

# POLICY ANALYSIS AND PROGRAM EVALUATION (PPAI 1200)

Mondays, 3:00-5:20pm – Spring 2009

Solomon 202

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Office Hours:  
Mondays 10:00am-12:00pm  
2<sup>nd</sup> Floor conference Room

## COURSE DESCRIPTION & OBJECTIVES

The purpose of this course is to expose you to some of the models and methods used in program evaluation. Program evaluation has emerged as an important function for program managers at all levels of government and in all facets of the non-profit sector. Increasingly program managers and directors are being asked by government agencies, foundations, and donors to gather data on program performance. Performance management implies linking the program to desired goals and outcomes, and the tools of program evaluation are an important part of evaluating the program's success. While you will not become an expert in program evaluation from this course, you should be comfortable with simple applications of these tools and, most importantly, learn to be an intelligent consumer of evaluations prepared by others.

I will focus on two types of program evaluations: *formative evaluations and summative evaluations*. *Formative evaluations* are assessments of how well a program is being implemented, or how closely program implementation fits with the intentions of policy-makers. *Summative evaluations* assess whether the program achieved its desired objectives. These evaluations often use statistical methods, such as multiple regression, to help isolate the effect of the program. A good evaluation design will differentiate objectives related to process and outcomes, and will match data collection and analysis to these different needs. In addition to highlighting different data gathering and analytic methods, this course will also consider the challenges of evaluating different types of programs in different contexts.

This course will be demanding, but will prepare you well for future graduate study or for work in the public, private, and non-profit sectors.

The first part of the semester will focus on designing formative evaluations to assess in-stream implementation of programs and will prepare you for the advanced statistics topics of the second half of the course. We will discuss how to design and perform formative evaluation research so as to maximize its utility to program managers. In addition, the first part of the course will cover a number of different data collection methods. The second part of the course will pick up where your introductory statistics classes left off by addressing multivariate regression analysis in more detail. As indicated above, multiple regression analysis is one of the principal tools used to estimate the effect of a program on outcomes. You will learn how to use Stata to carry out regression analysis.

There are three major goals for this part of the course. The first is to expose you to strategies for designing an evaluation study. Half the battle in program evaluation is coming up with a good research design that eliminates as many potential biases as possible. Second, you will link these different designs to the statistical tools used to analyze the results. Third, you will get practice

reading summaries of program evaluations, assessing research designs, and discussing strengths and weaknesses of evaluation studies.

## **COURSE PREREQUISITES**

Generally this course is open to students who have successfully completed PS1600, Soc 1100, or EDUC 1110. Exceptions will require the approval of the instructor. Students are expected to arrive in class with an understanding of ordinary least squares (OLS) regression techniques. We will review introductory statistics, but this review will not be adequate for those who have not taken the prerequisites and are not familiar with OLS.

## **REQUIRED TEXTS AND MATERIALS (BOOKS AVAILABLE AT BROWN BOOKSTORE)**

1. Trochim, William. The Research Methods Knowledge Base. 3rd Edition. Order at [www.atomicdogpublishing.com](http://www.atomicdogpublishing.com), 2001. (\$61.50 for online access only, \$80 for print and online access)
2. United Way of America. 1996. Measuring Program Outcomes: A Practical Approach. Available from United Way Store at 800-772-0008 (toll-free U.S.) or 703-212-6300. Item No. 0989. Price: \$5 (plus shipping and handling).
3. Shroeder, Larry D., David L. Sjoquist, and Paula E. Stephan. 1986. Understanding Regression Analysis: An Introductory Guide. Newbury Park: Sage Publications. (\$17)
4. Lewis-Beck, Michael S. 1980. Applied Regression: An Introduction. Newbury Park: Sage Publications.(\$17)
5. Weiss, Carol H. Evaluation: Methods for Studying Programs and Policies. Second Edition. Upper Saddle River, NJ: Prentice Hall.(\$54.95)
6. Reading Packet (available at Allegra on the corner of Thayer and Waterman)

## **GRADING AND WRITTEN ASSIGNMENTS**

Students are expected to come to class prepared by having completed the assigned readings and any written assignments or group projects. No late assignments will be accepted.

30%	Three Data Assignments (10% each)
20%	Take-home Midterm Examination
20%	Final Examination
15%	Critique of Evaluation Design
15%	Class Participation

## ASSIGNMENTS

1) **Exams (Two - 20% each):** There will be two exams in this course. A take-home midterm examination will be handed out on Tuesday, February 23<sup>rd</sup> and will be due at the beginning of class on **Tuesday, March 13<sup>th</sup>**. This take-home midterm exam will cover the course concepts through class session #5. On **Monday, May 11<sup>th</sup>** there will be a closed book, closed note final exam. The focus of this exam will be on multivariate regression and research design considerations.

2) **Data assignments (Three - 10% each):** Three short 2-3 page data assignments that will ask you to apply different concepts and techniques from class readings and lectures.

3) **Critique of evaluation (15%):** To give you practice as a consumer of program evaluations you will be required to write a three page memo summarizing and critiquing an evaluation study. Your assignment is to critique the program evaluation design, methods, and analysis. *A more detailed assignment sheet will be handed out on Tuesday, April 25th.* Memos are due on **Thursday, May 3<sup>rd</sup>**.

In your paper, you will address the following questions:

- a. In one paragraph, briefly describe the evaluation design used in the study. (Be sure to touch upon the key components of research designs that have been covered in class).
- b. Which statistical methods are used in the study? What was found to be statistically significant? Are you able to discern substantive significance?
- c. Critique this evaluation design using the material we have discussed regarding validity, causality, sampling, data collection, and design. Are there problems with the design that may bias the findings? Which problems are most serious?
- d. If the authors were to do this study again, how would you modify the data collection strategy, design, or analysis to address the problems that you have identified above?

Focus on the merits of the research design and the nature of the evidence. Do the authors lay out clear research questions and testable hypotheses? Do the authors provide adequate information about their data set, measures, and models? Do the analyses presented answer the questions posed at the outset? Are there other types of analyses or models the authors should have pursued?

4) **Class Participation (15%):** Students are expected to have completed the readings assigned for each week and to be prepared to discuss those readings. Several class periods will involve short in-class quizzes, assignments, or group activities to highlight particular readings, issues, or concepts.

## WEB SITES RELATED TO PROGRAM EVALUATION

### *Domestic Organizations*

American Evaluation Association:	<a href="http://www.eval.org">http://www.eval.org</a>
General Accounting Office:	<a href="http://www.gao.gov">http://www.gao.gov</a>
Congressional Budgeting Office:	<a href="http://www.cbo.gov">http://www.cbo.gov</a>
U.S. Department of HHS, Office of the Asst. Secretary for Planning and Research:	<a href="http://aspe.os.dhhs.gov">http://aspe.os.dhhs.gov</a>
Manpower Demonstration Research Corporation:	<a href="http://www.mdrc.org">www.mdrc.org</a>
Abt Associates:	<a href="http://www.abtassoc.com">www.abtassoc.com</a>
Mathematica:	<a href="http://www.mathematica-mpr.com">www.mathematica-mpr.com</a>
Urban Institute:	<a href="http://www.urban.org">www.urban.org</a>

### *International Organizations*

Canadian Evaluation Society:	<a href="http://www.evaluationcanada.ca">www.evaluationcanada.ca</a>
Asian Development Bank:	<a href="http://www.asiandevbank.org">www.asiandevbank.org</a>
European Bank for Reconstruction and Development:	<a href="http://www.ebrd.com">www.ebrd.com</a>
Inter-American Development Bank:	<a href="http://www.iadb.org">www.iadb.org</a>
North American Development Bank:	<a href="http://www.nadbank.org">www.nadbank.org</a>
Organization for Economic Cooperation and Development:	<a href="http://www.oecd.org">www.oecd.org</a>
World Bank:	<a href="http://www.worldbank.org">www.worldbank.org</a>

**COURSE OUTLINE**

<b>DATE</b>	<b>TOPIC</b>	<b>ASSIGNMENTS/ EXERCISES</b>
<b>Session 1: Monday, January 25<sup>th</sup></b>	Introduction History of the evaluation field Ex-post vs ex-ante evaluations Formative vs Summative evaluations	<b>Intake questionnaire In-class exercise: 10-minute presentation on the history of evaluation</b>
<b>Session 2: Monday, Feb 2</b>	<i>Review of Statistics and Stata</i>	<b>Meet in computer lab TBD (CIT room 265)  Data Assignment # 1 distributed</b>
<b>Session 3: Monday, Feb.9</b>	Theories of change: Program theory, logic models, and implementation theory	
<b>No Session Monday, Feb.16</b>	<b>NO CLASS – LONG WEEKEND</b>	
<b>Session 4: Monday, Feb. 23</b>	Data Collection Techniques Logic of Research Design	<b>Data assignment #1 due Take-home Midterm distributed</b>
<b>Session 5: Monday, March 2</b>	Experimental vs Quasi-experimental designs	
<b>Session 6 Monday, March 9</b>	Review of Simple Regression and Stata In-class data analysis with Stata	<b>Take-home midterm due Mid-semester course eval</b>
<b>Session 7 Monday, March 16</b>	Multiple Regression In-class data analysis with Stata	<b>Data assignment #2 distributed</b>
<b>No Session Monday March 23</b>	<b>NO CLASS – SPRING BREAK</b>	
<b>Session 8: Monday, March 30</b>	Applications of multiple regression Problems with multiple regression	<b>Data assignment #2 due Data assignment #3 distributed</b>
<b>Session 9: Monday, April 6</b>	Qualitative evaluation techniques	<b>In-class focus group facilitation and coding exercise</b>
<b>Session 10: Monday, April 13</b>	Critiquing evaluations	<b>Data assignment #3 due Evaluation critique assignment distributed</b>
<b>Session 11 Monday, April 20</b>	Advanced topics in program evaluation: Mixed methods, systems evaluation, Complexity-based methods	
<b>Session 12 Monday, April 27</b>	Ethical issues in program evaluation Exam review session	<b>Evaluation critique due</b>
<b>Session 13 Monday, May 4</b>	Short in-class exam	

## Assignments

<b>Session 1: Monday, Jan 25</b>	<b>Introduction: Evaluation history, ex-post vs ex-ante evaluations, formative vs summative evaluations</b>
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**In-class reading:**

- Patton, Michael Quinn. Utilization-focused evaluation, 4<sup>th</sup> Edition. Chapter 1, pp. 10-18
- Weiss, Chapter 1, pp. 10-15
- American Evaluation Association, “Guiding Principles for Evaluators” (Coursepak)
- Weiss, Chapter 2

**In-class exercises:**

- Intake questionnaire
- Develop a 5-10 minute speech on the history of evaluation

<b>Session 2: Monday, Feb 2</b>	<b>Review of Statistics and Stata Meet in computer lab TBD (CIT room 265?)</b>
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**Reading:**

- Review your basic statistics notes from one of the prerequisite stats classes
- Read UCLA Stata starter kit page, found at:  
<http://www.ats.ucla.edu/stat/stata/sk/default.htm>
- UCLA Stata portal class notes with movies, found at:  
<http://www.ats.ucla.edu/stat/stata/notes3/default.htm>. Please view the following class movies: exploring data; modifying data; managing data; and analyzing data, part 1. In analyzing data, stop when the part about regression starts (we’ll cover that later). It may help to print out the class notes provided on the website before you view the movies.

**Assignments:**

- Data assignment 1 distributed
- Take-home midterm distributed

<b>Session 3: Monday, Feb.9</b>	<b>Theories of change: Program theory, logic models, and implementation theory</b>
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**Reading:**

- United Way, pp. 1-80
- Weiss, Chapter 3 (pp. 46-71)
- Cunningham, Louise E., Robert Michielutte, Mark Dignan, Penny Sharp, and Jeanne Boxley. 2000. “The Value of Process Evaluation in a Community-Based Cancer Control Program.” Evaluation and Program Planning 23:13-25. (coursepak)
- Jaeger, Elizabeth A., Anne B. Shlay, and Marsha Weinraub, “Child Care Improvement On A Shoestring: Evaluating a Low-Cost Approach to Improving the Availability of Quality Child Care,” Evaluation Review, 24(5): 484-515, October 2000. (coursepak)

**No session**  
**Monday, Feb.16**

**LONG WEEK-END – NO CLASS**

**Session 4: Data Collection Techniques/ Logic of Research Design**  
**Monday, Feb 23**

**Reading:**

**Measurement**

- Weiss, Carol. 1998. "Chapter 6: Developing Measures." *Evaluation: Methods for Studying Programs and Policies*. New Jersey: Prentice Hall. pp. 114-151. (coursepack)
- United Way, pp. 81-112; 147-161

**Sampling**

- Trochim. "Chapter 2: Sampling." pp. 33-51.

**Introduction to Research Design**

- Trochim. "Chapter 7: Design." pp. 157-175.

**Assignments:**

- Data assignment 1 due
- Take-home midterm due

**Session 5: Experimental vs quasi-experimental designs**  
**Monday, Mar 2**

**Reading:**

**Experimental Design**

- Trochim. "Chapter 9: Experimental Design." pp. 185-206.
- Goering, John, Judith D. Feins, and Todd M. Richardson. 2002. "A Cross-Site Analysis of Initial Moving to Opportunity Demonstration Results." *Journal of Housing Research* 13(1):1-30. (coursepack)

**Quasi-Experimental Design**

- Trochim. "Chapter 10: Quasi-Experimental Design." pp. 209-229.
- Florence, Curtis S., David R. Hotchkiss, Robert J. Magnani, and H. Gilman McCann. 1999. "Assessing the Effects of Monetized Food Aid on Reproductive Behavior in Rural Honduras." *Evaluation and Program Planning* 22:399-411. (coursepack)

**Session 6**  
**Monday, Mar 9**

**Review of Simple Regression and Stata**  
**In-class data analysis with Stata**

**Reading:**

- Review your prerequisite class notes on simple regression
- Shroeder, Larry D., David L. Sjoquist, and Paula E. Stephan. 1986. *Understanding Regression Analysis: An Introductory Guide*. Newbury Park: Sage Publications. pp. 11-29.
- Lewis-Beck, Michael S. 1980. *Applied Regression: An Introduction*. Newbury Park: Sage Publications. pp. 9-47.

- UCLA Stata portal class notes with movies, found at: <http://www.ats.ucla.edu/stat/stata/notes3/default.htm>. Please view the following class movie: analyzing data, part 1, view the regression portion of this movie.
- Other Stata-related readings may be posted on the course website closer to the date of this class. I will let you know on Mar.2.

Assignments:

- Take-home midterm due
- Mid-semester course evaluation (in class)

<b>Session 7</b>	<b>Multiple Regression</b>
<b>Monday, Mar 16</b>	<b>In-class data analysis with Stata</b>

Reading:

- Shroeder, Larry D., David L. Sjoquist, and Paula E. Stephan. 1986. *Understanding Regression Analysis: An Introductory Guide*. Newbury Park: Sage Publications. pp. 29-65.
- Lewis-Beck, Michael S. 1980. *Applied Regression: An Introduction*. Newbury Park: Sage Publications. pp. 47-56.
- Houston, David J. 1999. "Implications of the 65-mph Speed Limit for Traffic Safety." *Evaluation Review* 23(3):304-315. (coursepack)
- Crew Jr., Robert E. and Scott Lamothe. 2003. "Evaluating the Effectiveness of Private Sector Organizations in Helping Welfare Beneficiaries Find Employment." *Evaluation Review* 27(2):151-164. (coursepack)
- Other Stata-related readings may be posted on the course website closer to the date of this class. I will let you know on Mar.9.

Assignments:

- Data assignment #2 distributed

<b>No Session</b>	<b>NO CLASS – SPRING BREAK</b>
<b>Monday Mar 23</b>	

<b>Session 8:</b>	<b>Applications of multiple regression</b>
<b>Monday, Mar 30</b>	<b>Problems with multiple regression</b>

Readings:

- Shroeder, Larry D., David L. Sjoquist, and Paula E. Stephan. 1986. *Understanding Regression Analysis: An Introductory Guide*. Newbury Park: Sage Publications. pp. 65-80.
- Lewis-Beck, Michael S. 1980. *Applied Regression: An Introduction*. Newbury Park: Sage Publications. pp. 56-74.
- *Levitt and Dubner, Freakonomics, pp. 161-76 (coursepak).*
- Fryer, Jr., Roland G. and Steven D. Levitt. "Understanding the Black-White Test Score Gap in the First Two Years of School," *The Review of Economics and Statistics*, 86(2): 447-464, May 2004. (coursepak)
- McCoy, Clyde B., Lisa R. Metsch, H. Virginia McCoy, and Shenghan Lai, "A

- *Gender Comparison of HIV and Drug Use Across the Rural-Urban Continuum,” Population Research and Policy Review, 18: 71-87, 1999. (coursepak)*

### Assignments:

- Data assignment #2 due
- Data assignment #3 distributed

<b>Session 9: Qualitative evaluation techniques</b> <b>Monday, Apr 6</b>
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### Readings:

- Grbich, Carol. *Qualitative Data Analysis: An Introduction*. London, Thousand Oaks and New Delhi: Sage Publications, Inc., 2007. “Epistemological Changes and their Impact on the Field.” 3-15 (coursepak).
- Ulin, P.R., Robinson, E.T., Tolley, E., McNeill, E. 2002. *Qualitative Methods: A Field Guide for Applied Research in Sexual and Reproductive Health*. Research Triangle Park, NC: Family Health International. Chapter 4, data collection, pp. 69-112 (coursepak)
- Ulin, P.R., Robinson, E.T., Tolley, E., McNeill, E. 2002. *Qualitative Methods: A Field Guide for Applied Research in Sexual and Reproductive Health*. Research Triangle Park, NC: Family Health International. Chapter 6, analysis, pp. 135-166 (coursepak)
- Grbich, Carol. *Qualitative Data Analysis: An Introduction*. London, Thousand Oaks and New Delhi: Sage Publications, Inc., 2007. “Discourse Analysis.” 146-154. (coursepak)
- Barbara J. Lutz, Shawn Kneipp, and Deirdra Means. 2009. *Developing a Health Screening Questionnaire for Women in Welfare Transition Programs in the United States*. *Qual Health Res*, 19: 105-115 (coursepak)

### Assignments:

- In-class focus group facilitation and coding exercise

<b>Session 10: Critiquing evaluations</b> <b>Monday, Apr 13</b>
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### Required Reading:

- Florence, Curtis, David R. Hotchkiss, Robert J. Magnani, and H. Gilman McCann. 1999. “Assessing the Effects of Monetized Food Aid on Reproductive Behavior in Rural Honduras.” *Evaluation and Program Planning*, 22: 399-411. (coursepak)
- Brown, J. Lynne and Nancy Ellen Kiernan. “Assessing the Subsequent Effect of A Formative Evaluation on a Program,” *Evaluation and Program Planning*, 24(2001): 129-43. (coursepak)
- Harris, William S. et al. “A Randomized, Controlled Trial of the Effects of Remote, Intercessory Prayer on Outcomes in Patients Admitted to the Coronary Care Unit,” *Arch Intern Med.*, 159: 2273-2278. (coursepak)
- Leon, Ana M., Sophia F. Dziegielewska, and Christine Tubiak. “A Program Evaluation Of A Juvenile Halfway House: Considerations For Strengthening Program Components,” *Evaluation and Program Planning*, 22(1999): 141-53. (coursepak)

### Assignments:

- Data assignment #3 due
- Evaluation critique assignment distributed

<b>Session 11</b> <b>Monday, Apr 20</b>	<b>Advanced topics in program evaluation</b>
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**Readings:****Spatial analysis, selection bias, and other considerations:**

- Clark, William A.V. Reexamining the Moving to Opportunity Study and Its Contribution to Changing the Distribution of Poverty and Ethnic Concentration Demography - Volume 45, Number 3, August 2008, pp. 515-535.

**Mixed methods research:**

- Caracelli, V.J. 2006. Enhancing the Policy Process Through the Use of Ethnography and Other Study Frameworks: A Mixed-Method Strategy. Research in the Schools, 13 (1): 84-92
- Onwuegbuzie, A.J., Johnson, R.B. The Validity Issue in Mixed Research. Research in the Schools, 13 (1): 48-63
- Yin, R.K. Mixed Methods Research: Are the Methods Genuinely Integrated or Merely Parallel? Research in the Schools, 13 (1): 41-47

<b>Session 12</b> <b>Monday, Apr 27</b>	<b>Ethical issues in program evaluation</b> <b>Exam review session</b>
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**Readings:**

Required:

The Belmont Report, available at <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm>

Recommended:

get certified in research ethics following the course provided at this website:

[http://research.brown.edu/rschadmin/hrpo\\_citi\\_menu.php](http://research.brown.edu/rschadmin/hrpo_citi_menu.php)

Be sure to print your certificate

**Assignments:**

- Evaluation critique due
- In-class final course evaluation

<b>Session 13</b> <b>Monday, May 4</b>	<b>Short in-class exam</b>
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