Course description

The Environmental Studies Senior Seminar brings together majors with different course backgrounds to analyze environmental problems using an interdisciplinary approach. Time in the course will be devoted to three main goals. (1) Reading about and discussing selected environmental problems and how society has responded to these issues. (2) Understanding the methods and techniques that are used to produce and disseminate the information that shapes environmental debates (including scientific knowledge, policy recommendations, historical analysis, public communication). (3) Developing and completing an independent research project.

Seminar leaders

Prof. Jill Miller, 224 McGuire Life Sciences, 542-2168, jsmiller@amherst.edu
Prof. Kate Sims, 301 Converse Hall, 542-2902, ksims@amherst.edu

Meeting time & location

Wednesdays, 2:00-5:00pm, McGuire Life Sciences building, room 230

Research assignments

An important component of the seminar is the completion of original and independent student research. Students who choose to write an honors thesis may expand this research project into their Environmental Studies thesis during the second semester.

In the course we will discuss how information has shaped environmental debates and policies. Your research goal is to create a product that could move the debate by clearly stating and answering a question. The specific topics and format will be developed in discussion with course leaders and thesis committees (if applicable). As noted in the schedule, the goal of the seminar is to approach this potentially daunting task in stages. You are responsible for planning ahead and staying on top of these deadlines in order to finish your research project on time.

Textbook and readings

Required texts for this seminar include *Silent Spring* (1962, Carson), *The World Without Us* (2008, Weisman), and *Limits to Growth: The 30 Year Update* (2004, Meadows et al.). All are readily available in paperback. Other readings (see attached list) will be made available on the course website http://www.amherst.edu/academiclife/departments/courses/0910F/ENST/ENST-70-0910F

You are also required to submit (via the course website) responses to each week’s readings by 5pm on the Tuesday before class. These should be thoughtful responses (questions, reactions, comments) that can provoke discussion; you should also read through the responses posted by fellow students in preparation for discussion.

Intellectual Responsibility

Plagiarism and other forms of academic dishonesty will not be tolerated and will be reported to the Dean of Students. If you are not already, make yourself aware of the College’s Statement of Intellectual Responsibility http://www.amherst.edu/~dos/conduct/rightsrespon.html. There is a useful summary of the pitfalls of plagiarism at http://www.amherst.edu/campuslife/deanstudents/acadhonesty
<table>
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<tr>
<th>Week</th>
<th>Dates</th>
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<td>1</td>
<td>9 Sept</td>
<td>Introductions; <em>The World Without Us</em>; How do we know what we know?</td>
<td>Weisman (2008, Chs. 1-3, 9)</td>
<td>Potential research questions (in class)</td>
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| 2    | 16 Sept| **Case 1: Biodiversity**  
**Dr. Josh Donlan:** Island restoration, invasive species, & maximizing your conservation buck | Ferraro & Pattanayak 2006; McCauley 2006; Donlan et al. 2005; Chapin 2004 | Project idea due               |
| 3    | 23 Sept| **Restoring the Florida Everglades** | Layzer (2006, Ch. 15); Bilger (2009)                                      |                               |
| 4    | 30 Sept| **Dr. Bethany Bradley**  
Conservation strategies & climate change | Bradley et al. (2009); Ricciardi & Simberloff (2009); McLachlan et al. (2007); Harris et al. (2006) | Literature search due          |
| 5    | 7 Oct  | **Case 2: Pollution**  
Silent Spring & early legislation | Carson (1962, Chs. 1-4, 8, 11-12, 16-17); Layzer (2006, Ch. 2), Baldwin (1962) |                               |
| 6    | 14 Oct | **Dr. Jessica Reyes**  
Cost-benefit analysis in health, Long term effects of lead | Reyes (2009); Rosenberg (2004); Tierney (2007) | Outline due                   |
| 7    | 21 Oct | **Seth Shulman**  
Toxic legacy of the US Military | Shulman & Pollack (1989); Shulman (1992, Preface & Ch. 1) |                               |
| 8    | 28 Oct | **Case 3: Resources**  
Ecological footprints; Limits to growth | Meadows et al. (2004); Norgaard (2002); Nordhaus et al. (1992) |                               |
| 9    | 4 Nov  | **Dr. Joseph Moore**  
Tragedy of the Commons | Hardin (1968); Wackernagel & Rees (1996, Chs. 1-2) | Draft 1 due                   |
| 10   | 11 Nov | **Case 4: People**  
**Dr. Diana Pei Wu**  
Youth organizing in environmental justice | Quiroz-Martinez et al. (2005) |                               |
| 11   | 18 Nov | Initial paper presentations | No reading | Draft 2 due                   |
| 12   | 25 Nov | **Thanksgiving break, no class** | No reading | Final paper due               |
| 13   | 2 Dec  | **Dr. Chris Cuomo**  
Indigenous knowledge & climate change | Cuomo (1998); Cuomo et al. (2008) |                               |
| 14   | 9 Dec  | Final project presentations | No reading |                               |
| 15   | 16 Dec | Reading period, no class | No reading |                               |