

P.S. 300 INTRODUCTION TO POLITICAL ANALYSIS Prof. Frank Wayman  
Winter Term 2005 MW 1:05-2:20 PM Room 1165 SSB  
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This syllabus is available at my website,  
<http://www-personal.umich.edu/~fwayman>  
050108

The purpose of this course is to provide students with basic skills in political analysis. It is oriented to practical problems in the analysis of political behavior. While other courses deal with substantive areas of knowledge, this one deals with the acquisition of abilities and the mastery of techniques. At the end of the semester there will be a term paper which will require you to apply the knowledge that you have acquired. This assignment will involve the analysis of public opinion data or other political data (e.g., data on members of Congress, or on nations and their involvement in wars and militarized disputes). The course does not require advanced mathematical skills (i.e., above the ninth grade level) or any prior knowledge of the computer.

#### **INTERDISCIPLINARY FOCUS:**

The skills taught in this course are broadly relevant, not only at the university, in political science, sociology, economics, public administration, and business administration, but also in government and business. Consequently, the lectures will emphasize applications in a broad variety of settings.

#### **COURSE REQUIREMENTS:**

In this course, as in all university courses, students are expected to do two hours of outside work for every hour in class. Students who do not expect to be able to do this should not take this course. In addition to the assigned readings and exercises, there will be two types of projects throughout the semester: data collection and data analysis. It is these practical assignments that will be the true test of your learning.

#### **GRADES:**

There will be three exams during the semester, plus a term paper. These four items will count about equally in the grading for the course. In addition, there will be grades given throughout the term for special assignments in data collection and analysis. These, along with class participation and attendance, will count for twenty percent of the grade.

Because of the nature of this course, in which understanding of one week's material depends on knowledge gained in prior weeks,

and in which it is important to participate in the learning process in class, attendance will be compulsory. Sign-up sheets will be passed around each day in class, to assure attendance. Students missing class will be required to bring a doctor's note or document of similar gravity to avoid penalty for non-attendance. Also, UM-D makes reasonable accommodations for persons with documented disabilities. Students should register with the Disability Resource Services Office within the first few weeks of the semester to be eligible for services that semester.

I have been asked by the Provost to include the following statement (which should go without saying): The University of Michigan values academic honesty and integrity. Each student has a responsibility to understand, accept, and comply with the University's standards of academic conduct as set forth in the Code of Academic Conduct, as well as policies established by the schools and colleges. Cheating, collusion, misconduct, fabrication, and plagiarism are considered serious offenses. Violations will not be tolerated and may result in penalties up to and including expulsion from the University.

**TEXTS:**

Students should acquire the following from the bookstore:

William Buchanan, *Understanding Political Variables*, 4th ed.;  
Herbert Weisberg, Jon Krosnick, and Bruce Bowen, *An Introduction to Survey Research and Data Analysis*, (Glenview, Ill.: Scott, Foresman, 1989), 3rd ed.;  
a course-pac of miscellaneous readings.

Recommended:

Ronald Stockton and Frank Wayman, *A Time of Turmoil*

Each student should buy the course pack, available from Dollar Bill Copy, for sale on line or at their toll-free number. \$Bill can be reached at 1-877-738-9200, or at [www.dollarbillcopying.com](http://www.dollarbillcopying.com). At the website, go to order products on line, then to the order course packs on line bar, then to UM-D, then to the course number. After selecting all those things, proceed to order, give mailing info., credit card, and \$Bill ships next day UPS to your address.

**MISSED DEADLINES:**

If you miss an examination or deadline, and have the required doctor's note or similar document, you will be allowed to take a make-up or complete the assignment, but you will also be required to do an additional research assignment as evidence of good faith. The assignment may consist of gathering some data

relevant to the class research project.

NOTE: The deadlines set in the course outline below are generally dated the day before class. This indicates the readings and workbook assignments that should be completed in preparation for the class the next day.

### **COURSE OUTLINE:**

#### **The Nature and Purpose of Social Science Analysis--**

Facts and Empirical Inquiry. "Concepts," "operationalization," "variables," "hypotheses," "theory," "intersubjective verification," and "the failure to disconfirm," provide enough jargon to allow us to talk to each other for the rest of the course. To be completed by JANUARY 15TH.

Readings: Weisberg, Krosnick, and Bowen, chs. 2 and 8 (The Survey Process and the Process of Data Analysis)

Course-pac, Reading No. 1 -- read an example of a theory, Wayman, "The Four Claim Rules: A Theory of Persuasion in Political Competition" and

Course-pac, Reading No. 2 -- operationalization of concepts: Dearborn panel questionnaire (party i.d., post-materialism, political trust and efficacy, political information)

Course-pac, Reading No. 3 -- Wayman, "A Cooperative Solution to Prisoner's Dilemma." (game theory)

Workbook: Buchanan, chs. 1-3 (pp. 1-62)

In class:

Introduction to course; introduction to the scientific method and social science; to be more specific:

concepts -- examples from international politics: 'capabilities' and 'power'; ex. from comparative politics: 'post-materialism'; ex. from American politics: 'party identification.'

theory -- Normative theory is designed to recommend regimes and/or policies, criticize regimes and/or policies, or suggest appropriate patterns of citizen behavior. E.g. Plato's cave, the @u{Republic}. Empirical theory is designed to explain and predict behavior. Anthony Downs' empirical theory of democracy. hypotheses -- Ex.: Stanley Milgram's *Obedience to Authority* and competing hypotheses predicting different patterns of human behavior.

basic terms, illustrated with panel study questionnaire:  
independent and dependent variables; nominal, categoric, and  
interval measurement; Likert indices.

review of exercises;

bivariate relations and causality.

### **Values and Normative Inquiry--**

Some tools for evaluative reasoning about social problems will be  
discussed. JAN. 22ND.

Readings: Course-pac reading No. 4, John Rawls,  
*A Theory of Justice*, pp. 60-78, 266-271.

Workbook: Buchanan, ch. 16 (pp. 241-250)

Workbook: A one-page dittoed exercise will be handed out,  
dealing with where to site a new hospital; the choice of location  
depends on whether the decision maker follows a utilitarian,  
egalitarian, or Rawlsian social decision rule.

In Class: Comparison of Social Decision Rules in Rawls'  
Framework. Utilitarianism, Egalitarianism, Rawlsian social  
justice.

### **Research Design--**

Any scientific research project should begin with an overall  
plan. What are the questions to be investigated? How can these  
questions best be answered? What evidence should be gathered?  
Where and when? What sorts of findings would support the  
hypotheses? What would require rejection of the hypotheses?  
JANUARY 29TH AND FEB. 6TH.

Readings: Stockton and Wayman, *A Time of Turmoil*, Appendix A (on  
reserve);

Weisberg, Krosnick, and Bowen, ch. 13;

Hall and Wayman, "Buying Time," Course-pac.

Workbook: Buchanan, chs. 4, 9, 14, and part of 5 (pp. 61-81,  
135-148, and 205-224)

In Class:

Causation

## Research Design

True Experimental Design: frustration and aggression vs. modelling and aggression, TV and violence; Iyengar and Kinder on media, agendas, and priming.

Non-Equivalent Control Group Design: Milgram's Obedience to Authority;

Interrupted Time-Series Design: Wayman's study of whether military alliances spread war or deter war; Hibbs on American and British elections, and the impact of the new government on inflation and unemployment.

Correlational Design -- 3rd Variable Controls. Predicting the vote for president from a voter's position on the issues, party ID, and assessments of candidates' character.

## Discussion of Exercises

Discussion of research article -- Hall and Wayman, "Buying Time"

The **FIRST EXAM** will cover the above material, and will take place FEB. 14TH. (10th class period)

Data Analysis. Once hypotheses have been constructed, they must be tested by looking at the evidence. We will learn some basic statistical procedures for analyzing data. For the term papers, actual data analysis will be conducted using MIDAS or SPSS, computer software packages of statistical programs which make our lives easier.

## **Univariate Statistics--** FEBRUARY 19TH.

Readings: Weisberg, Krosnick, and Bowen, chs. 9 and 10

Workbook: Buchanan, ch. 10 (pp. 149-170), ch. 15 (pp. 225-240)  
In Class: Mean, Standard Deviation, Standard Error of the Mean, Standard Error of the Difference between two means.

## **Contingency Tables--**

Examining relationships among categorical variables. FEB. 19TH.

Readings: Weisberg, Krosnick, and Bowen, ch. 11 and 12

Workbook: Buchanan, chs. 5-8, 13, 17-18 (pp. 79-134, 181-194, 251-286). Note typo at p. 264 of Buchanan: there should be a bar over the last  $x$  in the denominator of the formula for  $b$ ; without the bar the denominator would be zero, and one

cannot divide by zero.

In Class: Correlation Coefficients and Chi Square

**Correlation and Regression--** Fitting a line through a set of points, and measuring the goodness of fit. FEB. 26TH.

Readings: Weisberg, Krosnick, and Bowen, ch. 14

Workbook: Buchanan, ch. 19 (pp. 287-302). Note typo at p. 290 of Buchanan: there should be sigmas (summation signs) in front of each of the parenthetical terms in the formula for r-squared; the correct formulas, with the sigmas, are on Buchanan, p. 288.

In Class: Correlation Coefficients and Regression

SPRING BREAK IS FEB. 26TH-MARCH 6TH

**Dimensional Analysis, Indices, and Scales.** These terms refer to methods of improving measurement and clarifying the meaning of concepts. The following techniques will be illuminated through examples of their use: index construction (Likert "scaling"), Guttman scaling, and factor analysis. MAR. 4TH.

Readings: Weisberg, Krosnick, and Bowen, pp. 174-81.

Workbook: Buchanan, ch. 11 (pp. 171-180)

In Class: How to do Guttman scaling

Racial and Law and Order Factors from the Dearborn panel

**Causal Analysis--** By combining theory with regression analysis, one can move from knowledge of correlations to knowledge of causal patterns. Multiple regression and path analysis, and two-stage least squares examples will be given. MARCH 19TH.

Readings: Weisberg, Krosnick, and Bowen, ch. 13, and pp. 270-77.

Workbook: Buchanan, ch. 20-22 (pp. 303-352)

In Class: Explanations of U.S. Presidential election voting

**Using the Computer: SPSS--** MARCH 26TH

Readings: Handout of commands

Workbook: Buchanan, ch. 13 (pp. 195-204)

Assignment: Go to the Science Bldg. and run a canned program

In Class:

UMCE; SPSS commands

Your Term Paper. A **sample term paper** is on reserve at the Mardigian Library, as my pamphlet M-31. The title is "Political Efficacy." (The author, a former PS 300 student, is incorrectly listed by the library as Wayman.) Other sample term papers are in the course pack. **Look at the sample term paper, written by Dov Gardin, in the course pack. Not writing the paper in the form he has done, with contingency tables, having number of cases and percents in each cell, and with significance levels and chi-square and (except for nominal-level variables) correlation coefficients, will normally result in a grade of F.**

The **SECOND EXAM**, covering everything since the first exam, will be WED., MARCH 23RD.

**Reliability and Validity--** A reliable measure produces the same results under the same circumstances. A valid measure measures what it is supposed to measure. For example, IQ tests are a reliable measure: they will produce about the same results for the same individual time after time. APRIL 2ND.

Readings: Weisberg, Krosnick, and Bowen, pp. 76-78;

Wayman and Singer, "Evolution and Directions for Improvement in the Correlates of War Project Methodologies" (course-pac);  
Lee Cronbach, *Essentials of Psychological Testing*, pp. 122-125 --  
handout

In Class:

The four types of validity -- the LSAT and predictive validity, practice LSATs and concurrent validity, final exams and content validity, and anxiety tests and construct validity

Internal and External Validity -- in experimental designs

**Modes of Observation--**

These are the different techniques used to gather data.  
APRIL 9TH AND 16TH.

Survey Research. Administering questionnaires to people is time consuming, costly, and tedious, but those who love it (whether or not they are living off a large grant from the National Science Foundation) claim that it reveals important aspects of the world we live in. Proctor and Gamble, which is always using it to find what products people will buy, agrees. So do many students of organizational behavior, of American electoral politics, and of other important fields of social science.

Readings: Weisberg, Krosnick, and Bowen, chs. 1-7.

In Class:

Designing a Survey

Writing Questions

Interviewing

Interviewer Training

**Aggregate Data Analysis and other modes of observation (content analysis, evaluation research, etc.)-- APRIL 23RD.**

Readings: Weisberg, Krosnick, and Bowen, ch. 1

In Class: Elite Interviewing; Library and data bank resources; evaluation of the effectiveness of government programs; content analysis of the Congressional Record.

Writing and Disseminating Research Findings. APRIL 23RD.

Readings: Weisberg, Krosnick, and Bowen, chs. 15-17

Assignment: Write your term paper.

In Class: Other Modes of Research; Uses of Social Science

**Term papers** are due Wed., April 13th, at 1 PM. IMPORTANT: To receive your **computer analysis portion of the course grade** (10% of the grade), you must hand in two copies of your term paper, WITH YOUR SPSS PRINTOUT ATTACHED TO ONE OF THE TERM PAPER COPIES AND A XEROXED COPY OF IT ATTACHED TO THE OTHER. **All copies must be printed. Computer disk versions are not acceptable.**

The last class will be Wed., April 20th.

The THIRD EXAM will be Monday, April 25th, at 3 PM.