#### **PS 586: TECHNIQUES OF POLITICAL ANALYSIS II**

Irfan Nooruddin Department of Political Science The Ohio State University

Class Room:	150 Derby Hall	My Office:	2084 Derby Hall
Class Time:	M W 2:30 – 4:18 pm	My E-mail:	nooruddin.3@osu.edu

This course is the second course in the Political Science Department's undergraduate data analysis sequence. The course begins with a review of basic probability and distribution theory and then moves on to regression analysis. Most of the course examines the assumptions behind ordinary least squares (OLS) and the alternatives available when these assumptions are violated. Students will learn to use *STATA* to conduct statistical analyses, and will write a paper of original research using the tools covered in the class.

#### Books

Achen, Christopher. 1982. Interpreting and Using Regression. New York: Sage. [CA]
Gujarati, Damodar. 2006. Essentials of Econometrics, 3<sup>rd</sup> ed. McGraw-Hill/Irwin. [DG]

#### **Requirements and Grading**

Homework #1:	10%
Homework #2:	10%
Homework #3:	20%
Homework #4:	20%
Research Paper:	40%

#### **Policies and Procedures**

#### Students with Disabilities

Students who feel they need an accommodation based on the impact of a disability should contact me privately to discuss their specific needs. Please contact the Office of Disability Services at 614-292-3307 in Room 150 Pomerene Hall to coordinate reasonable accommodations.

#### Attendance

Attendance is recommended, but not required.

#### Extensions and Make-ups

Extensions will NOT be granted. You will be informed of all assignments well in advance, so good planning and time management skills will benefit you. Assignments must be handed to **me** in class on the day they are due (or before that date if you want). Late assignments will suffer a penalty of half a letter grade per day it is late. Make-up examinations and quizzes are NOT permitted. Also, there will be NO opportunities for extra credit.

#### Academic Dishonesty

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

\* The Committee on Academic Misconduct web pages (http://oaa.osu.edu/coam/home.html)

\* Ten Suggestions for Preserving Academic Integrity (http://oaa.osu.edu/coam/ten-suggestions.html)

\* Eight Cardinal Rules of Academic Integrity (http://www.northwestern.edu/uacc/8cards.html)

### Grading

Grading will be based upon (a) accuracy of factual information; (b) ability to synthesize the appropriate evidence, both theoretical and empirical, from all parts of the course not just rehashing the texts; (c) judgment in separating the important from the trivial, keeping on the subject, critically evaluating all assumptions [including your own and mine]; and (d) effective expression—organization, choice of words, basic grammar, etc. These are the essentials; <u>imagination and true originality are based on them and not a substitute for them</u>.

### Work Ethic

"Without struggle, there can be no progress"—Frederick Douglass

Faculty Rules (Rule 3355-8-24 A1): "One credit hour shall be assigned for each **three hours** per week of the average student's time, including class hours, required to earn the average grade of 'C' in this class."

**Be prepared to work in this course**. The value of this class to you will be in direct proportion to the amount of time and effort that you devote to it. If there is a question in your mind as to whether you want to complete all the work in this course you should consider enrolling in another course without delay. I will give you my best effort, and I expect nothing less from you.

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# Inqilāb Zindabād

Question Assumptions

What difference does it make to the dead, the orphans and the homeless, whether the mad destruction is wrought under the name of totalitarianism or the holy name of liberty or democracy? -- Mahatma Gandhi, 1869-1948, "Non-violence in Peace and War."

### ENTERTAINMENT SCHEDULE

### 1. Why Econometrics?

Monday, March 26: Introductions

Wednesday, March 28: DG, Ch 1, 2.

## 2. Probability and Distributions

Monday, April 2: DG, Ch 3.

Wednesday, April 4: DG, Ch 4.

# 3. Important Probability Distributions

Monday, April 9: DG, Ch 5.

Wednesday, April 11: NO CLASS.

# 4. Go Blue: Statistical Inference

Monday, April 16: DG, Ch 5, 6.

HW#1 DUE

Wednesday, April 18: DG, Ch 6, CA, all.

**5.** Bivariate Regression: Intuition, Estimation, and Hypothesis Testing *Monday, April 23*: DG, Ch 7.

Wednesday, April 25: NO CLASS.

**6. Multiple Regression: Estimation, Hypothesis Testing, and Model Specification** *Monday, April 30*: DG, Ch 8. **HW#2 DUE** 

Wednesday, May 2: DG, Ch 9, 10.

# 7. Multicollinearity and Heteroskedasticity

Monday, May 7: DG, Ch 12, 13.

Wednesday, May 9: NO CLASS.

# 8. Autocorrelation and Endogeneity

Monday, May 14: DG, Ch 14.

HW#3 DUE

Wednesday, May 16: DG, Ch 15.

**9. Discrete Dependent Variables: Linear Probability, Logit, Probit** *Monday, May 21*: DG, 16.6.

Wednesday, May 23: Presentations.

### **10. Presentations**

Monday, May 28: Presentations.

HW#4 DUE

Wednesday, May 30: Presentations & Wrap-up.

# FINAL PAPER DUE ON MONDAY, JUNE 4<sup>TH</sup> AT 1:30 PM