

ENVIRONMENTAL CONSERVATION

Geography/EnvSt 339
Spring, 2012
(Syllabus for the FIRST HALF of course)

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Course Description. The first half of this course is a brief introduction to major environmental problems and conservation approaches (weeks 1-2) followed by a survey American environmental conservation from a geographical perspective. Environmental conservation will be treated as a social process with careful attention paid to how changes in values, scientific understandings of nature, economy and politics affect conservation practice. Not only will we trace the major debates in environmental conservation but will also explore how differences in people's biophysical, economic and political surroundings have led to quite different perceptions of environmental problems and their solutions.

Readings. Required readings are listed under the topic headings for each week. You **MUST** do the reading assigned for a given week by your discussion section for the week. All required readings for the first half of the course are in a course packet that can be purchased from the Humanities Copy Center (1650 Humanities Building). A course packet will also be placed on 2-hour reserve in the Geography Library along with individual recommended readings (280 Science Hall). In addition, the recommended articles and the required articles in the reader will also be available in electronic form through the course web page which can be accessed through the Academics tab on your "My UW" account.

Grading. Grades will be determined on the basis on two exams (50 points each) covering the first half of the course (February 24th and March 16th) and discussion section activities (150 points for the whole semester). Discussion section activities are critical parts of this course. Attendance is **mandatory** at discussion sections. Not only will readings be discussed but you will also be assigned written work and may be given several brief quizzes.

COURSE OUTLINE AND READINGS

Week 1 Interlinked Environmental Problems: A Geographical Perspective (23 January)

- REQ: Worster, D. 1993. The nature we have lost. pgs 3-15 In *The Wealth of Nature*. New York: Oxford University Press.
Baer, P. *et al.* 2000. Equity and greenhouse gas responsibility. *Science* 289:2287.
Tilman, D. 2000. Causes, consequences and ethics of biodiversity. *Nature* 405:208-211.
Siebert, C. 2011. Food ark. *The National Geographic Magazine*, July, 2011. Retrieved from:
<http://ngm.nationalgeographic.com/2011/07/food-ark/siebert-text> on August 15, 2011
- REC: Steffen, W., P. J. Crutzen, and J. R. McNeill. 2007. Anthropocene: Are humans now overwhelming the great forces of nature. *Ambio* 36 (8):614-621.

Week 2 Approaches to Environmental Conservation (30 January)

- REQ: Hoekstra, J. M., T. M. Boucher, T. H. Ricketts, and C. Roberts. 2005. Confronting a biome crisis: global disparities of habitat loss and protection. *Ecology Letters* 8:23-29.
Ellison, K. and G. C. Daily 2003. Making conservation profitable. *Conservation in Practice* 4(2): 13-19.

Phelps, J., E. L. Webb, and A. Agrawal. 2010. Does REDD+ threaten to recentralize forest governance? *Science* 328:312-313.

REC: Brown, K. 2003. Three challenges for a real people-centered conservation. *Global Ecology and Biogeography* 12:89-92.

Week 3 The Roots of American Environmentalism

(6 February)

REQ: Leopold, A. 1998. Wilderness as a form of land use. In *The Great New Wilderness Debate*, eds. J. B. Callicott and M. P. Nelson, 75-84. Athens: University of Georgia Press.

Hays, S. P. 1990. From conservation to environmentalism. Pgs 144-152 In *American Environmentalism: Readings in Conservation History*. Edited by R. F. Nash. New York, McGraw-Hill.

White, R. 1995. Are you an environmentalist or do you work for a living? In *Uncommon Ground: Toward Reinventing Nature*, ed. W. Cronon, 171-185. New York: W.W. Norton and Company.

Pollan, M. 1991. The idea of a garden. In *Second Nature*, 209-238. New York: Dell Publishing.

Week 4 Public Lands

(13 February)

REQ: Sayre, N. 2007. The Western range: A leaking lifeboat for conservation in the New West. pp36-48 In Pritchett, L., Knight, R.L., Lee, J. (Eds): *Home Land: Ranching and a West that Works*. Rocky Mountain Land Library, Boulder, CO.

Foreman, D. 2004. Rewilding North America. Pgs 128-143 in Foreman, D. *Rewilding North America: A Vision for Conservation in the 21st century*. Washington, D.C.: Island Press.

Walker, P. A., and L. Fortmann. 2003. Whose landscape? A political ecology of the 'exurban' Sierra. *Cultural Geographies* 10 (3):469-491.

REC: Loder, A. 2010. Century later, "Big Burn" still has profound effect on wildfire policy. *Oregon Public Broadcasting*. August 23, 2010.

Streater, S. 2009. Reform of 1872 mining law won't save Western splendors. *New York Times* April 16, 2009.

Week 5 Environmental Regulation and Critics

(20 February)

REQ: Carson, R. 1990. Pesticides. In *American Environmentalism: Readings in Conservation History*, ed. R. F. Nash, 191-194. New York: McGraw-Hill.

Albrecht, V. S., & Christman, J. N. The Endangered Species Act. Retrieved from <http://library.findlaw.com/1999/Jan/1/241467.html> on August 15, 2011. (4 pages)

DuHamel, J. 2010. Repeal the Endangered Species Act. *Tucson Citizen*. October 8, 2010. Retrieved from <http://tucsoncitizen.com/wryheat/tag/esa/page/2/> on August 15, 2011. (3 pages)

The Wildlife Society. 2006. *Final TWS Position Statement: The Endangered Species Act*. Bethesda, MD: The Wildlife Society. (3 pages)

REC: Andrews, R.N.L. 1999. Chapter 12: Nationalizing pollution control pgs 227-254 In *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*. New Haven: Yale University Press.

Gottlieb, R. 1993. Reconstructing environmentalism: Complex movements, diverse roots. *Environmental History Review* 17 (4):1-19.

Room for debate. What if Republicans closed the EPA? *The New York Times*, August 24, 2011. Retrieved from <http://www.nytimes.com/roomfordebate> on August 25, 2011.

Friday, February 24 -- EXAM 1 (covering weeks 1-4)

Week 6 US Energy Futures and Global Warming

(27 February)

REQ: Kolbert, E. 2010. Oil shocks. *The New Yorker* May 31, 2010.

MacKay, D. J. C. 2008. Motivations. Pgs 2-21 In *Sustainable Energy - Without the Hot Air*. Cambridge, UK: UIT Cambridge

———. 2008. The balance sheet. Pgs 22-28 In *Sustainable Energy - Without the Hot Air*. Cambridge, UK: UIT Cambridge.

Course handout. The Role of Renewable Energy in Our Energy Future: David MacKay's Estimates for Great Britain and Analogous Estimates for U.S. 2pgs

MacKay, D. J. C. 2008. Can we live on renewables? Pgs 103-112 In *Sustainable Energy - Without the Hot Air*. Cambridge, UK: UIT Cambridge

Pollan, M. 2008. Why bother? *New York Times* April 20, 2008. 7 pgs.

REC: Keeney, D. 2009. Ethanol USA. *Environmental Science and Technology* 43:8-11.

Week 7 Environmental Justice and the Costs and Benefits of Economic Growth

(5 March)

REQ: McKibben, B. 2007. Reversal of fortune. *Mother Jones* March/April 2007:13 pgs.

Pastor, M. 2007. Environmental justice: Reflections from the United States. Pgs 351-376 In *Reclaiming Nature*, eds. J. K. Boyce, S. Narain and E. A. Stanton. London: Anthem Press.

Vidal, J. 2010. Nigeria's agony dwarfs the Gulf oil spill. The US and Europe ignore it. *The Observer* May 30, 2010.

REC: Bookchin, M. Death of a small planet. *The Progressive* August, 1989. 19-23.

Bullard, R. D., P. Mohai, R. Saha, and B. Wright. 2007. Executive Summary. Pgs x-xv In *Toxic Wastes and Race at Twenty 1987-2007*. Cleveland, OH: United Church of Christ.

Week 8 Summary and Catch-up

(12 March)

Friday, March 16th -- EXAM 2 (covering weeks 5-8)

ENVIRONMENTAL CONSERVATION- GEOG/ENV ST 339 – Spring 2012

Syllabus for SECOND HALF of the Course

PROVISIONAL – some readings will be changed before March

Professor: Lisa Naughton
355 Science Hall

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Description: In the 2nd half of the course we focus on environmental conservation in developing countries, where extraordinary biological diversity coincides with poverty. Conservation has vital importance for the poor, because they directly depend on the environment and suffer disproportionately if it is degraded. Moreover, poverty itself can worsen environmental problems. Thus conservationists today strive to protect the environment *and* alleviate poverty. By the end of the semester you will better understand the challenge of ‘pro-poor’ conservation, and see how global policies and markets can support or undermine sustainable development. We will first review various strategies for conserving rainforests in Africa, Latin America and SE Asia, from national parks, to ecotourism, to direct payments for forest. Then we will turn to urban environmental issues in developing countries, particularly those of megacities. By comparing conditions across cities, we will learn how economic growth solves some environmental problems, but creates others. Finally, we will view climate change from a Global South perspective, & explore N-S partnerships to store carbon in tropical forests.

Readings: Readings for the 2nd half of the course will be available as a reader (no text book) at L&S Copy Center (1650 Humanities Building), or you can download individual readings via MyWisc. Readings are assigned by week. Complete the readings before your discussion section. You will be tested on the readings in the exam. In your reading, focus on the author’s main arguments and the evidence s/he uses to support his/her arguments. Environmental issues are often controversial, so read critically.

Videos: Material from videos shown in class will be included in the exam (also included: the required video for week 5 that you must watch outside class). I will provide study questions for each video.

Grading: Grades will be determined on the basis of two in-class examinations (each 50 points) and discussion activities (75 points). Attending discussion section is mandatory. The exams will cover lectures (including guest speakers), readings and discussion section activities from the second half of the course. There is no final exam.

The exams: Students must take the exams at the scheduled times (4/20 and 5/11). Make-up exams can only be arranged if Prof. Naughton is notified in person in advance. Make-up exams will be entirely essay questions.

LECTURE SCHEDULE AND READINGS

Week 1 **Social and environmental change in developing countries**

M March 19 Challenging popular myths about ‘Third World’ people and environments.

W March 21 Population growth and ecological footprints.

F March 23 Tropical deforestation - Causes & Consequences

Readings: Now we are 7 Billion (2011); SUNY (2009); Diamond (2008); NPR interview (audio, 8.5 min); V & P 2005

Week 2 **Tropical rainforests - quest for sustainability**

M March 26 Tropical agriculture- social and ecological dimensions of sustainability

W March 28 “Avatar” & ‘Ecologically noble savages’

F March 30 Oil in the Amazon. Guest speaker: Mr. Lew Posekany, J.D.

Readings: V& P 2005 Chap 3 (pp 35-46), Butler 2010, DeSoto 2010, Diamond 1999

Week 3 **Community-based efforts to conserve biodiversity.**

M April 9 Sustainable logging. ‘Use the forest, or lose the forest’.

W April 11 Parks vs community-based conservation

F April 13 Conflict and compromise at Tambopata, Peru VIDEO: Return to Tambopata (28 min)

Readings: Smith et al 2006; Nepstead et al 2006; Science Daily 2011

Week 4 **Market-based conservation efforts**

M April 16 Living with Elephants

W April 18 Direct payments for ecosystem services.

F April 20 EXAM 3

Readings: Ferraro & Kiss 2002. *Required viewing:* "Milking the Rhino" [first 41 min, see video viewing tips handout].

Week 5 **Economic Growth and the Environment.**

M April 23 Kuznet's curves. Get rich, then clean up?

W April 25 VIDEO: "Cool It". Discussion: Is the environmental crisis overblown? [see video viewing tips]

F April 27 Guest lecture: Prof. H Gibbs. The Biofuel Boom in the Tropics.

Readings: WRI 1996-97 (Kuznet curves); Gibbs 2008; Dasgupta 2007

Week 6 **Urbanization, Economic growth & the Environment**

M April 30 Urbanization and the growth of megacities in the tropics

W May 2 Providing sewage treatment & clean water

F May 4 Beyond Kyoto: Global south perspectives on climate change

Readings: Medina 2008, Oppenheimer 2005, Anderson podcast (audio 15 min)

Week 7 **Campus efforts toward sustainability**

M May 7 Achievements and challenges for We Conserve. Guest speaker: V. Faramaz.

W May 9 Catch up and review.

F May 11 EXAM 4

Readings: Ricketts et al 2010; Paunchir 2009, WRI 2008

Sources for Readings:

Butler, R. 2010. "In the Battle to Save Forests, Activists Target Corporations". Yale Environment 360.

Dasgupta, P. 2007. "A Challenge to Kyoto" Nature 449: 143-144.

Diamond J. 1999. "Paradise and Oil." Discover 20(3): 94-102.

DeSoto, H. 2010. "The Peruvian Amazon is not Avatar". Institute for Liberty and Democracy (ILD). Peru.

Ferraro, P.J. & A. Kiss. 2002. "Direct Payments for Biodiversity Conservation." Science 298: 1718-1719.

Gibbs, H. et al. 2008. "Carbon payback times in the Tropics" Env. Research Letters 3: 10 pages.

Nepstead et al 2006 "Inhibition of Amazon deforestation and fire by parks and indigenous lands" Cons Bio. 20:66-73

Oppenheimer, M. 2005. "Defining Dangerous Anthropogenic Interference" Risk Analysis 25(6): 1399-140

Paunchir, T. 2009. "Pronouncement". Conf. of Indigenous Nations of the Ecuadorian Amazon.

Ricketts et al. 2010 Indigenous Lands, Protected Areas, and Slowing Climate Change vol.8. PLoS Biology.

Science Daily. 2011. "Global Biodiversity Loss Unstoppable with Protected Areas Alone"

www.sciencedaily.com/releases/2011/07/110728123059

Smith, J. et al. 2006. "Why policy reforms fail to improve logging practices" Forest Policy & Economics. 8: 458-469

Vandermeer, J. & I. Perfecto. 2005. Chapt 1-3 Breakfast of Biodiversity. IFDP, Oakland, CA.

WRI. 1996-97. "Kuznet Curves: Cities and the Environment." World Resources Institute.

WRI. 2008. "Turning back the Desert" pp. 142-157 in Chpt 3, The Roots of Resilience. Washington D.C.