APPLIED QUANTITATIVE REASONING II

UST/PAD/PDD/NAL 602

Fall Semester 2009

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Introduction

Applied Quantitative Reasoning II covers the logic of empirical inquiry and the design and implementation of research to address applied problems in urban, public, and nonprofit settings. Among the topics considered are: research designs (experimental, quasi-experimental, and non-experimental) and types of, as well as threats to, validity (internal, statistical conclusion, construct, and external); measurement, measurement validity, and reliability; different forms of analysis, including economic, qualitative, and statistical; and modes of data collection, including survey design and analysis. The course has a strong focus on program evaluation and performance measurement, and covers the ethics of the research process. The prerequisite for the course is UST/PAD/PDD 601 or permission of the instructor.

Use of E-mail for Course

Please do **not** use e-mail to submit course papers, examinations, or assignments, unless you have obtained permission from the instructor in advance. E-mail is to be used for short communications, not extended discussions. Please include in any e-mail message your full name and telephone number. If you would like to meet or talk with me, please telephone (216.687.5269) and/or schedule an appointment. If you leave a message on the answering machine, please speak and state your telephone number slowly. Thank you!

Course Objectives

At the conclusion of the course students will be able to meet the following objectives:

- Design a research project
- Implement a research project
- Apply a range of research methods depending on the research problem
- Evaluate the quality of measurement in their own research projects as well as in others' projects
- Evaluate the strengths and limitations of their own research projects as well as others' projects
- Prepare a logic model
- Use the vocabulary of applied research
- Make a professional presentation that involves research methods

Course Calendar

August	September	October	November	December
24: Course Overview	7: Labor Day (official CSU holiday)	5: Measurement and Data Collection	2: Economics-Based Evaluations	7: Final Examination
31: Prog. Evaluation & Perf. Measurement; begin Program Logic models	14: Program Logic Models; begin Research Design	12: Columbus Day (official CSU holiday)	9: Performance Measurement; begin Stat. Methods in Applied Research	
	21: Research Design	19: Measurement and Data Collection; begin Qualitative Evaluation Methods	16: Stat. Methods in Applied Research	
	28: Research Design; **Class begins at 7:30 PM**	26: Qualitative Evaluation Methods; Assessing Need for Program	23: Student Presentations	
			30: Student Presentations and Course Review	

Books

McDavid, James C., and Laura R. L. Hawthorn, Program Evaluation and Performance Measurement: An Introduction to Practice. Thousand Oaks, CA: Sage Publications, 2006.

Wholey, Joseph S.; Harry P. Hatry, and Kathryn E. Newcomer (eds.), Handbook of Practical Program Evaluation; Second Edition; San Francsico, CA: Jossey-Bass, 2004.

Note: The primary textbook for the course is McDavid and Hawthorn (2006). Wholey, Hatry, and Newcomer (eds.) brings both depth and breadth to the reading list. This book complements the presentation of McDavid and Hawthorn (2006) and offers the range of coverage that will allow students to pursue their particular interests in the field.

Equal Educational Opportunity

The Cleveland State University Office of Disability Services states: "Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216) 687-2015. The Office is located in UC 304. Accommodations need to be requested in advance and will not be granted retroactively."

Course Requirements and Evaluation of Student Performance

All coursework (readings, assignments, presentations, etc.) is to be completed and submitted on time. If you have a legitimate reason for late work, please notify the instructor immediately, so that the circumstances may be considered in advance of the due date. In fairness to all students, any work submitted after the due date will receive a penalty, unless you have made previous arrangements with the instructor regarding a legitimate reason for late work.

All written work for the course must meet the following standards:

- Typewritten or printed
- 12-point font minimum size (smaller font will not be accepted)
- Double-spaced text (single spaced papers will not be accepted)
- One-inch margins on all sides of the page
- **Dark type**
- Typed or printed on one side of page only
- Minimum of hand-written annotations or editions

All written work is to be submitted in hard copy, **not** by email, unless you have obtained permission from the instructor in advance.

Evaluation of student performance will be based on the following components with contribution to the course grade (%) as indicated.

Component	**Contribution to course grade (%)**
Class presentation project and positive course participation	30
Course assignments and in-class exercises	30
Final examination	40
Total	**100%**

The class presentation project calls for students to gain in-depth knowledge in one of the topical areas listed under XIV below. Students will prepare a PowerPoint (or similar) presentation for the class and lead a discussion of their selected topic. The presentation must incorporate a least two of the readings listed under XIV (depending on the topic). The suggested time for the class presentation is 15-20 minutes (depending on the number of students enrolled). All topics must be approved by the instructor in advance.

Other options are open for the class project and presentation, to be discussed in class.

Each student is responsible for bringing to class enough paper copies of their presentation for the other students and the instructor. Thank you.

The final examination for the course is scheduled for Monday, December 7th, at the same time as the regular class meetings.

We will discuss all course components fully in class.

Office Hours

Office hours are 3:00 PM – 5:00 PM on Wednesdays or by appointment in Room 238A. Please contact me in person or by telephone (216) 687-5269 to schedule an office visit. I prefer not to schedule appointments through e-mail. If you send an e-mail message, please include your full name and telephone number. If you leave a message on the answering machine, please speak and state your telephone number slowly. Thank you!

Class Sessions and Readings

The anticipated schedule for covering the course material appears below. Any changes or updates to the schedule will be discussed with students. All reading is to be completed prior to the designated class session.

I. August 24, 2009: Overview of the Course: The Political and Methodological Contexts of Applied Research and Program Evaluation

Readings: None

II. August 31, 2009: Program Evaluation and Performance Measurement

McDavid and Hawthorn, Chapter 1, "Key Concepts and Issues in Program Evaluation and Performance Measurement"

Wholey, Hatry, and Newcomer (eds.), "Meeting the Need for Practical Evaluation Approaches: An Introduction"

III. September 7, 2009: Labor Day (Official CSU Holiday: No class)

IV. September 14, 2009: Program Logic Models

McDavid and Hawthorn, Chapter 2, "Understanding and Applying Program Logic Models"

Wholey, Hatry, and Newcomer (eds.), Chapter 1, "Using Logic Models"

V. September 21, 2009: Research Design

McDavid and Hawthorn, Chapter 3, Research Designs for Program Evaluations

Wholey, Hatry, and Newcomer (eds.), Chapter 5, "Quasi-Experimentation"

Wholey, Hatry, and Newcomer (eds.), Chapter 6, "Using Randomized Experiments"

VI. September 28, 2009 (**Class begins at 7:30 PM)**: Research Design

Please see readings for V. above.

VII. October 5, 2009: Measurement and Data Collection

McDavid and Hawthorn, Chapter 4, "Measurement in Program Evaluation"

VIII. October 12, 2009: Columbus Day (Official CSU Holiday: No class)

IX. October 19, 2009: Qualitative Evaluation Methods

McDavid and Hawthorn, Chapter 5, "Applying Qualitative Evaluation Methods"

Wholey, Hatry, and Newcomer (eds.), Chapter 15, "Qualitative Data Analysis"

X. October 26, 2009: Assessing the Need for Programs

McDavid and Hawthorn, Chapter 6, "Assessing the Need for Programs"

XI. November 2, 2009: Economics-Based Evaluations

McDavid and Hawthorn, Chapter 7, "Concepts and Issues in Economic Evaluation"

Wholey, Hatry, and Newcomer (eds.), Chapter 18, "Cost-Effectiveness and Cost-Benefit Analysis"

XII. November 9, 2009: Performance Measurement

McDavid and Hawthorn, Chapter 8, "Performance Measurement as an Approach to Evaluation"

McDavid and Hawthorn, Chapter 9, "Design and Implementation of Performance Measurement Systems"

XIII. November 16, 2009: An Introduction to Statistical Methods in Applied Research

Read: Kenneth J. Meier, Jeffrey L. Brudney, and John Bohte, Applied Statistics for Public and Nonprofit Administration, Sixth Edition (Fort Worth, TX: Thompson-Wadsworth), Chapter 8, "The Normal Probability Distribution;" Chapter 11, "Introduction to Inference;" Chapter 12, "Hypothesis Testing;" Chapter 14, "Testing the Difference Between Two Groups;" Chapter 18, "Introduction to Regression Analysis, and "Statistical Tables"

Skim: Wholey, Hatry, and Newcomer (eds.), Chapter 16, "Using Statistics in Evaluation," and Chapter 17, "Using Regression Analysis"

XIV. November 23, 2009: Student Presentations: The general topics for student presentations are highlighted, followed by particular readings, below:

Designing (Pre) Evaluation Studies:

Wholey, Hatry, and Newcomer (eds.), Chapter 2, "Evaluability Assessment"

Wholey, Hatry, and Newcomer (eds.), Chapter 3, "Implementation Evaluation"

Practical Data Collection Procedures:

Wholey, Hatry, and Newcomer (eds.), Chapter 4, "Performance Monitoring"

Wholey, Hatry, and Newcomer (eds.), Chapter 7, "Meta-Analysis, Systematic Reviews, and Research Syntheses"

Wholey, Hatry, and Newcomer (eds.), Chapter 8, "Trained Observer Ratings"

Wholey, Hatry, and Newcomer (eds.), Chapter 9, "Using Surveys"

Wholey, Hatry, and Newcomer (eds.), Chapter 10, "Using Expert Judgment"

Wholey, Hatry, and Newcomer (eds.), Chapter 11, "Role Playing"

Wholey, Hatry, and Newcomer (eds.), Chapter 12, "Using Focus Groups"

Wholey, Hatry, and Newcomer (eds.), Chapter 13, "Collecting Data in the Field"

Wholey, Hatry, and Newcomer (eds.), Chapter 14, "Using Agency Records"

Utilization of Evaluation Results:

Wholey, Hatry, and Newcomer (eds.), Chapter 20, "Managing Evaluation Projects"

Wholey, Hatry, and Newcomer (eds.), Chapter 21, "Writing for Impact"

Wholey, Hatry, and Newcomer (eds.), Chapter 22, "Using Organizational Report Cards"

Wholey, Hatry, and Newcomer (eds.), Chapter 23, "The Use of Evaluation by Nonprofit Organizations"

Developing and Using Professional Judgment:

McDavid and Hawthorn, Chapter 11, "Program Evaluation and Performance Measurement: Joining Theory and Practice"

McDavid and Hawthorn, Chapter 12, "The Nature and Practice of Professional Judgment in Program Evaluation"

XV. November 30, 2009: Student Presentations (cont.) and Course Review: Pitfalls and Prospects for Effective Applied Research

Read: Wholey, Hatry, and Newcomer (eds.), Chapter 19, "Pitfalls of Evaluation"

Skim: Wholey, Hatry, and Newcomer (eds.), Chapter 24, "Other Issues and Trends in Evaluation"

XVI. December 7, 2009: Final Examination