Quantitative Skills for International Relations
IRP 704
Fall 2008

Professor:
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Classes:
Section I : Monday Morning 9:30 AM -12:15 PM -- 225B Eggers Hall
Section II : Monday Afternoon 3:45 PM - 6:30 PM -- 018 Eggers Hall

Description and Objectives

This class is an introduction to applied quantitative methods. The primary goal of this course is to provide you with the necessary skills to become a good user of statistical data in your own field. A good user is an informed, critical, cautious user of statistics. An informed user of statistical data understands the basic principles through which inferences about observable social and political phenomena are drawn, knows when to apply particular techniques and is aware of the potential flaws hidden behind apparently convincing figures. A critical user of statistics is able to assess how reliable the evidence backing a particular theoretical point or policy recommendation is. Finally, a cautious user of statistics is one that extracts as much information from the data as possible yet remains fully aware of the line after which a reasonable statement becomes a half-truth. These skills will help you pursue your career either as scholars or practitioners of international relations.

The course combines lectures and in-class labs and exercises. Lectures do not assume mathematical skills beyond high school algebra. This is not a general statistics class but a course on applied statistics for IR professionals. Hence lectures will be structured around real world examples and applications. The idea is to expose you to challenges similar to those you are likely to encounter in your future careers, and to teach you how statistical skills are helpful to overcome them. Some lectures will be closer to the text-book than others, but in general the text-book readings are to be taken as a *required complement* to the lectures. In class we will work through some "labs" together for some hands-on practice of the principles and techniques explained during the lecture.

The text for the course is David S. Moore (2006) *The Basic Practice of Statistics*, New York, Freeman and Company, 4th edition. The text is available for purchase at SU Bookstore. The software package that we will be using in class is SPSS 14. This program is available in all public labs throughout SU.

Software & Calculator

Packages of SPSS can also be downloaded to your laptops if you wish. If you are interested in this option you need to email webmaster@maxwell.syr.edu for further info and directions. You will need a TI-83 graphing calculator – available for purchase in the bookstores on campus, downtown, or almost anywhere that sells electronics.

Datasets

It is always good to be exposed to several data sets while learning and implementing statistical principles. Examples used in lectures will be drawn from a variety of sources and topics, normally related to the substantive interests of professionals in the area of international relations.

In addition, we will be working with two different data sets:

1) In-class lab sessions will be taught using the *American Public Opinion and US Foreign Policy, 2002 (ICPSR Study # 3673)*. We will use this dataset to illustrate how to work with SPSS 13 in addressing the practical implementation of the principles discussed during the lecture.

2) All assignments will be based on the *Worldviews 2002: European Public Opinion on Foreign Policy (ICPSR Study # 3730)*. The idea is that you implement the principles you learnt on a different data context. You are encouraged to work cooperatively on the assignments but each student must write his/her own responses separately. Assignments will also include shorter problems and exercises when appropriate.

Both datasets are available from my website: http://faculty.maxwell.syr.edu/chmahone/

Coursework and Grading

The final grade of the course will be a combination of the grades obtained in the different tasks students are asked to fulfill. These include:

1) Six short assignments. Assignments will be handed out in class and are due the following week at the beginning of class. For every day the assignment is late it will be marked down ten points. They will be graded and commented on by the TA. Essays should be written in a professional manner. Please do not hand in just the SPSS output. Late assignments **will not** be accepted unless previously agreed with the professor. Assignments constitute 30% of the final grade.

2) Two midterm exams. Both midterms will be graded and commented on by the TA. Each of the midterms accounts for 20% of the final grade. The first midterm exam will be on Monday September 29th. The second midterm will take place on Monday October 27th.

3) Participation. Hard work should always be rewarded and this portion of the grade speaks to that. Students are expected to attend every session of the course and actively participate. Random pop quizzes may be given from time to time to ensure students are doing the readings. Participation counts for 10% of the final grade.

4) Final exam. This exam covers the final portion of the course and accounts for 20% of the final grade. Prof. Mahoney and the TA will grade the final exam.

Each of the requirements of the course is graded on a 0-100 scale. Final grades will reflect the following scale:

A	94-100
A-	87-93
B+	80-86
B	75-79
B-	70-74
C	65-69
C-	60-64
F	<=59

Academic Integrity

Quantitative methods courses are always a fabulous opportunity to build connections with your cohort and working together is encouraged. However the assignments must be your own work, it will be clear if the assignments are replicas or your colleagues. Furthermore, if you rely on your fellow students to get through the assignments you will never pass the exams which you must complete on your own. So, work together to help each other LEARN; not to get the assignment done. Academic dishonesty will be dealt with according to the University's Academic Integrity Policy **http://academicintegrity.syr.edu**

Disability Services

Syracuse University is an academic community which values diversity and seeks to promote meaningful access to educational opportunity for all of its students. The Office of Disability Services facilitates access to programs and activities, coordinates auxiliary aids and services, provides access to adaptive technology, and when necessary, advocates on behalf of students with members of the campus community. For more information please visit: http://disabilityservices.syr.edu or contact: Voice Phone: (315) 443-4498, TDD: (315) 443-1371

Schedule

August 25: Why do IR practitioners need statistics? / Introducing some basic terminology / Becoming acquainted with SPSS 14. (Getting your feet wet: find some data!)

September 1: Labor Day Holiday -- **no class**

September 8: Univariate Statistics: central tendency, dispersion and density curves (A1 out).
Reading: Moore (chapters 1, 2, 3)

September 15: Correlation, Simple Linear Regression & Two-way Tables (A1 due/ A2 out).
Reading: Moore (chapters 4, 5, 6)

September 22: Building blocks for inference: Data production & Probability (A2 due).
Reading: Moore (chapters 8, 9, 10)

September 29: Midterm Exam I -- BRING CALCULATOR**!**

October 6: Building blocks for inference: Sampling Distributions (A3 out).
Reading: Moore (chapters 11, 13; Note in Ch 11 you do not need to read the optional sections on Statistical process control; X-charts; or Thinking about process control.)

October 13: Making Inferences: Confidence Intervals & Hypothesis testing (A3 due/A4 out).
Reading: Moore (chapters 14, 15, 16)

October 20: Quantitative Response Variables – Population Means & Two Sample Problems (A4 due)
Reading: Moore (chapters 18, 19)

October 27: **Midterm Exam II --** BRING CALCULATOR**!**

November 3: Categorical Variables – Population Proportions & Two proportions (A5 out).
Reading: Moore (chapters 20, 21)

November 10: Inferences about relationships (A5 due).
Reading: Moore (chapters 23, 25)

November 17: Regression Analysis I (A6 out).
Reading: Moore (chapter 24)

November 24: Regression Analysis II (A6 due).
Reading: Moore (chapter 28– on Companion CD – print out and read)

December 1: Final Exam (in class**) --** BRING CALCULATOR**!**