

University of Oregon

Environmental Studies Program

ENVS 411: Psychology of Climate Change Spring, 2010; Ezra Markowitz

Lectures: TR 12:00-1:50 pm, Gerlinger 246

Phone: 346-4990

Email: emarkowi@uoregon.edu

Office hours: Straub 320, Wed. 1:30-3:00 pm and by appointment

Course Description:

Global climate change is a complex and ever-evolving issue with presently unknown but potentially significant implications for human life at every scale: individual, family, community, national, global. These potential consequences for humans are intricately intertwined with the effects of climate change on other forms of life and natural ecosystems. As you have almost undoubtedly heard or read about over the past couple of years, the observed rise in greenhouse gases in the Earth's atmosphere due to anthropogenic activities (e.g., industrialization and transportation) may lead to dramatic climatic changes over the next 50-100 years (and beyond).

Climate change is an inherently interdisciplinary issue, as it is composed of scientific, social, economic, political and ethical dimensions. As we will discuss early on in the course, some of these dimensions have received considerably more attention than others, leading to an unbalanced conceptualization and understanding of the issue (at both the individual and societal levels). In this course we will attempt to address this imbalance, focusing largely on topics within the behavioral sciences that are often neglected in discussions of climate change. More specifically, we will delve into research taking place at the intersection of psychology and environmental conservation. In this course we will examine the psychological dimensions of climate change, focusing on three related issues: why people do what they do; how people understand climate change; and, what the expected psychological and social impacts are on individuals and communities.

Psychology is the study of human behavior, thought, perception and emotion. As an academic field, it has much to offer our understanding of and responses to the challenges posed by many environmental issues. In part this contribution stems from the insights psychological approaches can provide to other disciplinary perspectives on climate change. **Through readings, lectures, and active discussion, we will examine what psychology has to say about the 3 C's of climate change: causes, consequences and 'cures.'** As a final project for the course, students (in groups) will design and propose behavioral interventions related to the various topics we will discuss in class.

Prerequisites:

Junior or senior class standing.

Driving Questions:

This course will address three underlying questions:

- What do psychological methods, theories and perspectives uniquely bring to the study and analysis of (global) environmental problems, i.e., climate change?
- What effect if any has past research and application of psychological knowledge had on individual and cultural responses to global warming?
- How have insights from psychology been integrated (or not) into other perspectives and approaches to the 3 C's of climate change?

Course Goals:

- Introduce students to psychological perspectives on global environmental issues, primarily climate change;
- Broaden students' conceptualization of the challenges posed to humans by global warming;
- Encourage students to think about how to integrate knowledge and perspectives on environmental problems at various levels of analysis;
- Demonstrate that climate change and other environmental problems are social problems;
- Show relationship between individual level and community/societal level analysis of social/environmental issues.

Learning Objectives:

By the end of this course, students will be able to:

- Discuss how psychological theories and methods have been and can be applied to the 3 C's of climate change;
- Identify advantages and shortcomings of global warming analyses and responses that ignore/include individual-level considerations;
- Place psychological knowledge regarding climate change in the broader social scientific and policy context;
- Design interesting and significant intervention projects relevant to the psychology of climate change;
- Discuss theoretical, factual and methodological aspects of 'human dimensions of climate change';
- Critically review and synthesize primary research articles;
- Develop public presentation and group work skills.

Course Requirements:

- *Participation and attendance:* This course requires active, consistent and creative participation throughout the entire term. Students will have multiple opportunities and mediums for class participation (including in-class activities). This will **not** be a lecture-only course; we will run class primarily like a graduate-level seminar, so coming to class (prepared) is absolutely necessary to get something out of it!
- *Discussion board posts:* Post 2-3 questions (or short comments) in response to the readings that are assigned for the next day, one time per week (either by 9 pm Monday or 9 pm Wednesday). You can post on something that was particularly interesting to you, something that didn't make sense or simply pose a question related to the topic we'll be discussing for the day. I will use some of these

questions and comments to organize our class time. In total, each student should post 9 times (you get Week 10 off). It should take around 10 minutes to come up with questions and comments.

- *Midterm*: In-class exam covering first half of the course material
- *Group project*: A major component of this course is the group project, in which students will work in teams of 4-5 to research, design and propose (as a concept plan presented to the rest of the class) an intervention aimed at reducing greenhouse gas emissions via individual or community behavioral change(s). The format of the proposal is flexible; for example, it could be a proposed research study, a new business offering a service, or a student project to be put in place on a college campus. The assignment consists of three components: submitting a one-page written overview of your proposed topic and direction (week 5); a group presentation (week 10); and a 5-7 page memo or briefing accompanying your presentation in which your group quickly explains the proposal, presents an analysis of potential benefits and details the feasibility of the intervention. More details for the assignment will be provided in the first few weeks of the term.
- *Final paper*: In lieu of a final exam, students will write a concise (5-7 pages) final paper in which they choose one or more topics to research and analyze in some depth. Students will discuss their topic(s) with the instructor around week 6 or 7.

Grading Criteria:

Participation and attendance (20%)

Discussion board posts (5%)

Midterm exam (20%)

Group project plan (5%)

Group presentation (15%)

Group briefing/memo (10%)

Final paper (25%)

Required Reading:

All readings are on Blackboard. Readings come from a variety of sources, including peer-reviewed journals and the popular press. In addition, we will extensively utilize the recent APA (American Psychological Association) task force report on psychology and climate change.

Students with disabilities:

The University of Oregon is working to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your participation, please notify me as soon as possible. You are also welcome to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu

Academic honesty and integrity:

University policies relating to plagiarism, academic integrity and appropriate classroom conduct can be found online, including at the following websites:
www.libweb.uoregon.edu/guides/plagiarism/students
policies.uoregon.edu/ch1affirmation.html

Schedule

3/30

Introduction to the course and review of climate change science
Reading: IPCC (2007) Summary report for policymakers

4/1

Psychology in a nutshell; Conservation Psychology
Reading: Clayton & Brook (2005)
To Do: Look up “psychology” online, write down your own definition

4/6

Behavior I: Impacts of individuals, why we focus on behavior change
Reading: Gardner & Stern (2008), Swim et al. (2009) Section 2
To Do: Fill out footprint, www.nature.org/initiatives/climatechange/calculator/

4/8

Behavior II: Why do people do what they do?
Reading: Kollmuss & Agyeman (2002), Cialdini (2004) Chapter 4
Optional: Nolan et al. (2008)

4/13

Behavior III: Barriers to changing behavior; processes of change
Reading: Swim et al. (2009) Section 5
Review: Kollmuss & Agyeman (2002)

4/15

Behavior IV: Strategies for changing behavior
Reading Abrahamse et al. (2005), McKenzie-Mohr & Smith (1999) p. 153-160
Optional: Markowitz & Doppelt (2009)

4/20

Understanding I: Overview, what *do* people believe about climate change?
Reading: Dunlap & McCright (2008), Nisbet & Myers (2007)
Optional: Kempton et al. (1995) Chapter 4
To do: Collect survey data from friends

4/22

Understanding II: How do people learn about climate change?
Reading: Nisbet (2009), Boykoff & Boykoff (2004)
Optional: Corbett & Durfee (2004), Leiserowitz (2004)
To do: Find climate change messages

4/27

Understanding III: Processing and interpreting climate change information
Reading: Swim et al. (2009) Section 1, TBD
Optional: Moser (2007)

To do: 'Bathtub' simulator, <http://scripts.mit.edu/~jfmartin/sip/master/>

4/29

Understanding IV: Risk perception

Reading: Weber (2006), TBD

4/30

Graduate student conference panel on climate change (not required)

5/4 **Midterm**

5/6

Impact I: Physical and psychosocial implications of climate change

Reading: Swim et al. (2009) Section 3

5/11

Impacts II: How do people cope and adapt?

Reading: Swim et al. (2009) Section 4, Grothmann & Patt (2005)

5/13

Workshops: Work on group projects in class

Reading: none

5/18

Broader context I: Psychology in public policy, other social science perspectives

Reading: TBD

5/20

Broader context II: Is climate change an ethical issue?

Reading: Jamieson (2006), Gardiner (2006 or 2009)

5/25

Broader context III: Ethics of changing behavior

Reading: Students find articles

To do: Prepare for class debate

5/27

Problems, limitations

Reading: Current popular press

6/1

Presentations

6/3

Presentations and course wrap-up