

# Climate Change: Science, Perception and Policy

Syracuse University  
GOL 400/600 / PPA 730 / LAW 891  
State University of New York College of Environmental Science and Forestry  
EST 696

Spring 2008 • Wednesdays 2:30-5:15 PM • 175 Law  
Course web site: <http://www.esf.edu/es/meisner/est696.htm>

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## Course Description

Climate change (global warming) is rapidly becoming one of the most pressing issues of the twenty-first century. This course introduces students to the challenges posed by climate change through a unique multi-disciplinary exploration of the scientific, economic, policy, communicative, and even philosophical dimensions of the issue. The course will cover topics such as the current state of scientific knowledge about climate change, the role of the media in shaping public opinion on the issue, competing discourses of climate change, risk and uncertainty in decision-making, costs and benefits of different types of policies, the Kyoto protocol and other policy initiatives, actions being taken to address the issue, and the ethical dimensions of the choices facing humanity. Faculty from SU and ESF in law, economics, earth science, and environmental studies will co-teach this course and bring to students a unique dialog that crosses traditional disciplinary boundaries. Moreover, emphasis will be placed on drawing out the general lessons obtained from a multi-disciplinary approach to climate change: many of the insights will be applicable to other complex, highly technical environmental problems. This course is intended to bring together students from a diverse range of backgrounds and does not have specific prerequisites.

## Course Objectives

The objectives of this course are to encourage students...

- to understand the role of uncertainty in both science and policy-making
- to understand the role of media in influencing and shaping public opinion and policy
- to understand how law develops in response to information and public perception
- to understand why problems look different from different disciplinary perspectives and how that can be reconciled and why it's important to do that
- to be able to do simple calculations to assess order of magnitude and scale in science questions
- to be able to analyze simple statistics and interpret what they mean
- to learn how to analyze political rhetoric
- to learn how to analyze limitations and concepts in information
- to learn how to integrate information and perspectives from other disciplines their own work

## Course Materials

All required readings are listed in the course outline. These will be available in PDF format to download from the course Blackboard site.

In addition, if you have not already seen it, **before March 5** we recommend that you watch *The Day After Tomorrow*, a 2004 feature film about global warming. You can rent the film or take it out for free from the Onondaga County Public Library. You may also want to read Michael Crichton's 2004 book *State of Fear*.

## Evaluation

There are four major components to evaluation in this course. They are described briefly below. More details will be provided later.

### Participation

**10% (throughout)**

Participation is a vital part of this course. You should attend **all** classes and try to participate in discussions and other class activities. The quality of your participation is as important as the quantity.

### Individual Assignments

**10% (throughout)**

Some of the four professors will assign short exercises or other assignments during the semester. Depending on which section of the course you are registered for, the relative weighting of these assignments will vary.

### Country Background Paper and Presentation

**45% (due March 26)**

You will work in an interdisciplinary team representing a particular country to develop a background paper on your country's relationship to climate change and climate change policy. Your team will also present an overview of your results to the class on the 26th.

### Position Paper and Negotiation

**35% (due April 16)**

Your team will prepare a written assessment of a sample draft negotiating text (provided on March 26th) for a post-Kyoto international agreement on how to address global warming. These position papers will then be used as the basis for a negotiation exercise that will take place during the last class.

## Course Policies

A famous humorist once said that success in life is predicated on two things, "showing up and knowing the rules." We believe this too, and the following "rules" and information apply to this course. This information is thereby published, and both you and we must legally abide by it.

### Showing up

Attendance at all classes is mandatory for students. Excused absences include: *documented* university commitments, family issues (e.g. marriages or hopefully not, deaths), some non-university sanctioned religious holidays, and personal illnesses.

If you have a *predictable* absence, inform us by email by **January 30<sup>th</sup>**. That way, we can put your absence in our class registry. Beyond then, no predictable absences will be accepted for the semester.

*Unpredictable absences* include personal illnesses, breaking up with significant others, and so on. If you have an unpredictable absence, you must contact us *the day you missed the class*. Have a friend or relative contact us if you are unable to do so. No excuses beyond the actual day of the absence will be accepted. It is our discretion to grant or not grant unpredictable absences, and to request or not request substantiation of cause of the absence.

## Rules of the Course

We assume you will have read and studied the assigned material *before* the class for which it is assigned.

We assume you will be as courteous to others and the instructors in the class as you would want them and to be to you in their offices. Turn off cell-phones before you enter.

Plagiarism includes the following: ANY text cut and paste from the WWW or another document without quotation marks (“...”) and a citation or footnote next to it; simply moving words around or substituting words in a WWW paragraph.

Professors can find plagiarized WWW sites (computer programs).

You will fail the course if you plagiarize.

Late assignments will not be accepted except under special circumstances which you should have discussed with us ahead of time.

## Course Outline

Readings should typically be done before the class under which they are listed. The obvious exception to this is the reading for Week 1 which should be done before the second class.

### Week 1 • January 16

#### **Introductions (All)**

#### **About the course (Driesen)**

#### **How Large is the Problem? The Energy Sector and Emissions Sources (Wilcoxon)**

No Reading Assignment

### Week 2 • January 23

#### **Economics of the Environment (Wilcoxon)**

##### **Readings:**

Tietenberg, Tom H. (1992), “Economic Instruments for Environmental Regulation,” *Oxford Review of Economic Policy*, 6(1):17-33.

### Week 3 • January 30

#### **Economics of Climate Change (Wilcoxon)**

##### **Readings:**

McKibbin, Warwick J. and Peter J. Wilcoxon (2002). The Role of Economics in Climate Change Policy, *Journal of Economic Perspectives*, Volume 16, Number 2, Spring 2002, pp. 107-129.

Schelling, Thomas C. (1992), Some Economics of Global Warming, *American Economic Review*, 82(1), March, 1-14.

Schelling, Thomas C. (1997), The Cost of Combating Global Warming: Facing the Tradeoffs, *Foreign Affairs*, 76(6), Nov./Dec., 8-14,

### Week 4 • February 6

#### **Stabilization Wedges Game: Actions to Address Climate Change**

### Week 5 • February 13

#### **The Scientific Evidence for Climate Change Now (Siegel)**

Readings: TBA

**Week 6 • February 20*****The Causes of Climate Change and the Proxy Record (Siegel)***

Readings: TBA

**Week 7 • February 27*****What the Models Say and the Implications (Siegel)***

Readings: TBA

**Week 8 • March 5*****Discourses of Global Warming (Meisner)*****Readings:**

- McCright, A. M., & Dunlap, R., E. . (2000). Challenging Global Warming as a Social Problem: An Analysis of the Conservative Movement's Counter-Claims. *Social Problems*, 47(4), 499-522.
- McCright, A. M., & Dunlap, R., E. . (2003). Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy. *Social Problems*, 50(3), 348-373.
- Brown, D., et al. (2006). *White Paper on Ethical Dimensions of Climate Change*. University Park: Rock Ethics Institute, Penn State University.
- Moser, S. C., & Dilling, L. (2004). Making climate hot - Communicating the urgency and challenge of global climate change. *Environment*, 46(10), 32-46.

**Spring Break****Week 9 • March 19*****Mass Media and Public Perception (Meisner)*****Readings:**

- Boykoff, M. T., & Boykoff, J. M. (2004). Bias as Balance: Global Warming and the U.S. Prestige Press. *Global Environmental Change*, 14(2), 125-136.
- Brechin, S. R. (2003). Comparative Public Opinion and Knowledge on Global Climatic Change and the Kyoto Protocol: The U.S. versus the World? *International Journal of Sociology and Social Policy*, 23(10), 106-134.
- Lowe, T., Brown, K., Dessai, S., de Franca Doria, M., Haynes, K., & Vincent, K. (2005). *Does tomorrow ever come? Disaster narrative and public perceptions of climate change*. Norwich: Tyndall Centre for Climate Change Research.
- Kull, S., Ramsay, C., Lewis, E., & Weber, S. (2005). *Americans on Climate Change: 2005*. Washington: Program On International Policy Attitudes.

**Week 10 • March 26*****Student Team Presentations of Background Papers***

Note: Background Papers Due; Draft Negotiating Text Distributed.

**Week 11 • April 2*****The U.N. Framework Convention and the Kyoto Protocol (Driesen and Wilcoxon)*****Readings:**

- Bodansky, D. (1993). The United Nations Framework Convention on Climate Change: A Commentary, 18 *Yale Journal of International Law* 451 (excerpts).
- Driesen, D.M. (1998). Free Lunch or Cheap Fix? The Emissions Trading Idea and the Climate Change Convention, 26 *Boston College Environmental Affairs Law Review* 1, 18-40.
- McKibbin, W. J. and Wilcoxon, P. J. (2002). Chapters 3 and 4 of *Climate Change Policy after Kyoto: Blueprint for a Realistic Approach*, Washington: Brookings Institution, pp. 41-60.

**Week 12 • April 9*****European Implementation and Trading Design (Driesen)*****Readings:**

Ringle, M. (2006), Fostering Use of Renewable Energies in the European Union: The Race Between Feed-in Tariffs and Green Certificates, *Renewable Energy* 31: 1-17.

Long, S. and Kaminskaite-Salters, G. (2007), The EU ETS-Latest Developments and the Way Forward, *Carbon and Climate Law Review* 1: 64-72.

Wara, M. (2007), Is the Global Carbon Market Working?, *Nature* 8: 595-596.

**Week 13 • April 16*****US Response Beyond Kyoto (Driesen)***

Note: Country Position Papers Due

**Readings:**

Driesen, D. (2007), The Changing Climate for United States Law, *Carbon and Climate Law Review* 1:35-44.

**Week 14 • April 23*****Negotiations (All)***