PUBLIC ADMINISTRATION RESEARCH METHODS
PUBA 607
Wednesdays, 6-8:30

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Course Description

PUBA 607 is an introduction to research methods, primarily for graduate students and public administrators who wish to understand the principles and methods used to conduct valid research. Our course work and text are oriented to the field of public administration and therefore built on examples and issues from the public sector. The course is light on statistical methodology, but aims to improve the student's understanding of how statistical tools can improve the research project.

A combination of theory and hands-on practice will animate each evening. Most evening will begin with a theoretical lecture and discussion, with illustrative examples. Most evenings will end with a hands-on opportunity in a computer lab to explore, practice, and pursue mastery of the night's materials.

Student Learning Outcomes

The course will introduce students to basic methods and issues of research in public administration. After successful completion of the course, students should be able to:
1.   Compare the relative strengths and weaknesses of different types of research designs, and identify the most appropriate methodological tools for analysis of a variety of research questions, including experimental, quasi-experimental, and qualitative methods
2.   Evaluate major ethical and practical issues associated with conducting research
3.   Produce data analysis that effectively contributes to public administration debates
4.   Communicate and justify a research design and results to a professional non-technical audience, in oral and written form

Textbook and Readings

Eller, Warren S., Gerber, Brian J., and Robinson, Scott E. 2013. Public Administration Research Methods. Routledge Press. ISBN: 978-0415895309 [available Amazon and elsewhere, approximately $90 for purchase, $50 for rent. NOTE: important to purchase the edition that includes the "interactive eTextbook"]

additional readings available through Laulima

To maximize your learning, it is essential to come to class having read all assigned materials.

Software

Much of our classroom exercises will be completed with Excel. Additional illustrations

will be provided for other commonly available software, such as SPSS (available on all computers in the 3rd floor lab). Some of the more advanced exercises will be completed with Stata (also available on all computers in the 3rd floor lab, and it will be possible to complete the statistical analysis right in class). You should not need to purchase any specialized software, though student licenses are available at reasonable cost.

Assignments

A series of short assignments will be required, each of which mimics an important component of a research project. Thus, you will practice and demonstrate mastery of (a) forming a research question, (b) conducting a literature review, (c) designing a research plan and proposing hypotheses, (d) identifying and collecting data, and (e) analyzing data and presenting analyses, employing several different techniques.

Grading

Attendance and practice are vital to your performance. Attendance is required and constitutes 20% of your grade. Only documented hardships of the sort approved by the University will be accepted.

Because of the unusually cumulative nature of the material, timely completion of assignments is required, such that no late assignments will be accepted. Across the semester, ONE low grade may be dropped for purposes of calculating the student's grade. If you didn't turn an assignment in on time, that's your first and only strike. Note that some assignments may be challenging for many different reasons. Submission of partially completed assignments, attempted in good faith, will be graded generously and returned with constructive feedback. Students may re-submit ANY assignment that responds to the feedback offered by the instructor, for a replacement of the grade. Such re-submissions should be dramatically improved products to merit significant grade improvement. Most assignments should be typed and written and submitted electronically through laulima. The final assignment requires construction and presentation of a poster. Details will be provided. Assignments constitute 60% of your grade.

Being able to respond on the fly about methodological issues is an important skill, and you will be given a final exam for the course, to assess how well you have mastered that ability. The exam will present a mixture of short answer questions and problems requiring a more thorough answer, patterned after the materials from the assignments and in-class exercises, and will constitute 20% of your grade.

attendance:	20%
assignments:	60%
final exam	20%
Total	100%

Topics and Schedule

1. Introduction, Research Questions
    discussion: problem definition, premises, interest, practical application
    exercise: mini-research questions
    assignment: research question proposal (<300 words), due next period

2. Academic writing, research integrity, and ethical principles in research
      readings: Eller et al, chapter 4
                     Ansell, C. & A. Gash. (2007). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18: 543-571.
      discussion: citation style, intellectual property, copyright, body of knowledge, peer review, academic sources, online sources
      exercise: (group) literature summaries
      assignment: literature review (<750 words), due next period

3. Research Design: Experiments and Scientific Method
      readings: Eller et al, chapter 5
                     Simon, C. A. (2002). "Testing for Bias in the Impact of AmeriCorps Service on Volunteer Participants: Evidence of Success in Achieving a Neutrality Program Objective." *Public Administration Review,* 62(6): 670-678.
      discussion: observations, generalization, inference
      exercise: design and critiques (blind peer review)
      assignment: mini-research design exchanged and commented on by a partner [online]

4. Operationalizing Variables and Measurement Issues
      readings: Eller et al, chapter 6
                     Jost, J. T., C. M. Frederico, & J. L. Napier. (2009). "Political Ideology: Its Structure, Functions, and Elective Affinities." Annual Review of Psychology, 60: 307-37.
      discussion: variation, unit of analysis, systemic vs. random error, ethics and humanity of measurement, longitudinal v. cross sectional measurement
      exercise: spreadsheet assembly and visualization
      assignment: news item variable identification and description, due next period

5. Data 1: Archival Data, Textual Analysis, Interviews
      readings: Eller et al, chapters 8 and 9
                     Wood, L., P. Bernt, and C. Ting. (2009). "Implementing Public Utility Commission Websites: Targeting Audiences, Missing Opportunities." *Public Administration Review*. 69: 753-763.
      discussion: data sources, libraries, FOIA, meta-analyses, interview best practices, qualitative analysis, field research, human subjects procedures
      exercise: recorded interview coding

6. Data2: Surveys
      readings: Eller et al, chapter 11
                     Cohn, L. D., D. Hernandez, & T. Byrd. (2002). A Program to Increase Seat Belt Use Along the Texas-Mexico Border. *American Journal of Public Health*, 92: 1918–20.

discussion: survey administration, attitudes v. nonattitudes, scales, question wording, question order, response rates
excercise: (group) survey construction
assignment: data collection proposal (<500 words), due next period

7. Analysis: Data Types, Describing Data, Displaying Data
    readings: Eller et al, chapters 12 and 13
                A. C. Brooks. (2003). Taxes, Subsidies, and Listeners Like You: Public Policy and Contributions to Public Radio. *Public Administration Review,* 63: 554-61.
    discussion: categorical and continuous variables, descriptive statistics [mean, median, variance, skew], graph and chart styles and best practices
    exercise: charts and graphs
    assignment: graph and table assembly and refinement, due next period (sample data provided)

8. Sampling And Randomness
    readings: Eller et al, chapter 7
                Resh, William G., David W. Pitts. (2013). "No Solutions, Only Trade-Offs? Evidence About Goal Conflict in Street-Level Bureaucracies." *Public Administration Review,* 73(1): 132-142.
    discussion: probability, power law, population, bayesian perspective, nonresponse bias, stratification, margin of error
    exercise: m&m populations
    assignment: outlier identification and treatment (sample data provided)

9. Hypothesis Testing
    readings: Eller et al, chapter 15
                Cohn, L. D., D. Hernandez, & T. Byrd. (2002). A Program to Increase Seat Belt Use Along the Texas-Mexico border. American Journal of Public Health 92:1918–20.
    discussion: null hypothesis, standard error, typeI and typeII inference errors
    exercise: (partnered) hypothesis generation and critique
    assignment: hypothesis (<100 words), due next period

10. Analysis: Associations for Nominal, Ordinal and Continuous Variables
    readings: Eller et al, chapter 16
                Errol, E. J. & B. E. Winston, (2005). "A Correlation of Servant Leadership, Leader Trust, and Organizational Trust." *Leadership & Organization Development Journal,* 26: 6-22.
    discussion: statistics [chi-squared, gamma, correlation]
    exercise: crosstabs and correlations
    assignment: chi-squared testing (sample data provided)

11. Analysis: Regression 1
  readings: Eller et al, chapter 17
       Gilmour, John B., & David E. Lewis. (2006). Does Performance Budgeting Work? An Examination of the Office of Management and Budget's PART Scores. *Public Administration Review*, 66: 742-52.
  discussion: projection, coefficients, prediction, forecasting, slope, model fit, statistics [t-tests, R-squared, F-test], substantive v. statistical significance
  exercise: linear regression
  assignment: linear regression (<1 page) (sample data provided)

12. Analysis: Regression 2
  readings: Eller et al, chapter 18 (except pages 337-345)
       Devroye, Dan. (2003). "Who Wants to Privatize Social Security? Understanding Why the Poor Are Wary of Private Accounts." *Public Administration Review*, 63:316-28.
  discussion: specification, partial effects, omitted variable bias, multicollinearity, indirect effects
  exercise: multiple linear regression
  assignment: multiple regression (<2 pages) (sample data provided)

13. Analysis: Regression 3
  readings: Eller et al, chapter 18 (pages 337-345)
       Alonso, P., & G. Lewis. (2001). "Public Service Motivation and Job Performance: Evidence from the Federal Sector. *American Review of Public Administration*, 31: 363–80.
  discussion: regression assumptions, residuals, diagnostics, linearity, heteroskedasticity, longitudinal and spatial autocorrelation, statistics [durbin, white]
  exercise: diagnostics of residuals
  assignment: regression diagnostics (<1 page) (sample data provided)

14. Presentation of Research in Written and Oral Form
  readings: Eller et al, chapter 21
       Bardach, E. (2011). Practical guide for policy analysis: the eightfold path to more effective problem solving. CQ press. Chapter 4.
  discussion: powerpoint/prezi/etc best practices, visual effects
  exercise: critiques of published powerpoints
  assignment: mini-presentation [powerpoint, to be presented in class, next period]

15. Poster Presentations

16. Final Exam (during final exam period)

Sample Assignment: Research Methods

Cross-Sectional Analysis

Many states offer income tax deductions and credits, to encourage purchase of private long-term care isnurance. Your assignment is to answer the following question: **do the tax incentives offered in about 15 states induce additional insurance sales in the states**?

Data source: PUBAXXX_LTCI.DTA, state-level variation in "market penetration" (the proportion of over-50 population that has purchased long term care insurance), as provided in Figure 9 of a 2004 report by America's Health Insurance Plans (formerly Health Insurance Association of America).

Data type: cross-sectional (one observation for each of fifty states, plus the District of Columbia; 51 total observations)

Variables:

state	2-digit mail code
geo-name	full state name
ahippenetration	market penetration in the categories provided by AHIP
ahip_pen_percent	market penetration translated into percentages
ppctaxes	0 if state has no special tax incentives, 1 if state has LTCI tax break
medianHHincome	median household income for seniors 65 to 74 (source: Census)
LiveWithChildren	percent of seniors 65 and older who live with their children

Data analysis 1: calculate the average market penetration for states with and without tax incentives (the variable ppctaxes is the key independent or predictor variable, and the variable ahip_pen_percent is the key dependent variable). Report your results in a bar chart (there should be two bars)

Data analysis 2: perform a crosstabulation of market penetration categories and tax incentive availability (crosstab ppctaxes x ahippenetration, there should be eight "cells", you could look at chi-squared statistic or gamma statistic, or a few others.)

Data analysis 3: perform a t-test to determine whether the population of market penetration percentages in tax incentive states is different than the population of market penetration percentages in non-tax incentive states.

Data analysis 4: perform a bivariate regression featuring market penetration as the dependent variable and tax incentives as the only independent variable (look at the t-test for statistical significance, how does it differ from the t-test you performed in Data analysis 3?). Write up your results with a small table and brief explanation and conclusion.

Data analysis 5: perform a multiple regression featuring market penetration percentage as the dependent variable, and tax incentives, family structure (LiveWithChildren), and income as independent variables). Again, write up your results with a small table and brief explanatory text and conclusions.