Data Analytics and Presentation for International Policy Professionals

INTL 7007 | Spring 2026

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Course Information

Instructor:	Dr. Camila Lívio
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Time:	Wednesdays 8:35 – 11:15am
Place:	214, Candler Hall
Office Hours:	Thursdays, Noon to 2pm and by appointment @ 110 E Clayton St 5th Floor #511

Course Books

This course is structured around the following books. Supplemental readings and materials will be available on eLC.

- *Data Analysis for Social Science: A Friendly and Practical Introduction* — available for purchase
- *Hands-On Programming with R*
- *R for Data Science* — available for free in English, Spanish, Italian, Turkish, and Portuguese

Course Readings and Software

We will use *Data Analysis for Social Science: A Friendly and Practical Introduction* as a general guide for our course. Information on downloading R and RStudio, as well as using GitHub, is available in the book and in supplemental materials on eLC. I expect you to have completed the readings before each class.

Throughout this course, you will use the following platforms:

Platform	Purpose
R and RStudio	Write and run code for your assignments
GitHub Classroom	Complete and submit your labs
eLC	Access course syllabus, supplemental readings, upload written assignments, and track your grades

Course Description

As an international policy professional, you will need to stay up to date on data projects that could influence international policy and know how to present data effectively within the policy community. This course provides you with tools to find, critically examine, analyze, and present data to a broad audience. Although the focus will be on data analysis, no background in statistics or coding is required.

In this course, we will use R, a statistical programming language, to help you work with existing datasets and create your own data for policy analysis. I will also introduce other software tools that may be useful for your career.

Within the course of the Spring semester, we will learn to think about and manipulate data in the social sciences to measure, predict and explain a quantity of interest that will help you analyze the phenomenon you are interested in. We will also discuss different types of data and biases.

Objectives

This course is primarily designed to:

- Develop the ability to locate, critically evaluate, and analyze data in the social sciences.
- Gain practical skills in using R and other analytical tools to work with existing datasets and create original data for policy analysis.
- Learn to communicate data-driven insights effectively to diverse policy audiences and understand how data is used in real-world international policy careers.

Grading

Your course grade will be calculated as follows:

Component	Weight
Labs	60%
Final Project	25%
Critical Review of Data (*Data in Review*)	15%

Labs

Learning how to read, interpret, and generate knowledge from data entails practice, making mistakes, and asking questions. Our labs are designed for exactly this—they follow the statistical concepts and commands introduced in the book. Some labs will be completed during class time, while others will require work between classes.

Final Project

Using the tools and concepts learned in this class, you will prepare a 5–10 page (double-spaced) final project on a topic of your choice. You will present your findings during our last class meeting in a poster reception format, where visitors may join to view and discuss your work. A rubric will be provided.

Critical Review of Data

A key component of this class is exposure to existing international affairs datasets and the ability to critically evaluate their quality and usability. For this assignment, you will work in pairs and present your findings (typically at the beginning of class). Your presentation should include: (1) a general overview of the data, (2) written notes outlining the resource, relevant links, and references (1–2 pages), and (3) your evaluation of the dataset's strengths and potential limitations. A rubric will be provided.

Grading Scale

Your final grade will be calculated on the following scale:

Grade	Range	Grade	Range
A	94–100	**C+**	77–79.9
A-	90–93.9	**C**	74–76.9
B+	87–89.9	**C-**	70–73.9
B	84–86.9	**D**	60–69.9

Grade	Range	Grade	Range
B-	80–83.9	**F**	59 and below

Class Policy

Regular attendance is essential and expected. Extensions or makeup assignments are generally not permitted. If you think you have an exceptional circumstance, please discuss it with me outside of class.

Use of Large Language Models Policy

This course incorporates the use of Large Language Models (LLMs) as tools for coding assistance and code comprehension. However, students are expected to interpret all analytical outputs independently, without LLM assistance.

Academic Honesty

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 www.uga.edu/ovpi. 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.

Accessibility and Testing

If you plan to request accommodations for a disability, please register with Accessibility and Testing (formerly Disability Resource Center). They can be reached by visiting Clark Howell Hall, calling 706-542-8719 (voice) or 706-542-8778 (TTY), or online at accessibility.uga.edu. We are committed to helping all students succeed in this course.

Mental Health and Wellness 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
- **Accessibility and Testing Center:** accessibility.uga.edu

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

Changes to the Syllabus

This syllabus serves as a general plan for the course. Any necessary changes will be communicated in class or via email.

Class Schedule

January 14: Lecture 1 — Introduction to Course and Why Data in the Policy Community

- Syllabus and general information on the course
- Cukier, K. N., & Mayer-Schönberger, V. (2013, May/June). *The rise of big data: How it's changing the way we think about the world.* Foreign Affairs.
- Hands-On Programming with R
  - Appendix A1-4: Installing R and RStudio
  - Part I: Weighted Dice, The Very Basics, Packages and Help Pages

January 21: Lecture 2 - R: The Basics

- R for Data Science
  - Coding Basics, Comments, Naming, Calling Functions
- How to use LLMs for coding
- Pair programming

January 28: Lecture 3 — Why data analysis?

- Llaudet, E., & Imai, K. (2023). *Data analysis for social science: a friendly and practical introduction.* Princeton University Press.
  - DASS - Chapter 1 and 2 (until 2.4)
  - Lab 1; in class practice

February 4: Lecture 4 — Do Small Classes Improve Student Performance?

- DASS - Chapter 2 (Starting on 2.5)
- Getting to know GitHub Classroom
- Pair programming

February 11: Lecture 5 — Inferring Population Characteristics from Surveys

- Data in Review
- DASS - Chapter 3 (until 3.5)
- Lab 2 is due

February 18: Lecture 6 - Descriptive Statistics

- Data in Review
- DASS - Chapter 3 (starting on 3.5)
- Pair programming

February 25: Lecture 7 - Predicting Outcomes Using Linear Regression

- Data in Review
- DASS - Chapter 4 (until 4.5)
- Lab 3 is due

March 4: Lecture 8 - Predicting GDP Growth Using Night-Time Light Emissions

- Data in Review
- DASS - Chapter 5 (p. 116-128)
- Pair programming

March 11: SPRING BREAK

- Spring Break!

March 18: Lecture 9 - Estimating Causal Effects with Observational Data

- Data in Review
- DASS - Chapter 5
- Information session on Final Projects
- Lab 4 is due

March 25: Lecture 10 - Probability

- Data in Review
- DASS - Chapter 6 (until p. 179, 6.5)
- Pair programming

April 1: Lecture 11 - Probability (part II)

- Data in Review
- DASS - Chapter 6 (p. 179-195)
- Lab 5 is due

April 8: Lecture 12 - Quantifying Uncertainty

- Data in Review
- DASS - Chapter 7 (until p.211, 7.3)
- Pair programming

April 15: Lecture 13 - Hypothesis Testing

- Data in Review
- DASS - Chapter 7 (p.211-229)
- Lab 6 is due

April 22: Lecture 14 - Final Projects

- Final Project Festival