

ESM 296: Monitoring & Evaluation

Instructor: Mark Buntaine (Bren 4422)

Class meetings: Mondays & Wednesdays 9:30-10:45 (Bren 1424)

Office Hours: By Appointment

Course Description

Evidence-based programming and policy-making are now priorities for many non-profit organizations and public agencies, including those that deal with environment, energy, climate change, and natural resource management. At the heart of this approach is *monitoring and evaluation*, which help organizations learn about the effectiveness of policies and programs so that they can make better decisions about using scarce resources. This course provides an overview of the considerations and techniques involved with setting up monitoring and evaluation systems within public and non-profit organizations that are designed to promote learning about the efficacy, effectiveness, and impact of policies and programs.

Student Evaluation

Participation: Your active participation is important for the success of this course. I expect that you will closely read all of the assigned articles and documents before coming to class and that you will be prepared to engage in all discussions and activities. I expect you to attend all course sessions. Talk to me beforehand if you need to miss class for a legitimate reason, otherwise absences will negatively affect your participation grade.

Practicums: The course is organized into five units, each of which culminates with a practicum where you will be asked to practice the skills discussed in that unit. The detailed instructions for the practicums will be laid out in separate documents. For each practicum, you are encouraged to work in teams of up to three individuals. We will spend the practicum sessions on active work, group Q&A, and lightning presentations. For each practicum, your group will turn in a written product.

Final evaluation design: Pick any program with a well-documented plan or appraisal. Write an evaluation plan for that program. Justify why it is both methodologically sound and meets the needs of the organization. The specific instructions will be laid out separately.

Grading:

Participation	15%
P1: Theory of change	10%
P2: Measurement strategy	10%
P3: Impact evaluation concept	10%
P4: Process evaluation concept	10%
P5: Organizational M&E strategy	10%
Final: Evaluation design	35%

Course Policies

Assignment completion policy: You must complete all assignments to pass the course.

Re-grades: I take student evaluation seriously and do not entertain requests to re-grade assignments unless I receive a formal, written request for a re-grade that compellingly documents a serious oversight on my part. A serious oversight on my part indicates that the entire assignment should receive further attention. Your score may go up or down if I decide that an assignment needs this kind of attention, so plan accordingly. That being said, I strongly encourage you to meet with me to discuss my feedback on your assignments.

Academic Honesty: I expect you to adhere to the highest standards of academic honesty. This means only turning in work that is your own and properly citing all information and ideas that you draw from others. Any assignment that does not adhere to UCSB academic honesty guidelines will not receive credit and will be referred to campus judicial procedures. See:

<http://judicialaffairs.sa.ucsb.edu/AcademicIntegrity.aspx>

Reference Texts

Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). [*Handbook of Practical Program Evaluation*](#). John Wiley & Sons. (on-campus access only)

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). [*Impact Evaluation in Practice*](#). Washington, D.C.: World Bank Publications.

Unit 1: Introduction

Session 1 (M 4/2) — Introduction & preliminaries

Baylis, K., Honey-Rosés, J., Börner, J., Corbera, E., Ezzine-de-Blas, D., Ferraro, P. J., ... & Wunder, S. (2016). [*Mainstreaming impact evaluation in nature conservation*](#). *Conservation Letters*, 9(1), 58-64.

Ferraro, P. J., & Hanauer, M. M. (2014). [*Advances in measuring the environmental and social impacts of environmental programs*](#). *Annual Review of Environment and Resources*, 39, 495-517.

Session 2 (W 4/4) — Goals of M&E

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). [*Why evaluate?*](#) Chapter 1, in *Impact Evaluation in Practice*. Washington, D.C.: World Bank Publications, pp. 1-30.

Pritchett, L. (2002). [It pays to be ignorant: a simple political economy of rigorous program evaluation](#). *The Journal of Policy Reform*, 5(4), 251-269.

Session 3 (M 4/9) — Theory of change

White, H. (2009). [Theory-based impact evaluation: principles and practice](#). *Journal of Development Effectiveness*, 1(3), 271-284.

Conservation International (2013). [Constructing theories of change models for ecosystem-based adaptation projects: a guidance document](#). Conservation International. Arlington, VA.

Session 4 (W 4/11) — Theory of change (practicum)

Examples of theories of change:

[Alaska Conservation Foundation](#)

[Rare](#)

[Marine Stewardship Council](#)

[Ford Foundation](#)

[WASH Alliance International](#)

Forti, M. (2012). [Six theory of change pitfalls to avoid](#). Blog post.

Assignment: Pick a future-oriented program or strategy for an organization that is intended to have an impact on outcomes you care about. Sketch out and justify a detailed theory of change that links the input and activities of the organization to the targeted outcomes and impacts.

Unit 2: Monitoring

Session 5 (M 4/16) — Results framework

Independent Evaluation Group. (2012). [Designing a results framework for achieving results: a how-to guide](#). Washington, D.C.: World Bank.

Adaptation Fund. (2011). [Results Framework and Baseline Guidance: Project-Level](#). Washington, D.C.: Global Environment Facility.

Session 6 (W 4/18) — Indicators

Anderson, J. L., Anderson, C. M., Chu, J., Meredith, J., Asche, F., Sylvia, G., ... & McCluney, J. K. (2015). [The fishery performance indicators: a management tool for triple bottom line outcomes](#). *PLoS One*, 10(5), e0122809.

U.S. Government (2016). [Feed the Future Indicator Handbook](#). Washington, D.C.: Feed the Future.

Session 7 (M 4/23) — Interviews, surveys, and human subjects

Newcomer, K. E. & Triplett, T. (2015). [Using surveys](#). Chapter 14, in Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (Eds.). [Handbook of Practical Program Evaluation](#). John Wiley & Sons, pp. 344-382.

Nuno, A., & John, F. A. S. (2015). [How to ask sensitive questions in conservation: A review of specialized questioning techniques](#). *Biological Conservation*, 189, 5-15.

Session 8 (W 4/25) — Measurement strategy (practicum)

Example results frameworks / measurement strategies

[Green Climate Fund](#)

[CGIAR](#)

[Canada National Energy Board](#)

[Food and Agriculture Organization](#)

[California Water](#)

Assignment: Pick a future-oriented program or strategy for an organization that it intended to have an impact on outcomes you care about. Sketch out a detailed results framework for the program. Additionally, design a data collection instrument that will be used to measure the outcomes in your results framework.

[Template](#) (Gates Foundation)

Unit 3: Impact Evaluation

Session 9 (M 4/30) — Causal inference and counterfactuals

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). [Causal inference and counterfactuals](#). Chapter 3, in *Impact Evaluation in Practice*. Washington, D.C.: World Bank Publications, pp. 47-62.

Ferraro, P. J. (2009). [Counterfactual thinking and impact evaluation in environmental policy](#). *New Directions for Evaluation*, 2009(122), 75-84.

Session 10 (W 5/2) — Randomized evaluations

Jayachandran, S., De Laat, J., Lambin, E. F., Stanton, C. Y., Audy, R., & Thomas, N. E. (2017). [Cash for carbon: A randomized trial of payments for ecosystem services to reduce deforestation](#). *Science*, 357(6348), 267-273.

Aklin, M., Bayer, P., Harish, S. P., & Urpelainen, J. (2017). [Does basic energy access generate socioeconomic benefits? A field experiment with off-grid solar power in India](#). *Science Advances*, 3(5), e1602153.

Session 11 (M 5/7) — Design principles for randomized evaluations

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). [Choosing a sample](#). Chapter 15, in *Impact Evaluation in Practice*. Washington, D.C.: World Bank Publications, pp. 261-290.

Blair, G., Cooper, J., Coppock, A., & Humphreys, M. [A general framework for learning about research designs](#). Working Paper.

Session 12 (W 5/9) — Design challenges of randomized evaluations

Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). [Addressing methodological challenges](#). Chapter 9, in *Impact Evaluation in Practice*. Washington, D.C.: World Bank Publications, pp. 159-174.

Glennerster, R. (2017). [The practicalities of running randomized evaluations: partnerships, measurement, ethics, and transparency](#). In *Handbook of Economic Field Experiments* (Vol. 1, pp. 175-243). North-Holland.

Session 13 (M 5/14) — Impact evaluation (practicum)

Reading: [3ie Impact Evaluation Database](#) (read at least two impact evaluations of interest)

Assignment: Pick a program of interest that has yet to be implemented, but for which a full description or initial appraisal has been carefully documented. Design an impact evaluation for this program that can be used to estimate the impacts of the program. The impact evaluation should address: (1) treatment; (2) randomization; (3) sample; (4) power; and (5) contingencies.

Session 14 (W 5/16) — Quasi-experimental techniques

Henry, G. T. (2015). [Comparison group designs](#). Chapter 6, in Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (Eds.). *Handbook of Practical Program Evaluation*. John Wiley & Sons, pp. 137-157.

Ahmadi, G. N., Glew, L., Provost, M., Gill, D., Hidayat, N. I., Mangubhai, S., & Fox, H. E. (2015). [Integrating impact evaluation in the design and implementation of monitoring marine protected areas](#). *Phil. Trans. R. Soc. B*, 370(1681), 20140275.

Unit 4: Performance and Process Evaluation

Session 15 (M 5/21) — Formative Evaluation

Patton, M. Q. (1994). [Developmental evaluation](#). *Evaluation practice*, 15(3), 311-319.

Ballantyne, R., & Hughes, K. (2006). [Using front-end and formative evaluation to design and test persuasive bird feeding warning signs](#). *Tourism Management*, 27(2), 235-246.

Session 16 (W 5/23) — Process and performance evaluation

Epstein, D., & Klerman, J. A. (2012). [When is a program ready for rigorous impact evaluation? The role of a falsifiable logic model](#). *Evaluation Review*, 36(5), 375-401.

Independent Evaluation Group. (2018). [Integrated Solid Waste Management and Carbon Finance Project](#). Washington, D.C.: World Bank, Report 123798.

Session 17 (M 5/28) — Process and performance evaluation (practicum)

Mascia, M. B., Pailler, S., Thieme, M. L., Rowe, A., Bottrill, M. C., Danielsen, F., ... & Burgess, N. D. (2014). [Commonalities and complementarities among approaches to conservation monitoring and evaluation](#). *Biological Conservation*, 169, 258-267.

Assignment: Pick a program of interest that has yet to be implemented, but for which a full description or initial appraisal has been carefully documented. Develop a strategy to measure progress towards program goals during the implementation of the project. Additionally, address how your evaluation will test critical process-based assumptions about the theory of change.

Unit 5: Building Monitoring & Evaluation Systems

Session 18 (W 5/30) — Developing organizational M&E strategies

U.S. Environmental Protection Agency (2009). [Guidelines for Evaluating and EPA Partnership Program](#). Washington, D.C.: U.S. Environmental Protection Agency.

Australian Government (2009). [Natural Resource Management Monitoring, Evaluation, Reporting, and Improvement Framework](#). Commonwealth of Australia.

Session 19 (M 6/4) — Fish Forever M&E Strategy (Guest Speaker: Gavin McDonald)

Readings: TBD

Session 20 (W 6/6) — Organizational M&E strategy (practicum)

Hatry, H. P. & Newcomer, K. E. (2015). [Pitfalls in evaluations](#). Chapter 26, in Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (Eds.). [Handbook of Practical Program Evaluation](#). John Wiley & Sons, pp. 701-724.