

## ITRN 501: DATA ANALYTICS IN GLOBAL POLITICAL ECONOMY

George Mason University  
Fall 2020

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Office hours: by appointment  
Class hours: Mon 7:20 – 8:30 PM  
Class location: zoom and blackboard

### IMPORTANT NOTE FOR SCHEDULING:

Lecture Powerpoints with audio recording will be posted Wednesday before the Monday class. Please go over the lecture before our virtual zoom class each Monday, which will be utilized for class exercises and questions.

### LEARNING OBJECTIVES

- Understand how to find and analyze major forms of data for international economic analyses to support important concepts and formulations.
- Calculate descriptive statistics, present graphical techniques, and conduct binary regression.
- Operationalize concepts and test hypotheses.
- Detect and evaluate patterns in data. Formulate careful generalizations.
- Analyze multiple regression.
- Provide policy advice utilizing data and methods learned in this course.
- Develop critical skills to understand deficiencies in data and methodologies

### ASSIGNMENTS

1. Come prepared to class each week including following online lectures and class discussions via zoom. Attendance, participation, and presentations comprise 10 percent of the grade. I encourage you to utilize data from trade media and periodicals in your class comments. You are allowed one unexcused absence, and one excused absence. For each additional absence, you lose a point.
2. There will be 4 data-related assignments, each worth 10 points. These assignments (bullet #2 above) must be turned in on paper during class. No exceptions.
3. A mid-term exam will be worth 30 points.
4. The final assignment will be small group-oriented (2-3 people in each group). This assignment will prepare a trade negotiation strategy for a country but must include the following element: a regression that places this country w.r.t others on at least one causal dimension. The regression will use cross-sectional data. Avoid time series data as we will not have time to study these in class. For the country in question, also incorporate tariff schedules, macro-economic data, fiscal data, financial data including exchange rates, and wage-data. This assignment will be worth 20 points.

*My thanks to Isaac Wohl & Phillipp Magness for previous iterations of ITRN501 syllabi before 2018 from which I have incorporated many features*

## READINGS

Diez, David; Christopher Barr; and Mine Çetinkaya-Rundel (DBC). *Open Intro Statistics*, Fourth edition. Electronic version available for free at:

<http://www.openintro.org/stat/textbook.php> [DBC]

I'll make a version available on Blackboard, but you can download on your own. The book is open source but I encourage you to make a small contribution to the authors at the prompt.

Economist. *Numbers Guide: The Essentials of Business Numeracy*. Economist Books, 2014. [Economist]

Enrico Giovannini. 2008. *Understanding Economic Statistics: An OECD Perspective*. Paris: Organization for Economic Cooperation and Development. [Download here](#). [OECD]

International Monetary Fund. 2017. *Finance and Development: Back to Basics – Economic Concepts Explained*. Washington, DC: The International Monetary Fund. [Download here](#). [IMF]

## DATA SOURCES

See Chapter 3 of Enrico Giovannini [OECD]. 2008. *Understanding Economic Statistics: An OECD Perspective*. Paris: Organization for Economic Cooperation and Development

### *Trade Data:*

- United Nation's COMTRADE: <https://comtrade.un.org/>
- USITC's DataWeb: [http://dataweb.usitc.gov/scripts/user\\_set.asp](http://dataweb.usitc.gov/scripts/user_set.asp)
- World Bank's World Integrated Trade Solution: <http://wits.worldbank.org/wits/>
- World Trade Organization's Trade and Tariff Data: [http://www.wto.org/english/res\\_e/statis\\_e/statis\\_e.htm](http://www.wto.org/english/res_e/statis_e/statis_e.htm)

### *Development Indicators*

- World Bank's World Data Indicators: <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>

### *Listings:*

- The Guardian. [The top 10 sources of data for international development research](#)
- 75 Sources of Economic Data, Statistics, Reports, and Commentary: <https://library.law.yale.edu/news/75-sources-economic-data-statistics-reports-and-commentary>

### *Other sources of international data:*

- ICPSR: <https://www.icpsr.umich.edu/icpsrweb/ICPSR/>

### Technical Skills

If you are not familiar with Excel, please utilize the following tutorials:

[Excel for Windows Training](#)

[Excel for Simple Linear Regression](#)

There are also many other resources on the web and tutorials on YouTube

### CLASS SCHEDULE

DATES	TOPIC	READINGS
<b>PART I: COLLECTING AND UNDERSTANDING ECONOMIC DATA</b>		
Week 1: August 24	Introduction to syllabus, data questions	<p><i>Time</i>. 9 May 2014. <a href="#">World mania for Economic Data is Pretty Silly</a>.</p> <p>Roberto Aragão and Lukas Linsi. 2020. "<a href="#">Many shades of wrong: what governments do when they manipulate statistics</a>." <i>Review of International Political Economy</i>.</p> <p>OECD, Chapters 1 &amp; 3</p> <p>State of the Global Economy (look through for type of data being cited): <a href="https://www.ft.com/global-economy">https://www.ft.com/global-economy</a></p>
No class on Monday, September 2: Labor Day		
Week 2: August 31	The Macro Economy	<p>IMF, chapters beginning on pages 6 (Rodrigo), 14 (Callen), 32 (Oner), 34 (Claessen and Ahsan Kose), 36 (Horton &amp; El-Ganairy)</p> <p>OECD, Chapter 1&amp;2, 4.11</p> <p><i>Recommended:</i> BEA, "<a href="#">Measuring the Economy</a>," Dec 2015.</p>
Week 3: Sept 14	Trade	<p>IMF, page 40 (McDonald)</p> <p>OECD, Chapter 4.6.1-4.6.4 (Trade, FDI, MNCs)</p> <p>World Trade Organization. <a href="#">Trade Policy Reviews</a>. Familiarize yourself with a country of your choice.</p> <p><b><u>PROBLEM SET #1 GIVEN OUT: DUE SEPTEMBER 23</u></b></p>

Week 4: Sept. 21	Services and Finance	GATS Schedule, GATS List of Services, and “How to Read Commitments” ( <a href="https://www.wto.org/english/tratop_e/serv_e/guide1_e.htm">https://www.wto.org/english/tratop_e/serv_e/guide1_e.htm</a> )  OECD. <a href="#">Services Trade Restrictiveness Index</a> .  IMF: pp. 42-49 (Catão, Callen, Kose & Prasad, Ghosh & Ramakrishnan)  OECD: 4.10
Week 5: Sept. 28	Development	The World Bank. <a href="#">World Development Indicators</a> .  OECD, Chapter 4.6.5 & 4.6.6 (Migration, Development Aid) OECD: chapter 4.14  World Bank, <a href="#">Atlas of Sustainable Development Goals</a>  <u>PROBLEM SET #2 GIVEN OUT: DUE OCTOBER 7</u>

## PART II: PRESENTING AND ANALYZING DATA

Note: Please familiarize yourself with Excel techniques

Week 6: October 5	Summary Statistics	Economist: Chapter 1 & 3 DBC: Chapters 1-4
Week 7: October 12	Presenting Graphs and Tables	Schwabish, “ <a href="#">An Economist’s Guide to Visualizing Data</a> ,” <i>Journal of Economic Perspectives</i> , 2014.  Economist, Chapter 4  PROBLEM SET #3 GIVEN OUT: DUE OCTOBER 21
Week 8: October 19	Confidence Intervals and Hypothesis Testing	DBC, chapters 5, 7.1
Week 9: October 26	Mid-term	
Week 10: Nov. 2	Linear Regression 1	DBC, Chapter 8
Week 11: Nov 9	Linear Regression 2	Categorical Data: DBC 6.1-6.3 In-class Lab

		Chapter 8.1  PROBLEM SET #4 GIVEN OUT: DUE NOVEMBER 19
Week 12: Nov. 16	Intro to Multiple Regression	DBC, Chapter 9.1
<b>PART III: THINKING BEYOND NUMBERS</b>		
Week 13: Nov. 23	Thinking quantitatively & policy issues	Odell, John S. 2001. "Case study methods in international political economy." <i>International Studies Perspectives</i> 2, no. 2: 161-176.  Ch.2: "Descriptive Inference" from Gary King, Robert Keohane and Sidney Verba, <a href="#">Designing Social Inquiry</a> , Princeton, 1994  OECD: Chapters 4.12, 5
Week 14: Nov. 30	Class Presentations	

## CLASS POLICIES

### Specific Course Policies

- This is a discussion intensive class. Should there be an emergency and you are unable to attend class, please provide appropriate documentation. I discourage absence for any reason other than a medical or family/personal emergency.
- We will work closely with each other on all assignments and deadlines will need to be respected. Any delayed assignment will get a grade lower for one day it is late, two grades lower for two days of late work, and so on and so forth.
- Please turn off your cellular phones or switch them to silent or vibrate mode before coming to class. You are allowed one free incoming ring in the class.
- Use of laptop computers is allowed in class. Use of social media and e-mailing during class hours is not allowed. The only exception will be times when we look up global networks on social media sites to fulfill class goals.
- You can drink or eat in class as long as you do not disrupt the class with loud sounds, making a mess, or filling the class with exuberant aromas! I especially do not want foods in the class, which necessitate loud crunchy sounds.

A few George Mason Policies are essential for the conduct of this class.

- *Academic Integrity: The integrity of the University community is affected by the individual choices made by each of us. GMU has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using Harvard or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.*

- Diversity at Mason: George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth. An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. *Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives.* Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.
- Disability: *If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Office of Disability Services (SUB I, Rm. 4205; 993-2474;<http://ods.gmu.edu>) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.*
- Privacy: *Students must use their MasonLive email account to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information. I will send you any information related to your grade only on your MasonLive email account.*