2nd).

Pop quizzes (10% of final assessment)

There will be at least two pop quizzes in the semester. These will require you to apply the skills covered in the course materials.

Class attendance and participation (10% of final assessment)

You are expected to attend and participate in class. Attending every class and asking questions is the best way to succeed in this course.

Grading Scale

Your final grade will be calculated on the following scale:

- 94 to 100 - A
- 90 to 93.9 - A-
- 87 to 89.9 - B+
- 84 to 86.9 - B
- 80 to 83.9 - B-

- 77 to 79.9 - C+
- 74 to 76.9 - C
- 70 to 73.9 - C-
- 60 to 69.9 - D
- 59 and below - F

Software & AI

Software

This course will use the statistical software Stata. We've been lucky enough to get special access to Stata for you for 6 months. I'll be posting information on this in the course page in eLC. If you want to continue using Stata after the end of the semester, you can purchase a perpetual license ($225 - https://www.stata.com/ order/new/edu/profplus/student-pricing/).

To note, you have access to Stata through the vLab: https://eits.uga.edu/support/vlab/. However, I strongly recommend you download Stata yourself using the instructions on eLC.

If you have a Stata coding related question, do the following
- Stata has a good users guide under Menu > Help > PDF documentation > User's Guide [U]. Browse through this, at least the Stata Basics section.
- Come to my office hours or catch me after class and ask me!
- If you know the command, type "help" followed by the command in a Stata window to find documentation on that command.
- You can just google your question. You will find that Statalist (www.statalist.org) forums have a lot of Stata experts and you will find answers to most of your questions in some forum there.

AI Policy

To ensure you develop and master the foundational knowledge and skills in this course, the use of generative AI (GAI) tools in solving problem sets is strictly prohibited. Also, note that ChatGPT often gives wrong information on Stata coding, and you are better off doing your own research on statalist, googling, consulting the Stata user's guide, and talking to me to solve coding issues. This prohibition extends to AI writing tools like Grammarly and Wordtune, as well as GAI tools like ChatGPT, Copilot, Writesonic, Rytr, and Rtutor. If you are uncertain about using a particular tool to support your work, please consult with me before using it.

Useful Information and University Policies

Phone, Tablet, and Laptop Usage in Class

I do not allow the use of phones in class. Laptop usage is only allowed for in-class Stata exercise or note-taking. Tablet usage is only allowed for notetaking.

Tips for Succeeding in This Course

- Attend class! At times the material in this course can be difficult. Class provides the best opportunity to understand the material and ask questions.
- Complete the problem sets. The problem sets are designed to help you apply the concepts we cover in class.
- Form a study group with some of your classmates. You are allowed and encouraged to work with each other on the problem sets. However, each of you have to prepare and submit your own work for the problem sets and will be graded individually.
- Come to my office hours! I am always happy to answer questions about the course material.

Prohibition on Recording Lectures

The following is copied from here: https://spia.uga.edu/wp-content/uploads/2024/01/Prohibition-on-Recording-Lectures.pdf

"In the absence of written authorization from the UGA Disability Resource Center, students may not make a visual or audio recording of any aspect of this course. Students who have a recording accommodation agree in writing that they:

- Will use the records only for personal academic use during the specific course.
- Understand that faculty members have copyright interest in their class lectures and that they agree not to infringe on this right in any way.
- Understand that the faculty member and students in the class have privacy rights and agree not to violate those rights by using recordings for any reason other than their own personal study.
- Will not release, digitally upload, broadcast, transcribe, or otherwise share all or any part of the recordings. They also agree that they will not profit financially and will not allow others to benefit personally or financially from lecture recordings or other course materials.
- Will erase/delete all recordings at the end of the semester.
- Understand that violation of these terms may subject them to discipline under the Student Code of Conduct or subject them to liability under copyright laws."

University Honor Code and Academic Honesty Policy

UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at https://honesty.uga.edu/Academic-Honesty-Policy/

I expect that the Student Honor Code will guide your efforts in this course. A lack of knowledge of the academic honesty policy does not explain a violation. Please email me with any questions.

Disability Services

If you plan to request accommodations for a disability, please register with the Disability Resource Center. They can be reached by visiting Clark Howell Hall, calling 706-542-8719 (voice) or 706-542-8778 (TTY), or by visiting http://drc.uga.edu

Well-being Resources

UGA Well-being Resources promote student success by cultivating a culture that supports a more active, healthy, and engaged student community.

Anyone needing assistance is encouraged to contact Student Care & Outreach (SCO) in the Division of Student Affairs at 706-542-8479 or visit sco.uga.edu. Student Care & Outreach helps students navigate difficult circumstances by connecting them with the most appropriate resources or services. They also administer the Embark@UGA program which supports students experiencing, or who have experienced, homelessness, foster care, or housing insecurity.

UGA provides both clinical and non-clinical options to support student well-being and mental health, any time, any place. Whether on campus, or studying from home or abroad, UGA Well- being Resources are here to help.

- Well-being Resources: well-being.uga.edu
- Student Care and Outreach: sco.uga.edu
- University Health Center: healthcenter.uga.edu
- Counseling and Psychiatric Services: caps.uga.edu or CAPS 24/7 crisis support at 706- 542-2273
- Health Promotion/ Fontaine Center: healthpromotion.uga.edu
- Disability Resource Center and Testing Services: drc.uga.edu

Additional information, including free digital well-being resources, can be accessed through the UGA app or by visiting https://well-being.uga.edu.

Disclaimer

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Tentative Course Schedule*

Week	Topics	Assignments
Week 1 **8/11**	• Welcome and course overview • Why data for policy using Cukier, Kenneth, and Viktor Mayer-Schoenberger. 2013. "The rise of big data: How it's changing the way we think about the world." *Foreign Affairs* • The quest for causality (Real Metrics Ch. 1)	• Read The quest for causality (Real Metrics Ch. 1) • Why data for policy using Cukier, Kenneth, and Viktor Mayer-Schoenberger. 2013. "The rise of big data: How it's changing the way we think about the world." *Foreign Affairs* • Read Stats in the Wild: Good Data Practices (Real Metrics Ch. 2)
Week 2 **8/18**	• Exploratory data analysis (Real Metrics Ch. 2) • Application data analysis	• Read Bivariate OLS (Real Metrics Ch. 3) • Read "Regression Analysis: Stata Annotated Output" • Problem set 1 available (Due 8/28)
Week 3 **8/25**	• Bivariate OLS (Real Metrics Ch. 3) • "Regression Analysis: Stata Annotated Output" • Application data analysis	• Read Multivariate OLS (Real Metrics Ch. 4) • Problem set 2 available (Due 9/4)
Week 4 **9/1**	• Multivariate OLS (Real Metrics Ch. 5) • Application data analysis	• Read Multivariate OLS (Real Metrics Ch. 4)
Week 5 **9/8**	• Multivariate OLS (Real Metrics Ch. 5) • Application data analysis	• Read Dummy independent variables (Ch. 6) • Problem set 3 available (Due 9/18)
Week 6 **9/15**	• Dummy independent variables (Real Metrics Ch. 6) • Application data analysis	• Read Dummy dependent variables (Ch. 12) • Read Datta, B. K., Ashwini Tiwari, and Ishtiaque Fazlul. (2022). "Child marriage and risky health behaviors: Tobacco use among child brides in adulthood in India." *BMC Women's Health.*
Week 7 **9/22**	• Dummy dependent variables (Real Metrics Ch. 12) • Datta, B. K., Ashwini Tiwari, and Ishtiaque Fazlul. (2022). "Child marriage and risky health behaviors: Tobacco use among child brides in adulthood in India." *BMC Women's Health.* • Application data analysis	• Read Fighting endogeneity – Fixed effect and Difference in differences (Ch. 8) • Problem set 4 available (Due 10/2)
Week 8 **9/29**	• Fighting endogeneity – Fixed effect and Difference in differences (Real Metrics Ch. 8) • Application data analysis	• Read Fighting endogeneity – Fixed effect and Difference in differences (Ch. 8)
Week 9 **10/6**	• Fighting endogeneity – Fixed effect and Difference in differences (Real Metrics Ch. 8) • Application data analysis	• Read Cohen, Dara Kay, and Ragnhild Nordås. 2014. "Sexual violence in armed conflict: Introducing the SVAC dataset, 1989-2009." *Journal of Peace Research* and • Read Sundberg, Ralph, and Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research.* • Problem set 5 available (Due 10/16)

Week	Topics	Assignments
Week 10 **10/13**	• Maps and graphic data • Cohen, Dara Kay, and Ragnhild Nordås. 2014. "Sexual violence in armed conflict: Introducing the SVAC dataset, 1989-2009." *Journal of Peace Research.* • Sundberg, Ralph, and Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research.* • Application data analysis	• Experiments, survey experiments (Ch. 10) • Druckman, James N., and Donald P. Green. "A New Era of Experimental Political Science." Advances in Experimental Political Science (2021). Chapter 1. • Problem set 6 available (Due 10/23)
Week 11 **10/20**	• Experiments, survey experiments (Real Metrics Ch. 10) • Druckman, James N., and Donald P. Green. "A New Era of Experimental Political Science." Advances in Experimental Political Science (2021). Chapter 1. • Application data analysis	• Experiments, survey experiments (Ch. 10) • Druckman, James N., and Donald P. Green. "A New Era of Experimental Political Science." Advances in Experimental Political Science (2021). Chapter 1.
Week 12 **10/27**	• Experiments, survey experiments (Real Metrics Ch. 10) • Druckman et al (2021), chapter 1 • Application data analysis	• Read Glaeser, E. L., Kim, H., & Luca, M. (2018). Nowcasting gentrification: using yelp data to quantify neighborhood change. *AEA Papers and Proceedings.* • Problem set 7 available (Due 11/6)
Week 13 **11/3**	• Large datasets • Glaeser, E. L., Kim, H., & Luca, M. (2018). Nowcasting gentrification: using yelp data to quantify neighborhood change. In *AEA Papers and Proceedings.* • Application data analysis	• Read Lee, Alexander. 2015. "How (and How Not) to Use Archival Sources in Political Science." and • Braun, Robert. 2016. "Religious Minorities and Resistance to Genocide: The Collective Rescue of Jews in the Netherlands during the Holocaust." *American Political Science Review.*
Week 14 **11/10**	• Administrative data, archival data • Lee, Alexander. 2015. "How (and How Not) to Use Archival Sources in Political Science." • Braun, Robert. 2016. "Religious Minorities and Resistance to Genocide: The Collective Rescue of Jews in the Netherlands during the Holocaust." *American Political Science Review.* • Application data analysis	• Read Lee (2015) and Braun (2016)
Week 15 **11/17**	• Administrative data, archival data • Read Lee (2015) and Braun (2016) • Application data analysis	• Problem set 8 available (Due 11/27)
Week 16 **11/24 **	• Thanksgiving holiday	
Week 17 **12/1 ***	• TBD	

* I reserve the right to change this schedule. I will notify students of any changes via eLC or in class.

Find important dates for Fall 2025 here: https://reg.uga.edu/general-information/calendars/academic-calendars/

** No class on November 25, Tuesday as I will be travelling for the Southern Economic Association Conference. No class on November 27th, Thursday for Thanksgiving.

*** Last class of the semester on 12/2.