

Climate Change Policy Analysis AS.425.603

CLASS SYLLABUS AND RELATED INFORMATION

Fall 2013

This course examines climate change and energy policy from several perspectives including economic, technical, scientific, political and practical considerations. Sources and trends of greenhouse gas emissions will be examined, and a range of mitigation and adaptation measures explored and assessed. Solutions in place and being proposed by governments, communities, and institutions (both for profit and non-profit) will be studied and compared. Students will become familiar with the fundamental concepts of climate policy analysis and the key factors and decisions that influence the impact of human society on the climate system and in turn, the changing climate's impact on human society.

LEARNING OBJECTIVES

In addition to understanding the basic dimensions of climate policy, students will:

- Become familiar with key concepts, methods and ongoing debates surrounding climate change policy analysis
- Examine adaptation and mitigation measures being proposed and taken
- Acquire a deeper understanding of a select topic on greenhouse gas mitigation or adaptation through a paper.

COURSE REQUIREMENTS

Regular class attendance, preparation of assigned readings, and active engagement in class discussion are expected and required. Several brief written assignments, problem sets and other class assignments will be required during the semester. For the final product, students will prepare a term paper report focusing on a topic of your choosing (that may incorporate some of the material from earlier assignments).

ASSESSMENTS:

Several large and small assessments will be assigned throughout the course. Specific assignments and requirements and their relative contribution to your final grade are as follows:

- Class participation (25% of final grade).
- Occasional small assignments to be shared with the class. For example, you will be asked to bring in and speak to one news article related to the course over the duration of the session (5% of final grade).
- 4 short (3 pages) policy memos related to class topics. Of the four memos, the one with the lowest grade will be dropped when calculating final grades (25% of final grade).
- One term paper ~15 pages in length due at the end of the session (45% of final grade).

General

This course adheres to all University policies described in the academic catalog. A few to pay close attention to are noted below.

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Plagiarism

Read and adhere to JHU's policy: <http://advanced.jhu.edu/students/plagiarism/>

Dropping the Course

You are responsible for understanding the university's policies and procedures regarding withdrawing from courses. And you should be aware of the current deadlines and penalties for dropping classes.

Students with Disabilities

The Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact Denise O'Sullivan at dosullivan@jhu.edu

Further information and a request for accommodation form can be found at:

<http://advanced.jhu.edu/students/disability-accommodations/>

Contact Information:

John Larsen

JLarsen3@jhu.edu or johnwlarsen@gmail.com

Mobile: 617-519-9423

Office hours: 30 minutes prior to each scheduled class or by appointment

Course Text:

Required: Stephen H. Schneider, Armin Rosencranz, Michael D. Mastrandrea, and Kristin Kuntz-Duriseti (editors). Climate Change Science and Policy. Washington, D.C.: Island Press. 2010.

Plus supplemental reading as assigned available on Blackboard and newspaper articles circulated by classmates.

Disclaimer:

All views expressed throughout this course by the instructor are his own and do not reflect the views of the Department of Energy or the Administration.

COURSE SCHEDULE

Class	Topic	Reading	Assignment
1: 10 Sept.	Course overview • Introduction to the course, resources and expectations • Discussion: What is Climate Policy?	OPTIONAL: Schneider, et al. pp. 11-43.	
2: 17 Sept.	GHG Emissions • Greenhouse gas emission sources, trends and projections	USEPA, Inventory of GHG Emissions and Sinks 1990-2011, 2013. pp. ES-1-ES-26 USEIA, Annual Energy Outlook 2013 pp. 1-6, 55-90 IEA, World Energy Outlook 2012 Executive Summary WRI "Climate Analysis Indicators Tool 2.0 beta" 2013	

Class	Topic	Reading	Assignment
3: 24 Sept.	Economics of climate policy analysis - Costs of inaction - Costs of action	Schneider, et al. pp. 141-150, 185-194, 211-217. Holladay and Schwartz, "The Other Side of the Coin" 2009 Interagency Working Group on Social Cost of Carbon, United States Government "Technical Support Document: -Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866" 2010	Memo 1 assigned Course paper topic due
4: 1 Oct.	Market based policies part 1 - Carbon taxes - Cap and trade	Schneider, et al. pp.194-210. Pew Center on Climate Change "Cap and Trade 101" 2009 Congressional Budget Office "Effects of a Carbon Tax on the Economy and the Environment" 2013 British Columbia Ministry of Finance "Tax Cuts, Funded by a Revenue Neutral Carbon Tax" 2013 Yin "The Carbon Tax Fantasy" 2013	Memo 1 due
5: 8 Oct.	Market based policies part 2 - Point of regulation/scope - Allowance/revenue distribution - Cost containment	Pizer "Scope and Point of Regulation for Pricing Policies to Reduce Fossil-fuel CO ₂ Emissions" RFF Assessing U.S. Climate Policy Options: Issue Brief 4, 2008 Larsen, "Emission Reductions Under Cap and Trade Proposals in the 111 th Congress" June. 2010. National Commission on Energy Policy "Allocating Allowances in a Greenhouse Gas Trading System", 2007 Mignone "Cost Containment for Cap-and Trade: Designing Effective Compliance Flexibility Mechanisms" 2009 Brookings Institution	
6: 15 Oct.	Regulation: Emissions Standards	Schneider, et al. pp. 476-483 Rubin "A Performance Standards Approach to Reducing CO ₂ Emissions from Electric Power Plants" 2009 Pew Center on Climate Change. New York Department of Conservation "CO ₂ Performance Standards for Major Electric Generating Facilities" 2012 International Council on Clean Transportation "Global Light-duty Vehicles: Fuel Economy and Greenhouse Gas Emissions Standards: April 2011 Update and August 2011 Update" 2011 USEPA/NHTSA "Fact Sheet: EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks" 2012	Memo 2 assigned Term paper outline and thesis statement due
7: 22 Oct.	Complementary Policies and	Schneider, et al. pp. 433-455	Memo 2 Due

Class	Topic	Reading	Assignment
	Incentives Renewable Portfolio Standards, efficiency standards, building codes, incentives	Wiser, Et al. "Renewable Portfolio Standards: A Factual Introduction to Experience from the United States" LBNL Report 2007. USEIA, Today in Energy "Most states have Renewable Portfolio Standards" 2/3/2012 Gillingham and Palmer "Bridging the Energy Efficiency Gap" RFF Report 2013 National Research Council "Effects of U.S. Tax Policy on Greenhouse Gas Emissions: Summary" 2013 pp. 1-10 USEIA, Annual Energy Outlook 2013 pp. 24-30	
8: 29 Oct.	Federalism and climate policy - The role of states and regions - Emissions leakage - International trade and competitiveness	Aulisi, et al., "Climate Policy in the State Laboratory" 2007. pp.1-24 (plus at least 4 case studies) Hull "13 things to know about California's cap-and-trade program" San Jose Mercury News Feb. 22, 2013 Stavins "California's Global Warming Solutions Act and National Climate Change Policy" 2010. C2ES "State Climate Action Maps" 2013 Regional Greenhouse Gas Initiative "Program Overview" and "Summary of Model Rule Changes" 2013	Memo 3 assigned
9: 5 Nov.	Policy in action - U.S. programs - The European experience - Program design and market dynamics	Schneider, et al. pp 235-240 Larsen, et al. "Comprehensive Summary of H.R.2454" 2009. Parker "Climate Change and the EU Emissions Trading Scheme (ETS): Looking to 2020" CRS Report 2010 Burns "The European Union's Emissions Trading System: Climate Model, Now Climate Muddle?" July 2013 Bianco, Et al. "Summary of Can the U.S. Get There from Here? Using Existing Federal Laws and State Action to Reduce Greenhouse Gas Emissions" WRI Report 2013 President's Climate Action Plan, June 2013	Memo 3 due
10: 12 Nov.	The Clean Air Act – part 1 - GHG regulatory authority under the Clean Air Act	Chettiar and Schwartz, "The road ahead" 2009 pp. 1-57 McCarthy and Yacobucci, "Cars, Trucks, and Climate: EPA Regulation of Greenhouse Gases from Mobile Sources" 2013 EPA "Prevention of Significant Deterioration and Title V Operating Permit Greenhouse Gas (GHG) Tailoring Rule Step 3 and GHG Plantwide Applicability Limits" Fact Sheet 2013	Term paper draft literature review due Memo 4 assigned
11: 19 Nov.	The Clean Air Act – part 2 The CAA and the power	Obama "Presidential Memorandum -- Power Sector Carbon Pollution Standards" 2013	Memo 4 due

Class	Topic	Reading	Assignment
	sector	Richardson, et al. "Greenhouse Gas Regulation under the Clean Air Act" RFF Report 2010 "Clean Air Act Section 111" 42 USC § 7411 Manchin "Manchin Slams Obama's War On Coal and Economy" 2013	
12: 26 Nov.	Adaptation and Resilience - US adaptation and planning - International aspects of adaptation	U.S. Department of Energy "U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather" 2013 IPCC "Assessment of Adaptation Practices, Options, Constraints and Capacity" IPCC Fourth Assessment Report Working Group 2, 2007	
13: 3 Dec.	International issues and climate policy 1 From Rio to Kyoto	Schneider, et al. 221-234, 251-276 The United Nations Framework Convention on Climate Change, 1992 The Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998	
14: 10 Dec.	International issues and climate policy 2 From Copenhagen to the future	UNFCCC "Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009" pp. 4-9 UNFCCC "Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action" 2011 UNEP "The Emissions Gap Report 2012" 2012 pp. 1-7 Morgan, et al. "Reflections on COP 18 in Doha: Negotiators Made Only Incremental Progress" 2012	Course term paper due