Course Instructor  Jennifer Coates

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I am happy to meet with you at a time that works for your schedule. Please email to set up an appointment.

Graduate Credit: 1 credit
Prerequisites: None

Course Description

There is consensus within the nutrition community that inadequate project monitoring and evaluation (M&E) represent a major constraint in domestic and international programmatic efforts to address problems of malnutrition and food insecurity. The absence of sound M&E processes in large numbers of nutrition and food security projects, despite continued evidence of their value in assessing and improving project performance, suggests that many project planners and managers may not yet have the necessary skills or understanding to develop and operate such systems. This course is designed to help address this need. The same M&E principles can be applied across both domestic and global programmatic contexts. That said, my personal experience is almost entirely internationally-focused, so most in-class examples and many of the activities have an international programming bent. I welcome students in the class with domestic interests, and strive to offer domestically-focused options for the term project and in-class exercises where possible.

The course content is structured around the following:

- Steps involved in developing an M&E system: These steps are the basic “nuts and bolts” of M&E. Though they are largely generic in nature and could thus be used for a wide range of projects they will be studied and discussed primarily in the context of international nutrition and food security projects.

- M&E issues specific to nutrition and food security interventions: Interspersed throughout the semester, there will be a review of the basic theories of change of specific nutrition and food security interventions (e.g. nutrition education,
micronutrient initiatives, growth promotion, etc.), and discussion of their central M&E issues, including the time needed to see results, indicators, and specific challenges with evaluation of these interventions.

Course Objectives

By the end of this semester students will

1. Be familiar with the strategies and techniques for monitoring and evaluating projects, particularly those related to nutrition and food security;

2. Be exposed to multiple international and some domestic examples of monitoring and evaluation systems, both large and small;

3. Have experience in the design of monitoring and evaluation plans; and

4. Be able to assess the adequacy of proposals and program evaluations designed by others.

Textbooks

The following textbook will be used throughout the semester.

1. Levinson, James, Beatrice Rogers, Kristin Hicks, Tom Schaetzel, Lisa Troy, and Collette Young. 1997. Monitoring and Evaluation: A Guidebook for Nutrition Project Managers. Washington, DC: The World Bank. This is an old book but it does a very good job of clearly distilling the material and it makes a good foundation on which to supplement with additional readings. The book is available on Canvas.


Academic Conduct

Each student is responsible for upholding the highest standards of academic integrity, as specified in the Friedman School’s Policies and Procedures manual (http://nutrition.tufts.edu/student/documents) and Tufts University policies (http://students.tufts.edu/student-affairs/student-code-conduct/academic-integrity-policy). It is the responsibility of each student to understand and comply with these standards, as violations will be sanctioned by penalties ranging from failure on an assignment and the course to dismissal from the school.
Assessment and Grading

<table>
<thead>
<tr>
<th>Assessment Area</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class attendance and participation</td>
<td>10%</td>
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<tr>
<td>Logical Framework and Theory of Change</td>
<td>15%</td>
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<tr>
<td>Indicator Matrix and Indicator Measurement Discussion</td>
<td>15%</td>
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<tr>
<td>Monitoring Information System Design</td>
<td>25%</td>
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<tr>
<td>M&amp;E Innovations</td>
<td>10%</td>
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<tr>
<td>Evaluation Design</td>
<td>25%</td>
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<td>Total</td>
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Course Late Policy:

Assignments must be submitted on or before the due date. Extensions will be considered only in extraordinary circumstances. (Having a lot of other schoolwork is not extraordinary!). If you think you will need an extension, please contact me with your request in advance of the deadline. Each assignment submitted up to two days late without prior approval will be docked 2 points. Assignments submitted more than 2 days past the deadline will be docked a total of 4 points.

Assignments:

All nutrition or food security projects should have a detailed monitoring and evaluation plan to guide the M&E of the project. A preliminary version of this plan is typically required as part of a project proposal for external funding. Through four separate assignments, students will develop the key components of an M&E plan for an actual food security and/or nutrition project. One additional assignment during the course of the semester will require students to engage with emerging and novel M&E-related innovations. Other real-life, practical exercises, workshops, and activities will be woven into the class throughout the semester.

Three of these assignments are to be tackled in small groups. We recognize that there are advantages and disadvantages to group projects. In this case, we feel that the advantages outweigh the disadvantages. Group projects can spread the work and instill teamwork skills, which are important elements of M&E and project design, management and implementation. More importantly, chances are that the M&E-related work that Friedman graduates do in the future, either as project staff, external evaluators, or consultants offering technical assistance, will be done in a collaborative fashion. It is thus vital that you become accustomed to working through these processes in conjunction with other people. Please note that there will be an opportunity to reflect on the work of others in your group at the end of the semester via a peer evaluation. The total peer evaluation score that you
receive from your group members will be factored into your overall course participation grade.

Summary Description of Assignments:

The description of assignments provided here is a summary only; detailed instructions will be posted on Trunk 2-3 weeks in advance of each assignment due date.

1. **Logical Framework (LF)**. Being able to diagram program theory is a critical foundation for planning and implementing M&E systems. The purpose of this assignment is to offer practice in developing a logical framework for a project, including inputs, assumptions, outputs, assumption, outcomes, impacts, and benefits. The assignment will also require you to narrate the theory of change that is implicit in your program, and to critique the soundness of this theory of change.

2. **Indicator Matrix (IM)**. The objectives of this assignment are: 1) to practice operationalizing measurable indicators and 2) to assess the appropriateness of one indicator over another in food security and nutrition M&E based on research justifying the indicators’ validity, cost-effectiveness, context appropriateness, and other criteria.

3. **Program Monitoring Information System Design (group project)**: This assignment will require you to consider key elements of a program monitoring information system and propose a system design that is appropriate for your semester project.

4. **M&E Innovations (group project)**: While the focus of this class is on mastering a core set of skills for designing, implementing, and managing program monitoring and evaluation processes, students should also be attuned to innovative and cutting-edge techniques, methods, and concepts that are expanding the frontiers of M&E. This assignment will require students to work with their term project groups to identify and share an M&E innovation with the class. Students will facilitate a session that involves introducing the innovation, discussing its potential applications, critiquing its pro’s and con’s relative to standard practice, and engaging the class to consider the relevance of the innovation in the context of the semester projects.

5. **Impact Evaluation and Process Evaluation Design (group project)**: This final assignment of the semester requires students to develop a realistic and feasible plan for an impact evaluation and a process evaluation of their selected project.

6. **Class Attendance and Participation**: Class sessions will incorporate group activities and discussion to reinforce the various skills taught through lectures and to encourage peer-to-peer learning. Students are expected to come to class prepared to actively participate in these activities and discussions, some of which will require advance preparation. We will also ask groups to rate the other members contributions to the
three group projects, to provide a peer evaluation score. The average peer evaluation score will be incorporated into the class attendance and participation grade.

**Accommodation of Disabilities:** Students with documented disabilities are entitled to academic accommodation appropriate to their needs. If you require accommodations for this course, please contact me confidentially prior to the end of the second week of classes.
## Course Schedule

<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Topic</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/16</td>
<td>Course Overview and Introduction to M&amp;E</td>
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<tr>
<td></td>
<td>1/23</td>
<td>University policy: no class – Substitute Monday schedule</td>
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<tr>
<td>2</td>
<td>1/30</td>
<td>Project Goals, Objectives, and Targets; Theory of Change; Using Conceptual Frameworks for Better M&amp;E</td>
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<tr>
<td>3</td>
<td>2/6</td>
<td>Measurement and Indicators, Part I (impact indicators)</td>
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<tr>
<td>4</td>
<td>2/13</td>
<td>Measurement and Indicators, Part II (output and outcome indicators)</td>
<td>Assignment 1 due 2/13 by 11:59 on Trunk. Selection of groups for final project due to course TA by midnight on 2/15</td>
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<tr>
<td>5</td>
<td>2/20</td>
<td>Monitoring Information Systems for Improved Performance</td>
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<tr>
<td>6</td>
<td>2/27</td>
<td>Process Evaluation and Other Implementation Research</td>
<td>Assignment 2 due 2/27 by 11:59 on Trunk</td>
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<tr>
<td>7</td>
<td>3/6</td>
<td>Impact Evaluation Design, Part I</td>
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<tr>
<td>8</td>
<td>3/13</td>
<td>Impact Evaluation Design, Part II</td>
<td></td>
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<tr>
<td>9</td>
<td>3/27</td>
<td>Qualitative &amp; Participatory M&amp;E</td>
<td>Monitoring Information System Design due 3/27 by 11:59 on Trunk</td>
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<tr>
<td>10</td>
<td>4/3</td>
<td>Evaluating Program Sustainability; Using Evaluation Data for Maximum Impact</td>
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<tr>
<td>11</td>
<td>4/10</td>
<td>M&amp;E Innovations presentations and discussion</td>
<td>M&amp;E Innovation presentations in class 4/10</td>
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<tr>
<td>12</td>
<td>4/17</td>
<td>Measuring Efficiency: Cost-benefit and Cost-effectiveness</td>
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<tr>
<td>13</td>
<td>4/24</td>
<td>Last class: Evaluation Plan Project Workshop</td>
<td>Final evaluation plan due by Friday, 5/10 at 11:59 PM</td>
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Course Topics, Learning Objectives and Readings

Class 1: Course Overview and Introduction to M&E

Learning Objectives
• Integrate (plan, design, etc) M&E in the project cycle
• Explain the components of an M&E System
• Discuss the challenges to M&E of Nutrition and Food Security Programs

Optional reading:


January 23: NO CLASS, UNIVERSITY MONDAY SCHEDULE

Class 2: Setting Project Goals, Objectives, and Targets; Understanding Program Theory of Change; Using Logical Frameworks for Better M&E

Learning Objectives
• Design project goals and objectives
• Compose program targets
• Explain and discuss program theory of change
• Develop a logical framework/logic model
• Summarize the purpose of logical frameworks for M&E

Activities:
• Develop a logframe for a conditional cash transfer program
• Critique past project logframes

Required Readings:


*Additional Resources:*


*Assignment:* Develop a logical framework for the specified project (to be announced in class). Due on the Trunk website by midnight, *February 13*th.

**Class 3: Measurement and Indicators, Part I (Impact Indicators)**

*Learning Objectives:*

- Summarize the current debates over:
  - indicators and methods for measuring changes in dietary intake
  - indicators for measuring food security and nutrition impacts
- Describe other sources of M&E information, beyond ‘indicators’

*Activities:*

- Discuss Logical Framework assignment

*Required Readings:*


Additional Resources:


3. Browse this website for detailed write-ups about food security and diet-related indicators: Data4Diets: Building Blocks for Diet-related Food Security Analysis: [https://inddex.nutrition.tufts.edu/data4diets](https://inddex.nutrition.tufts.edu/data4diets)

Class 4: Measurement and Indicators, Part II (Output and Outcome Indicators)

*Learning Objectives:*
- Summarize qualities of a suitable indicator
- Discuss and demonstrate the process of selecting indicators for purpose and context
- Design an indicator matrix which includes ‘process’ (output) indicators and ‘outcome’ indicators: eg. those measuring coverage and behavior change.

*Activities:*
- Critique indicator examples
- Practice developing an indicator matrix

*Required Readings:*


Additional Resources:


Assignment: Prepare an Indicator Matrix for selected indicators for the specified project (to be announced in class). Due on the Trunk website by 11:59 on February 27th

Class 5: Monitoring Information Systems for Improved Performance

Learning Objectives:

- Explain the purposes of monitoring
- Design a program monitoring information system
- Describe routine data collection methods and information flows
- Explain and apply the “management by exception” technique
- Integrate data collection methods to ensure data quality

Activities:
- Bangladesh Management by Exception Exercise

Required Readings:
1. Levinson, et al: Section 3


Additional Resources:


Assignment: Monitoring System Assignment due March 27th by 11:59 PM

Class 6: Process Evaluation and Other Implementation Research

Learning Objectives:

- Explain the objectives of process evaluation and identify key research questions
- Define “implementation research” and “delivery science”
- Apply methods for answering process evaluation questions, including barrier analysis.

Required readings


Additional Resources:


Class 7: Impact Evaluation Design, Part I

Learning Objectives:
• Argue the pros and cons of randomization design
• Explain the potential bias in estimating program effects
• Design a quasi-experimental impact assessment
• Calculate sample size and design a sampling plan for an evaluation

Activity:
• Debate Pro’s and Con’s of randomized controlled trials in evaluation research.

Required Readings:
1. Levinson, et al: Section 4

2. Bamberger et al, Chapters 11, 12, and 15


Additional Resources:


**Class 8: Impact Evaluation Design, Part II**

*Learning Objectives:*
- Discuss real-life evaluation constraints
- Summarize the pro’s and con’s of RCT alternatives
- Analyze the Bangladesh Integrated Nutrition Program evaluation controversy

*Activities:*
- Critique of Bangladesh Integrated Nutrition Program Final Evaluation Results

*Required Readings:*
1. Bamberger et al. Chapters 3-7, 16


*Additional Resources:*
1. DAC. Criteria For Evaluating Development Assistance and DAC Quality Standards for Development Evaluation. OECD Development Assistance Committee (DAC), 2010. *(skim).*

2. Levinson, et al: Section 7 – 8
March 21: Spring Break; no class

Class 9: Qualitative and Participatory M&E

Learning Objectives:
- Summarize and discuss participation and accountability as development principles
- Compare and contrast qualitative vs. quantitative approaches
- Explain specific qualitative and participatory techniques

Activities:
- Simulation of participatory data collection exercises

Required Readings:
  a) Webinar: Participation in Evaluation. Available at: http://betterevaluation.org/blog/four_reflections_on_participation_in_evaluation
  b) Participation not for you? Four reflections that might change your mind. Available at: http://betterevaluation.org/blog/four_reflections_on_participation_in_evaluation
  c) Positioning participation on the power spectrum. Available at: http://betterevaluation.org/blog/positioning_participation_on_the_power_spectrum
  d) Choices about voices. Available at: http://betterevaluation.org/blog/choices_about Voices

Additional Resources:
Class 10: Assessing Program Sustainability; Using Evaluation Data for Maximum Impact

Learning Objectives:
- Discuss and argue
  - When evaluation is worthwhile ("Evaluability")
  - Ethical issues concerning M&E
  - The politics of evaluation
  - Should sustainability be the objective of all development programs?
- Explain how to ensure maximum utilization of the evaluation through various reporting techniques
- Consider options for evaluating program sustainability

Activities:
- Discussion of Influential Evaluations case studies
- Discuss USAID/FFP Exit Strategies Study Findings

Required Readings:

2. UNICEF. (2018). Influential Evaluations: A Selection of UNICEF Evaluations That Led to Learning and Change. Read the overview and at least two case studies of your choice; come prepared to discuss what made these evaluations particularly influential.


Additional Resources:


**Assignment**: Group presentation on M&E Innovation due in class on 4/11.

**Class 11: M&E Innovations Presentations and Discussion**

**Learning Objectives:**
- Investigate innovative technology and approaches being used for M&E
- Articulate the relevance of innovative M&E approaches to real-life project scenarios

**Activity:**
- Group presentations on the selected M&E innovation, its potential applications, and its relevance in the context of the semester project.

*No required or additional readings*

**Class 12: Measuring Efficiency: Cost-benefit and Cost-effectiveness**

**Learning Objectives:**
- Explain the logistics and challenges to assembling cost data
- Measure costs and benefits
- Know the key elements of a cost-effectiveness analysis

**Activity:**
- Designing a cost-effectiveness study for the Bangladesh Save the Children Community Management of Acute Malnutrition (CMAM) Program

**Required Readings:**

1. Rossi Chapter 11, *an overview*

2. Puett et al. 2012: *a societal CEA of an innovative CMAM delivery model, using an activity-based costing methodology*

3. Phillips Sanghvi 1996: *CEA using secondary data to compare 3 vitamin A interventions*

4. Wilford et al. 2011: *an example of a decision analysis costing model applied to a CMAM program*
Additional Resources:
5. Fiedler et al. 2008: a detailed account of costs in an important nutrition program
6. Caldes et al 2006: clear & detailed study comparing 3 cash transfer programs in Latin America
8. Jha et al 1998: useful example of how to compare C-E of various health interventions
10. Fox-Rushby & Hanson 2001: instructions for calculating DALYs, for those interested
11. Horton 2010: Scaling up Nutrition report from the World Bank, outlines recommended nutrition interventions

Assignment: Final impact and process evaluation plan due May 10th.

Class 13: Evaluation Plan Project Workshop

Learning Objectives:
• Obtain and offer feedback on the evaluation needs of a real-life project
• Discuss tailored evaluation designs for specific project scenarios

Required Readings:
• Background information for each of the group term projects

Activity:
• Group workshop on final evaluation plan

No additional required readings