

Draft September 24, 2010
The Evergreen State College
Master of Environmental Studies Program

Case Studies: Thesis Research Design
Fall 2010

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Class times: Tuesdays, 6 – 10 PM; LH2; Lab II 2207 & 2211
 Thursdays, 6 – 10 PM; LH2; Lab II 2207 & 2211

Objectives

This final, required core program of the MES program has four major objectives:

- To develop a comprehensive understanding of research design;
- To develop an understanding of a variety of research methods for people headed for professional careers in the environment (work in agencies, non-profits, for-profit companies, and further graduate training);
- To create an opportunity to prepare a Thesis Prospectus for examination and discussion by the respective thesis reader (students planning to begin their Thesis work next Fall will prepare a “practice” Prospectus);
- To solidify and enhance the learning accomplished in the spring in quantitative and qualitative methods class.

Case study format

In the first two weeks of the program, students will work on a number of tasks: (1) exploring the epistemological foundations of research through reading two books, (2) reviewing the MES Thesis Prospectus, (3) identifying a Prospectus topic, and (4) introducing the Human Subjects Review process.

In weeks three through eight, we will examine three different research cases in depth. We will read a “central” research paper and several relevant auxiliary papers. In each case, students will work through structured assignments designed to critically evaluate the research. This will involve coming to grips with the authors’ formulation of the research question; identifying independent and dependent variables; structuring research methods (the selection of analytical tools); placing the research in its intellectual, disciplinary, environmental, and political economic context; selecting data and evidence; framing the presentation; and developing text and graphics to communicate the findings. We will link the discussions to the issues embedded in the *Thesis Prospectus*. As we move through the cases, we will progressively provide less faculty guidance on how to complete the analysis; in this way students will gain the independent capacity to “think like a researcher.”

In week nine, we will conduct detailed workshops and individual help on each student's Prospectus (*students will have been working on their Prospectus during the entire quarter*). In week ten, students will present their Prospectus to the class in a PowerPoint presentation.

Writing Assignments

For each case study, students will prepare a brief analysis that dissects the research example studied. This paper will provide a critical assessment of the primary research paper examined, place it into its context, and assess its effectiveness. These papers will integrate materials from the MES *Thesis Prospectus*, the lectures, and the readings for the respective cases. A separate handout will provide more details.

No later than the end of week ten, students will submit their Thesis Prospectus as the final writing assignment.

Selection of cases

The three cases developed in weeks two through eight will illustrate provocative examples of important research in environmental issues. Cases will consist of

- economic consequences of climate change
- debate over logging practices and ecological consequences
- analysis of four previously completed MES thesis projects

Readings (Partial; additional items will be added)

Kuhn, Thomas S., *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 3rd edition, 1996). ISBN: 978-0-226-45808-3.

Porter, Theodore M., *Trust in Numbers, The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995), 310 pp.

Michael, Jeffrey A., "Episodic flooding and the Cost of Sea-Level Rise," *Ecological Economics* 63 (2007): 149 – 159. (Available through Evergreen Library: in "Journal Title" type in "ecological economics." Michael's article is in Volume 63 Issue 1.)

Donato, D.C., et al., (20, January, 2006) *Post-Wildfire Logging Hinders Regeneration and Increases Fire Risks*, *Science*, Volume 311. P.352

MES Theses: TBA

Additional reading assignments associated with the articles

Detailed Weekly Schedule

Week	D – D – M	Activity	Reading
1	Tue-28-Sep	Introduction to Case Studies Lecture: Ralph, Research in Social Science Workshop: Understanding the <i>Thesis Prospectus</i> and the Human Subjects Review process	
	Thu-30 Sep	Lecture: Gerardo Research in Natural Science Seminar: Kuhn	Kuhn, <i>The Structure of Scientific Revolutions</i>
2	Tue-5-Oct	Lecture: Ralph Research Design Social Science (variables) Seminar: Porter	Porter, <i>Trust in Numbers</i>
	Thu-7-Oct	Lecture: Gerardo Research Design in Natural Science (variables) Seminar: Porter	Porter, <i>Trust in Numbers</i>
3	Tue-12-Oct	Case 1: Sea Level Rise & Climate Change Lecture: Ralph, Economics Workshop: Translations, Questions, Framing, and Methods	Michael, Jeffrey A., “Episodic Flooding and the Cost of Sea-Level Rise”
	Thu-14 Oct	Lecture: Ralph, Economics Workshop: Situating the research in the literature review (QFM for prior articles, background accepted/background contested, intended objectives of new research)	Articles, TBA
4	Tue-19 Oct	Lecture: Gerardo, Science of Climate Change Workshop: Understanding the methods in the articles.	
	Thu-21-Oct	Lecture—TBA Workshop: Assessing the successes, weaknesses, effectiveness, and reasons Presentation of Findings Case Study 1 Due: Case Study Assessment No. 1	
5	Tue-26-Oct	Case 2: Biscuit Fire Controversy Lecture: Gerardo Workshop: Translations; Question, Framing,	Donato et al., 2006, “Post Wildfire Logging...”

Week	D – D – M	Activity	Reading
		Methods	
	Thu-28-Oct	Lecture: Gerardo Workshop: Situating the research in the literature review (QFM for prior articles; background accepted—background contested; intended consequences of new research)	Articles TBA
6	Tue-2-Nov	Lecture: Ralph Workshop: Understanding the methods used.	
	Thu-4-Nov	Lecture—TBA Workshop/Seminar: Assessing the successes, weaknesses, effectiveness, and reasons. Presentation of findings Due: Case Study Assessment # 2	
7	Tue-9-Nov	Case 3: MES Theses Panel: MES thesis writers (1 & 2):TBA Workshop: Questions, variables, framing, and context	MES Theses TBA
	Thu-11-Nov	Panel: MES thesis writers (3 & 4):TBA Workshop: Method and successes	
8	Tue-16-Nov	Workshop: Thesis Prospectus of the case-study thesis	
	Thu-18-Nov	Team presentations: the teams’ reconstructions of the thesis prospectuses Due: Team Case Study Assessments # 3	
	22 – 26 Nov	Thanksgiving Week—No classes	
9	Tue-30-Nov	Finalizing your Thesis Prospectus Class format TBA	
	Thu-2-Dec	Finalizing your Thesis Prospectus Class format TBA	
10	Tue-7-Dec	Student presentations of Thesis Prospectuses	
	Thu-9-Dec	Student presentations of Thesis Prospectuses	
	13-17 Dec	Evaluation Week	