Harvard Extension School ENVR-E120 - Fall Semester 2010 Environmental Ethics and Land Management Introduction to the Ethics of Sustainability

http://courses.dce.harvard.edu/~envre120

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Class Schedule / Course Readings | Teaching Assistants: Tracy Stamos, Zachary Zevitas, Craig Crouch, & Wendy Machmuller | Print Version of Core Syllabus Maxwell Dworkin G115 (33 Oxford Street), Wednesdays, 7:35-9:35 | Discussion Section: Room 302 (1 Story Street), 5:25-6:25pm, Wednesdays

Course Description:

Our environmental circumstances pose problems of value and choice for each of us and challenge us to reconsider the way we act individually and collectively in an ever changing ecosystem. Whether we like it or not there is no escaping the fact that ethical values are embedded in the premises and assumptions of all decisions we make concerning land and resource use.

Responsible land management has come to include concern for land as habitat -- not just for humankind alone -but for other communities of species that inhabit it as well. In addition, we have come to understand that land management needs to reflect an understanding of the land in its ecological context, including its local and larger significance in the hydrological cycle, the carbon cycle, public health, etc.

This course invites students to reflect upon the problems confronting those who have to make decisions about land management and resource use. It highlights different approaches to environmental ethics and examines the underlying assumptions of the scientific, managerial, economic, aesthetic, religious, judicial and public policy discourse on the environment. Emphasis will be given to the growing global recognition that humankind is now evolving toward a new consciousness of the ethics of sustainability.

The course requires students to:

- fill in the Course's <u>Student Information Form</u> in class (and <u>online</u>, providing background information -- name, address, e-mail, etc.). This form needs to be submitted only once in the first week of term. If however, there is a change in your e-mail address, your Harvard ID or any other information in the form, please fill out the form an additional time and submit the information.
- attend lectures and study class lecture notes made available in most cases via the Internet.
- complete "in-class," "take-home" or "online" short assignments & weekly quizzes that will be presented occasionally throughout the term;
- complete Assigned Reading -- and suggested readings, where appropriate. Regularly consult, study and absorb the material listed under **Weekly Assignments** (ie. **Week 1**, **Week 2**, etc.) where appropriate. Class and online discussions will often assume you know about and are familiar with this material.

[**N.B.** Beyond the works listed below, additional Assigned Reading and handouts may be distributed in class or via the World Wide Web from time to time during the semester. These materials form an integral part of the course, and they are to be read and reflected upon as well as those readings listed below.];

- complete and submit to the appropriate course "dropbox" on it iSites website by Tuesday, 6
 October 2010 a Statement of Research Intent. This should be a title and a paragraph, indicating what your research for the Prospectus and eventual paper will focus upon.
- complete and submit a *Prospectus* with an *Annotated Bibliography* for their Term Research Paper. The deadline for submitting the *prospectus* is 20 October 2010 in class. Suggestions on the prepartion of the research paper and corresponding class presentation are outlined in the web

document: Guidelines for ENVR-E-120 Prospectus Term Paper.

- prepare and deliver an **online presentation** covering the issues and perspectives on environmental ethics reflected in the term paper.
- complete and submit a Term Research Paper with supporting Bibliography on a selected topic concerning environmental ethics and land management. . To receive a grade in the course, all papers must be received in "hardcopy," printed format on or before December 8, 2010 Submission of this paper in electronic form only will not be accepted as valid.

N.B. It is recognized that students from different levels of educational experience may well be taking this course, ranging from undergraduates through graduate and professional school students. All students taking the course will be expected to fulfill the requirements enumerated above, but the assessment of their work will take into account their respective levels of educational experience. The subject for the term research paper should be discussed with the course instructor.

Course Grading and Late Submission of Written Work:

Grading for the course will be derived from 5 total elements:

- in-class and/or online participation in the course <u>"Chat Room"</u> during class as well as the Harvard iSite class discussions. (Topics and questions will be posted under the link to <u>"Environmental Ethics</u> <u>Discussions"</u> on the class Harvard iSite. In addition, your participation over the course of the semester in the online blog: <u>"Workshop for sharing ideas for Public Presentations"</u> will be noted and counted as well as an indication of your general class participation.) (approximately 10%);
- on-time online submission by 6 October 2010 of the <u>"Statement of Research Intent."</u> (approximately 10%)
- on-time online submission by 20 October 2010 of the research <u>Prospectus with Annotated</u> <u>Bibliography</u> (approximately 30%);
- 4. on-time online submission of the <u>public presentation material</u> related to your final paper by December 8, 2010. (approximately 10%)
- on-time online submission of the term research paper PLUS "hardcopy" submission by December 8, 2010. (approximately 40%) [N.B. all papers must be received in "hardcopy," printed format on or before December 8, 2010. Submission in electronic form is required as well. All papers must be submitted to the Final Paper Dropbox on the Harvard iSites course website.]

N.B. Late submission of the course written work (specifically the *Prospectus* with *Annotated Bibliography* and the final research paper) will normally result in a loss of one third of a grade per day (not *per* class session, but per 24 hour delay). Thus, for example, a student who might normally receive a B+ for the written exercise should expect to receive a B if the paper is one day late. Similarly a student who might normally receive a B+ if it is received two days late.

Class Session Schedule [Date (Class Session Number)]

Month/Day	Wednesdays
September	<u>1 (1)</u>
	<u>8 (2)</u>
	<u>15 (3)</u>

	<u>22 (4)</u>
	<u>29 (5)</u>
October	<u>6 (6)</u>
	<u>13 (7)</u>
	<u>20 (8)</u>
	<u>27 (9)</u>
November	<u>3 (10)</u>
	<u>10 (11)</u>
	<u>17 (12)</u>
	no class
December	<u>1 (13)</u>
	<u>8 (14)</u>
	<u>15 (15)</u>

- 1. Introduction to Course
- 2. Basic Concepts of Ecology
- 3. Elements of Ethical Reasoning An Anthropologist's Approach
- 4. Environmental Ethics: The Terrain and Main Components of Debate
- 5. Our Historical Context: Colonialism, Imperialism and Sprawl
- 6. Public Lands: Mining, Timber & Grazing Lands

- Statement of Research Intention

- 7. Private Lands: Agriculture
- 8. Land Management and the Emerging Water Crisis

- Prospectus & Annotated Bibliography is due by end of class

- 9. Land Management and Waste: Toxic & Nuclear Waste
- 10. Land Management and the Global Commons: Air, Oceans, Forests
- 11. Land Management and Public Health
- 12. <u>Sick Earth, Diseased Humans: "Geo-Engineering" vs. "Planetary</u> <u>Physiology</u>"
- 13. <u>Global Trends and Local Counter-Trends in Human Relations to the</u> Land
- 14. From Beneith the Grassroots to The Sky Above -- Soils, Climate, Food and Visions for a Sustainable Future

- NB All Papers Must Be Submitted by the end of this

session

- 15. <u>Principles of Ecosystem Management and the Ethics of Global</u> <u>Sustainability</u>
- 1. Introduction to Course -
 - Sept. 1, Introduction to the scope, character and requirements of the course. An
 - 2010 overview discussion of topics to be covered and an introduction to how to get access to the related resources for each course session.

Assigned Reading:

[no reading assigned for the first class session] Week 1 -- Resources and Assignments

2. Basic Concepts of Ecology -

Sept. 8, 2010 All living species live in ecosystems. No organism can live apart from an environment, and the ecosystem can be understood as the ensemble of organisms and the environments needed to sustain them. Environmental ethics -- if it is to be more than a simple academic exercise in logic -- needs to be grounded in a firm understanding of the structure and function of ecosystems. This class will outline some of the fundamental characteristics of ecosystems and emphasize basic concepts of ecology that will serve as a foundation for further discussions of ethical behavior in an ecosystem.

Assigned Reading:

Weiskel, Timothy C. & Richard Grey

1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992), pp.v-xi and pp. 1-12. (<u>Preface</u> and <u>Chapter I</u>)

Week 2 -- Resources and Assignments

- 3. Elements of Ethical Reasoning An Anthropologist's Approach
 - Sept. 15, 2010 All societies possess at least some form of ethical reasoning, and often many conflicting systems. Ethical systems -- like linguistic systems -- are a "built in" feature of human cultural life. Ethics have to do with people think "*ought* to be done," and all societies struggle with the tension between the way things *are* and the way they think they *ought to be*.

Yet although the existence of ethical systems is universal, individual ethical systems themselves-- like languages -- are far from universal. We are presented with several questions to resolve: Where do societies get their sense of what "ought to be?" How is it possible to compare different ethical systems? If there is no such thing as a single "universal" ethic, are there nevertheless common elements in all ethical reasoning?

Assigned Reading:

Timothy C. Weiskel

1983 <u>"Rubbish and Racism: The Problem of Boundary in an</u> <u>Ecosystem,"</u> The Yale Review, (Winter, 1983), pp. 225-244.

4. Environmental Ethics: The Terrain and Main Components of Debate

Sept. 22, A number of thinkers and writers have contributed to the development of thinking about environmental ethics, and it is worth considering some of their specific contributions. Aldo Leopold, wrote his influential <u>Almanac</u> nearly sixty years ago -- before there was much consciousness of humans acting as destructively as we now know they can in an ecosystem. What relevance can his observations possibly have for us today?

Assigned Reading:

Aldo Leopold

1949 <u>A Sand County Almanac: And Sketches here and there</u> (New York, Oxford
1968 University Press, 1968), Parts 1 and 2

Recommended

Marc D. Hauser

- 2006 <u>Moral Minds: How Nature Designed Our Universal Sense of Right and</u> <u>Wrong</u> (New York, Harper Collins, 2006)
- Week 4 -- Resources and Assignments

Week 3 -- Resources and Assignments

5. Our Historical Context: Colonialism, Imperialism and Sprawl

Sept. 29, 2010

Although some writers seem to transcend their circumstances while considering issues of environmental ethics, most thinkers are thoroughly grounded in the conditions of a particular time and place. This is also true of cultures as a whole. The values of a culture are "artifacts" of historical circumstance and collective experience.

It is important to keep this in mind in assessing statements about "what ought to be done" to or with the land. The contemporary concern for land and resource management comes into play only after a particular history of colonial expansion and imperial domination that has characterized global history for the last five hundred years.

What impact does this history have upon statements of environmental ethics? Should the sensitivities and sensibilities of the "First Nations" be taken into account in developing contemporaty environmental ethics? With the recent history of colonialism in mind, what is an appropriate "baseline" for ethical judgments about behavior in the environment?

Assigned Reading:

Crosby, Alfred

1993 <u>Ecological Imperialism : The Biological Expansion of Europe, 900-1900</u> (Studies in Environment and History) (Cambridge, Cambridge University Press, 1993). [*Entire volume*].

Weiskel, Timothy C. & Richard Grey

1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992, pp. 13-52.

Week 5 -- Resources and Assignments

6. Public Lands: Mining, Timber & Grazing Lands

October 6, The United States government owns a considerable amount of land 2010 throughout the entire United States. How should this public land be managed? What are the historical patterns of mining, timber and grazing practices on public lands? Many of these practices were put in place over a century ago. Should these practices be reformed? If so, according to what

principles should these lands be managed?

Assigned Reading:

Klyza, Christopher McGrory

1996 <u>Who Controls Public Lands</u> (Chapel Hill, N.C., University of North Carolina Press, 1996). [*Entire volume*]

N.B. - Statement of Research Intent is due - to be submitted in class or, for distance learners, via the <u>Course "Drop-Box"</u>

Week 6 -- Resources and Assignments

7. Private Lands: Agriculture

October 13, 2010 One of the most intensive uses of privately held land in America is that involved with agriculture. How have agricultural lands been managed in the past? What are the factors that lead farmers to manage their lands poorly? What affect has the changing structure of American agriculture had upon land management in agriculture?

Assigned Reading:

UNEP

2007 <u>Global Environment Outlook (GEO-4)</u>, (Nairobi, Keny, New York, New York, UNEP, 25 October 2007).

Weiskel, Timothy C. & Richard Grey

- 1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992), pp. 53-136.
- Week 7 -- Resources and Assignments
- 8. Land Management and the Emerging Water Crisis
 - October 20, 2010 Land use constitutes an important component of the hydrological cycle. Land management practices profoundly effect the quality of both surface and ground water. Since these two sources of water provide virtually all the water available for industrial use and human consumption, land management practices will largely determine the nature of both localized and regional water crises. What responsibilities does society have to manage "wetlands"? or underground "aquifers"? How can changes in land management practices effect current and future generations?

Assigned Reading:

Vandana Shiva

- 2002 <u>Water Wars: Privatization, Pollution, and Profit</u> (Boston, South End Press, 2002), entire.
- Peter H. Gleick
 - 2006 "Global Freshwater Resources: Soft-Path Solutions for the 21st Century," Science Magazine's State of the Planet 2006-2007 (AAAS, Washington, D.C., 2006), especially, pp. 59-68.

N.B. - Prospectus is due - to be submitted in class or, for distance learners, via the <u>Course "Drop-Box"</u>

Week 8 -- Resources and Assignments

management?

9. Land Management and Waste: Toxic & Nuclear Waste Issues

October 27, 2010 From their earliest archeological remains, humans have been identified by their garbage piles. In the industrial and nuclear era some forms of human waste have left toxic and lethal legacies on the land. How should these wastes be managed? Who should bear the brunt of these residues? What the environmental justice issues reflected in waste placement and

Assigned Reading:

Felicity Arbuthnot

1999 <u>Depleted Uranium: A Post-War Disaster for Environment and Health</u> (Laka Foundation, 1 May 1999).

- Herman Damveld and Robert Jan van den Berg
 - 2000 <u>Nuclear Waste and Nuclear Ethics: Social and ethical aspects of the</u> <u>retrievable storage of nuclear waste</u>, (Amsterdam, Laka Foundation, January 2000).

Week 9 -- Resources and Assignments

10. Land Management and the Global Commons: Air, Oceans, Forests

November 3, 2010 Some resources are by nature fluid, and for that reason, they cannot be adequately understood as simply localized assets. Land management decisions in some specific regions affect the health of oceans and the composition of the global atmosphere upon which the whole world community depends for its well being. How should land management principles be crafted to preserve and protect the global commons of air, oceans, fisheries and forests?

Assigned Reading:

Editors of Science Magazine

2006 <u>Science Magazine's State of the Planet 2006-2007</u> (AAAS, Washington, D.C., 2006), pp. 22-36, & 101-153,

Timothy C. Weiskel, & Richard Grey

1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992), pp. 137-178.

Timothy C. Weiskel

2005 <u>"From Sidekick to Sideshow—Celebrity, Entertainment, and the Politics of</u> <u>Distraction Why Americans Are 'Sleepwalking Toward the End of the Earth,"</u> American Behavioral Scientist, 49, 3, (November 2005), pp. 393-409.

also, please read:

Shaw, Jonathan

2002 "The Great Global Experiment," Harvard Magazine. (November-December 2002).

Week 10 -- Resourcs and Assignments

Begin to Consult Great Expectations for Class Papers

11. Land Management and Public Health

November Scientists who are aware of the way in which healthy ecosystems function 10, 2010 have been emphasizing that changes in land management practices can have profound public health implications. In the long run it is widely acknowledged that the health of human populations rests upon the health of the underlying ecosystems upon which they depend. Abrupt or even gradual changes in land management practice over time can lead to the rapid growth of vector species or the rapid disappearance of keystone species, causing massive public health crises for humans or their domestic animals.

Assigned Reading:

Garrett, Laurie

2000 <u>Betrayal of Trust: The Collapse of Global Public Health.</u> (New York, Hyperion, 2000), [Entire volume].

Week 11 -- Resourcs and Assignments

12. Sick Earth, Diseased Humans: "Geo-Engineering" vs. "Planetary Physiology"

November 17, 2010

Assigned Reading:

James Lovelock

2006 <u>The Revenge of Gaia: Earth's Climate Crisis and the Fate of Humanity</u> (Basic Books, 2006).

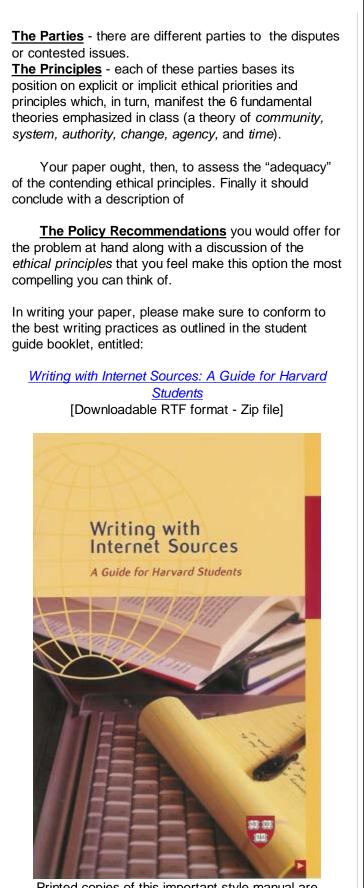
Weiskel, Timothy C. & Richard Grey

1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992), pp. 179-216.

Week 12 -- Resources and Assignments

Nota Bene - Remember that your papers should contain different levels of analysis, elaborating:

<u>A Problem</u> - the topic you are investigating should present some kind of problem, dispute or dilemma.



Printed copies of this important style manual are available at the Extension School offices at 51 Brattle

Street, Cambridge, MA 02138.

13. Global Trends and Local Counter-Trends in Human Relations to the Land

December 1,

2010

Suggested Readings: James Lovelock 2009 <u>The Vanishing Face of Gaia: A Final Warning</u> (New York, Penguin, 2009). Dianne Dumanoski 2009 <u>The End of the Long Summer: Why We Must Remake Our Civilization to</u> Survive on a Volatile Earth (New York, Crown Publishers, 2009).

Week 13 -- Resources and Assignments

- 14. From Beneith the Grassroots to The Sky Above -- Soils, Climate, Food and Visions for a Sustainable Future
 - December In addition to centralizing, standardizing and mechanizing trends in the evolution of global
 - 8, 2010 agriulture, we are also beginning to see counter trends on a local basis. Some of this impulse emerges from a recognition that current global trends are destroying the topsoil around the world, and the response has been to re-examine the fundamental mechanisms of restoring and maintaining soil fertility. Another major impulse for reform has emerged from a growing awareness that the world's increasingly petro-intensive food system is currently designed primarily for delivering profit to large corporate entities rather than providing healthy or nutritious food to those who need it.

We will consider the approach to two specific alternative approaches -- one focused on restoring foil fertility and the second focusing upon healthy and sustainable food systems.

Richard Heinberg

2007 <u>Peak Everything: Waking Up to the Century of Declines</u> (New York, New Society Publishers, 2007).

Week 14 -- Resources and Assignments

[Note Bene: All <u>Public Presentation Materials for Research Papers</u> + All Papers are Due in Class 8 December 2010 - AND in the appropriate <u>Course Dropbox</u>]

15. Principles of Ecosystem Management and the Ethics of Global Sustainability

December 15, 2010

, Numerous international efforts have been launched to articulate and codify ethical principles of sustainability. These include principles adopted at the first global environmental summit known as the United Nations Conference on Environment and Development (UNCED), held in Rio de Janiero in 1992. In addition, the Coalition for Environmentally Responsible Economies (CERES) has drawn up a list of ten principles, and the international Earth Charter movement has developed others that it will seek to place before the United Nations in 2002.

How can these efforts be assessed? What is their value? What can be said to be "fair" or ethically justified given the history of global development until the dawn of the 21st Century?

Assigned Reading:

James Lovelock 2006 <u>The Revenge of Gaia: Earth's Climate Crisis and the Fate of Humanity</u> (Basic Books, 2006). Weiskel, Timothy C. & Richard Grey 1992 <u>Environmental Decline and Public Policy: Pattern, Trend and Prospect</u> (Michigan, Pierian Press, 1992), pp. 179-216. Week 15 -- Resources and Assignments

Assigned Reading for the Course are drawn from:

James Lovelo	ock	
2009	The Vanishing Face of Gaia: A Final Warning (New York, Penguin, 2009).	
Bill McKibber		
1949	Eaarth: Making a Life on a Tough New Planet (New York, Times Books,	
1968	2010).	
Jeff Goodell		
2010	How to Cool the Planet: Geoengineering and the Audacious Quest to Fix Earth's Climate (New York, Houghton Mifflin Harcourt, 2010)	
Aldo Leopold		
1949	A Sand County Almanac: And Sketches here and there (New York, Oxford	
1968	University Press, 1968).	
Crosby, Alfre	d	
1993	Ecological Imperialism : The Biological Expansion of Europe, 900-1900 (Studies in Environment and History) (Cambridge, Cambridge University Press, 1993).	
Garrett, Laur	ie	
2000	Betrayal of Trust: The Collapse of Global Public Health. (New York, Hyperion, 2000).	
Richard Heinberg		
2007		
Klvza, Christo	opher McGrory	
1996	Who Controls Public Lands (Chapel Hill, N.C., University of North Carolina Press, 1996).	
Vandana Shiva		
2002	Water Wars: Privatization, Pollution, and Profit (Boston, South End Press, 2002).	
Weiskel, Tim	othy C. & Richard Grey	
1992	Environmental Decline and Public Policy: Pattern, Trend and Prospect	
	(Michigan, Pierian Press, 1992),	
Suggested Readings:		
Dianne Dumanoski		
2009	The End of the Long Summer: Why We Must Remake Our Civilization to Survive on a Volatile Earth (New York, Crown Publishers, 2009).	
Arran Stibbe		
2000	The Handback of Suptainability Literacy: Skills for a Changing World (New	

2009 <u>The Handbook of Sustainability Literacy: Skills for a Changing World</u> (New York, Green Books, 2009).

+ The Unassigned, Recurrent, Required Reading: <u>The New York Times</u> <u>The Harvard Gazette</u> <u>Google Earth</u>

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