



URP 5429.01 Planning for and Mitigating Global Climate Change Spring 2007

Instructor: Robert Deyle

M/W 5:15 - 6:30 PM

Global climate change is here! Significant impacts have already been documented and others are projected to occur within the next 30 to 100 years, well within the planning horizon of long-range planning in many fields. There is ongoing discussion within the scientific community of the possible onset of one or more major tipping points sometime within the next 50 years that may commit the earth to hundreds, if not thousands of years of dramatic change.

This will be an interdisciplinary graduate seminar, capped at 15 students, in which participants will explore the projected impacts of global climate change on natural and human systems and the options that planners, policy makers, and other professionals may have, both to adapt to climate change as it occurs and to attempt to mitigate it before a tipping point is reached.

Readings will draw from one or two recent overviews of global climate change plus primary research works and popular press articles on the following broad topics: (1) the science of climate change, (2) projected impacts on human and natural systems, (3) adaptive strategies, (4) mitigation strategies, (5) ethics, politics, and social action. Participants will have the opportunity to shape the scope of the final syllabus to reflect their interests.

Course requirements include (1) active class participation, (2) formal class presentation on a topic of interest to each student, (3) completion of a series of briefings (papers and/or PowerPoint slide shows) designed to communicate salient points on each main topic to a lay audience, and (4) completion of a term paper in which the student analyzes a specific projected impact and the alternatives for mitigating and adapting to that impact.

Open to graduate students in all fields including but not limited to the Arts, Communication, Education, Engineering, Natural and Physical Sciences, and Social Sciences.

Possible texts include:

- (1) Houghton (2004) *Global Warming: The Complete Briefing*. 3rd edition. Cambridge Univ. Press.
- (2) Intergovernmental Panel on Climate Change (2001). *Third Assessment Report*. Cambridge Univ. Press.