

## **CPEP NTRES 2010: Environmental Conservation**

**Summer 2018**

### **Course Information**

**Instructors: Erin Larson & Michelle Wong**

#### Objectives:

Our lives are increasingly touched by questions about environmental degradation at local, regional and global scales. Business as usual is being challenged. This course will stimulate you to go beyond the often-simplistic portraits of the environmental dilemma offered by the mass media so that you will have a firmer basis for responsible citizenship and action on environmental issues. At the end of the course, you will design a proposed solution--industrial or policy--starting with a grant proposal to an execution plan with timeline.

#### Readings:

The required readings provide additional depth to the course. Please read the article for the day before coming to class. Some of the quiz questions will be from these required readings.

Upon completion, students will be able to:

1. Describe the natural environment and explain how its relationships with human activities have developed and changed through time.
2. Appreciate how human cultural and social systems impact the physical, chemical and biological environment.
3. Use their knowledge to predict an aspect of the environment in the future and how human behavior and actions might alter the trajectory.

Grading: Students will be evaluated on the basis of three criteria:

1. Attention in lecture as indicated by performance on quizzes. (30%)
2. Research papers and project proposal. (30%)
3. Respectful participation in class discussions. (25%)
4. Final presentation. (15%)

#### Quizzes:

To encourage students to get the most out of this course, a total of about a dozen quizzes will be administered in class. These will provide an incentive to do the readings and to be attentive. Quizzes will not occur every class and will not be announced ahead of time.

#### Writing:

The objective of the essays is to encourage students to explore aspects of environmental conservation in which they have particular interest. Two separate pieces are required for the semester: the first will be a critical review of some environmental issue of your choosing. The second will be a white paper of a policy or proposed innovative solution. More details on paper format and grading will be provided in the first few weeks of the class.

#### Discussions:

The objective is to provide an opportunity to participate actively with your peers in the analysis of environmental problems and evaluate and summarize scientific evidence for debate. Evaluation of performance will be based principally on thoughtful, considerate, and engaged participation.

## Class Schedule

Class	Date	Day	Topic	Readings from Course Reader
1	6/12/18	Tues	Introduction/Tragedy of the Commons	None
2	6/14/18	Thurs	Climate Change	Read pgs. 3-8 (Hardin), skim pgs. 9-14 (Vitousek et al.), Read pgs. 22-47 (IPCC)
3	6/19/18	Tues	Human Population Growth	Read pgs. 60-65 (Cohen), pgs. 66-69 (United Nations), pgs. 70-75 (Cohen)
4	6/21/18	Thurs	Agriculture	Read pgs. 84-93 (FAO), pgs. 94-95 (Fedoroff et al.),
5	6/26/18	Tues	Food Systems and Waste	Read pgs. 162-178 (FAO), pgs. 163-154 (Zimmerman)
6	6/28/18	Thurs	Energy	Read pgs. 199-209 (Gray), pgs. 214-222 (Ananthaswamy and Page), pgs. 261-268 (Jacobson and Delucchi)
7	7/3/18	Tues	Land resources/Mining	Read pgs. 271-282 (Forgrave), pgs. 283-291 (Prior et al.), pgs. 294-305 (White)
8	7/5/18	Thurs	Forests	Read pgs. 313-320 (UNEP), pgs. 343-365 (Meyfroidt and Lambin)
9	7/10/18	Tues	Biodiversity	Read pgs. 368-383 (Kahn), pgs. 384-399 (Millenium Ecosystem Assessment), pgs. 400-404 (Loreau et al.)
10	7/12/18	Thurs	Case Study: Deforestation in Brazil	Read pgs. 98-114 (Nolan), pgs. 115-120 (Nepstad et al.)
11	7/17/18	Tues	Oceans and Fisheries	Read pgs. 407-410 (Adler), pgs. 411-413 (Nijhuis), pgs. 414-417 (Kroodsma et al.) pgs. 418-420 (Costello et al.)
12	7/19/18	Thurs	Water	Read pgs. 423-426 (Sengupta), pgs. 427-441 (Ramsar Convention), pgs. 442-449 (Palmer and Allan), pgs. 450-454 (Vorosmarty et al.)
13	7/24/18	Tues	Case Study: Ecuador and Dams	Read pgs. 457-461 (SDM handout), pgs. 462-466 (BBC), pgs. 467-472 (Latrubesse et al.), pgs. 474-484 (Timpe and Kaplan)
14	7/26/18	Thurs	Solid and Hazardous Waste + Pollution	Read pgs. 489-494 (Zeller, Jr.), pgs. 495-498 (UNEP), pgs. 499-502 (O'Rourke)
15	7/31/18	Tues	Environmental Justice, Final Presentations	Read pgs. 578-583 (Bullard), pgs. 584-600 (Bullard), pgs. 601-620 (Bullard and Johnson)