

INTL 7007: Data Analytics and Presentation for International Policy Professionals

Wednesdays, Starting at 1:50 pm

Fine Arts Building 201

Spring 2022

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Office Hours: Thursdays, 10:30-12:30 and by appointment

Course Description and Objectives

As an international policy professional, you will have to be up-to-date on data projects that could influence international policy and know how to present data within the policy community. This course provides you with tools that will help you find, critically examine, analyze, and present international policy data to a broad community. Although the focus will be on data analytics, **no background in statistics is expected or required**. We will be using multiple data software tools to help you work with existing datasets and/or create your own data for the policy community. Each week will focus on different datasets and data structures that you could be using as a policy professional. Whenever possible, I will organize Q-&-A Zoom sessions with policy professionals where we will ask them questions about how they use data in their current careers.

Grading

Your course grade is calculated from the following components:

- **55%** - Practice Sets
- **10%** - Critical Review of Existing Dataset
- **25%** - Final Policy Memo and Academic Poster
- **10%** - Active Participation

Practice Problem Sets

Throughout the semester, you will be required to “get your hands dirty” with existing data and examine an existing dataset and provide some answers to policy questions using the data. Some of these assignments will be completed during class time; other assignments will require work between classes.

Critical Review of Existing Dataset

For the dataset presentation, you will (1) present a general overview of a dataset chosen from the related datasets section of the course reading list, (2) provide the class with typed notes (1-2 pages) that outline the source, coverage, and overview of the dataset (to be uploaded to eLC before the class meeting), and (3) provide a five minute general overview of the strengths and weaknesses of the dataset and how it connects to what we have gone over for the class. If multiple people sign up for the same dataset, the presentation will take the form of a general Q&A with all presenters. The goal of this assignment is to increase familiarity with common datasets used in international policy.

We will get a calendar of presentations together during the first class.

Final Policy Memo

Using the tools we have discussed in class, you will prepare a 5-10 page (double-spaced) policy memo on a topic of your choice that makes extensive use of the tools discussed in class. At our last class meeting, you will present an academic poster of your main findings in a poster reception.

Active Participation

I have also allotted 10% of your grade to *participation*. To receive full credit for the participation component of this grade, please make it clear that you have read and reflected on the readings, Offering tangential or off-topic comments will harm your grade.

Grading Scale:

Your final grade will be calculated on the following scale:

- 94 to 100 - A
- 90 to 93.9̄ - A-
- 87 to 89.9̄ - B+
- 84 to 86.9̄ - B
- 80 to 83.9̄ - B-
- 77 to 79.9̄ - C+
- 74 to 76.9̄ - C
- 70 to 73.9̄ - C-
- 60 to 69.9̄ - D
- 59 and below - F

Useful Information and University Policies

Attendance Policy and Make Up Policy

Attendance is not required this semester. As stated above, however, 10% of your grade is based on participation. I am willing to work with you to make up any work that you miss without penalty. However, please plan to turn in all assignments on time. Problem sets will generally be due a week after they are assigned throughout the semester. Your dataset presentation and final policy memo also have set due dates. Your final policy memo rubric does include a component based on timely completion of the assignment.

Preferred Name and Pronouns

The following is taken verbatim from LINK:

“Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student’s legal name. I am eager to address you by your preferred name and/or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.”

Prohibition on Recording Lectures

The following is taken verbatim from LINK:

“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. o 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

The following is taken verbatim from LINK:

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.

Changes to the Syllabus Could Occur

The following is taken verbatim from LINK:

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

FERPA Statement

The following is taken verbatim from LINK:

“The Federal Family Educational Rights and Privacy Act (FERPA) grants students certain information privacy rights. See the registrar’s explanation at www.reg.uga.edu/general-information/ferpa/. FERPA allows disclosure of directory information (name, address, telephone, email, date of birth, place of birth, major, activities, degrees, awards, prior schools), unless requested in a written letter to the registrar.”

Disability Services

The following is taken verbatim from LINK:

“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>”

The following is taken verbatim from LINK:

“Students with disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor or designate during regular office hours or by appointment.”

I want to help all students succeed in this course!

Mental Health and Wellness Resources

The following is taken verbatim from LINK:

“If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources for a student seeking mental health services (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support (<https://www.uhs.uga.edu/info/emergencies>). If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center. Additional resources can be accessed through the UGA App.”

Some material in this course contains references to violence. I urge you to take your mental health seriously. There are campus resources to help.

Course Readings and Software

No book purchases are necessary for this class. All of the readings come from academic journal articles, online materials, and book chapters. If the readings cannot be easily downloaded from Google Scholar on campus, readings can be found on the eLearningCommons page for this course. I expect you to have completed the readings **before** coming to each week’s class.

This course will use Stata and R software packages. For this semester, we’ve been lucky enough to get special access to Stata for you for 6 months. I’ll be posting information on this to the course page in eLC. If you are interested in buying Stata for yourself, I urge you to purchase a perpetual license (\$225 - <https://www.stata.com/order/new/edu/profplus/student-pricing/>) so that you can use these tools later on. R is free. I encourage you to use RStudio (also free). We’ll talk about how to get R early in the semester.

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

Class Outline

January 12th: Module 1: Introduction to Course and Why Data in the Policy Community

- **Goals: Set up course, introduction, expectations for semester**
- 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* 92:28.

January 19th: Module 2: What Can We Do With Data? A Beginner's Guide to Stata

- **Goals: Begin using Stata, understand how to import data or create data in Stata, where to go to get help, how to summarize data, creating do and log files for your work with data**
- Rodriguez, German. 2019. "Stata Tutorial." <https://data.princeton.edu/stata/tutorial.pdf>
- Fuhrmann, Matthew and Benjamin Tkach. 2015. "Almost Nuclear: Introducing the Nuclear Latency Dataset." *Conflict Management and Peace Science* 32 (4): 443-461.
 - This will be the dataset we will use for most of the examples for the next two weeks.
- Fuhrmann, Matthew. 2016. "The Nuclear Latency Dataset: Codebook." http://www.matthewfuhrmann.com/uploads/2016/09/_codebook_2015-1215.pdf

January 26th: Module 3: What Can We Do With Data? A Beginner's Guide to R

- **Goals: Begin using R, understand how to import data or create data in R, where to go to get help, what makes R different than Stata, creating script files for your work with data**
- "Introduction to R workshop notes." 2018. <http://tutorials.iq.harvard.edu/R/Rintro/Rintro.html>
- Paradis, Emmanuel. "R for Beginners." https://cran.r-project.org/doc/contrib/Paradis-rdebuts_en.pdf
- Great overviews of differences between R and Stata and some basic commands: <https://www.princeton.edu/~otorres/RS>, http://rslblissett.com/wp-content/uploads/2016/09/RTutorial_160930.pdf

February 2nd: Module 4: Time-Series Cross-Sectional Data (Economic, Regimes) & Understanding Statistical Tables

- **Goals: Continue our work with Stata/R, review basic social science statistics, run statistical models in Stata/R**
- UK Government Statistical Service. "Statistics for policy professionals: things that you need to know." https://gss.civilservice.gov.uk/wp-content/uploads/2018/05/Guidance-on-Statistics-for-Policy-Professionals-v1.0_FINAL.pdf
- Gallo, Amy. 2015. "A refresher on regression analysis." *Harvard Business Review* <https://hbr.org/2015/11/a-refresher-on-regression-analysis>

- Fuhrmann, Matthew. 2012. "Splitting Atoms: Why Do Countries Build Nuclear Power Plants?" *International Interactions* 38 (1): 29-57.
- Jo, Dong-Joon, and Erik Gartzke. 2007. "Determinants of nuclear weapons proliferation." *Journal of Conflict Resolution* 51(1): 167-194.

Related Datasets:

- Qualities of Governance Time-Series Dataset
 - <https://qog.pol.gu.se/data/datadownloads/qogstandarddata>
- Varieties of Democracy
 - <https://www.v-dem.net/>
- CIRI Human Rights Dataset
 - <http://www.humanrightsdata.com/p/data-documentation.html>

February 9th: Module 5: Time-Series Cross-Sectional Data (Violence) & Visualization

- **Goals: Learn how to merge data from two or more datasets into one data file, how to collapse or change lengths of time (moving from events to years), explore visual representations of data (both with and without statistical modeling)**
- Early, Bryan R., Matthew Fuhrmann, and Quan Li. 2013. "Atoms for Terror? Nuclear Programs and Noncatastrophic Nuclear and Radiological Terrorism," *British Journal of Political Science* 43 (4): 915-936.
- Blake Campbell & Amanda Murdie. 2021. "Keep the Informants Talking: The Pursuit and Use of CBRN Weapons by Terrorist Organizations." *Studies in Conflict & Terrorism*. Forthcoming.
- Global Terrorism Database: <https://www.start.umd.edu/gtd/>

Related Datasets:

- International Military Intervention Dataset
 - <https://www.k-state.edu/polsci/intervention/>
- UCDP/PRIO Armed Conflict Dataset
 - <https://www.prio.org/Data/Armed-Conflict/UCDP-PRIO/>
- Correlates of War Project
 - <http://www.correlatesofwar.org/>
- Third-Party Peacekeeping Missions Dataset, 1946-2014:
 - <http://uca.edu/politicalscience/dadm-project/dadm-data-sets/>
- International Crisis Behavior Project
 - <https://sites.duke.edu/icbdata/data-collections/>

February 16th: Module 6: Automated Events Data

- **Goals: Understand the potential and the problems with automated events data, how to extract necessary information from events datasets into Stata and R**
- King, Gary, and Will Lowe. "An automated information extraction tool for international conflict data with performance as good as human coders: A rare events evaluation design." *International Organization* 57.3 (2003): 617-642.
- Schrodtt, Philip A., and David Van Brackle. "Automated coding of political event data." Handbook of computational approaches to counterterrorism. Springer New York, 2013. 23-49.
- Schrodtt, Philip A. "Automated production of high-volume, real-time political event data." (2010). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1643761
- Bell, Sam, David R. Cingranelli, Amanda Murdie, and Alper Caglayan. 2013. "Coercion, Capacity, and Coordination: Predictors of Political Violence." *Conflict Management and Peace Science*. 30(3): 240-262.

Related Datasets:

- GDELT:
 - <https://www.gdeltproject.org/>
- ICEWS:
 - <https://dataverse.harvard.edu/dataverse.xhtml?alias=icews>
- SCAD:
 - <https://www.strausscenter.org/scad.html>

February 23rd: Module 7: Twitter Data

- **Goals: Basic introduction to how to extract Twitter data into Stata and R, analysis of Twitter data, discussion of potential and problems with this data for policy professionals**
- Zeitzoff, Thomas. 2011. "Using Social Media to Measure Conflict Dynamics: An Application to the 2008–2009 Gaza Conflict." *Journal of Conflict Resolution* 55(6): 938–69.
- Zeitzoff, Thomas. 2017. "How Social Media Is Changing Conflict." *Journal of Conflict Resolution* 61(9): 1970–91.
- Pablo Barberá, Thomas Zeitzoff. 2018. "The New Public Address System: Why Do World Leaders Adopt Social Media?" *International Studies Quarterly*, 62(1): 121–130.

Related Datasets:

- Trump Twitter Archive, Version 2
 - <https://www.thetrumparchive.com/>
- Any dataset in the DocNow Catalog (you'll need to use Hydrator)
 - <https://catalog.docnow.io/>

March 2nd: Module 8: Maps and Geographic Data

- **Goals: Basic introduction on making maps with Stata and R, understanding grids and geocoded data**
- Cohen, Dara Kay, and Ragnhild Nordås. 2014. "Sexual violence in armed conflict: Introducing the SVAC dataset, 1989–2009." *Journal of Peace Research* 51(3): 418-428.
- Sundberg, Ralph, and Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research*, 50(4): 523–532.

Related Datasets:

- Geoquery:
 - <http://geo.aiddata.org/query>
- World Bank Geocoded Research Release, Version 1.4.2
 - <https://www.aiddata.org/data/world-bank-geocoded-research-release-level-1-v1-4-2>
- Political and Societal Violence By And Against Refugees (POSVAR) dataset
 - <https://doi.org/10.1177/0022343318811440>
- UCDP Geo-referenced data
 - https://ucdp.uu.se/downloads/index.html#ged_global

March 9th: Spring Break!

March 16th: Module 9: Surveys & Experiments

- **Goals: Discuss the potential for surveys and experiments for policy professionals, outline the problems with human subject research, create basic survey and survey experiments**
- Please go through human subjects training courses: <https://research.uga.edu/compliance-training/human-subjects/>
- Establish a Qualtrics account: https://eits.uga.edu/web_and_applications/qualtrics/
- Green, Donald P., and Alan S. Gerber. "The underprovision of experiments in political science." *The Annals of the American Academy of Political and Social Science* 589.1 (2003): 94-112.
- Druckman, James N., et al. "The growth and development of experimental research in political science." *American Political Science Review* 100.4 (2006): 627-635.
- Allred, Brent B., Michael G. Findley, Daniel L. Nielson, J.C. Sharman. 2017. "*Anonymous Shell Companies: A Global Audit Study and Field Experiment in 176 Countries.*" *Journal of International Business Studies* 48(5): 596-619.

Related Datasets:

- World Values Survey:
 - <http://www.worldvaluessurvey.org/wvs.jsp>
- Latinobarómetro:
 - <http://www.latinobarometro.org/lat.jsp>
- Geocoded Afrobarometer Data
 - <https://afrobarometer.org/data/geocoded-data>

March 23rd: Module 10: Network Analysis Data

- **Goals: Discuss network data and its analysis, basic overview of how network data can be used in Stata and R**
- Hafner-Burton, Emilie M., Miles Kahler, and Alexander H. Montgomery. "Network analysis for international relations." *International Organization* 63.3 (2009): 559-592.
- Murdie, Amanda, and David R. Davis. "Looking in the mirror: Comparing INGO networks across issue areas." *The Review of International Organizations* 7.2 (2012): 177-202.
- Asal, Victor, and R. Karl Rethemeyer. "Researching terrorist networks." *Journal of Security Education* 1.4 (2006): 65-74.

Related Datasets:

- Stanford Large Network Dataset Collection (choose any dataset listed)
 - <https://snap.stanford.edu/data/>
- Brandon Kinne's Replication Datasets (choose any dataset listed)
 - <https://dataverse.harvard.edu/dataverse.xhtml?alias=bkinne>
- Zeev Maoz's Replication Datasets (choose any dataset listed)
 - <http://maoz.ucdavis.edu/datasets.html>

March 30th: Class Canceled - Dr. Murdie presenting research at the International Studies Association Annual Meeting

April 6th: SPECIAL CLASS: Final Project Meetings

April 13th: Module 11: Small N Data - Focus Groups and Interviews

- **Goals: Discuss small N data issues, focus on case selection, discuss how to protect human subjects**
- Look over this website: <http://atlasti.com/>
- And this one: <https://provalisresearch.com/qualitative-research-software/>
- Carpenter, Charli, et al. "Explaining the advocacy agenda: Insights from the human security network." *International Organization* 68.2 (2014): 449-470.
- Aberbach, Joel D., and Bert A. Rockman. "Conducting and coding elite interviews." *PS: Political Science & Politics* 35.4 (2002): 673-676.

April 20th: Module 12: Small N Data - Fieldwork and Archives

- **Goals: Discuss the role of fieldwork and archival research, ethical challenges of field research during conflict zones**
- Parkinson, Sarah Elizabeth. 2013. "Organizing Rebellion: Rethinking High-Risk Mobilization and Social Networks in War." *American Political Science Review* 107(3): 418-432.
- Wood, Elisabeth Jean. "The ethical challenges of field research in conflict zones." *Qualitative Sociology* 29.3 (2006): 373-386.
- Braun, Robert. "Religious Minorities and Resistance to Genocide: The Collective Rescue of Jews in the Netherlands during the Holocaust." *American Political Science Review* 110.1 (2016): 127-147.
- Lee, Alexander. 2015. "How (and How Not) to Use Archival Sources in Political Science." <http://www.rochester.edu/content/uploads/2014/07/archives.pdf>

April 27: End of Semester Poster Reception

Final Papers Due May 5th by 11:59 pm

Dataset Presentation - Rubric

Components	Unacceptable 0 Points	Acceptable	Good	Excellent Full Credit
Correctly identifies dataset, unit of analysis, available information, source of information, and potential limitations of dataset (10 points)	Significant failure to identify dataset, unit of analysis, available information, source of information, and potential limitations of dataset 0 POINTS	Attempt to outline dataset but serious issues/inaccuracies identified 4 POINTS	Present the dataset correctly; some minor issues with understanding 8 POINTS	Students show advanced understanding of dataset, unit of analysis, available information, source of information, and potential limitations of dataset 10 POINTS
Questions and Answers from Professor and Class (3 points)	Unable to answer basic questions from professor and/or class as to the reading 0 POINTS	Answers to questions from professor and/or class show some serious issues with understanding the reading 1 POINT	Answers to questions from professor and/or class show some minor issues with the reading; Q&A dominated by one partner 2 POINTS	Clear, logical answers to questions asked, both partners involved in Q&A 3 POINTS
Presentation Skills (2 points)	Presentation seriously distracts from content 0 POINTS	Presenter has major presentation issues to work on 1 POINTS	Professional presentation is attempted but minor issues remain 1.5 POINTS	Professional presentation, provides handout 2 POINTS

Policy Memo Rubric

Component	Performance Description	Performance Level	Comments on Component
Motivation & Introduction (1/2 - 1 page)	5 = Memo quickly identifies problem to be addressed with new/alterd policy, and outlines the need to solve problem 4= a full introduction is provided but underdeveloped 3 = introduction is missing key parts necessary 2 = the memo's topic is unclear or muddled 1 = complete failure at an introduction		
Examination of the Problem (1-3 pages)	5 = clearly outlines the problem and why the problem needs to be addressed, connects problem to security of country, shows urgency 4 = acceptably outlines problem 3 = somewhat difficult to understand problem 2 = significant failure to provide a problem 1 = complete failure		
Outline of Proposed Policy Recommendations (1-3 pages)	5 = provides a complete policy recommendation(s) to address problem, policy recommendations clearly linked to solving problem 4 = policy recommendations provided by unclear 3 = serious problem understanding recommendations 2 = recommendations do not related to stated problem 1 = complete failure		
Discussion of Costs, Challenges, & Counterarguments to Policy Recommendation	5 = a thorough discussion of the costs, challenges, and counterarguments to the policy recommendation(s) is provided, provides evidence that the policy recommendation is still preferred course of action 4 = costs and challenges discussed but not convincingly 3 = significant problems with understanding possible costs and challenges 2 = costs and challenges ignored 1 = complete failure		
Use of Data & Evidence	5= uses data and methods in class to aid in goal of the memo 4 = significant problems with the use of data and methods from class 1 = complete lack of data and methods from class		
Use of Visuals	5 = provides figures/tables using methods from class to aid in the goals of the memo 4 = significant problems with applying the methods from class to visuals 1 = complete failure in providing visuals		
Appendix with Stata/R Code for Data & Visuals	5 = Provides an appendix with the Stata or R code to replicate data and visuals 4 = code shows serious flaws 1 = complete failure in providing appendix		

Mechanics	5 = writing style adds to the overall quality of the paper, citation style is consistent, between 5-10 pages
	4 = minor problems with citation, spelling, grammar, or sentence structure, between 5-10 pages
	3 = writing mechanics detract from the quality of the paper, between between 5-10 pages
	2 = serious writing and citation errors
	1 = writing and citation errors too numerous for college work

Presentation of Poster & Deadlines Followed	5 = Yes
	1 = No

**Additional
Comments:**

Final Grade: