90-823: Program Evaluation S21 Heinz College, CMU

<u>Instructor Contact information:</u>
<u>Head TA Contact information:</u>

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Course Description:

In all parts of the world, governments, funding agencies, organizations, and individuals are involved in activities meant to improve some aspect of people's lives – disaster relief in Puerto Rico, human rights work in Sierra Leone, increasing school attendance in Detroit or improving outcomes for IV drug users in Barcelona are just a few examples. The needs addressed by these programs are often compelling and the programs themselves can be innovative and inspired. From those running and funding social programs to those whose needs are meant to be addressed by these programs a central question arises:

Does this social program work?

In this course you will learn how to gather and synthesize evidence to address this question. *Program evaluation* is the systematic application of social science methods to assess each aspect of a program: the need for the program, the program's design and implementation, and ultimately the program's impact on relevant outcomes. A completed program evaluation results in (a) information regarding the program's merit, (b) an accounting of the objective strengths and limitations of this information and (c) the implications of both (a) and (b) for decision making.

Program evaluations differ as much as the social programs they evaluate. Social programs may carry out evaluation internally, or an external organization may be brought in. An evaluation may be highly quantitative or entirely qualitative; it may focus exclusively on needs assessment or only on outcomes. 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 positive impacts on programs and their target populations. There are also flawed program evaluations that provide weaker information than could have been obtained, provide incorrect information, or are misleading.

This course is designed to familiarize the student with the central concepts and methods of program evaluation. Students will be taught how to conduct basic program evaluations as well as how to critique and monitor more comprehensive program evaluations. Successful completion of this course will prepare students to be productive members of teams that design and carry out program evaluations or that commission program evaluations and make decisions based upon their results.

Learning Objectives:

By the end of this course, successful students will be able to...

- Be a valuable member of an evaluation team, able to contribute to both planning and execution, while having a solid foundation on which to build.
- Be an informed consumer of program evaluations, and assist governments, agencies or funding organizations in making decisions based on evaluations.
- Differentiate between strengths, limitations, and weaknesses of an evaluation and communicate those distinctions clearly.
- Understand the methods and concepts introduced in the course, AND be able to explain them clearly, in plain language, to diverse stakeholders with diverse backgrounds.
- Identify when each method for evidence gathering and analysis would be appropriate or inappropriate, and defend those assessments.
- Explain to a newly elected official how to assess a government program.

Format of the Class:

This class meets <u>synchronously</u> 10:10-11:30am EST Tuesday and Thursday. This class is inperson(rotation)-plus-remote (IRR) starting the week of February 15th and remote-only for the first two weeks of the semester. If the class needs to go fully remote at any point in the semester, you will receive an email from me (the instructor) and an announcement will be published on our course website on Canvas.

At any point during the semester, you may choose to participate in the class remotely even if you have been assigned to attend in person one day per week. If you decide to switch to remote for one or more classes, please try to email me and the Head TA, Lingwei Cheng, at least 24 hours in advance so I can prepare the breakout rooms and in-class sessions appropriately. In addition, if you are able, let us know the expected length of your remote engagement (e.g., number of classes or for an extended period of time).

Course Text:

• Rossi PH, Lipsey MW, Freeman HE. (2019). *Evaluation: A Systematic Approach* (8th ed). Thousand Oaks, CA: Sage Publications. ISBN: 978-1-5063-0788-6.

Other Recommended Texts:

- Fowler FJ (2013). *Survey Research Methods* (5rd ed.). Thousand Oaks, CA: Sage Publications. ISBN: 9781483323596
- Daniel J (2011). Sampling Essentials: Practical Guidelines for Making Sampling Choices. Thousand Oaks, CA: Sage Publications. ISBN: 9781452238401

Your Role:

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

- Conduct your learning with <u>Academic Integrity</u> (http://www.cmu.edu/policies/documents/Cheating.html)
- Attend **class** and constructively participate in it AND/OR view class asynchronously and contribute via the discussion board.
- Contribute to and take responsibility for the **team project**
- Do individual assignments & Prepare for exams
- **Pursue your own understanding**: What is solid, missing, or vague? What can you do to make it more solid: attend office hours, participate in Blackboard Discussions, create a Study Group, review reading, make an appointment with the Instructor or TA...

Course Grading:

Participation: Class & Discussion Board:	5%
Response Papers, Problem Sets, Quizzes:	25%
Team Project:	25%
Midterm exam:	20%
Final exam:	25%

<u>Participation in Classroom/Discussion Board Discussions</u>: The ability to engage in informed, productive conversations about program evaluation with multiple stakeholders is essential to success as a funder, consumer, or conductor of evaluations. Students will have numerous opportunities to practice engaging in such conversations, to reflect on their contributions, and to improve their performance in class and on Canvas. (5%)

<u>Individual Assignments – Response Papers & Problem Sets:</u> You may work with others but must write up your own response and note on your Homework the names of those with whom you worked. Assignments will be due at the start of class; please hand them in electronically via Canvas before that time. There will be zero credit for late assignments, we will drop the lowest grade for each of the 2 assignment types. (25%)

Midterm and Final Examinations: The midterm exam will cover all course material prior to the exam. The final exam is cumulative and will cover all course material with a focus on the material covered in the second half of the semester. On both exams students will be allowed to use one sheet (both sides) of notes and will need a calculator. (45% total)

Team Project: Propose and Justify a Program Evaluation Design in response to an RFP (25%)

- <u>The goal</u> of this group project is to have your team put the concepts, vocabulary, and methodologies of program evaluation into practice.
- The product of this group project will be a substantial written report that clearly describes the proposed design, gives justification for the design choices and demonstrates how the design is responsive to/appropriate for the RFP, the program, and the target population. What your team hands in is expected to be a polished and professional document.

Attendance and Late Assignment Policies:

Students are expected to attend class or view it asynchronously. Participation is graded. Students are responsible for all assignments and for all material discussed during class, whether present or absent. As indicated above, two individual assignments (one of each type) will be dropped from final grade calculations (the final HW assignment is not eligible for being dropped, it is required of all students). At your own risk, you may choose to not hand in assignments you intend to drop – as this option is available to you, we will not accept or grade any late assignments and no extensions will be granted. Please plan accordingly.

Cheating & Plagiarism

Students are expected to honor the letter and the spirit of the Carnegie Mellon University Policy on Cheating and Plagiarism. All activities cited in that policy will be treated as cheating in this course. Students are expected to familiarize themselves with this policy. Students are also encouraged to review the Carnegie Mellon University Academic Disciplinary Actions Overview for Graduate Students, which details penalties and sanctions, as well as students' rights. I will take a zero-tolerance policy on cheating and plagiarism and will consult with Departmental leadership on appropriate action for all instances of cheating and plagiarism. As the aforementioned policies indicate, penalties can include course failure, suspension, and dismissal from the program.

Carnegie Mellon University Policy on Cheating and Plagiarism
http://www.cmu.edu/policies/documents/Cheating.html
Carnegie Mellon University Academic Disciplinary Actions Overview for Graduate Students
http://www.cmu.edu/policies/documents/GradDisc.html

Personal Accommodations

Students with disabilities: If you wish to request an accommodation due to a documented disability, please inform me and contact Disability Resources as soon as possible. They can be reached at access@andrew.cmu.edu or (412) 268-2013 and I look forward to talking with you.

Writing Assistance: For assistance with the written or oral communication assignments in this class, visit the Global Communication Center (GCC). GCC tutors can provide instruction on a range of communication topics and can help you improve your papers, presentations, and job application documents. The GCC is a free service, open to all students, and located in Hunt Library. You can make tutoring appointments directly on the GCC website: http://www.cmu.edu/gcc. You may also browse the GCC website to find out about communication workshops offered throughout the academic year.

Final Remark

• Use of electronic devices during class: As research on learning shows, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, pager, laptop, tablet, etc. makes noise or is visually distracting during class. For this reason, I ask you to *turn off* your mobile devices, and use your laptop/tablet only for Zoom, to take notes, and/or to access assigned materials.

Statement Regarding Diversity and Inclusion

We must treat every individual with respect. We at Heinz College are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus. We, at CMU, and I as your professor, will work to promote diversity, equity and inclusion not only because diversity fuels excellence and innovation, but because we want to pursue justice. We acknowledge our imperfections while we also fully commit to the work, inside and outside of our classrooms, of building and sustaining a campus community that increasingly embraces these core values. Each of us is responsible for creating a safer, more inclusive environment. It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit.

Statement of Support for Students' Health & Well-being

Your graduate school experience might prove to be exciting, stimulating, and enjoyable, but it is likely to entail stress as well, particularly under current pandemic conditions. The University Provost provides the following thoughts for students. I consider them important.

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. There are many helpful resources available through CMU and an important part of the graduate school experience is learning how to ask for help. Asking for support sooner rather than later is almost always helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at http://www.cmu.edu/counseling/. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

Sequence of Topics & Readings – subject to change

- I. <u>Program Evaluation: Stages and Methods</u>
 - a. What is Program Evaluation? Stage 0: Context of Program Evaluation, Identifying Relevant Questions
 - i. Rossi: Chapter 1
 - ii. Methods Focus (What): Capture-Recapture
 - b. Stage 1: Needs Assessment
 - i. Rossi: Chapter 2 & Case Study; Recommended: Henry: Chapters 1-2;6a;
 - ii. Methods Focus (How): Probability Sampling I
 - c. Stage 2: Program Theory Evaluation
 - i. Rossi: Chapter 3 & Case Study
 - ii. Methods Focus (What): Logic Models; Assessing the Theory
 - iii. Methods Focus (How): Document Review & Individual Interviews
 - d. Stage 3: Process Evaluation
 - i. Rossi: Chapter 4 & Case Study
 - ii. Methods Focus (What): Coverage; Measurement Properties
 - iii. *Methods Focus (How)*: Administrative Data, Direct Observation and Focus Groups
 - e. Stage 4: Outcome Evaluation Identifying and Measuring Outcomes
 - i. Rossi: Chapter 5; Recommended: Fowler: Chapters 4, 5 & 6;
 - ii. Methods Focus (How): Designing Survey Questions;
 - iii. Methods Focus (How): Selecting a Survey Mode
 - f. Stage 4 continued: Outcome Evaluation Assessing Program Impact I
 - i. **Rossi:** Chapters 6 & 7
 - ii. Methods Focus (What): Causal Inference, missing counterfactuals
 - iii. Methods Focus (How): Random Assignment vs. Randomized experiments
 - g. Stage 4 continued: Outcome Evaluation Assessing Program Impact II
 - i. Rossi: Chapter 8
 - ii. Methods Focus (How): Non-randomized outcome designs
 - iii. *Methods Focus (How)*: Estimating counterfactuals in observational studies; Sources of bias

II. Beyond the Basics & Putting it into Practice

- a. Probability Sampling II
 - i. Henry: Chapters 6b & 7a; Fowler: Chapter 2a
 - ii. Methods Focus: Stratification, Clustering, Calculating Sample Sizes
- b. Better than an Observational Study, Not as Good as an Experiment
 - i. Case Study
 - ii. *Methods Focus*: Regression Discontinuity; Quasi-Experiments; Instrumental Variables
- c. Interpreting and Presenting Program Evaluation Evidence
 - i. Rossi: Chapter 9
 - ii. *Methods Focus*: Over- and Under- Stating Evidence; Moderators and Mediators
 - iii. *Methods Focus*: Multiple Testing problems and fixes (Bonferroni)

Important Dates:

Midterm Exam: TBD

Team Project #1 Due Date: TBD

Final Exam: Week of May 10-14th (specific day & time to be determined)