POL 502: INTERMEDIATE STATISTICS FOR PUBLIC POLICY
FALL 2011
LOCATION: POLI SCI DEPARTMENT
TIME: MONDAY 6-9 PM

Instructor: Martijn Schoonvelde   Email: martijn.schoonvelde@stonybrook.edu
Office: SBS S-737   Office Hours: Wednesday 12-2pm
Course website: https://blackboard.stonybrook.edu/

COURSE DESCRIPTION

This is the second methodology course of the Political Science Department's M.A. in Public Policy program. The course is designed as an applied statistics class to provide students with the tools necessary to conduct empirical research in public policy. Upon completion of the class, students will be able to conduct a range of statistical techniques specifically including Ordinary Least Squares regression, and Logistic regression. To facilitate learning, several of the classes, or parts thereof, will be held in the computer lab to allow in class hands-on experience. Even though this course will include computer-based data analysis, however, much of this course will involve learning statistical formulae to understand the statistical procedures. Thus, a tolerance for algebra will be a necessity.

COURSE REQUIREMENTS

The overall course grade consists of the following components:

Homework Assignments   20%
Midterm Exam   25%
Take-Home Final Exam   25%
Research Paper and Presentation   30%

Homework Assignments
There will be 5 homework assignments. You are encouraged to work with your classmates to complete these assignments but the work you turn in must be your own. I will not accept late homework assignments for any reason.

Examinations
The midterm exam will be held during the normal class period on October 17th. Standard exam rules apply. Makeup exams will only be provided if the student can provide proof of a valid reason to miss the exam (i.e. funerals of family members or serious illness). The final exam will be distributed on the last day of class and will be due on Monday, December 12th. You must work alone on the final exam.

Research Paper and Presentation
The research paper and corresponding presentation can be completed on any topic the student chooses, provided that it is cleared by me. The project must empirically evaluate a substantive policy problem the student is interested in.

The paper should consist of a short introduction that outlines the research question, identifies and justifies examining key variables. This must include a discussion of the existing research on the topic with relevant findings integrated into the discussion. This section should end with a statement of the primary hypotheses. The following section of the paper should include a detailed method section that clearly operationalizes all the variables in the analysis, discusses the coding schemes and expected effects, and notes the limitations of using these specific variables. Following this, the student should engage in the empirical analysis, along with any diagnostic tests that apply to properly discuss the results. Finally, the paper should conclude with a brief statement of the major findings, a general statement regarding what this study contributes to our knowledge of the policy area and a general policy recommendation. The paper should be approximately 15-20 pages in length (of text, double-spaced, 12 font).

The presentations should cover the same topic as the paper, though in an abbreviated manner. Do not simply read your paper in front of the class. The presentation should be approximately 10 minutes (which is quite short to communicate your topic and findings). In the talk you must explain the topic, justify the hypotheses, present the data and discuss the implications of the analysis. Following the presentation, you should be able to answer a few questions from your peers. Here are some potential data sources:

PUBLIC OPINION http://www.electionstudies.org
FEDSTATS: http://www.fedstats.gov
CENSUS BUREAU http://www.census.gov
U.S. BUREAU of JUSTICE: www.ojp.usdoj.gov
BUREAU LABOR STATISTICS http://www.bls.gov/
BUREAU OF ECONOMIC ANALYSIS: http://www.bea.gov/
INTERNAL REVENUE SERVICE http://www.irs.gov
ORGANIZTION FOR ECONOMIC DEVELOPMENT http://www.oecd.org
WHITE HOUSE ECONOMIC STATISTICS BRIEFING ROOM   http://www.whitehouse.gov/omb/
FEDERAL BUDGET http://www.gpoaccess.gov/usbudget/
FEDERAL SPENDING AT STATE & LOCAL LEVEL http://www.usgovernmentspending.com/
NATIONAL CENTER FOR EDUCATION STATISTICS: http://nces.ed.gov/
UNESCO data on countries: http://www.uis.unesco.org/ev_en.php?ID=3753_201&ID2=DO_TOPIC
GALLOP POLLS: http://www.gallup.com/home.aspx

GRADING

All tests will be graded on a 0-100 scale and **grades will not be curved**:

A	100-94	B+	89-87	C+	79-77	*F	69-0
A-	93-90	B	86-84	C	76-74		
		B-	83-80	C-	73-70		

* The Graduate School does not recognize a 'D'.

COMPUTER WORK

Like last semester, we will again use SPSS. The use of SPSS is not optional, as some assignments and the final paper will require graphical and statistical analysis using this software. SPSS is installed on computers on some SINC sites, but it is strongly recommended you buy your own copy of SPSS (see `Readings' section). Lack of access to SPSS or a facility with SPSS will not be accepted as an excuse for not completing or turning in assignments on time.

MISCELLANEOUS

Make-up Exams, Extensions
Late assignments will not be accepted. There will be no make-up exams and I will not grant incompletes in the course, except in cases of emergency or where university policy applies. Doctor's notes are expected for medical excuses. If you miss an exam without a valid excuse, you will receive a zero.

Blackboard
I make use of Blackboard to distribute documents and homework. You are responsible for making sure your current email address is on file with the Blackboard system and that you are receiving my emails. I will not accept the excuse that you did not receive my e-mails (and any assignments therein) through Blackboard under any circumstances.

READINGS

• Studenmund, A.H. (2011). *Using Econometrics: A Practical Guide, 6th Edition.* Addison Wesley

Longman (**Required**)
- Pollock, Philip H. 2009. *An SPSS Companion to Political Analysis*. Third Edition. CQ Press. (**Strongly Encouraged**)
- I strongly encourage you buy your own copy of SPSS. The cheapest option is a bundle offered by CQ press that includes the text, the companion, and a student copy of SPSS for only $25 more than the price of the two text books (see cqpress.com for more info) If you want to buy SPSS separately, student copies are also available at the Seawolves Marketplace in the Student Activities Center. Again, lack of access to SPSS or a facility with SPSS will not be accepted as an excuse for not completing or turning in assignments on time.

LECTURES

Lecture slides will be made available before class on Blackboard.

CLASS SCHEDULE*

Week 1 August 29:   Introduction and course overview – Review notes from POL 501

Week 2 September 5:   **NO CLASS**

Week 3 September 12:   Scientific Method and Research Validity

Week 4 September 19:   Introduction to Regression – Ch. 1-2

Week 5 September 26:   Ordinary Least Squares – Ch. 3-4

Week 6 October 3:   OLS, continued – Ch. 5

Week 7 October 10:   Finish OLS, Review

Week 8 October 17:   **MIDTERM EXAM**

Week 9 October 24:   Using Regression Analysis – Ch. 11

Week 10 October 31:   Violating Assumptions: Specification and Functional Form – Ch. 6-7

Week 11 November 7:   Violating Assumptions: Multicollinearity – Ch. 8

Week 12 November 14:   Violating Assumptions: Serial Correlation and Heteroskedasticity – Ch. 9-10

Week 13 November 21:   Dummy Variables and Interactions – Brambor, Clark and Golder (2005) - on Blackboard

Week 14 November 28:   Logistic Regression – Ch. 13

Week 15 December 5:   **RESEARCH PRESENTATION; PAPERS DUE**

December 12:   **TAKE-HOME FINAL EXAM DUE BY 5 PM**

* Changes in the schedule may occur as the semester progresses.

UNIVERSITY POLICIES

Americans with Disabilities Act:

If you have a physical, psychological, medical or learning disability that may impact your coursework, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Academic Integrity:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work.   Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary.

*Critical Incident Management***:**

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.