

**Methods of Analy-Intl Com/Pol - 71226 - ITRN 501 - 001
Syllabus**

Time/Date: 7:20 pm - 10:00 pm Tuesdays
Location: Arlington Campus 257
Instructor: Danilo Pelletiere, Ph.D.
Phone (202)-662-1530 x237
Class website: <http://home.earthlink.net/~dpelleti/id7.html>
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Office Hours: One hour before class and by appointment.

Course Description

This course introduces students to the skills necessary to conduct quantitative research and analysis of issues related to international commerce and policy. Students obtain practical information on sources of data, their origins, strengths and weaknesses. The course will develop students' familiarity with basic methods of statistical analysis of data, including the use of computers for analyzing and displaying information. It covers major data sources as well as literature and indices related to international policy, including trade data, economics and financial indicators, and development indicators.

Course Materials

The Economist (2003) *Guide to Economic Indicators*.
The Economist (2003) *Numbers Guide*.
Gaske, D. (1999) *Understanding the Calculations of Key Economics and Business Statistics*, Kendall Hunt.
Access to Microsoft Excel application

Course Requirements and grading

Class participation/Attendance 20%
One examination 20%
Class project paper 20%
Class presentation 20%
Homework assignments 20%

Class Schedule and Assignments

1. August 26	Christine Pommerening Guest lecturer – (Instructor out of the country) Syllabus, readings, introduction to policy analysis <i>Get started on your reading</i>
2. September 2	The building blocks of analysis. The nature of data, where it comes from; types of data and analysis; types of analysis; the research process thinking in models, practice and ethics, the importance of writing and logic in making methods and data useful; presenting statistical data; introduction to Excel <i>Numbers guide Chapter 1; Gaske chapter 6</i>
3. September 9	Computer Lab Location TBD Economic and financial data search strategies. Using Excel
4. September 16	Inflation, currency, and investment Comparing prices, adjusting data for inflation, working in multiple currencies, interest and annuities <i>Gaske Chapters. 4, 5, Numbers guide chap 2</i> Data collection and preparation assignment due
5. September 23	The basic mechanics of analysis Percentages, shares, ratios, frequency distributions, indexes, measures of central tendency <i>Guide to Economic Indicators Chap 1,2; Numbers guide pages 6-21, chapter 3; Gaske chap 2, pg 25 and 27</i> Inflation and exchange rate assignment due
6. September 30	Measures of change and adjusting time series Absolute change, percent change, changes over time, moving averages <i>Gaske chap 1; Guide to Economic Indicators chap 1(for moving averages)</i> Basic analysis assignment due
7. October 7	Basic development indicators National economy indicators In class analysis exercise <i>Guide to Economic Indicators chap 3, 4, 5, 6, 7, 10</i>
8. October 14	<i>No class</i>
9. October 21	Basic trade and commerce indicators <i>Guide to Economic Indicators chap 8, 11, 13</i> In class analysis exercise Measures of change analysis due
10. October 28	Midterm Exam
11. November 4	Final project check-in /Basic statistical analysis Measures of central tendency revisited, dispersion and variation, <i>Numbers guide chapter 6, 4,</i>
12. November 11	Examining relationships and forecasting Correlation coefficient and OLS regression; statistical significance <i>Readings: Numbers Guide pages 104(bottom)-110; Gaske pages 30-32</i>
13. November 4	Final project check-in /Multiple Regression <i>Readings: Numbers Guide pages 110--115</i>
14. November 11	Putting it all together An in-class exercise similar to final paper Preparation for Presentations/Final paper check in OLS Multiple Regression Assignment Due
November 18	Presentations
November 25	Presentations
December 2	Papers due, evaluations

Home Work Assignments

Home work can be done in groups and with outside help. Homework must be turned in on paper at the beginning of each class and is graded as satisfactory 100 pts, not satisfactory 50pts, late, 25 pts, or missing 0 pts)

Data collection and preparation assignment

Read this assignment carefully and completely before beginning!!

- 1) Pick the continent (i.e. Africa, Asia, Europe, North America and the Caribbean, South America, or Oceania)
- 2) For one recent “target year” locate the following indicators for as many of the countries on that continent as you can find data
 - a. Gross domestic product
 - b. Gross exports in \$
 - c. Infant mortality rate
- 3) Collect the same data for two years adjacent to the target year (i.e. two years prior, two immediately subsequent years, or one year prior and one subsequent year), so that you have three points of data for each variable. If you have problems finding any of the variables or finding time series data, document your difficulties in writing, and provide two additional data points as close to the target year as possible.
- 4) Put all the data into an Excel spreadsheet. Print it out, along with a description of the problems you encountered.
- 5) Remember to make sure the data are as comparable (e.g. from the same source), and if possible for as similar intervals across variables as you can find them.

Inflation and exchange rate assignment

- 1) You will be provided with data in a spreadsheet and asked to:
 - a. adjust data for inflation
 - b. make various exchange rate adjustments

Basic analysis assignment

You will be provided with data in a spreadsheet and asked to calculate a number of basic statistics in Excel in order to answer questions on your results.

Measures of change assignment

- 1) You will extract data on a decade of trade for your country of interest and lay them out in a spreadsheet. Calculate the following statistics
 - a. The absolute change from the first to last year
 - b. The percent change from the first to last year
 - c. Average annual percent rate of change over the entire period
 - d. A simple index with the first year as the base year.
 - e. A series of the weighted three year average
- 2) Present your results in an easy to read, complete tables.

OLS Regression Assignment

You will be asked to carry out a basic regression analysis in Excel using a dataset provided in class and use the results to respond to a set of questions.

Final project presentation and brief:

1. Students will use the methods and indicators learned in this class to analyze the trends and patterns of trade for a country of their choice from 1980 to today. The analysis must include the following elements
 - a. An analysis of the trends in the volume and composition of its imports and exports;
 - b. A discussion of its trading partners and any changes in the countries it trades with;
 - c. An overview of the trend and pattern of the growth and development of its domestic economy; and
 - d. A discussion of the causes for the trends and patterns observed, possibly including changes in its terms of trade, internal politics, and external relationships.
2. The main body of the paper must include tables, charts or maps in making its central arguments or illustrating key points.
3. A data appendix should be included providing all the basic data used in the analysis.

The presentation will be 10 minutes long and the paper will roughly ten single sided, double spaced pages including tables and charts, but excluding data and other appendices.

Selected Data Sources for International Commerce and Policy

GMU's International Commerce Web Guide
<http://library.gmu.edu/resources/internationaltrans/>

Boston University, Project on Human Development
<http://humandevlopment.bu.edu/>

International Monetary Fund, General Data Dissemination System
International Monetary Fund, International Financial Statistics
<http://www.imf.org/external/data.htm>

World Bank, Global Development Finance
World Bank, World Development Indicators
See GMU databases

United Nations Development Program, Human Development Indicators
<http://hdr.undp.org/hdr2006/statistics/>

United States International Trade Commission's DataWeb
<http://dataweb.usitc.gov/>

International Trade Centre
<http://www.intracen.org/tirc/>

United Nations Conference on Trade and Development's Trade Analysis and Information System (TRAINS)
http://r0.unctad.org/trains_new/index.shtm

Additional Information

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 993-2474. All academic accommodations must be arranged through the DRC.

The SPP Policy on Plagiarism is as follows:

The profession of scholarship and the intellectual life of a university as well as the field of public policy inquiry depend fundamentally on a foundation of trust. Thus any act of plagiarism strikes at the heart of the meaning of the university and the purpose of the School of Public Policy. It constitutes a serious breach of professional ethics and it is unacceptable.

Plagiarism is the use of another's words or ideas presented as one's own. It includes, among other things, the use of specific words, ideas, or frameworks that are the product of another's work. Honesty and thoroughness in citing sources is essential to professional accountability and personal responsibility. Appropriate citation is necessary so that arguments, evidence, and claims can be critically examined.

Plagiarism is wrong because of the injustice it does to the person whose ideas are stolen. But it is also wrong because it constitutes lying to one's professional colleagues. From a prudential perspective, it is shortsighted and self-defeating, and it can ruin a professional career.

The faculty of the School of Public Policy takes plagiarism seriously and has adopted a zero tolerance policy. Any plagiarized assignment will receive an automatic grade of "F." This may lead to failure for the course, resulting in dismissal from the University. This dismissal will be noted on the student's transcript. For foreign students who are on a university-sponsored visa (eg. F-1, J-1 or J-2), dismissal also results in the revocation of their visa.

To help enforce the SPP policy on plagiarism, all written work submitted in partial fulfillment of course or degree requirements must be available in electronic form so that it can be compared with electronic databases, as well as submitted to commercial services to which the School subscribes. Faculty may at any time submit student's work without prior permission from the student. Individual instructors may require that written work be submitted in electronic as well as printed form. The SPP policy on plagiarism is supplementary to the George Mason University Honor Code; it is not intended to replace it or substitute for it.