HEINZ COLLEGE, CARNEGIE MELLON UNIVERSITY
PROGRAM EVALUATION (90-823 SECTION W)
FALL SEMESTER: 2024 (12 UNITS)

INSTRUCTOR CONTACT INFORMATION:

Professor: Amanda Cash, DrPH, MPH
Class Time: Wednesday, 6pm-840pm
Office Hours: by appointment
E-mail: acash@andrew.cmu.edu; ajcash@gmail.com

Mobile/text – 202-375-0054

I. COURSE DESCRIPTION:

Program evaluation provides an objective basis for decision making regarding program outcomes; it is the systematic application of social science methods to assess needs for a program along with the program's design, implementation, and outcomes. It results in (1) information regarding the program's merit, worth, or significance and (2) an accounting of the objective strengths and weaknesses of this information.

Program evaluations are a critical component of determining program value. Social programs may carry them out internally, or an external organization may carry out the evaluations. Evaluations and their results may be highly politically charged or of interest only to direct stakeholders. There are excellent program evaluations that have had tremendous impacts on programs and their target populations. There are also poor or flawed program evaluations that provide weaker information than could have been obtained, provide incorrect information, or are misleading.

The program evaluation course is designed to:

- Provide the student with the theoretical, conceptual, methodological, and statistical tools of program evaluation.
- Teach the student how to conduct basic and complex program evaluations, as well as how to critique and monitor comprehensive program evaluations.
- Successful completion of this course will prepare students to be a contributing member of teams that design and carry out program evaluations or that commission program evaluations and make decisions based upon their results.

II. COURSE OBJECTIVES:

By the completion of this course, the graduate student will:

- Understand the purpose of program evaluation, the various types of program evaluation methodologies, and how to use program evaluation methods to answer research questions relevant to policy, practice, and programing.
- Develop a *logic model* to express a *theory of change*, and specify strategies to implement this *theory of change* for systems transformation.

- Describe interventions in measurable terms that articulate a *theory of change* and specify underlying assumptions that guide service delivery strategies designed to produce change and/or outcomes.
- Learn about performance measurement and systematic tracking of outputs and outcomes.
- Understand quantitative and qualitative data collection techniques used in program evaluation, as well as state-of-the-art techniques for data analysis and deducing study conclusions.
- Master common pitfalls to program evaluation studies and communication of findings, including threats to internal and external validity.
- Evaluate the applicability of evaluation findings to policy-makers, practitioners, and program managers in public service, as well as how to translate evaluation findings into policy and program recommendations.

III. Course Text:

The textbook is available at the bookstore or via Amazon.com

- Wholey, J.S., Hatry, H.P., & Newcomer, K.E. (2015, 4th edition). Handbook of Practical Program Evaluation. Jossey-Bass, San Francisco, CA.
- O*ptional.* Springer, F.J., Hass, P.J., & Porowski, A. (2017). Applied Policy Research: Concepts and Cases. Routledge, New York, NY.

IV. Required Additional Readings:

The additional required readings will be posted via Canvass.

- Worthen, B., Sanders, J., Fitzpatrick, J. (1997). Program evaluation, alternative approaches and practical guidelines. Evaluation's basic purpose, use, and conceptual distinctions (Chapter 1). New York.
- Werner, A. (2004). A guide to implementation research. An introduction to implementation research (Chapter 1). Urban Institute.
- W.K. Kellogg Foundation: Logic model development guide. Available at http://www.wkkf.org/knowledge-center/resources/2006/02/wk-kellogg-foundation-logic-model-development-guide.aspx
- Schorr, L., & Farrow, F. (2011). Expanding the evidence universe: Doing better by knowing more. Center for the Study of Social Policy.
- Haskins, R., & Baron, J. (2011). Building the connection between policy and evidence. The Obama evidenced-based initiatives. NESTA.
- Cartwright, N. (2007) Are RCTs the gold standard? Biosocieties, 11-20.
- Heinrich, C., Maffioli, A., & Vazquez, G. (2010). *A primer for applying propensity-score matching*. Inter-American Development Bank.
- Hunter, D. (2006). Daniel and the rhinoceros. Evaluation and Programming Planning, 29, 180-185.
- Reichardt, C. S. (2009). Quasi-experimental design. The SAGE handbook of quantitative methods in psychology, 46, 71.
- Eccles, M., Grimshaw, J., Campbell, M., & Ramsay, C. (2003). Research designs for studies evaluating the effectiveness of change and improvement strategies. Quality and Safety in Health Care, 12(1), 47-52.
- Shrank, W. (2013). The Center for Medicare and Medicaid Innovation Blueprint for Rapid Cycle Evaluation of New Care and Payment Models. Health Affairs, 32, 4, 1-6.

- Cody, S., & Asher, A. (2014). Smarter, Better, Faster: The Potential for Predictive Analytics and Rapid-Cycle Evaluation to Improve Program Development and Outcomes, Hamilton Project, Brookings Institution.
- Rangan, V. & Chase, L. The payoff of pay for success. Stanford Social Innovation Review, Fall 2015.
- Thoemmes, Felix. "Propensity score matching in SPSS." *arXiv preprint arXiv:1201.6385* (2012).
- Thoemmes, Felix J., and Eun Sook Kim. "A systematic review of propensity score methods in the social sciences." *Multivariate Behavioral Research* 46.1 (2011): 90-118.

Other Resources

- Checklist For Reviewing a Randomized Controlled Trial of a Social Program or Project, To Assess Whether It Produced Valid Evidence, Coalition for Evidence-Based Policy, 2010. http://coalition4evidence.org/wp-content/uploads/2010/02/Checklist-For-Reviewing-a-RCT-Jan10.pdf

- Key Items to Get Right When Conducting Randomized Controlled Trials of Social Programs, LJAF Evidence-Based Policy team, 2016. http://www.arnoldfoundation.org/wp-content/uploads/Key-Items-to-Get-Right-in-an-RCT.pdf

- Rigorous Program Evaluations on a Budget: How Low-Cost Randomized Controlled Trials Are Possible in Many Areas of Social Policy, 2012 (.pdf, 6 pages).http://coalition4evidence.org/wp-content/uploads/2012/03/Rigorous-Program-Evaluations-on-a-Budget-March-2012.pdf

- How to Read Research Findings to Distinguish Evidence-Based Programs from Everything Else. http://coalition4evidence.org/help-desk/workshop/

V. Prerequisites

Students should complete the first year of the MS DC core curriculum before enrolling in this class.

VI. Your Role:

We are partners in this learning experience. I EXPECT YOU TO:

✔️ Attend class and constructively participate in it

✔️ Read materials for each week

✔️ Contribute to and take responsibility for assignments

✔️ Prepare for exams

✔️ Conduct your learning with academic integrity

✔️ Be aware of and be proactive about your own learning style and time management

✔️ Communicate with me as soon as you have any issues

VII. ATTENDANCE POLICY:

Class participation is graded (it is worth 10% of the total course grade – see grading section of syllabus). Students are expected to attend all classes. However, there can be unforeseen circumstances and emergencies that arise. Students may be granted one excused absence for the course which could include an illness or personal emergency (you need to contact me within 1-2 days of missing class if not sooner in order to be excused) or an apprenticeship-related travel/opportunity that is worked out with me in advance of the missed class. After the one excused absence, or for any unexcused absences, the student can choose to submit a make-up paper (due within two weeks of the missed class) OR receive a "0" for their participation grade for each missed class which will factor into the student's final grade for the course. The student should contact me to work out the topic for the paper. Please note that even if a student misses a class (whether excused or unexcused), assignments due for that day must still be completed and handed in. Under certain circumstances, such as illness of the student, the instructor may grant extensions to due dates.

VIII. COURSE POLICIES:

Referencing is expected whenever quoting or otherwise using others' work (such as paraphrasing or employing key ideas). Standard APA style will be used for in-text citations and for references. Given the availability of information on the Web, it is often difficult to evaluate the quality of online sources. It is expected that students will pay attention to the domain, sponsor, author's background, and date of information on websites used and will cite all information obtained from websites (see APA Manual 5th edition, for how to reference sources from electronic media). *In general, on-line sources should be from refereed journals unless you find an exceptionally well documented website related to your topic/research.*

Academic conduct. Students are subject to Carnegie Mellon University's policies on academic integrity (http://www.cmu.edu/academic-integrity/plagiarism/index.html). Plagiarism is a serious offense that will result in the student failing the course. Note that all academic integrity violations will be reported to the Associate Dean. Additional penalties may be imposed. Plagiarism includes:

- Presenting another writer's work as your own;
- Cutting and pasting content verbatim without using quotation marks to indicate a direct quote;
- Inserting a direct quote or paraphrasing content without citing the source in-text using footnotes, endnotes, or parenthetical citations with a corresponding Works Cited, References, or Notes page – in a manner consistent with an APA, MLA, or Chicago style guide;
- Providing incomplete or incorrect information about the source cited;
- Relying on artificial intelligence tools to produce assignments;
- Over-relying on templates or other writers' phrasing.

Also, submitting work written for another course is not acceptable; consequently, a failing grade will be issued for that assignment.

In this class, any use of generative AI for any graded course assignment is prohibited. Passing off any generated content as your own (for example - cutting and pasting content into written assignments, or paraphrasing AI

content) constitutes an academic integrity violation. If you have questions about using generative AI in this course please talk to me first before doing so.

IX. Grading Scale:

The grading scale will be:

A+ 100-98	B+ 89-87	C 70-79
A 97-94	B 86-83	F <70
A- 93-90	B- 80-82	

X. Assignments and Capstone Project:

A. Homework Assignments. There will be 4-6 short homework assignments given in class (due the following week). The homework assignments will be spread across the semester as we cover specific topics.

DUE: Various/TBD (25% of grade)

B. Quiz. The quiz covers materials to date in course (Section 1 of course).

DUE: October 2nd (20% of grade)

C. *Concept Paper: Policy and Evidence.* Select option #1 or #2. Develop an approximately 5-page paper on one of the following options:

Option #1. Select a prominent program evaluation study in the published literature:

1. Summarize the research questions, study design, and methods
2. Critique the study
    - What were the strengths and weaknesses?
    - What would you change to improve the study?
3. What are the study implications?

Option #2. Develop a paper of approximately 5-8 pages in length based on an emerging topic in the field of evaluation (e.g., equity-focused program evaluation; rapid cycle evaluation, AI in evaluation).

1. Present a literature review on the initiative, including key issues.
2. Discuss the merits and challenges of the framework.
3. Discuss the long-term implications of the initiative and its potential to impact public policy, including programmatic efforts.

In a 10-minute presentation, share with the class your concept paper based on the evidenced-based concept paper developed in Assignment C above.

DUE: November 6 (20% of grade)

D. ***Capstone/Final Project and Presentation.*** The capstone project and presentation covers all materials in the course and the expectation is to take what you are learning and apply it to a real-world scenario. You will be expected to work in teams, and at the end of the semester your team will be expected to present the final technical proposal to the professor, and each team will be expected to present to the class on the final day of class. Each person in the team will be required to present some aspect of the project in the final presentation. A separate document will be shared outlining the requirements of the project.

DUE: Dec 11 (30% of grade)

E. ***Class Participation.***

DUE: N/A (10% of grade)

XI. COURSE OUTLINE:

Please find below the course outline. It is expected that you read each assignment prior to coming to class. Throughout the course, we will use a mix of lecture, in-class group work, and discussion.

WEEK	DISCUSSION TOPIC	READINGS, ACTIVITIES & ASSIGNMENTS
Section #1: PROGRAM EVALUATION: OVERVIEW & PLANNING		
1 8/28/24	• Introductions to course • Syllabus • Overview of program evaluation • Overview of the final project and expectations - Developing and bidding on an RFP for evaluation services	• Course Textbook, Chapter 1, Planning and designing useful evaluations (Newcomer, Hatry, Wholey, 2015) • Program evaluation, alternative approaches and practical guidelines, Chapter 1, Evaluation's basic purpose, use, and conceptual distinctions (Worthen, Sanders, Fitzpatrick, 1997) • **Homework Assignment 1 – see slides**
2 9/4/24	• Overview of program eval. (cont.) • Stakeholder engagement • Implementation research • Types of program evaluation studies (e.g., formative, summative)	• Course Textbook, Chapter 2, Analyzing and engaging stakeholders (Bryson, Quinn Patton, 2015) • A guide to implementation research, Chapter 1, an introduction to implementation research (Werner, 2004) • **In Class Assignment – see Capstone Project Outline**
3 9/11/24	• Theory of Change • Logic models • Outputs vs. Outcomes	• Course Textbook, Chapter 3, Using logic models (McLaughlin, Jordan, 2015) • W.K. Kellogg Foundation: Logic model development guide (2004) • **In Class Assignment – see Capstone Project Outline**
4 9/18/24	• Performance measurement	• Course Textbook, Chapter 5, Performance Measurement: Monitoring program outcomes (Poister, 2015)

	• Difference between performance measurement and evaluation	• **Milestone due for Capstone**: draft methods and/or design outline, research questions, and draft logic model should be ready and be prepared to discuss in class.
Section #2: PROGRAM EVALUATION: TYPES OF METHODOLOGICAL DESIGNS		
5 9/25/24 Virtual Class	• RCT designs (causal designs) • Baseline equivalency	• Course Textbook, Chapter 7, Randomized Controlled Trials and Nonrandomized Designs (Torgerson, Torgerson, & Taylor, 2015) • Course Textbook, Chapter 6, Comparison group designs (Henry, 2015)
6 10/2/24	• Quasi-experimental designs • Propensity score matching • Threats to internal and external validity	• **Assignment #B Due: QUIZ [Covers Section 1 of Course]** • Reichardt, C. S. (2009). Quasi-experimental design. The SAGE handbook of quantitative methods in psychology, 46, 71. • Heinrich, C., Maffioli, A., & Vazquez, G. (2010). *A primer for applying propensity-score matching*. Inter-American Development Bank. • Thoemmes, Felix. "Propensity score matching in SPSS." *arXiv preprint arXiv:1201.6385* (2012). • Thoemmes, Felix J., and Eun Sook Kim. "A systematic review of propensity score methods in the social sciences." *Multivariate Behavioral Research* 46.1 (2011): 90-118. • Eccles, M., Grimshaw, J., Campbell, M., & Ramsay, C. (2003). Research designs for studies evaluating the effectiveness of change and improvement strategies. Quality and Safety in Health Care, 12(1), 47-52.
7 10/9/24	• Multisite evaluations • Rapid cycle evaluations • Predictive analytics	• Course Textbook, Chapter 10, Designing, managing, and analyzing multisite evaluations (Rog, 2015) • Shrank, W. (2013). The Center for Medicare and Medicaid Innovation Blueprint for Rapid Cycle Evaluation of New Care and Payment Models. Health Affairs, 32, 4, 1-6. • Cody, S., & Asher, A. (2014). Smarter, Better, Faster: The Potential for Predictive Analytics and Rapid-Cycle Evaluation to Improve Program Development and Outcomes, Hamilton Project, Brookings Institution.
8 10/16/24	FALL BREAK	Work on your concept paper on Evidence
9 10/23/24 Guest Lecturer	• Evaluation design debates • *The Evidence Act*	• Cartwright, N. (2007) Are RCTs the gold standard? Biosocieties, 11-20. • Hunter, D. (2006). Daniel and the rhinoceros. Evaluation and Programming Planning, 29, 180-185.
10 10/30/24	• Tiered-evidence programs • Pay for success • Evidenced based programming	• Building the connection between policy and evidence. The Obama evidenced-based initiatives. NESTA. Haskins, R., & Baron, J. (2011) • Rangan, V. & Chase, L. The payoff of pay for success. Stanford Social Innovation Review, Fall 2015.

		• Expanding the Evidence Universe: Doing Better by Knowing More (Schorr & Farrow, 2011)
11 11/6/24	N/A	**<u>Assignment #C Due:</u> Concept Paper on Evidence and Class Presentations**
Section #3: DATA COLLECTION & DATA ANALYSIS		
12 11/13/24	• Study recruitment and retention • Incentives • Survey methods	• Course Textbook, Chapter 9, Recruitment and retention of study participants (Cook, Godiwalla, Brooks, Powers, & John, 2015) • Course Textbook, Chapter 14, Using surveys (Newcomer, Triplett, 2015)
13 11/20/24	• Data sources (agency records) • Field data collection • Qualitative techniques • Focus groups • Interviews • Stories/anecdotes	• Course Textbook Chapter 13, Using agency records (Hatry, 2015) • Course Textbook, Chapter 17, Collecting Data in the Field (Nightingale, Rossman, 2015) • Course Textbook, Chapter 20, Focus group interviewing (Krueger, Casey, 2015) • Course Textbook, Chapter 19, Conducting semi-structured interviews (Adams, 2015)
No Class 11/27/24	No Class – Thanksgiving Break	No Class – Thanksgiving Break
Section #4: USE OF EVALUATION		
14 12/4/24	• Content analysis/coding • Inferential statistics (t-test, ANOVA, regression, etc.) • Using statistics in evaluation • Evaluation firms • Careers in evaluation • Evaluation pitfalls • Course Review	• Course Textbook, Chapter 22, qualitative analysis (Goodrick, Rogers, 2015) • Course Textbook, Chapter 23, Using statistics in evaluation (Newcomer, Conger, 2015) • Course Textbook, Chapter 29, Contracting for evaluation products and services (Bell, 2015) • Course Textbook, Chapter 26, Pitfalls in evaluation (Hatry, Newcomer, 2015)
15 12/11/24	N/A	**<u>Assignment #D Due</u>: Final Project Presentations – Lightening Rounds**