

SYLLABUS: Ecological and Social Sustainability

Winter 2017

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Times: Tues. & Thurs., 6–10PM

Locations: Lecture: Seminar II, C-1105
Seminar: Seminar II, C-2105, C-2107, C-2109

Credits: 8

Office Hours: By appointment

Required Texts: *Thinking in Systems*, Donella Meadows
Environmental Social Science, Emilio F. Moran
The Two-Mile Time Machine, by Richard Alley
Trust in the Land: New Directions in Tribal Conservation, Beth Rose Middleton
The Literature Review, Diana Ridley
The Great Derangement, Amitav Ghosh
(Other readings will be made available as PDFs on Canvas.)

Program Objectives:

- To develop an understanding of sustainability in socio-ecological systems;
- To understand the interplay between biophysical, socio-economic, and cultural factors in environmental problem solving;
- To understand and use interdisciplinary approaches to environmental studies that combine science and humanities;
- To develop students' ability to design and execute a scholarly research paper in order to advance to candidacy.
- To understand how human activity has affected how the earth's carbon cycle and climate system functions and its implications for policy and cultural representations of climate change.

Program Description: Ecological and Social Sustainability (ESS) addresses the theoretical, practical, cultural, and ethical challenges involved in understanding and resolving environmental issues related to sustainability. We will examine how these concepts are understood from multiple perspectives, emphasizing how systems thinking, complexity, and imaginative modes of inquiry contribute to a nuanced understanding of the prospects and challenges of fostering sustainability and sustainable development.

Format: Students will participate in seminars, lectures, and workshops that focus on developing critical thinking, writing, discussion, and presentation skills. By the end of the quarter, each student will produce a professional quality, 12-15-page research paper (candidacy paper) and a 10-minute professional presentation of their findings. A series of workshops and discussions throughout the quarter will support the various stages of research and writing involved in such a project, including choice of a manageable topic, efficient literature searches, composing organized drafts, and presentation of research. This work is intended to deepen knowledge not only of the chosen topic, but also of the meaning and nature of professional work in environmental studies. Part of your advancement to candidacy is based upon your ability to design and execute a scholarly research paper.

Seminar Facilitators: The ESS seminar will provide opportunities to analyze materials through writing and group discussion, as well as to develop oral communication and facilitation skills. Toward these ends, we are asking students to organize and facilitate seminar discussions.

FACILITATORS (2 per seminar session, sign-up sheet at first seminar):

- Meet with each other before class to identify major themes/questions and decide how you are going to facilitate the seminar. There is no formal writing assignment for facilitators, but you should be prepared to discuss the background of the author(s) and other work they've done, and you should have prepared an outline of your themes, questions, and strategies for stimulating discussion.
- Poll the class at the beginning of seminar to identify other themes/questions.
- Lead or manage the discussion: prioritize themes and questions, coordinate discussion (small group or all class discussion or debate), assign any in-class writing prompts you may find useful, and ensure widespread participation, and manage time to ensure that important themes are covered.

Candidacy Paper: You will receive separate instructions about the requirements for producing your 12-15-page candidacy paper and providing an oral presentation of your findings. However, important due dates are listed in the Program Schedule, found on the next page.

Seminar Tickets: For every seminar, you are required to come to class (a) having read the entire assigned reading, (b) with your copy of the assigned reading in hand and, (c) with a roughly one-page, double-spaced, typed response or "ticket." This ticket should respond to specific assignments for each seminar, which will be posted ahead of time on the program web page. These assignments will require you to identify things like key concepts from the readings and questions the text raised for you, including relevant page references that would help ground or elucidate your questions. The primary purpose of this exercise is to help you be prepared to raise ideas and stimulate seminar discussion. For clarity, we have indicated when you should bring a seminar ticket to class in the detailed schedule.

Synthesis Essay: You are required to write a synthesis essay that reflects on linkages between 4-6 of the reading assignments over the quarter including at least two of the books. Your essay should be 4-6 pages (double-spaced) (Alley, Ghosh, or Middleton). All papers should be carefully drafted and revised. We encourage you to work with the Graduate Writing Assistant on revisions. All quotations and references to sources beyond the assigned text should be properly cited. There will be a separate handout providing more guidance regarding how to construct the synthesis essay.

Credit and Evaluation: Partial credit is not awarded in the MES Program. Full credit will be awarded based upon attendance, punctuality, participation, and submission of all assignments on time. To be excused due to illness, etc., contact your seminar instructor as soon as you know that you will have a problem meeting these expectations. Depending upon the reason, you may or may not be excused. Credit will be jeopardized if there are unexcused absences, a pattern of tardiness, lack of participation on a regular basis, and failure to submit all assignments on time. As described previously, part of your advancement to candidacy is based upon your ability to design and execute a scholarly research paper.

Portfolio: Please bring a physical copy of your final portfolio from gCORE to your seminar instructor. ESS Portfolios, however, will be submitted on the final day of class electronically.

There will be a workshop on assembling these portfolios early in the quarter. These should be carefully organized, professional-quality portfolios representing all of your work for the quarter. Each student's portfolio should be divided into sections and labeled to indicate contents (e.g., class notes, notes on assigned readings, research notes, assignments with instructor's written comments, workshop handouts, self-assessment of prospectus presentation, etc.). Also include your draft self-evaluation. All students are required to participate in an evaluation conference with their seminar instructor during the 11th week, bringing with them a draft self-evaluation. Please write an evaluation of each of your faculty members, and submit them via my.evergreen.edu. These are required but they do not have to be shared with the faculty until after credits are posted.

SCHEDULE (1/12/17)

Wk.	Date	Lectures, Workshops, Seminars	Reading Assignments	Other Assignments
1	Jan. 10	Introduction to the program <i>go over expectations for the candidacy paper</i> <u>Faculty Roundtable:</u> Perspectives on sustainability <u>Seminar:</u> readings posted on Canvas	Readings on Canvas: 1. <i>Sustainability: Principles and Practice</i> Ch. 1 & 2 2. <i>Principles of Terrestrial Ecosystem Ecology</i> , pp. 423-435	Due: Writing Self Assessment (to seminar faculty leader – post on Canvas)
	Jan. 12	<u>Faculty Roundtable & Workshop:</u> Systems Thinking <u>Seminar:</u> <i>Thinking in Systems; LeGuin</i>	<i>Thinking in Systems</i> , Meadow “The Ones Who Walk Away from Omelas,” LeGuin (Canvas)	Due: Candidacy paper topic and references (to seminar faculty – post on Canvas) Seminar ticket
2	Jan. 17	<u>Lecture/Workshop:</u> Earth as a system: exploring climate dynamics and energy inputs/outputs (Erin) <u>Lecture:</u> Population (Ted) <u>Candidacy Paper Workshop:</u> scope and question	Readings on Canvas: Chapin Ch. 2 (all) Kump Ch. 3, pp. 48-55.	
	Jan. 19	<u>6-7:15:</u> Library Workshop, Library 2610 (Computer Center) GROUP 1 (A-L) <u>6-7:00:</u> Workshop: How to make an argument, SEM II C-2105, GROUP 2 <u>7:15-8:30:</u> Library Workshop, Library 2610 (Computer Center) GROUP 2 <u>7:30-8:30:</u> Workshop: How to make an argument, SEM II C-2105, GROUP 1 <u>9pm:</u> Seminar: Moran, ch. 1-2	<i>Environmental Social Science</i> , Moran, ch. 1 & 2	Due: Revised candidacy paper question and references (post on Canvas) Seminar ticket on Moran, ch. 1 & 2

3	Jan. 24	<u>Lecture</u> : Fate of energy: Principles of ecosystems ecology (Erin) <u>Workshop</u> : Ecosystem Concepts	Readings on Canvas: Excerpts of Chapin Ch. 1, Kump Ch. 9	
	Jan. 26	<u>Lecture/workshop</u> : narrative analyses (Miranda) <u>Workshop</u> : Being a critical reader & writer; close reading exercises <u>Workshop</u> : assembling an electronic portfolio	Excerpt, Mieke Bal, <i>Narratology</i> ; “Alarms & Excursions”, Waldrop <i>The Literature Review</i> , Ridley, ch. 4, 8 & 9	
4	Jan. 31	<u>Lecture/workshop</u> : The Global Carbon Cycle: Amazon Case Study (Erin) Seminar: Richey et al. (2002)	Readings on Canvas: Richey et al. (2002), TBA	Seminar ticket
	Feb. 2	<u>Lecture</u> : Interdisciplinarity, Scale & Time (Ted) <u>Seminar</u> : Moran, ch. 5 & Whitesell (1996)	1. <i>Environmental Social Science</i> , Moran, ch. 5 2. Whitesell article (Canvas)	Due : Candidacy Paper 1 st paragraph, point based outline (see pp. Booth, & bibliography with top 5 sources annotated (to seminar faculty – post on Canvas) Seminar ticket

5	Feb. 7	<p>Lecture/workshop: <i>The Great Derangement</i>, ch. 1 and 2, Amitav Ghosh (Miranda)</p> <p><u>Lecture/workshop</u>: Long term controls on climate (Erin)</p> <p><u>Seminar</u>: Ghosh</p>	<p><i>The Great Derangement</i>, chapter 1 and 2, Amitav Ghosh</p> <p>Readings Posted on Canvas: Kump Ch. 12 and 14</p>	Seminar ticket
	Feb. 9	<p><u>Lecture</u>: Institutions, Commons, and Sustainability (Ted)</p> <p>Developing an argument: analytical versus descriptive writing</p> <p><u>Seminar</u>: Moran, ch. 7-8</p>	<p><i>Environmental Social Science</i>, Moran, ch. 7 & 8</p>	Seminar ticket
6	Feb. 14	<p>Lecture: Past carbon cycle and relationship with climate (Erin)</p> <p><u>Seminar</u>: <i>The Two-Mile Time Machine</i>, Richard B. Alley</p>	<p><i>The Two-Mile Time Machine</i>, Alley, pp. 3-131, 140-165</p>	Seminar ticket
	Feb. 16	<p><u>Lecture/workshop</u>: Eco-literature–<i>Plastic: An Autobiography</i>, Cobb (Miranda)</p> <p>Peer review workshop on argumentation in the candidacy paper</p> <p><u>Seminar</u>: <i>Plastic: An Autobiography</i>, Allison Cobb</p>	<p><i>Plastic: An Autobiography</i>, Allison Cobb</p> <p>Read whole text free online here: http://www.essaypress.org/ep-35/</p>	Seminar ticket
7	Feb. 21	<p><u>Lecture</u>: Present and Future Climate Change Impacts (Erin)</p>	<p>Readings posted on Canvas: Selections from IPCC and EPA; TBA</p>	<p>Due: Candidacy Paper – First complete draft due to faculty and peers</p>

	Feb. 23	<p><u>Guest Panel:</u> Land Trust Efforts in Nisqually Watershed</p> <p><u>Seminar:</u> <i>Trust in the Land</i></p>	<i>Trust in the Land: New Directions in Tribal Conservation</i> , Middleton, chapters 1–6, 12, 14, 16, 17	Seminar ticket
8	Feb. 28	<p><u>Lectures/workshops:</u> Ghosh, chapter 3 (Miranda)</p> <p>Carbon Capture Solutions (Erin)</p> <p>Peer review: first draft candidacy paper meeting</p>	<p>Ghosh, ch. 3</p> <p>Readings Posted on Canvas: Carbon capture readings, TBA</p>	Due: Synthesis essay
	Mar. 2	<p><u>Lecture:</u> Sustainable Development (Ted)</p> <p><u>Workshop:</u> Crafting Presentations</p>	Readings on Canvas	
9	Mar. 7	<p><u>Lecture:</u> Science & Advocacy (Ted)</p> <p><u>Seminar:</u> Science & Advocacy</p>	Science & Advocacy readings on Canvas	Seminar ticket
	Mar. 9	<p><u>Guest Lecture:</u> Kirsten Evans, readings TBA</p> <p>Large group seminar on sustainability</p>		
10	Mar. 14	Candidacy paper presentations		Due: Candidacy Paper (to seminar faculty – post on Canvas)
	Mar. 16	Candidacy paper presentations		Due: Portfolio (to seminar faculty – post on Canvas)