PROGRAM EVALUATION for
SUSTAINABILITY and DEVELOPMENT¹
EAS 582
School for Environment and Sustainability, University of Michigan
Revised January 2023

Instructor: Dr. Pam Jagger
Office: 2004 Dana Building/Zoom
Email: pjagger@umich.edu

Class Meeting Time: Friday 2:30 to 5:20 with a 15-minute break at the midpoint

Jagger Office Hours: Monday 1 to 3 PM (Starting on 23 Jan)

GSI: Vania Tally
Email: vtally@umich.edu

Tally Office Hours: Tuesday 1-2 PM Tuesday (in SEAS Commons)
Thursday 2-4 PM Thursday - Virtual
https://umich.zoom.us/j/6888806654
Schedule appointment here

Course Description: The overarching question for this course is how do we know if sustainability initiatives achieve intended outcomes? The course draws on the theoretical foundations of public policy, political economy and the field of environment and development economics and policy. The core analytic orientation of the course is fundamentals of program or impact evaluation for sustainability and development initiatives including, research design for causal inference, realistic and process evaluation, design and measurement challenges, data sources and quality, approaches to synthesizing evidence, and cost effectiveness analysis. The course draws on a range of cases from low and middle-income countries including efforts to address water and sanitation, air pollution and energy access, forest-based climate mitigation, etc. Students who take this class will be able to analyze different approaches to monitoring and evaluation and critically evaluate existing evidence regarding the effectiveness of sustainability and development programs and policies. These skills are fundamental for developing new policy and designing programs that build productively on experience.

Recommended prerequisite: An intermediate course in public policy, economics, political science and/or statistics.

Course Website: https://umich.instructure.com/courses/587030

¹I reserve the right to make updates and changes to the Syllabus during the course of the semester. I will inform the class of updates to the syllabus on during class, via email, and through updates on Canvas.
**Course Communication:** All course materials are posted on the Canvas website. Announcements are sent to your e-mail accounts from the Canvas site. If you email me, I will do my best to get back to you within 24 hours. I will be slower to respond over the weekend. **Please note EAS 582 in your subject line.** The best emails are short and to the point, for longer more involved questions or comments please come to office hours or arrange a time to meet.

**Learning Objectives:**

- Understand the increasing role of evidence-based policy making in the field of sustainability and development
- Develop core foundations of causal inference, impact evaluation and other monitoring and evaluation strategies dominating current international development discourse and apply them efforts with joint outcomes of environmental sustainability and poverty reduction
- Be familiar with common strategies for synthesizing evidence for policy makers, program managers and other key decision makers
- Be able to evaluate and critique the existing evidence base for programs, policies and projects focused on sustainability and development


This book is a non-technical introduction to impact evaluation for development practitioners, policy makers and students. It focuses on:

1. Why to evaluate and how to prepare;
2. How to evaluate;
3. How to implement an evaluation; and
4. How to get data for an evaluation.

It is uploaded on the Canvas site, full text is available online at: [https://openknowledge.worldbank.org/handle/10986/25030](https://openknowledge.worldbank.org/handle/10986/25030), or search the Michigan Library for “Impact Evaluation in Practice” > view catalogue results > Option 1, click “available online”

I’ve also uploaded a document from the OECD (2010) which provides a glossary of key terms in results-based management.

**Readings:** All readings other than the required textbook are located on the Canvas Site. Most of the readings are for practitioner and policy communities, though there are some with a more academic focus. Please complete the reading PRIOR to coming to class. **See note on engagement below.**

**Lecture Capture:** Lecture capture is available in our classroom. See Lecture Recordings tab on Canvas site. You are expected to attend classes in person unless you are sick.
**Assignments**

**Engagement:** Attend and engage! Your attendance and participation are encouraged, expected, appreciated, and noted. Participation includes being well prepared for class and making valuable (i.e., learned, inquisitive, contestation etc.) contributions to discussions and debates on a regular basis. Participation is assessed twice over the course of the semester, so you have a signal midway through as to how you are doing.

**Completion of PEERRS Training:** Impact evaluations frequently involve the collection of data from human subjects. Having a solid understanding of the rights of study participants and the principles that guide responsible conduct of research, particularly in low- and middle-income countries where protections are lacking, is essential. Complete the Program for Education and Evaluation in Responsible Research and Scholarship (PEERRS) Human Subjects Social and Behavioral Sciences Module and Certification Test. **To get full credit for doing this you need to email me (pjagger@umich.edu) a PDF of your certification.** Put this on your resume after you have done it! [http://my.research.umich.edu/peerrs/](http://my.research.umich.edu/peerrs/) Go to Human Subjects Research Protections. It takes roughly 3 hours to complete the training.

**Quizzes:** There will be four substantive quizzes in this class. The quizzes are *not* cumulative.

**Evidence Review:** This is a group project. You will work with 4 or 5 other students to select a topic in that falls within the broad category of sustainability and development. Your task is to review the evidence on strategies to improve sustainability and development outcomes. I will work with you to make sure that your topic is narrowly defined, but not so narrow that it will be hard to find information. Potential topics include solar home system adoption, establishment of protected areas, community led total sanitation etc. Topic selection is due to me by 15 March. A detailed rubric will be provided in early March.

**Grading**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Quiz 1</td>
<td>15%</td>
<td>Jan 20</td>
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<tr>
<td>Quiz 2</td>
<td>15%</td>
<td>Feb 24</td>
</tr>
<tr>
<td>Engagement, Part 1</td>
<td>10%</td>
<td>Feb 28</td>
</tr>
<tr>
<td>Completion of PEERRS training</td>
<td>5%</td>
<td>Mar 3</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>15%</td>
<td>Mar 31</td>
</tr>
<tr>
<td>Quiz 4</td>
<td>10%</td>
<td>Apr 14</td>
</tr>
<tr>
<td>Engagement, Part 2</td>
<td>10%</td>
<td>Apr 14</td>
</tr>
<tr>
<td>Evidence Review</td>
<td>20%</td>
<td>Apr 20</td>
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Late (unexcused) assignments will be penalized at 10 percentage-points per day. Please notify me as soon as possible of any excused absences.
Grade grievances: you must submit requests for a re-grade within one week of receiving the original grade. You must attach the original graded item and provide a clear written explanation of what you would like to be re-evaluated and why. Your adjusted grade may be higher or lower than the original.

Academic Integrity: Our academic community, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. We hold all members of our community to high standards of scholarship and integrity. To accomplish its mission of providing an optimal educational environment and developing leaders of society, we promote the assumption of personal responsibility and integrity and prohibits all forms of academic dishonesty, plagiarism, and misconduct. Academic dishonesty may be understood as any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. Plagiarism involves representing the words, ideas, or work of others as one’s own in writing or presentations and failing to give full and proper credit to the original source. Conduct, without regard to motive, that violates the academic integrity and ethical standards will result in serious consequences and disciplinary action. Additional information regarding academic dishonesty, plagiarism and misconduct and their consequences is available at: https://rackham.umich.edu/academic-policies/section8/#112

OTHER INFORMATION

Inclusivity: Members of the SEAS and the broader UM community represent a rich variety of backgrounds and perspectives. We are committed to providing an atmosphere for learning that respects diversity. While working together to build community we ask all members to:
- share their unique experiences, values, and beliefs
- be open to the views of others
- honor the uniqueness of their colleagues
- appreciate the opportunity that we must learn from each other in this community
- value one another’s opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal (or professional) nature
- use this opportunity together to discuss ways in which we can create an inclusive environment in SEAS classes and across the UM community

Mental Health and Wellbeing Resources: The University of Michigan is committed to advancing the mental health and wellbeing of its students. We acknowledge that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impact students’ academic performance. If you or someone you know is feeling overwhelmed, depressed, and/or need support, services are available. For help, contact Counseling and Psychological Services (CAPS) and/or University Health Service (UHS). For a listing of other mental health resources available on and off campus, visit http://umich.edu/~mhealth/.
Accommodations for Students with Disabilities: If you believe you need an accommodation for a disability, please reach out to U-M Services for Students with Disabilities (SSD) office to help determine appropriate academic accommodations and how to communicate about your accommodations with your professors. Any information you provide will be treated as private and confidential.

Public Health Protection Policy: In order to participate in any in-person aspects of this course—including meeting with other students to study or work on a team project—you must follow all the public health safety measures and policies put in place by the State of Michigan, Washtenaw County, the University of Michigan, and SEAS. Up to date information on U-M policies can be found here. It is expected that you will protect and enhance the health of everyone in the community by staying home and following self-isolation guidelines if you are experiencing any symptoms of COVID-19.

Use of Technology: Students should follow instructions from their instructor as to acceptable use of technology in the classroom, including laptops, in each course. All course materials (including slides, assignments, handouts, pre-recorded lectures, or recordings of class) are to be considered confidential material and are not to be shared in full or part with anyone outside of the course participants. Likewise, your own personal recording (audio or video) of your classes or office hour sessions is allowed only with the express written permission of your instructor. If you wish to post course materials or photographs/videos of classmates or your instructor to third-party sites (e.g., social media), you must first have informed consent. Without explicit permission from the instructor and in some cases your classmates, the public distribution or posting of any photos, audio/video recordings or pre-recordings from class, discussion section or office hours, even if you have permission to record, is not allowed and could be considered academic misconduct.
# Motivation and Foundations for Program Evaluation

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Read</th>
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| 1    | 6 Jan | Welcome and introduction  
The rise of evidence-based policy making  
Evidence based policy making for sustainability and development |
|      |      | Syllabus  
For reference:  
DFID (2014)  
USAID (2011)  
Pew and MacArthur (2014) |
| 2    | 13 Jan | Evaluation questions  
Theory of Change  
Outcomes and measurement/evaluative criteria |
|      |      | Gertler et al. (2016) – Chapter 1/2  
Peersman (2014)  
Puri et al. (2020)  
Rogers (2014)  
Transfer Project (2020) |
| 3    | 20 Jan | Causal inference  
Counterfactual thinking |
|      |      | *Course material and quiz will be offered on-line and asynchronously.  
Quiz 1 (15%)  
Gertler et al. (2016) – Chapter 3  
Ferraro (2009) |

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### Foundational Study Designs

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<th>Week</th>
<th>Date</th>
<th>Read</th>
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<tbody>
<tr>
<td>4</td>
<td>27 Jan</td>
<td>Randomized selection methods</td>
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</table>
|      |      | Gertler et al. (2016) – Chapters 4/5/6  
Editorial (2020)  
Ravallion (2020)  
White et al. (2014) |
| 5    | 3 Feb | Quasi-experimental methods |
|      |      | Gertler et al. (2016) – Chapter 7/8  
White et al. 2014 |
| 6    | 10 Feb | Evaluating environmental programs |
|      |      | Alpizar and Ferraro (2020)  
Asquith (2020) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
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<tbody>
<tr>
<td>7</td>
<td>17 Feb</td>
<td>Methodological challenges for impact evaluation</td>
</tr>
<tr>
<td>9</td>
<td>3 Mar</td>
<td>SPRING BREAK</td>
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<tr>
<td></td>
<td></td>
<td>Implementing Program Evaluation</td>
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<tr>
<td>10</td>
<td>10 Mar</td>
<td>Operationalizing impact evaluation</td>
</tr>
<tr>
<td>13</td>
<td>31 Mar</td>
<td>Rapid and/or low-cost impact evaluation</td>
</tr>
</tbody>
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### Technology for efficient evaluation

**Quiz 3 (15%)**

- Haskins and Feldman (2016)
- Jagger and Rana (2017)

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### Synthesizing and Communicating Impact for Impact

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<tr>
<th>Week</th>
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<tbody>
<tr>
<td>14</td>
<td>7 Apr</td>
<td>• Systematic reviews</td>
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<tr>
<td></td>
<td></td>
<td>• Evidence Gap Maps</td>
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<tr>
<td></td>
<td></td>
<td>Snilstveit et al. (2013)</td>
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<td></td>
<td></td>
<td>Waddington et al. (2012)</td>
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<tr>
<td>15</td>
<td>14 Apr</td>
<td>• Disseminating results for policy impact</td>
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<td></td>
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<td>• Lessons from USAID/DFID/Oxfam</td>
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<tr>
<td></td>
<td></td>
<td>Gertler et al. (2016) – Chapter 14</td>
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<td></td>
<td></td>
<td>CGD (2022)</td>
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**Quiz 4 (10%)**
ONLINE RESOURCES

Development Impact Blogs
http://blogs.worldbank.org/impactevaluations/
https://www.povertyactionlab.org/blog
https://www.poverty-action.org/blog
http://www.3ieimpact.org/blogs
https://www.npr.org/sections/goatsandsoda/502900047/development
http://social-media-for-development.org/top-10-international-development-blogs/
http://chrisblattman.blogspot.com/

Evidence-based Policy Making Websites
https://www.urban.org/urban-wire/everything-you-need-know-about-commission-evidence-based-policymaking
https://campbellcollaboration.org/
http://www.3ieimpact.org/
http://www.environmentalevidence.org/
https://snappartnership.net/teams/evidence-based-conservation/

Podcasts