GVPT 722 Spring 2015 Thursday 11:00am – 1:45pm Lefrak Lab 4

Professor: David Cunningham Chincoteague 3117C Office hours: Wednesday 1:30-2:30 (or by appointment) <u>dacunnin@umd.edu</u>

Professor: William Reed Chincoteague 2107 Office hours: Friday 11am-12pm (or by appointment) wlr@umd.edu

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Overview

This course builds on GVPT 622, Quantitative Methods for Political Science, which provided an introduction to statistical research methods. Thus, command of the material covered in GVPT 622, or its equivalent, is assumed. The key goals of this course are to enhance your ability to understand and engage in the testing of theories via the analysis of political data. In building your statistical skill set, it is hoped that you also obtain the ability to teach yourselves techniques that are beyond the scope of this course as well as new techniques that will be developed over the course of your career. To accomplish that goal you must commit to spending considerable time with the material outside of class.

We will begin with a review of ordinary least squares regression and will move quickly to a deeper investigation of this method, including violations of basic assumptions. Next, we will study qualitative response models. After a discussion of the linear probability model and its weaknesses, the logit and probit models will be introduced. The course will conclude with an examination of techniques for the analysis of time series data and methods to deal with endogeneity. As time permits, we will cover recent developments in political methodology.

Logistics

This is a blended learning course. There will be an in class lecture on Thursdays. In lieu of a lab sessions students are required to review and complete material that will be available on the course page at: <u>http://elms.umd.edu</u>. This material will vary from week to week and will consist of videos, assignments, readings, and other activities. This type of blended learning is designed to provide an asynchronous learning environment in which students have an opportunity to learn and review material outside of the lecture and to expose students to different approaches to learning. The material covered in the asynchronous lecture will not necessarily be a review of the material discussed in the lectures. There will be new material that the students are responsible for mastering.

University Rules

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism.

For more information on the Code of Academic Integrity or the Student Honor Council, please visit:

http://www.studenthonorcouncil.umd.edu/whatis.html

The University of Maryland has a new policy regarding medically necessitated absences from class. Under the new policy, we will accept a self-signed note from the student attesting to the date of the illness as an excused absence from a single lecture.

Evaluation

Your grade will be determined by Participation – 20%, Exam I – 30%, Exam II – 30%, and several homework assignments – 20%. If you are going to miss class on an exam day and would like your absence to be excused, you are required to email me regarding your absence in advance of the class and bring documentation to support your excused absence on the day you return. The new absence policy (one sick absence without a health center note) does not apply to days where we are scheduled to have an exam. Numerical scores are mapped into letter grades as follows:

100-94, A	86-84, B	76-74, C	66-64, D
93-90, A-	83-80, B-	73-70, C-	63-60, D-
89-87, B+	79-77, C+	69-67, D+	59-0, F

Readings

- Gujarati, Damodar, M., and Dawn C. Porter. 2009. *Basic Econometrics*. 5th ed., New York, NY: McGraw- Hill/Irwin.
- Achen, Christopher H. 1982. *Interpreting and Using Regression*. Thousand Oaks, CA: Sage.
- Articles will be assigned when relevant and posted to ELMS.

Schedule Week 1 January 29: Introductions Week 2 February 5: Simple Regression I, Chapters 1-3 Week 3 February 12: Simple Regression II, Chapters 4-6 Week 4 February 19: Lab Session Week 5 February 26: Multiple Regression, Chapters 7-8 Week 6 March 5: Indicator Variables, Chapter 9 Week 7 March 12: Multicollinearity, Chapter 10 Week 8 March 26: Exam I Week 9 April 2: Heteroskedasticity, Chapters 11-12 Week 10 April 9: Model Specification, Chapter 13, 15 Week 11: April 16: Endogeneity, Chapters 18, 20 Week 12 April 23: Panel Data & Time Series, Chapter 16 Week 13 April 30: Maximum Likelihood Estimation, Chapter 15 Week 14 May 7: Conclusion Week 15 May 14: Exam II