Syllabus
Psychology of Environmental Decision Making and Sustainable Behavior
Executive Education Certificate Program in Conservation and Environmental Sustainability
Columbia University, Spring 2013

[Class time]
[Location]

Instructors
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Course Description
Cues in our physical environment unconsciously influence our decision-making and perception of environmental risk. For example, the presence of dead plants in an environment strengthens beliefs in global warming and the presence of signs indicating that people litter actually leads others to litter more. Drawing upon a body of cutting-edge behavioral and social science research, this course explores the mental barriers to scientific communication and information processing, including the concepts of framing, biases and heuristics, and choice architecture. Learn about the difficulty that individuals and groups have in processing and responding effectively to complex environmental challenges such as climate change, natural resource consumption, and ecosystem degradation. Learn how to design policies and programs that are more effective at promoting sustainable behaviors. Based on the popular “Psychology of Climate Change Communication Guide” published by the Center for Research on Environmental Decisions (CRED) in 2009, this course will incorporate research exercises and cutting-edge research findings into an updated, classroom version of the guide.

Course Objectives
Students will gain a basic understanding of human decision making under conditions of uncertainty. The course will provide an overview of relevant research methods used in cognitive and social psychology, anthropology, and other social science disciplines. Students will explore why humans communicate and make decisions the way that we do, techniques for communicating climate change, and methods for improving decision making across a range of environmental issues including energy reduction, preparation for natural hazards, resource allocation, and more.
Course Assignment

- Case studies – students will write a short proposal to improve climate change communications in their place of work or institution of their choosing. They will utilize existing company documents and analyze them based on criteria available in the course materials and lectures.

Schedule

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<tr>
<th>Number</th>
<th>Lecture</th>
<th>Topics</th>
<th>Readings</th>
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| 1      | Overview of class  
Knowing your audience and getting their attention  
Communicating scientific uncertainty  
Mental model interviews  
Domain Specific Risk Taking (DOSPERT) research method and exercise | Subjective perception of risk, mental models, confirmation bias, framing, predictability | CRED 2009  
Weber & Stern 2011 |
| 2      | Translate scientific data into concrete experience  
Beware the overuse of emotional appeals | Motivating behavior change, brain processing systems, finite pool of worry, single action bias | Marx et al. 2007  
Kahneman TBD |
| 3      | Tapping into Social Identities and Affiliation  
Group Participation  
Research methods in anthropology | Group dynamics, commons dilemmas, social goals, participatory processes | Peterson et al. 2010  
Krantz et al. 2008 <or other TBD> |
| 4      | Making behavior change easier Part I | Choice architecture, gains vs. losses, default effects | Danny Gilbert biases paper  
Weber TBD |
| 5      | Making behavior change easier, Part II  
Choice architecture in the lab  
Course wrap-up | Issues of implementation, choice architecture uses, course summary | Larrick/Ungemach/Camilleri paper TBD,  
Johnson/Goldstein (2007) |
Class Reading


