GVPT 622: Quantitative Methods for Political Science I Thursday 11:00-1:45 Lefrak Lab 3 Thursday 3:30-6:15 Lefrak Lab 3 Wednesday 3:15-5:15 Lefrak Lab 1 Instructor: David Cunningham Office: Chincoteague 3117C Office Hours: Tuesdays 10:00-12:00 and by appointment dacunnin@umd.edu Teaching Assistant: Ted Plettner Office: Tydings 1135D Office Hours: Tuesday 1:00-3:00 and by appointment plettner@umd.edu

## Overview

This course provides an introduction to research methods for political scientists and will cover the basics of quantitative research in political science. The course has two main goals. The first is to enable students to read and evaluate political science research that uses quantitative methods. The second is to prepare you for more advanced methodology courses. In addition, you will learn how to apply basic quantitative methods to political questions and acquire basic knowledge of the statistical software Stata.

#### Lab & Discussion Sections

Stata is available for your use in the government and politics computer lab in Tydings 1115 as well as in the OACS labs in Lefrak Hall. You may also purchase a discounted copy of Stata for home use at http://www.stata.com/order/new/edu/gradplans/direct-shippricing/. Ted Plettner is the teaching assistant for this course. He will be in charge of the Lab and Discussion Section.

#### Books

There are three required textbooks for this course and one recommended. The required books are *Introduction to the Practice of Statistics* by David S. Moore, George P. McCabe and Bruce Craig, from W.H. Freeman Press (Eighth Edition); *The Essentials of Political Analysis* (Fourth Edition) and *A Stata Companion to Political Analysis* (Second Edition) by Phillip H. Pollock III. The recommended text is *A Gentle Introduction to Stata, 3<sup>rd</sup> Edition* by Alan C. Acock. In the lectures, we will generally follow the order of the material in the Moore et al. book. You will use the Pollock books (as well as other materials) in the Lab and Discussion Section.

# Evaluation

There are five main components to your grade in this course. There are three exams, each of which is worth 20% of your final grade. Usually, each week in section there will be a homework assignment due and the total of these assignments will equal 20%. The remaining 20% of your grade is made up of participation, which includes both the regular class meeting

and the Lab and Discussion section. 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 to 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. The grades in this course will be based on the normal 10-point scale, with pluses and minuses.

## Academic Integrity

University of Maryland is one of a small number of universities with a student-administered Honor Code and an Honor Pledge. The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. Compliance with the code is administered by the Student Honor Council, which strives to promote a "community of trust" on the College Park campus. Allegations of academic dishonesty should be reported directly to the Honor Council (301-314-8450) by any member of the campus community. Cases are decided by joint faculty-student boards. For additional information, consult the Office of Student Conduct website. For a description of the University's definition of academic dishonesty, suggestions on how to prevent cheating, and practical answers to frequently asked questions about the Code of Academic Integrity, consult the Student Honor Council's Resources webpage. It is a student's responsibility to familiarize themselves with this, and accordingly this course assumes that all students are thoroughly familiar with the Honor Code and Honor Pledge.

## **Religious Observances**

The University of Maryland policy entitled Assignments and Attendance on Dates of Religious Observance states that students should not be penalized in any way for participation in religious observances and that, whenever feasible, they be allowed to makeup academic assignments that are missed due to such absences. However, the student must personally hand the instructor a written notification of the projected absence within two weeks of the start of the semester. The request should not include travel time. Instructors should take the validity of these requests at face value. For your reference, an extensive list of religious holidays appears at <a href="http://www.interfaithcalendar.org">http://www.interfaithcalendar.org</a>.

# Accommodations for Students with Disabilities

University of Maryland is legally obligated to provide appropriate accommodations for students with documented disabilities. Students who seek special accommodations due to disabilities must first set up an appointment with Dr. Jo Ann Hutchinson or her staff at the Disability Support Services (DSS) office in the Counseling Center, 301-314-7682. Students should download the DSS registration forms and bring appropriate documentation to the DSS office (Shoemaker 0126) prior to the meeting. The DSS representative will make a determination of the appropriate accommodations and provide an accommodation form to distribute to instructors. Faculty should request that students both present these forms at the beginning of the semester and make an appointment to discuss the arrangements. When the arrangements involve modifications of testing procedures, students will present a test authorization form, which instructors are to complete and hand deliver along with the test to 0106 Shoemaker. This material can also be faxed to 301-314-9478.

#### **Course Schedule**

(note: the readings next to each date are the readings to have been done for that class)

Thursday, September 4: Introduction

Wednesday, September 10: First Lab & Discussion Section

Thursday, September 11: Descriptive Statistics Read: Moore, Chapter 1

Wednesday, September 17: Second Lab

Thursday, September 18: Relationships Between Two Variables Read: Moore, Chapter 2

Wednesday, September 24: Third Lab Homework 1 due

Thursday, September 25: Research Design Read: Moore, Chapter 3

Wednesday, October 1: Fourth Lab Homework 2 due

Thursday, October 2: Applications I

Wednesday, October 8: Fifth Lab Homework 3 due

Thursday, October 9: First Exam

Wednesday, October 15: Sixth Lab Discussion of exam solutions

Thursday, October 16: Probability Theory Read: Moore, Chapters 4 & 5

Wednesday, October 22: Seventh Lab No Homework Due

Thursday, October 23: Hypothesis Tests & Margin of Error Read: Moore, Chapters 6 & 7

Wednesday, October 29: Eighth Lab Homework 4 due

Thursday, October 30: Hypothesis Tests II

Read: Moore, Chapters 8 & 9

Wednesday, November 5: Ninth Lab Homework 5 due

Thursday, November 6: Applications II

Wednesday, November 12: Tenth Lab Homework 6 due

Thursday, November 13: Second Exam

Wednesday, November 19: Eleventh Lab Discussion of exam solutions

Thursday, November 20: Regression Read: Moore, Chapter 10

Wednesday, November 26: No Lab (Thanksgiving)

Thursday, November 27: No class (Thanksgiving)

Wednesday, December 3: Thirteenth Lab No Homework Due

Thursday, December 4: Regression II Read: Moore, Chapter 11

Wednesday, December 10: Fourteenth Lab Homework 7 due

Thursday, December 11: Applications III

Wednesday, December 17: Fifteenth Lab Homework 8 due

Thursday, December 18: Third Exam