PSC 201

Political Inquiry

Professor:
Kevin A. Clarke
Harkness 317
Office Hours: Tues, 3:00-4:30
kevin.clarke@rochester.edu

Teaching Assistants:
Rabia Malik (Hark 305)
Mattan Sharkansky (Hark 338)
Office Hours: TBA
rabia.malik@rochester.edu
mattan.sharkansky@rochester.edu

PURPOSE

This course provides undergraduates with the analytical, conceptual, and statistical foundation necessary for developing the ability to read and perform empirical research in political science. Topics include experiments and observational studies, concepts and measurement, descriptive data analysis, and statistics. Emphasis is on the use of statistics to evaluate empirical evidence.

PREREQUISITES

Working knowledge of high school algebra is the only course prerequisite. Note that this course fulfills the Political Science department's techniques of analysis requirement.

COURSE REQUIREMENTS

Evaluation is based on problem sets (25% of your grade) and three midterm exams (25% of your grade each). Students may work together on problem sets, but each must turn in his or her own write-up. You will be allowed to use a calculator on all exams. The exams are given as scheduled and are not given early — make any travel plans accordingly. You must take all three exams to pass the course.

We will make solutions to the problems sets available. Consequently, late problem sets will receive a grade of zero.

A web page for this course is to be found here:

http://www.rochester.edu/College/PSC/clarke/201/201.html

ACADEMIC INTEGRITY

Be familiar with the University's policies on academic integrity and disciplinary action (http://www.rochester.edu/College/CCAS/AdviserHandbook/ AcadHonesty.html). Violators of University regulations on academic integrity will be dealt with severely, which means that your grade will suffer, and I will forward your case to the Chair of the College Board on Academic Honesty.

Remember that the same technology that has made plagiarism easier to accomplish has also made it easier to detect. If you do not cite a source, it is plagiarism. If you do cite it, it is scholarship.

TEXT

Freedman, David, Robert Pisani, and Roger Purves (2007). *Statistics*, 4th ed. New York: Norton. (FPP)

COURSE SCHEDULE

I. Observational Studies and Measurement

January 17: Introduction

- None (first day of class)

January 22: Controlled Experiments and Observational Studies

- FPP: Ch. 1-2

II. Describing and Summarizing Data

January 24: Frequency Distributions

- FPP: Ch. 3

January 29: Measures of Central Tendency

- FPP Ch. 4

January 31: Measures of Dispersion

- FPP Ch. 4

February 5: The Normal Approximation

- FPP Ch. 5

February 7: Measurement Error

- FPP Ch. 6

III. Analyzing Relationships

February 12: Correlation I

- FPP Ch. 8

February 14: Midterm exam 1 — no exceptions.

- None

February 19: Correlation II

- FPP Ch. 9

February 21: Regression I

- FPP Ch. 10

February 26: Regression II

- FPP Ch. 11-12

IV. Probability

February 28: Probability I

- FPP Ch. 13

March 5: Probability II

- FPP Ch. 14

March 7: Midterm exam 2 — no exceptions.

- None

March 12-14: Spring Break

- None

March 19: The Binomial Formula

- FPP Ch. 15

March 21: The Law of Averages

- FPP Ch. 16

March 26: Expectations and Standard Errors

- FPP Ch. 17

March 28: The Normal Approximation

- FPP Ch. 18

V. Sampling

April 2: Surveys

- FPP Ch. 19

April 4: Errors in Sampling

- FPP Ch. 20

April 9: The Accuracy of Percentages

- FPP Ch. 21

April 11: No class

- None

April 16: The Accuracy of Means

- FPP Ch. 23

VI. Tests of Significance

April 18: Hypothesis Testing

- FPP Ch. 26

April 23: Hypothesis Tests for Means

- FPP Ch. 27

April 25: The Chi-Square Test

- FPP Ch. 28

April 30: Midterm exam 3 — no exceptions.