

CIS 1xy: Introduction to Environmental Studies Spring 2007

Instructors: Dr. A. Ingram (English), Dr. Martin (Economics), Dr. Peroni (Biology)

Course time: MWF 10:30 – 11:20 [if possible]

Prerequisite: None

Course description: The purpose of the course is to demonstrate the necessity and process of interdisciplinary synthesis in identifying, studying, and resolving environmental issues through the analysis of an environmental studies canon and through studying the perspectives, methodologies, tools, and concepts of various disciplines. Environmental studies is an interdisciplinary endeavor that describes and analyzes issues related to human use of the natural world. It encompasses many disciplines within science, technology, society, and the arts and stresses interrelationships among disciplines, and between humans and the natural world. The course is designed to help the student apply knowledge and skills already acquired, to strengthen the understanding of Environmental Studies and interdisciplinary thinking, and to facilitate a broader perspective.

Issues may include global climate change, biodiversity, pollution, human population demography, sustainability, energy, and overconsumption. Assignments will be varied, and will include self-directed learning components, group work, interactive discussion, essays, and oral presentations. Students will utilize an interdisciplinary approach to study the effects of human use of the natural world on the environment and the interactions of culture, society, resources, and the environment. In order to foster this interdisciplinary approach, the course is team-taught by professors from various disciplines, including natural sciences, social sciences, and humanities. The content will touch on all of the following areas: society, cross-cultural awareness, values analysis, policy, economics, demography, literature, religion, history, artistic expression, chemistry, physics, technology, ecology, and local issues.

Course Objectives:

- To develop an appreciation for the interdisciplinary nature of environmental issues.
- To understand interdisciplinary studies as a dynamic endeavor that requires more than mere acquisition and memorization of facts.
- To understand and integrate concepts regarding the interrelatedness of environmental components.
- To understand how science, culture, society, economics, ethics, and politics all interact to affect the environment.
- To think critically about, analyze problems, and evaluate data and statistics dealing with environmental change.
- To speak and write about these issues in an effective manner.
- To learn to work effectively in a group environment.
- To find, through library research, and analyze critical writings on environmental issues.
- To critically analyze major environmental issues at both the global and local scales.

Assignments and grading:

20%	Participation
45%	Short papers (5 total; due weeks 1, 4, 6, 7, 11)
10%	Population Pyramid (week 9)
25%	Final Research Paper (includes initial and revised proposals, annotated bibliography, oral presentation, peer review, and final 10-15 page paper)

Course materials: All assignments will be available on Electronic Reserve.

Course Overview:

WEEK	TOPIC
1	Defining “environment” and “environmental studies”
2	Interdisciplinarity: What are the advantages and limitations of interdisciplinarity? What is global about the environment?
3	Sustainability: Introducing concepts
4	Issue 1: Global climate change
5	Global climate change, week 2
6	Global climate change, week 3
7	Global climate change, week 4
	SPRING BREAK
8	Issue 2: Population demographics
9	Population demographics, week 2
10	Population demographics, week 3
11	Population demographics, week 4
	EASTER BREAK
12	Issue 3: Sustainability revisited
13	Sustainability, week 2
14	Sustainability, week 3
15	Conclusions and integration of topics and disciplines

Week 1. Defining ‘environment’ and “environmental studies”

Preparation for paper due at the end of this week: before you begin these readings, draft a brief essay in which you define “environment.”

How do we define “environment”?

- Golley, F. “The Environment.”
- DiChiro, G. “Nature as Community: The Convergence of Environment and Social Justice.”

Is “environment” the same as “wilderness”? Was America originally wilderness?

- Silko, L. “Landscape, History, and the Pueblo Imagination.”
- Mann, C. Excerpt from *1491: New Revelations of America Before Columbus*.
- Kretch, S. Chapter on “Fire” from *The Ecological Indian*.
- Cronon, W. “The Trouble with Wilderness.” From *Uncommon Ground*.

How did we get to our current environmental situation?

- White, L. “The Historical Roots of our Environmental Crisis.”
- Gore, A. “Environmentalism of the Spirit.”

Short reflection essay (500-1000 words): after completing the readings for this week, how have your initial thoughts about what is “environment” changed? [This paper will be used primarily as a diagnostic tool to evaluate students’ writing ability.]

Week 2. Interdisciplinarity.

What are the advantages to interdisciplinary fields and approaches?

- Berry, W. "The Ecological Crisis as a Crisis of Character."
- Orr, D. "The Problems of Disciplines and the Disciplines of Problems."
- Soule, M and Press, D. 1998. What is Environmental Studies? *Bioscience* 48: 397-405.
- Maniates, MF and Whissel, JC. 2000. Environmental studies: the sky is not falling. *Bioscience* 50: 509-17.

What are the limitations of interdisciplinarity?

- Conrad, J. Limitations to Interdisciplinarity in Problem Oriented Social Science Research. *Journal of Transdisciplinary Environmental Studies* 1, May 2002.
- Winder, N. Successes and problems when conducting interdisciplinary or transdisciplinary (= integrative) research. From *Interdisciplinary and transdisciplinary landscape studies: Potential and limitations*.

Class discussion: What are the advantages and disadvantages of interdisciplinarity within environmental studies? Relatedly, what might be the advantages and disadvantages of single-discipline majors and interdisciplinary majors as preparation for those pursuing an environmentally-related career?

What is global about the environment?

- Orr, D. "A Tale of Two Systems: Sustainability in an International Perspective."
- Taylor, P. 1997. "How do we know we have global environmental problems? Undifferentiated science-politics and its potential reconstruction" in P. Taylor, S. Halfon and P. Edwards (eds) *Changing Life: Genomes-Ecologies-Bodies-Commodities*. Minneapolis: University of Minnesota Press. Pp. 149-174.
- Speth, G. 2004. "Prologue" and "Chapter 1: Environmental Challenges Go Global," in *Red Sky at Dawn*. New Haven: Yale Univ. Press. Pp. 1-22.

Writing Workshop: *We will use the students' first (diagnostic) essays as the basis for a writing workshop session sometime during Week 2, either in small groups (one with each professor) or as a whole class.*

Week 3. Introducing Sustainability: concepts

Are you living a sustainable life?

- Determine your Ecological footprint at www.myfootprint.org
- Take the Bioregional Quiz (from Anderson et al., *Lit & Environment*.)

Class discussion: Are we living sustainably? How do most Americans compare to citizens elsewhere in the world?

How do we define and measure sustainability?

- Palmer, M., et al. "Ecological science and sustainability for the 21st century."
- Mayer, A. et al. "The multidisciplinary influence of common sustainability indices."
- Orr, D. "The Problem of Sustainability" and "Two Meanings of Sustainability"
- World Commission on Environment and Development, "From One Earth to One World: An Overview by the World Commission on Environment and Development"

Why should we care about sustainability?

- Daly, H. "Introduction" to *Beyond Growth*
- Durning, A. Excerpt from *How Much is Enough?*
- Hawken, P. Excerpt from *The Ecology of Commerce: A Declaration of Sustainability*.

We will also schedule a Library Orientation session during Week 3.

Issue 1: Global Climate Change

Introduction

This module will focus on *global climate change*, perhaps one of the greatest challenges facing humanity at the beginning of the twenty-first century. Through examination of this complex environmental issue, students will address a range of interdisciplinary perspectives that will help them define what an environmental problem is and develop interdisciplinary approaches for dealing with climate change, whether that change be harmful or beneficial to society or the planet at large. In addition, we will discuss humanity's role in climate change.

Week 4: Climate Change: A Global Environmental Issue

What is the scope of the global climate change? Are the changes harmful or beneficial, and does your perspective or background affect your view of change?

- Speth G (2004) "Prologue" and "Chapter 1: Environmental Challenges Go Global," pp. 1-22.
- Gore A (2006), selected readings.
- Kolbert E (2006), selected readings.
- Jasanoff S (2001) "Image and Imagination: The Formation of Global Environmental Consciousness," in Miller & Edwards (2001), pp. 309-338.
- Burroughs WJ (2001) "Chapter 1: Introduction" and "Chapter 8: The Causes of Climate Change," pp 1- 8; 201-235.

Short Reflection Essay (1000 words): How does our perception of the environment and planet shape our responses to it?

What are the impacts of climate change? How has climate change impacted past societies?

- Cox JD (2005), selected readings.
- Gore A (2006), selected readings.
- Weart S (2003) "Chapter 8: The Discovery Confirmed," pp. 160-192.
- Watson RT (2001) "Summary for Policy Makers," in The IPCC Report, pp. 2-34.
- Linden E (2006), selected readings.

Week 5: Is the Climate Really Changing?

Modeling, Measuring and Predicting

- Burroughs WJ (2001) "Chapter 6: The Measurement of Climate Change."
- Edwards P (2001) "Chapter 2: Representing the global atmosphere: Computers, models, data and knowledge about climate change," in Miller & Edwards (2001), pp. 31-66.

Class Discussion: Assess the effect of a changing climate on weather patterns and other global environmental factors.

The Authority of Science: Credibility and Climate Skeptics

- Gore A (2006), selected readings.
- Pearce F (2005), selected readings.
- Demeritt D (2001), selected readings.
- Michaels PJ & Balling RC (2002) "Chapter 2: Global Warming Goes Global," pp. 11-20.
- Other readings from skeptics of humanities role in climate change

Civilization, People, and Numbers

- Wohlforth C (2004) "Preface"; "Chapter 1: The Whale"; "Chapter 3: The Snow"; "Chapter 4: The Lab"; "Chapter 7: Signs"
- Linden E (2006), selected readings.

Class Discussion: Is there a scientific consensus about global climate change? Will climate change lead to the end of civilization?

What's happening in the higher latitudes and higher altitudes, and how is it affecting people and animals that live there?

- Sturm M, Perovich D, & Serreze M (2003)
- Arctic Climate Impact Assessment (2004)
- Oral histories of indigenous peoples
- Doran, P. Cold, Hard Facts. *New York Times* op-ed, Jul. 27, 2006.

Short Research-based Essay (1000-1500 words): Assess the effects of a changing environment on cultural practices of indigenous peoples in Alaska or northern Canada.

Week 6. Governmental Policy Responses and Effects on Ecosystems and Societies

- Victor DG (2004), selected readings.
- Flannery T (2006), selected readings.
- The Framework Convention for Climate Change and the Kyoto Protocol
- American Economic Review Articles (Pizer 2006, Nordhaus 2006, Olmstead and Stavins 2006)

The Collapse of Kyoto

- Victor DG (2001), "Chapter One: Crisis and Opportunity" and "Chapter 5: After Kyoto: What Next?," pp. 3-24; 109-116.
- Rabe B (2004) "Chapter 5: Looking Ahead," pp. 146-180.

Submit Op-ed Essay (1000 words) to class for in-class peer review.

Week 7: Warming or Climate Change? Ethical perspectives and the Popular Press

- McKibben (2005)
- Barcott (2005)
- Kakutani (2004)
- Leggett J (2005)

- Motavalli J (ed, 2004) "Introduction"; "Chapter 1: China: The Cost of Coal"; "Chapter 5: Asia The Clouds Got in the Way"; "Chapter 8: Australia, Florida and Fiji," pp 1-8; 11-24; 79-92; 127-140.
- McKibben B (2005) Titling at Windmills. NY Times, February 16, 2005

Class Discussion: What is the right, moral, or ethical response to humans' role in climate change? What is the efficient technological solution to climate change? Group projects assessing multiple perspectives due.

Op-Ed Essay due.

SPRING BREAK

Issue 2: Human Population Growth

Introduction

This module will focus on *human population growth*. There are currently 6.5 billion people living on this earth. What are the consequences of human population growth for the environment? In this module, we will begin by reviewing classical theories of population growth and considering whether these theories can be applied to developing countries' current experiences of population growth. We will then examine the relationship between population and the environment. How does population growth affect the environment, and vice versa? Are there environmental limits to population size/density/growth??? Next, we will explore issues of urbanization and migration. What is the impact of urbanization? What should we make of recent trends of counterurbanization? We will consider the environmental context of migration and whether migrants have a positive or negative influence on the environment. Finally, we will examine population policies both in the United States and other countries experiencing rapid population growth.

Week 8: A Brief History of Population Growth

How many people have ever lived on earth?

- Haub, C. 2002. How Many People Have Ever Lived on Earth? Pp. 6-8 in Population and Society, edited by F. Trovato. Oxford University Press, Ontario.

Theories of population growth

- Malthus, T. R. [1830] 1985. A Summary View of the Principle of Population. Penguin, London.
- Davis, K. 1945. The World Demographic Transition. The Annals of the American Academy of Political and Social Science 235: 1-11.
- Crenshaw, E. M., Christenson, M., and Oakey, D. R. 2000. Demographic Transition in Ecological Focus. American Sociological Review 65:371-391.
- Huff, DE and Varley JD (1999) Natural Regulation in Yellowstone National Park's Northern Range, Ecological Applications 9(1):17-29. Stable URL: <http://links.jstor.org/sici?sici=1051-0761%28199902%299%3A1%3C17%3ANRIYNP%3E2.0.CO%3B2-2>
- Lundberg P, Ranta E, Ripa J, and Kaitala V (2000) Population variability in space and time. Trends in Ecology and Evolution 15(11):460-464.

Class Discussion: Should theories developed based on historical Europe be applied to developing countries today?

Week 9: The Relationship Between Population and Environment

Hardin's Tragedy

- Hardin, G. 1968. The Tragedy of the Commons. *Science* 162: 1243-1248.
- Feeny, D., Berkes, F., McCay, B. J., and Acheson, J. M. 1990. The Tragedy of the Commons: Twenty-Two Years Later. *Human Ecology* 18: 1-19.

Does population affect the environment?

- York, R., Rosa, E. A., and Dietz, T. 2003. Footprints on the Earth: The Environmental Consequences of Modernity. *American Sociological Review* 68: 279-300.

Does the environment affect population?

- Biddlecom, A. E., Axinn, W. G., and Barber, J. S. 2005. Environmental Effects on Family Size Preferences and Subsequent Reproductive Behavior in Nepal. *Population and Environment* 26: 183-206.

Do population and environment affect each other?

- Deane, G. D., and Gutmann, M. P. 2003. Blowin' Down the Road: Investigating Bilateral Causality between Dust Storms and Population in the Great Plains. *Population Research and Policy Review*, 22: 297-331.

Class Discussion: How important is population growth as an environmental issue?

What is the limit?

- Dasgupta, P. 2005. Regarding Optimum Population. *The Journal of Political Philosophy* 13: 414-442.
- Keyfitz, N. 2002. Are There Ecological Limits to Population? Pp. 34-42 in *Population and Society*, edited by F. Trovato. Oxford University Press, Ontario.
- Cohen, JE (1995) Population growth and Earth's human carrying capacity. *Science* 269:341-348.

Class Discussion: What is the optimum human population size for the world? For the United States? For Davidson?

Population pyramids due. Create age/sex population pyramids for two countries over two time periods (use US Census Bureau and/or United Nations data). Make within-country comparisons over time and between-country comparisons. Why do you think there have been changes (or lack of changes) in the population compositions? What significance does changing age/sex structure have for the environment?

Week 10. Urbanization, Migration, and the Environment

Urbanization, Overurbanization, and Counterurbanization

- Shandra, J. M., London, B., and Williamson, J. B. 2003. Environmental Degradation, Environmental Sustainability, and Overurbanization in the Developing World: A Quantitative, Cross-National Analysis. *Sociological Perspectives* 46: 309-329.
- Mitchell, C. J. A. 2004. Making Sense of Counterurbanization. *Journal of Rural Studies* 20: 15-34.

Migration and the Environment

- Hunter, L. M. 2005. Migration and Environmental Hazards. *Population and Environment* 26: 273-302.
- Redelinghuys, N. and Pelsler, A. J. 2002. Environmental Migration in Southern Africa: Towards a Proposed Strategy for Action. *Journal for Contemporary History* 27: 33-53.

Are migrants helpful or harmful to the environment? Do the effects of migrants vary across time and space?

- Cassels, S., Curran, S. R., and Kramer, R. 2005. Do Migrants Degrade Coastal Environments? Migration, Natural Resource Extraction and Poverty in North Sulawesi, Indonesia. *Human Ecology* 33: 329-363.
- Jones, R. E., Fly, J. M., Talley, J., and Cordell, H. K. 2003. Green Migration into Rural America: The New Frontier of Environmentalism? *Society and Natural Resources* 16: 221-238.

Class Debate: Should environmental refugees be allowed unrestricted access to the United States? *As part of your preparation for this debate, you will form small groups to research the Pro or Con side of the issue. The Pro groups and Con groups will then get together to share research findings and brainstorm debate strategies.*

Week 11. Population Policy

National Population Policies

- Meyerson, F. A. B. 2004. Policy View: Immigration, Population Policy, and the Sierra Club. *Population and Environment* 26: 61-69.

Population Policy in China and India

- Greenhalgh, S. 2003. Science, Modernity, and the Making of China's One-Child Policy. *Population and Development Review* 29: 163-196.
- Donaldson, P. J. 2002. The Elimination of Contraceptive Acceptor Targets and the Evolution of Population Policy in India. *Population Studies* 56: 97-110.

Short Reflection Essay (1000-1500 words): How can population policy effectively address environmental problems?

EASTER BREAK

Issue 3: Sustainability revisited

Introduction

This module focuses on *sustainability*. Like global climate change and human population growth, sustainability is one of the key environmental issues to analyze when discussing human interactions with their environment, both local and global. Sustainable practices ensure that physical environments, communities, social systems, and economic systems provide not only for the present but also for the future, nurturing us now and remaining capable of nurturing the many generations to come. By ending the course with a focus on sustainability, we intend to close our discussions thinking about resource use in the context of a global human population that is large and getting larger: humans may have the ability to degrade the environment, but do we also have the ability to maintain and restore it?

Week 12: Success Stories in Sustainable Development

- Herman Daly, "Carrying Capacity as a Tool of Development Policy: The Ecuadoran Amazon and the Paraguayan Chaco" and "Marx and Malthus in Northeast Brazil: A Note on the World's Largest Class Difference in Fertility and its Recent Trends."

The Green Belt Movement

- Wangari Maathai, "Foresters without Diplomas"

Curitiba, Brazil

- McKibben, B. "Curitiba" chapter from *Hope, Human and Wild*

Kerala, India

- McKibben, B. "Kerala" chapter from *Hope, Human and Wild*.
- Parayil, Govindan, ed. Excerpts from *Kerala: The Development Experience - Reflections on Sustainability and Replicability*. London: Zed Books, 2000.

Initial proposal for final research paper due.

Week 13: Resource Use and Sustainability

Land Use and Agriculture

- Desta, S. and Coppock, D. L. 2004. Pastoralism under Pressure: Tracking System Change in Southern Ethiopia. *Human Ecology* 32: 465-486
- Dyson, T. and Grada, C. O. 2002. Demography, Food Production and Famine Risks in the Twenty-First Century. *IDS Bulletin* 33: 108-113.
- Scanlan, S. J. 2001. Food Availability and Access in Lesser-Industrialized Societies: A Test and Interpretation of Neo-Malthusian and Technoecological Theories. *Sociological Forum* 16: 231-262.
- Tole, L. 2004. A Quantitative Investigation of the Population-Land Inequality-Land Clearance Nexus. *Population and Environment* 26: 75-106.
- Kranzer, B. 2003. Everglades Restoration: Interactions of Population and Environment. *Population and Environment* 24: 455-484.

Is all economic growth a good thing?

- Riley, K. 2002. Motor Vehicles in China: The Impact of Demographic and Economic Changes. *Population and Environment* 23: 479-494.

Revised proposal for final research paper due.

Week 14: Can We Affect – and Effect – a Sustainable Future?

What makes a community sustainable?

- Running Grass, “Building a More Inclusive Environmental Movement” (in Anderson et al., Lit & Environment).
- Excerpts from *The Environmental Justice Reader: Poetics, Politics, Pedagogy*.
- The Earth Charter

What constitutes “sustainable thinking”?

- U. S. Catholic Bishops, “Renewing the Earth.” (in Anderson et al., Lit & Environment)
- Theodore Roszak, “Green Guilt and Ecological Overload.” *New York Times* Jun. 9, 1992. [Rpt. in Walker, *Reading the Environment* 535-539.]
- Aldo Leopold, “Thinking Like a Mountain.”

Sustainable Design

- *Cradle to Cradle*
- David Orr on Green Building

Annotated bibliography for final research paper due: minimum 15 sources.

Week 15: Conclusions

- Concluding discussions and reflections:
 - **How does your understanding of sustainability affect your understanding of global climate change? Of human population dynamics?**
 - **Have your ideas about living a sustainable life changed at all over the course of the semester? If so, how? If not, why not?**
 - **What are the advantages and limitations of an *interdisciplinary* introductory environmental studies course?**
- Course evaluations
- **Oral presentations on final research papers**
- **Peer review: final research papers**

Final research paper (10 – 15 pages) will be due during exam week, in lieu of a final exam.

List of Assigned Readings

Defining Environment

- DiChiro, Giovanna. "Nature as Community: The Convergence of Environment and Social Justice." In William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature*. New York: Norton, 1996. 298 – 320.
- Golley, Frank B. "The Environment." *A Primer for Environmental Literacy*. New Haven: Yale UP, 1998. 3 – 9.
- Gore, Al. "Environmentalism of the Spirit." From *Earth in the Balance*. Houghton-Mifflin, 1992. [Rpt. in Jenseth and Lotto, *Constructing Nature*, 348-370.]
- Kretch, Shepard. "Fire" from *The Ecological Indian*.
- Mann, Charles. Excerpt from *1491: New Revelations of America Before Columbus*.
- Silko, Leslie Marmon. "Landscape, History, and the Pueblo Imagination." *Antaeus 57* (Autumn 1986): 83 – 94.
- Lynn White, Jr. "The Historical Roots of our Environmental Crisis." From *The Ecocriticism Reader*, eds. Cheryl Glotfelty and Harold Fromm. U of Georgia P, 1995.

Interdisciplinarity

- Berry, Wendell. "The Ecological Crisis as a Crisis of Character." From *The Unsettling of America*. San Francisco: Sierra Club Books, 1997. 17 – 26.
- Orr, David. "The Problems of Disciplines and the Disciplines of Problems." From *Earth in Mind: On Education, Environment, and the Human Prospect*. Washington, D.C.: Island Press, 1994. 94-99.
- Orr, David. "A Tale of Two Systems: Sustainability in an International Perspective." From *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany: SUNY P, 1992. 41-59.
- Soule, M and Press, D. 1998. What is Environmental Studies? *Bioscience* 48: 397-405.
- Maniates, MF and Whissel, JC. 2000. Environmental studies: the sky is not falling. *Bioscience* 50: 509-17.

Sustainability: Introducing Concepts

- Daly, Herman. *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon P, 1996.
- Dodge, Jim. "Where you at? A Bioregional Quiz." Lorraine Anderson et al., eds. *Literature and the Environment: A Reader on Nature and Culture*. Longman, 1999.
- Durning, Alan. *How Much is Enough?: The Consumer Society and the Future of the Earth*. New York: Norton, 1992.
- "Ecological Footprint." www.myfootprint.org
- Hawken, Paul. *The Ecology of Commerce: A Declaration of Sustainability*. New York: HarperCollins, 1994.
- Mayer, Audrey L, Thurston, Hale W, Pawlowski, Christopher W. 2004: The multidisciplinary influence of common sustainability indices. *Frontiers in Ecology and the Environment*: Vol. 2, No. 8, pp. 419–426.
- Orr, David. "The Problem of Sustainability" and "Two Meanings of Sustainability" from *Ecological Literacy*. 3-40.
- Palmer, Margaret A, Bernhardt, Emily S, Chornesky, Elizabeth A, Collins, Scott L, Dobson, Andrew P, Duke, Clifford S, Gold, Barry D, Jacobson, Robert B, Kingsland, Sharon E, Kranz, Rhonda H, Mappin, Michael J, Martinez, M Luisa, Micheli, Fiorenza, Morse,

Jennifer L, Pace, Michael L, Pascual, Mercedes, Palumbi, Stephen S, Reichman, OJ, Townsend, Alan R, Turner, Monica G. 2005: Ecological science and sustainability for the 21st century. *Frontiers in Ecology and the Environment*: Vol. 3, No. 1, pp. 4–11.

World Commission on Environment and Development. "From One Earth to One World: An Overview by the World Commission on Environment and Development." *Our Common Future*. New York: Oxford University Press, New York, 1987.

Issue 1: Global Climate Change

- Arctic Climate Impact Assessment (2004) *Impacts of a Warming Arctic*. Cambridge University Press, Cambridge.
- Barcott B (2005) Not So Hot. *NY Times Review*, Jan 30, 2005.
- Brown L (2003) *Plan B: Rescuing a Planet Under Stress and a Civilization in Trouble*. Earth Policy Institute.
- Burroughs WJ (2001) *Climate Change: A Multidisciplinary Approach*. Cambridge: Cambridge University Press.
- Climate Change 2001: Synthesis Report (The IPCC Report) (2001) Cambridge University Press, Cambridge.
- Cox JD (2005) *Climate Crash: Abrupt Climate Change and What It Means for Our Future*. Joseph Henry Press.
- Demeritt D (2001) The Construction of Global Warming and the Politics of Science. *Annals of Association of American Geographers*, 91(2): 307-337.
- Flannery T (2006) *The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth*. Atlantic Monthly Press
- Gore A (2006) *An Inconvenient Truth*. Rodale Press, Inc.
- Kakutani M (2004) Beware! Tree Huggers Evil Plot to Save World. *NY Times Review*, Dec 13, 2004.
- Kolbert E (2006) *Field Notes From a Catastrophe: Man, Nature, and Climate Change*. Bloomsbury
- Leggett J (2005) Dangerous Fiction. *New Scientist*, March 5 2005, pp 50-52.
- Linden E (2006) *The Winds of Change: Climate, Weather, and the Destruction of Civilizations*.
- McKibben B (2005) Imagine that: What the warming world needs now is art, sweet art. *Grist Magazine*, 21 April 2005:1-4.
- McKibben B (2005) Titling at Windmills. *NY Times*, February 16, 2005
- Michaels PJ & Balling RC (2002) *The Satanic Gases*. Washington, DC: Cato Institute.
- Miller C & Edwards P (eds; 2001) *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. MIT Press, Cambridge, MA.
- Motavalli J (ed, 2004) *Feeling the Heat: Dispatches from the Frontlines of Climate Change*. Routledge, New York.
- Nordhaus WD (2006) After Kyoto: Alternative mechanisms to control global warming. *American Economic Review* 96:31-34.
- Olmstead SM and Stavins RN (2006) An international policy architecture for the post-Kyoto era. *American Economic Review* 96:35-38.
- Pearce F (2005) Menace or Myth? *New Scientist*, 12 February 2005:38-43.
- Pizer WA (2006) The evolution of a global climate change agreement. *American Economic Review* 96: 26-30.
- Rabe BG (2004) *Statehouse and Greenhouse: The Emerging Politics of American Climate Change Policy*. Brookings Inst. Press, Washington, DC.
- Speth JG (2004) *Red Sky at Morning: America and the Crisis of the Global Environment*

- Sturm M, Perovich D, & Serreze M (2003) Meltdown in the North. *Scientific American*, Oct. 2003:60-67.
- Victor DG (2001) *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming*. Princeton Univ. Press, Princeton.
- Victor DG (2004) *Climate Change: Debating America's Policy Options*. Brookings Institution Press.
- Watson RT (2001) *Climate Change 2001: Synthesis Report. The IPCC Report*. Cambridge University Press, Cambridge.
- Weart S (2003) *The Discovery of Global Warming*. Harvard Univ Press, Cambridge, MA.
- Wohlforth C (2004) *The Whale and the Supercomputer: On the Northern Front of Climate Change*. North Point Press, New York.

Issue 2: Human Population Growth

- Biddlecom, A. E., Axinn, W. G., and Barber, J. S. 2005. Environmental Effects on Family Size Preferences and Subsequent Reproductive Behavior in Nepal. *Population and Environment* 26: 183-206.
- Cassels, S., Curran, S. R., and Kramer, R. 2005. Do Migrants Degrade Coastal Environments? Migration, Natural Resource Extraction and Poverty in North Sulawesi, Indonesia. *Human Ecology* 33: 329-363.
- Cohen, JE (1995) Population growth and Earth's human carrying capacity. *Science* 269:341-348..
- Crenshaw, E. M., Christenson, M., and Oakey, D. R. 2000. Demographic Transition in Ecological Focus. *American Sociological Review* 65:371-391.
- Dasgupta, P. 2005. Regarding Optimum Population. *The Journal of Political Philosophy* 13: 414-442.
- Davis, K. 1945. The World Demographic Transition. *The Annals of the American Academy of Political and Social Science* 235: 1-11.
- Deane, G. D., and Gutmann, M. P. 2003. Blowin' Down the Road: Investigating Bilateral Causality between Dust Storms and Population in the Great Plains. *Population Research and Policy Review*, 22: 297-331.
- Donaldson, P. J. 2002. The Elimination of Contraceptive Acceptor Targets and the Evolution of Population Policy in India. *Population Studies* 56: 97-110.
- Feeny, D., Berkes, F., McCay, B. J., and Acheson, J. M. 1990. The Tragedy of the Commons: Twenty-Two Years Later. *Human Ecology* 18: 1-19.
- Greenhalgh, S. 2003. Science, Modernity, and the Making of China's One-Child Policy. *Population and Development Review* 29: 163-196.
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