

**SCHOOL OF PUBLIC POLICY**

DRAFT \*\*\*8-15-08\*\*\*

**PUBP 704 STATISTICAL METHODS FOR POLICY ANALYSIS****SPRING 2008****Section 1****Thursday 4:30-7:10 pm****Arlington 242****Section 3****Wednesday 7:20-10 pm****Arlington 242**

Instructor: Prof. David Armor

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**COURSE DESCRIPTION**

Policy analysis utilizes both qualitative and quantitative methods, and the quantitative methods draw heavily from statistics and econometrics. This course provides students with an introduction to basic statistical techniques used in the policy sciences. The emphasis is on applications and interpretation rather than statistical theory, and applications use both Excel and the popular statistical package SPSS.

**COURSE OBJECTIVES AND EXPECTATIONS**

By the end of the course, students are expected to understand how to apply, calculate or obtain, and interpret the following statistical techniques using policy-relevant data:

- Descriptive statistics such as percentages, means, medians, and measures of dispersion;
- Cross-tabulations and the  $\chi^2$  test; introduction to probability theory & sampling
- Central limit theorem, confidence intervals, and hypothesis testing (the t-test);
- Simple bivariate regression and correlation;
- Multivariate regression and regression “diagnostics” (departures from assumptions)

**COURSE TEXTBOOKS AND MATERIALS**

Berman, Evan M. *Essential Statistics for Public Managers and Policy Analysts*, 2nd Edition, CQ Press (October 2006).

Kirkpatrick, Lee A. and Brooke C. Feeney, *A Simple Guide to SPSS Version 16*, Wadsworth Publishing (May 2008)

SPSS Student Version, version 15 or 16 (Purchase at [www.journeyed.com](http://www.journeyed.com) or other sites)

Hand calculator

Some online resources will also be used (e.g., Statsoft)

**HOMEWORK, EXAMS, AND GRADING**

1. Homework: Five homework assignments will cover the five major statistics techniques\*
2. Midterm: In-class exam will cover the first 3 statistics techniques
3. Final: Take-home exam covering the last two techniques and a short policy analysis applying multiple regression techniques
4. Grading:

Homework	30%
Midterm	30%
Final	40%

\*Homework should reflect your own work and your own understanding of the material. However, you may work with 1 or 2 other students provided you each write separate answers.



## **ACADEMIC ACCOMMODATION FOR A DISABILITY**

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through the DRC.

## **SPP POLICY ON PLAGIARISM**

The profession of scholarship and the intellectual life of a university as well as the field of public policy inquiry depend fundamentally on a foundation of trust. Thus any act of plagiarism strikes at the heart of the meaning of the university and the purpose of the School of Public Policy. It constitutes a serious breach of professional ethics and it is unacceptable.

Plagiarism is the use of another's works or ideas presented as one's own. It includes, among other things, the use of specific words, ideas, or frameworks that are the product of another's work. Honesty and thoroughness in citing sources is essential to professional accountability and personal responsibility. Appropriate citation is necessary so that arguments, evidence, and claims can be critically examined.

Plagiarism is wrong because of the injustice it does to the person whose ideas are stolen. But it is also wrong because it constitutes lying to one's professional colleagues. From a prudential perspective, it is shortsighted and self-defeating, and it can ruin a professional career.

The faculty of the School of Public Policy takes plagiarism seriously and has adopted a zero tolerance policy. Any plagiarized assignment will receive an automatic grade of "F." This may lead to failure for the course, resulting in dismissal from the University. This dismissal will be noted on the student's transcript. For foreign students who are on a university-sponsored visa (e.g. F-1, J-1, or J-2), dismissal also results in the revocation of their visa.

To help enforce the SPP policy on plagiarism, all written work submitted in partial fulfillment of course or degree requirements must be available in electronic form so that it can be compared with electronic databases, as well as submitted to commercial services to which the School subscribes. Faculty may at any time submit student's work without prior permission from the student. Individual instructors may require written work be submitted in electronic as well as printed form. The SPP policy on plagiarism is supplementary to the George Mason University Honor Code; it is not intended to replace or substitute for it.

(<http://www.gmu.edu/facstaff/handbook/aD.html>)