INTL 4004e: Data Analytics for International Policy

Summer 2023 - Fully Online Course
All Materials Available Via eLC

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1 Course Description and Objectives

This course will provide students with the tools to find, critically examine, analyze, understand, and present international affairs data to a broad community. Although the focus is on data analytics, **no background in statistics is expect or required.** The course will provide an overview of multiple data software tools to help work with existing datasets and/or create new data for the policy community. All instruction will be delivered online. At the end of the course, students will be able to claim a working knowledge of Stata, Qualtrics, social network analysis, quantitative data analysis, and survey methods.

2 Online Course Format

This course is completely online! All materials are available online through UGA's eLearning Commons (eLC) portal. The course is asynchronous; you can work on the materials on your own schedule throughout the week.

The course consists of nine modules, about a module a week. Each module will consist of required readings, videos, and slides. Most weeks will include both a discussion post and a problem set (no problem set the first, shortened week). With the exception of the last week, the module assignments will be due by Sunday night at 11:59 pm (Eastern time). One way to complete the course would be to focus on the readings and general overview video on Monday and Tuesday, then focus on any applied videos on Wednesday, and then work on the problem set and discussion board post on Thursday and Friday of the week. Or, you could wait until the weekend and complete all of the videos and materials on Saturday and then complete the assignments on Sunday (the only problem with that approach, however, is that you wouldn't have access to office hours before the due date if you ran into any problems). For the last week, due to the shortened schedule, Module 9 will be due at 11:59 pm on August 4th (Friday). You are welcome to work ahead.

Any way you want to tackle the work of the week is fine with me! As long as each module is completed before the deadline, you can work whenever and wherever works for you best!

I'm here to help however I can. Please feel free to email at any time. I'm making my whole Thursday afternoon each week available for office hours (over Zoom). I'm also happy to schedule a time to chat.

3 Grading

Your course grade is calculated from the following components:

- **80%** - Application Problem Sets (8 problem sets, 10% each)
- **20%** - Reflective Message Board Posts (9 posts, 2.22% each)

Application Problem Sets

Starting with Module 2 (June 12-18), you'll have an application problem set for each semi-weekly module. The problem set will require you to apply the skills covered in the course materials for each module, typically using statistical software. All problem sets should be turned in to the assignment dropbox on eLC.

The focus on each problem set is on ***progress, not perfection.*** As such, each application problem set will be graded in the following way:

Rubric for Application Problem Set				
Components	**Unacceptable 0 Points**	**Acceptable**	**Good**	**Excellent Full Credit**
Problem Set Attempted (50 points)	Problem set not turned in by the end of the semester (August 4th) 0 POINTS	An unfinished problem set turned in by the end of the semester (August 4th) 10 POINTS		The full problem set (each problem attempted) is turned in by the end of the semester (August 4th) 50 POINTS
Problem Set Turned in on Time (10 points)	Problem set not turned in by the due date listed on the syllabus 0 POINTS			Problem set turned in by the due date listed on the syllabus 10 POINTS
Analysis Itself (20 points)	Analysis is incomplete or incorrect with no documentation (do file, script file) provided 0 POINTS	Analysis is incomplete or incorrect in some large part, but documentation (do file, script file) provided, shows some large issue with application and problem-solving 10 POINTS	Analysis is incomplete or incorrect in some small part, but documentation (do file, script file) provided, shows some minor issues with application and problem-solving 15 POINTS	Analysis is complete and correct; documentation (do file, script file) provided 20 POINTS
Analytical Write-Up (20 points)	No attempt made to communicate analysis results and substantive meaning for international policy 0 POINTS	An attempt is made to communicate analysis results and substantive meaning for international policy, but serious errors remain or discussion is incomplete 10 POINTS	A good attempt is made to communicate analysis results and substantive meaning for international policy, some minor errors remain or discussion is incomplete 15 POINTS	A complete analysis of the results is clearly communicated, and the substantive meaning of the results for international policy is provided 20 POINTS

Reflective Message Board Posts

There will be a discussion board for each module. I will start off the discussion board with some questions about the topics covered in the materials. For each module, you will contribute at least one thoughtful response to the discussion board question that references the course materials. Each message board will be graded in the following way:

Rubric for Reflective Message Board Posts				
Components	**Unacceptable 0 Points**	**Acceptable**	**Good**	**Excellent Full Credit**
Reference to Course Materials (10 points)	Fails to refer to the course materials at all 0 POINTS	Attempts to answer the question with reference to the course materials but answer shows little comprehension 4 POINTS	Answers the question with reference to the course materials; some minor issues with understanding the course materials still exist 8 POINTS	Message shows mastery of the course materials **(if required in discussion question)** 10 POINTS
Analysis and Argument (10 points)	Presentation of opinion or statement without evidentiary or logical support; illogical argument that doesn't answer question asked 0 POINTS	Question answered in a haphazard fashion that may show large logical holes 4 POINTS	Logical answer but does not provide much novel content 8 POINTS	Clear, logical argument in answer that shows student is able to apply the materials in novel ways 10 POINTS
Peer Awareness and Participation (5 points)	If answer is not the first response to a question, answer is unconnected with the previous message board content and shows little grasp of what peers have written 0 POINTS	If answer is not the first response to a question, answer shows some passing knowledge of previous message board posts of peers 1.5 POINTS	If answer is not the first response to a question, answer does refer to previous message board postings but does not provide any additional real content for discussion 2.5 POINTS	Either the first response to a question on the message board or, if answer is not the first response to a question, answer does add to the general conversation and shows an awareness of what peers have already mentioned 5 POINTS
Writing Mechanics (5 point)	Several errors in spelling, punctuation, capitalization, and/or sentence structure showing carelessness or inability to write at the graduate level 0 POINTS	A few overlooked errors 2 POINTS	Few or no errors, but sentence structure could improve 4 POINTS	No errors and excellent sentence structure and fluency 5 POINTS
Assignment Particulars (5 point)	Student doesn't provide an answer to instructor's question prompt by the required date and time 0 POINTS			Student answers required prompts by the required date and time 5 POINTS

Grading Scale:

Your final grade will be calculated on the following scale:

- 94 to 100 - A
- 90 to $93.\bar{9}$ - A-
- 87 to $89.\bar{9}$ - B+
- 84 to $86.\bar{9}$ - B
- 80 to $83.\bar{9}$ - B-
- 77 to $79.\bar{9}$ - C+
- 74 to $76.\bar{9}$ - C
- 70 to $73.\bar{9}$ - C-
- 60 to $69.\bar{9}$ - D
- 59 and below - F

4 Useful Information and University Policies

Attendance Policy and Make Up Policy

This course is completely asynchronous, meaning that you can work at your own pace throughout each week. This should help you manage the course materials and avoid any missed due dates. If you miss a due date for a discussion board, I will allow all students one late submission request. The late discussion board post would still have to be completed by the end of the semester (August 4th). For application problem sets, you can turn these problem sets in late for a penalty; see rubric above. Grades are due immediately after the course is over; late or missing assignments at this time may cause difficulties in grade reporting.

Beyond the one free late submission request, please refer to the UGA class attendance policy: https://provost.uga.edu/policies/
affairs-policy-manual/4-06-class-attendance/.

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.

5 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. All readings can be found on the eLearningCommons page for this course.

This course will use statistical software. Due to the shortened summer semester, we will focus mainly on Stata. You could also use R for your assignments, and I will provide script files to help you use R. 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.

6 Course Outline

******NOTE: All sample code and datasets used in the videos or slides are also provided in eLC. Please download this information for each module and follow along with the video.***

Module 1: Introduction to Course and Why Data for Policy (June 8-11)

- **Goals: Set up course, introduction, expectations for semester**
- **Readings:**
  - 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.
- **Videos:**
  - Module 1: Introduction to the course
- **Slides:**

  - Module 1: Introduction to the course

- **Assignments:**
  - Message Board Post for Module 1 - Due June 11th, 11:59 pm Eastern

Module 2: What Can We Do With Data? A Beginner's Guide to Statistical Computing (June 12-18)

- **Goals: Begin using Stata, compare Stata to R and look at R, where to go to get help, how to carry out some basic descriptive analysis using statistical computing packages**
- **Readings:**
  - (Just browse!) - Quality of Government Basic Dataset Codebook. https://www.qogdata.pol.gu.se/data/codebook_
- **Videos:**
  - Module 2: Overview of Descriptive Analysis
  - Module 2: Installing Stata
  - Module 2: Descriptive Analysis in Stata (divided into three parts)
  - Module 2 Installing R (optional)
  - Module 2: Descriptive Analysis in R (optional)
- **Slides:**
  - Module 2: Overview of Descriptive Analysis
  - Module 2: Descriptive Analysis in Stata
  - Module 2: Descriptive Analysis in R (optional)
- **Assignments:**
  - Message Board Post for Module 2 - Due June 18th, 11:59 pm Eastern
  - Application Problem Set for Module 2 - Due June 18th, 11:59 pm Eastern

Module 3: Crash Course in Multivariate Analyses (June 19 is a holiday, June 20-25)

- **Goals: Understand the basics of models where you "control" for other factors (multivariate analyses), learn how to run these models on statistical software, focus on ways to provide results of these models to consumers**
- **Readings:**
  - 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
- **Videos:**
  - Module 3: Multivariate Analyses Basics
  - Module 3: Multivariate Analyses in Stata (divided into two parts)

- Module 3: Multivariate Analyses in R (optional)

- **Slides:**
  - Module 3: Multivariate Analyses Basics
  - Module 3: Multivariate Analyses in R (optional)

- **Assignments:**
  - Message Board Post for Module 3 - Due June 25th, 11:59 pm Eastern
  - Application Problem Set for Module 3 - Due June 25th, 11:59 pm Eastern

Module 4: Maps and Geographic Data (June 26-July 2)

- **Goals: Basic introduction on making maps with statistical software, understanding grids and geocoded data**

- **Readings:**
  - 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.

- **Videos:**
  - Module 4: General Overview to Maps
  - Module 4: Easy Way to Make Maps in Stata
  - Module 4: Hard Way to Make Maps in Stata
  - Module 4: Making Maps in R (Optional)

- **Slides:**
  - Module 4: Maps

- **Assignments:**
  - Message Board Post for Module 4 - Due July 2nd, 11:59 pm Eastern
  - Application Problem Set for Module 4 - Due July 2nd, 11:59 pm Eastern

Module 5: Twitter Data (July 4 is a holiday, July 3-9)

- **Goals: Basic introduction to how to extract Twitter data into statistical software, analysis of Twitter data, discussion of potential and problems with this data for policy professionals**

- **NOTE: Twitter's access for academics is constantly changing due to its new ownership. Becuase of this, our problem set may be updated to if we are unable to get real-time access to Twitter's API.**

- **Readings:**
  - 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.

- **Videos:**
  - Module 5: Social Media and International Affairs Overview
  - Module 5: Twitter in Stata
  - Module 5: Twitter in R (Optional)
- **Slides:**
  - Module 5: Twitter Slides
- **Assignments:**
  - Message Board Post for Module 5 - Due July 9th, 11:59 pm Eastern
  - Application Problem Set for Module 5 - Due July 9th, 11:59 pm Eastern

Module 6: Network Analysis Data (July 10-16)

- **Goals: Discuss network data and its analysis, basic overview of how network data can be used in international affairs, overview of how to use this data in statistical software**
- **Readings:**
  - Murdie, Amanda. 2014. "The Ties that Bind: A Network Analysis of Human Rights INGOs." *British Journal of Political Science.* 44(1): 1-27.
  - Asal, Victor, and R. Karl Rethemeyer. "Researching terrorist networks." *Journal of Security Education* 1.4 (2006): 65-74.
- **Videos:**
  - Module 6: Networks Overview
  - Module 6: Networks in Stata
  - Module 6: Networks in R (Optional)
- **Slides:**
  - Module 6: Overview of Network Analysis Slides
- **Assignments:**
  - Message Board Post for Module 6 - Due July 16th, 11:59 pm Eastern
  - Application Problem Set for Module 6 - Due July 16th, 11:59 pm Eastern

Module 7: Surveys and Survey Experiments (July 17-23)

- **Goals: Discuss the potential for surveys and experiments for policy professionals, outline the problems with human subject research, create basic survey and survey experiments**
- **Readings:**
  - Druckman, James N., and Donald P. Green. "A New Era of Experimental Political Science." Advances in Experimental Political Science (2021). Chapter 1.
- **Videos:**
  - Module 7: Overview of Surveys

  - Module 7: World Values Survey in Stata
  - Module 7: World Values Survey in R (Optional)
- **Slides:**
  - Module 7: Surveys
- **Assignments:**
  - Message Board Post for Module 7 - Due July 23rd, 11:59 pm Eastern
  - Application Problem Set for Module 7 - Due July 23rd, 11:59 pm Eastern

Module 8: Interviews (July 24-30)

- **Goals: Discuss the potential for interviews and focus groups, go over practical tips for conducting interviews.**
- **Readings:**
  - Aberbach, Joel D., and Bert A. Rockman. "Conducting and coding elite interviews." *PS: Political Science & Politics* 35.4 (2002): 673-676.
- **Videos:**
  - Module 8: Interview Overview
- **Slides:**
  - Module 8: Interviews
- **Assignments:**
  - Message Board Post for Module 8 - Due July 30th, 11:59 pm Eastern
  - Application Problem Set for Module 8 - Due July 30th, 11:59 pm Eastern

Module 9: Archival Research (July 31-August 4th)

- **Goals: Discuss the role of archival research for international policy, work with archival sources**
- **Readings:**
  - 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/college/faculty/alexander_lee/wp-content/uploads/2014/07/archives.pdf
- **Videos:**
  - Module 9: Archives
- **Slides:**
  - Module 9: Archival Research Overview
- **Assignments:**
  - Message Board Post for Module 9 - Due August 4th, 11:59 pm Eastern
  - Application Problem Set for Module 9 - Due August 4th, 11:59 pm Eastern