# Topics in Human Dimensions of Environmental Change: Political Ecology of Climate

16:378:502:01 or 16:215:600:01 or 16:450:606:01 Wed 5:35-8:35, Cook Bldg Rm 226

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## Course Description

This course is the topics seminar for the Human Dimensions of Environmental Change graduate certificate program. Each year this seminar focuses on a particular aspect of environmental problems. This semester we will be examining climate change from the perspective of political ecology approaches. Political ecology is field of theory that draws on multiple disciplinary strands, such as in geography, anthropology and sociology, and which examines "the political sources, conditions and ramifications of environmental change" (Bryant 1992). In particular, political ecologists focus attention on the "way meso and macro scale political and economic forces set the context for local environmental action and interaction" (Robbins 2001). We will use this frame of reference to examine the social, cultural, political and economic factors at play in the construction of climate change as a global problem and in the proposed solutions to it. This focus will include such topics as: how scientific knowledge of climate change is produced and used; how climate change produces inequality in both impacts and in culpability; how social relations may be defined and reimagined by climate change; and how market approaches to climate mitigation have been created and with what consequences.

## Learning Objectives

- **Analyze** various approaches to climate change, from different disciplinary perspectives, with a critical eye and examine their viewpoints, methodologies, and positions.
- **Synthesize** class readings and discussions into the broader context of the student's own graduate work.
- **Evaluate** the merits of political ecology approaches to climate change in a specific topical context through research and writing of a final paper.

## Assignments & Grading

There are 100 points that are possible to achieve in the work in this class.

Assignment	Points	Due Date
	(100 total)	
Weekly 1 page reading reflections	40	Each week
Participation in discussion, including	20	Each week
leading one week's discussion		
Final paper	40	May 8, 2013

**Reading reflections**: Each week by the Tuesday before class, at 5pm, students will submit a very brief (no more than 1-2 page) review and reflection on the assigned readings for that day in which they will highlight the key points, and analyze the message of the readings for their relationship to class themes. These will be graded pass/fail.

**Class discussion**: Because this is a small seminar, success depends on the active involvement of all participants. I will expect everyone in class each week and prepared to discuss the assigned readings, unless you have cleared absences with me ahead of time. Additionally, each student will take responsibility for one class session in which they will be primarily responsible for leading the class discussion. This will involve preparing additional discussion questions above and beyond the weekly summary. Dates will be assigned the first week of class.

**Final paper**: Each student will complete a final term paper, of approximately 15 pages in length, on some aspect of the political ecology of climate. Students need to discuss their topic choice in advance with the instructor. Development of dissertation chapters, prospectuses, or grant proposals are encouraged.

**Grading:** The following university scale will be used. Cutoffs for grades are firm.

A 90-100

B+ 89-88

B 80-87

C+ 79-78

C 70-77

F 69 and under

#### SAKAI INFORMATION

This course will have a Sakai site that will contain the syllabus, website announcements, all handouts and online readings, and some class notes and PowerPoint presentations. The website is only a supplemental aid, and not a replacement for being in weekly class discussions.

#### Outline and Schedule of Class Periods

#### Jan 30. Political Ecology

Robbins, P. 2004. Ch 1 in *Political Ecology*. Malden MA: Blackwell, p 1-16.

Bryant, R L. 1998. "Power, Knowledge and Political Ecology in the Third World: a Review." *Progress in Physical Geography* 22 (1): 79–94.

Watts, M, and R Peet. 2004. "Liberating Political Ecology." In *Liberation Ecologies* (2<sup>nd</sup> Ed): Environment, Development, Social Movements. New York: Routledge, p 1-29.

Peet, R, P Robbins, and M Watts. 2011. "Global Nature." In *Global Political Ecology*, eds. R Peet, P Robbins, and Michael Watts. Routledge: New York, p 1-47.

Greenberg, J B, and T K Park. 1994. "Political Ecology." *Journal of Political Ecology* 1 (1): 1–12.

Bryant, R L. 2001. "Political Ecology: a Critical Agenda for Change." In *Social Nature: Theory, Practice and Politics*, eds. Noel Castree and B Braun. Oxford: Blackwell.

## Feb 6. Disciplinary approaches to climate change

- · **Anthropology**: Crate, S. A. (2011). Climate and culture: Anthropology in the era of contemporary climate change. *Annual Reviews in Anthropology*, *40*(1): 175–194
- **Geography:** Hulme, M. (2007). Geographical work at the boundaries of climate change. *Transactions-Institute Of British Geographers*, *33*(1): 1–7.
- **Geography:** O'Brien, K. (2011). Responding to environmental change: A new age for human geography? *Progress in Human Geography*, *35*(4): 542–549
- **Sociology:** Yearley, S. 2009. Sociology and climate change after Kyoto: what roles for social science. *Current Sociology* 57(3):389-405
- · **Sociology/Geography**: Hulme, M. (2010). Cosmopolitan climates: Hybridity, foresight and meaning. *Theory, Culture & Society, 27*(2-3): 267–276
- · **History**: Carey, M. (2012) Climate and history: a critical review of historical climatology and climate change historiography. *WIRES Climate Change* 3: 233-249.

## Feb 13. The production of knowledge

Forsyth, Timothy (2003). Critical Political Ecology. Ch 1, 2, 3, 4. Routledge

Hulme, M. (2009) Ch 3, The Performance of Science. In *Why We Disagree about Climate Change*. Cambridge: Cambridge University Press.

Demeritt, D. (2001). The construction of global warming and the politics of science. *Annals of the Association of American Geographers*, *91*(1), 307–337.

Hulme, M., & Mahony, M. (2010). Climate change: What do we know about the IPCC? *Progress in Physical Geography*, *34*(5), 705–718.

Hulme, M. (2013). How climate models gain and exercise authority. In *The Social Life of Climate Change Models: Anticipating Nature*. K Hastrup and M. Skrydstrup, eds. New York: Routledge.

Berkhout, F. (2010). Reconstructing boundaries and reason in the climate debate. *Global Environmental Change*, *20*(4), 565–569

## Feb 20. Public involvement in climate change

Forsyth, Timothy (2003). Critical Political Ecology. Ch 5, 6, 8, 9. Routledge.

Funtowicz, SO, and JR Ravetz. 1993. "Science for the Post-Normal Age." Futures 25 (7): 739-755.

Jasanoff, Sheila. 2012. Cosmopolitan knowledge: Climate science and global civic epistemology. In *Oxford Handbook of Climate Change and Society*, Oxford: Oxford University Press, pp. 129–143.

Wolf, Johanna, and Susanne C Moser. 2011. "Individual Understandings, Perceptions, and Engagement with Climate Change: Insights From in-Depth Studies Across the World." *Wiley Interdisciplinary Reviews: Climate Change* 2 (4) (May 17): 547–569.

Slocum, R. (2004). Polar bears and energy-efficient lightbulbs: strategies to bring climate change home. *Environment and Planning D: Society and Space*, *22*, 413–438.

Rudiak-Gould, Peter. 2012. "Promiscuous Corroboration and Climate Change Translation: a Case Study From the Marshall Islands." *Global Environmental Change* 22 (1) (February 1): 46–54.

#### Feb 27. Climate and risk.

Beck, U. (2006). Living in the world risk society. Economy and Society, 35(3), 329-345

Forsyth, Critical Political Ecology ch 7

Hultman, Nathan, David M. Hassenzahl, and Steve Rayner. Climate Risk. *Annual Review of Environ. Resour.* 2010. 35:283–303

Hulme, Why We Disagree about Climate Change, ch 6&7

Thompson, M., & Rayner, S. (1998). Risk and governance part I: the discourses of climate change. *Government and opposition*, 33(2), 139–166

Rayner, S. (2007). The rise of risk and the decline of politics. *Environmental Hazards*, 7(2), 165–172.

Johnson, L. 2011. "Climate Change and the Risk Industry: the Multiplication of Fear and Value." *Global Political Ecology*.

Wachinger, Gisela, et al. 2012. "The Risk Perception Paradox-Implications for Governance and Communication of Natural Hazards." *Risk Analysis* (December 24).

## Mar 6. Impacts from climate change

Richardson, K W. Steffen and D. Liverman, eds. (2011) The impact of climate change on human societies. In *Climate Change: Global Risks, Challenges and Decisions*. Cambridge p 101-133.

Figueroa, Robert. (2012). "Indigenous Peoples and Cultural Losses." In *Oxford Handbook of Climate Change and Society*. Oxford: Oxford University Press.

Bolin, I. (2010). The glaciers of the Andes are melting: Indigenous and anthropological knowledge merge in restoring water resources. In *Anthropology and Climate Change*, S. Crate and M. Nuttall, eds. Left Coast Press, pp. 228-239.

Jacka, J (2010). Global averages, local extremes: The subtleties and complexities of climate change in Papua New Guinea. In *Anthropology and Climate Change*, S. Crate and M. Nuttall, eds. Left Coast Press, pp.

197-208.

Bradnock, R W, and P L Saunders. 2000. "Sea-Level Rise, Subsidence and Submergence." In *Political Ecology: Science, Myth and Power*. London: Arnold, pp 66-90.

Bjørst, LR ( 2010). "The Tip of the Iceberg: Ice as a Non-Human Actor in the Climate Change Debate." Études/Inuit/Studies 34 (1): 133-150.

Martello, ML. 2008. "Arctic Indigenous Peoples as Representations and Representatives of Climate Change." *Social Studies of Science* 38(3): 351-376.

#### Mar 13. Vulnerability

Adger, W Neil. 2006. "Vulnerability." Global Environmental Change 16 (3) (August 2): 268–281.

(Entitlements/poverty approach): Tschakert, Petra. 2007. "Views From the Vulnerable: Understanding Climatic and Other Stressors in the Sahel." *Global Environmental Change* 17 (3-4) (August): 381–396.

(Uneven development/marginalization approach): Collins, Timothy W. 2010. "Marginalization, Facilitation, and the Production of Unequal Risk: the 2006 Paso Del Norte Floods." *Antipode* 42 (2) (March): 258–288.

(Actor-Network/Hazardscape approach): Yamane, Akiko. 2009. "Climate Change and Hazardscape of Sri Lanka." *Environment and Planning* A 41 (10): 2396–2416.

Birkenholtz, T. 2011. "Network Political Ecology: Method and Theory in Climate Change Vulnerability and Adaptation Research." *Progress in Human Geography* (October 24).

Moore, Amelia. 2010. Climate Changing Small Islands: Considering Social Science and the Production of Island Vulnerability and Opportunity. *Environment and Society: Advances in Research* 1:116-31.

Farbotko, Carol, and Heather Lazrus. 2011. "The First Climate Refugees? Contesting Global Narratives of Climate Change in Tuvalu." *Global Environmental Change* 22 (2) (December 22): 382–390.

Cameron, Emilie S. 2012. "Securing Indigenous Politics: a Critique of the Vulnerability and Adaptation Approach to the Human Dimensions of Climate Change in the Canadian Arctic." *Global Environmental Change* 22 (1) (February 1): 103—114.

#### Mar 27. Adaptation

Pelling, M. 2010. Adaptation to Climate Change: From Resilience to Transformation. Routledge. Ch 1 and 2

Perramond, Eric P. 2007. "Tactics and Strategies in Political Ecology Research." *Area* 39 (4): 499-507.

Thornton, Thomas F, and Nadia Manasfi. 2010. "Adaptation—Genuine and Spurious: Demystifying Adaptation Processes in Relation to Climate Change." *Environment and Society: Advances in Research* 1 (1) (January 1): 132–155.

Ford, James D, Tristan Pearce, Frank Duerden, Chris Furgal, and Barry Smit. 2010. "Climate Change Policy

Responses for Canada's Inuit Population: the Importance of and Opportunities for Adaptation." *Global Environmental Change Part A* 20 (1) (February): 177–191.

Sejersen, Frank. 2009. Resilience, human agency, and climate change adaptation strategies in the Arctic. In The Question of Resilience: Social Responses to Climate Change, K. Hastrup, ed.

Nelson, Donald R, and Timothy J Finan. 2009. "Praying for Drought: Persistent Vulnerability and the Politics of Patronage in Ceará, Northeast Brazil." *American Anthropologist* 111 (3) (September 2): 302–316.

Beck, Silke. 2010. "Moving Beyond the Linear Model of Expertise? IPCC and the Test of Adaptation." *Regional Environmental Change* 11 (2) (July 13): 297–306.

#### April 3. Development

Roberts, JT and Parks, B. 2007. *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy.* Cambridge: MIT Press.

# April 10. Culpability

Norgaard, K. M. 2006. "We Don't Really Want to Know": Environmental Justice and Socially Organized Denial of Global Warming in Norway. *Organization & Environment* 19 (3):347–370.

Li, Tania. 2000. "Articulating indigenous identity in Indonesia: resource politics and the tribal slot." Comparative Studies in Society and History 42(1):149-79.

Hughes, David. Of innocence and insularity: climate change and the victim slot. Forthcoming in *American Anthropologist*, December 2013.

## April 17. Governance

Schroeder, H (2009). The history of international climate change negotiations. In *The Politics of Climate Change: A Survey*, Boykoff, M, ed. Routledge.

Liverman, D.M. (2009) Conventions of climate change: constructions of danger and the dispossession of the atmosphere. *Journal of Historical Geography*. 35(2):215-404

Oels, Angela. 2006. Rendering climate change governable: From Biopower to Advanced Liberal Government? *Journal of Environmental Policy and Planning* 7 (3): 185-207.

Carter, C et al (2009). When science meets strategic realpolitik: The case of the Copenhagen UN climate change summit. *Critical Perspectives on Accounting* 22 (2011) 682—697

Benson, Melinda (2010). Regional Initiatives: Scaling the Climate Response and Responding to Conceptions of Scale. *Annals of the Association of American Geographers*, 100(4) 2010, pp. 1025–1035

Andonova Liliana B and Michele M. Betsill and Harriet Bulkeley. Transnational Climate Governance. *Global Environmental Politics* 9.2 (2009): 52-73

## April 24. Markets & neoliberalism

Calel, R. (2013). Carbon markets: a historical overview. WIREs Climate Change.

Bridge, G. (2011). Resource geographies 1: Making carbon economies, old and new. *Prog Hum Geogr* 2011 35: 820

MacKenzie, D. (2009) Making things the same: Gases, emission rights and the politics of carbon markets. *Accounting, Organizations and Society* 34 (2009) 440–455.

Bumpus, A and Liverman, D. (2011). Carbon colonialism? Offsets, greenhouse gas reductions, and sustainable development. In *Global Political Ecology*.

Lovell, H., Bulkeley, H. and Liverman, D. (2009). Carbon offsetting: sustaining consumption. *Environment and Planning A* 41(10), 2357-2379.

Lovell, H. and Liverman, D (2010). Understanding Carbon Offset Technologies. *New Political Economy*, 15:2, 255-273

#### May 1. Land use and climate

Backstrand, K. and Lovebrad, E. (2006). Planting Trees to Mitigate Climate Change: Contested Discourses of Ecological Modernization, Green Governmentality and Civic Environmentalism. *Global Environmental Politics* 6:1.

Baldwin, A. 2009. Carbon Nullius and Racial Rule: Race, Nature and the Cultural Politics of Forest Carbon in Canada. *Antipode* 41(2): 231–255

Agrawal, A. et al. 2011. Reducing Emissions from Deforestation and Forest Degradation. *Annu. Rev. Environ. Resour.* 2011. 36:373–96

Cabello, J. and Gilbertson, T. 2012. A colonial mechanism to enclose lands: A critical review of two REDD+-focused special issues. *Ephemera* 12(1/2): 162-180.

Schroeder, H (2010). Agency in international climate negotiations: the case of indigenous peoples and avoided deforestation. *Int Environ Agreements* (2010) 10:317–332

Dan van der Horst & James Evans (2010): Carbon Claims and Energy Landscapes: Exploring the Political Ecology of Biomass. *Landscape Research* 35:2, 173-193

Pere Ariza-Montobbio et al. 2010. The political ecology of Jatropha plantations for biodiesel in Tamil Nadu, India. *The Journal of Peasant Studies* 37 (4): 875–897