

Environmental Studies 3: Environment and Society Fall 2020

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Course Description

The relationship between humans and the environment is mediated by the consumption of natural resources, the discharge of pollution and waste, and the transformation of landscapes and ecosystems. Unsustainable outcomes arise because individuals and organizations have incentives to undertake actions that degrade environmental quality, often in the context of markets. As a result, achieving sustainability requires laws, public policies, social norms, and shared understandings that align individual action with collective well-being. This course analyzes the causes and solutions of environmental problems by integrating concepts from a variety of social science disciplines. In addition, it explores the role that ecology and ecosystem science play in understanding and responding to sustainability challenges.

Remote Instruction Format

This course will be taught asynchronously with synchronous components. Lectures will generally be pre-recorded and students will have the flexibility to complete assignments over the course of one or more days. In order to foster a shared sense of community centered on learning about environment and society, we will typically convene one synchronous meeting per week during our scheduled class period that focuses on updates, discussions, and engagement. These sessions will be recorded and posted on Canvas for the internal use by members of the class community. We understand that the structure of online engagement may pose challenges for some students. Please contact us at any point if you are facing challenges or concerns related to remote learning, and we will strive to develop a workable solution that suits your needs and keeps you involved.

Course Requirements

Course evaluations will be based on:

- **Weekly assignments** (20% total). Weekly assignments will consist of open-book quizzes or written responses, released for completion for 24 hours. Students will be graded on their six highest scores.
- Two **essay examinations** (25% each). Essay exams will focus on writing clear, concise answers in response to a set of questions that asks students to synthesize course content.
- A **final paper** (25% total). Final papers will evaluate and discuss a current environmental issue in a “feature article” style aimed at an educated audience that is not familiar with the specific topic. The task is to communicate sophisticated ideas to a general readership within five pages. Paper proposals will be due on Friday, October 30th, counting for 5% of your grade. Final papers will be due on Monday, November 30th, counting for 20% of your grade.

- **Student engagement** (5%). This will focus on students' engagement with the weekly synchronous meetings, online forums, and other class activities. We are mindful that time-zone differences may present challenges for some students, and we work with you to provide opportunities to engage with other students and the instructors.

Teaching Assistant

The teaching assistant for this class is Hunter Snyder (Hunter.T.Snyder.GR@dartmouth.edu). He will hold office hours to answer questions about the course materials and to support your work on the final paper assignment.

Readings

The course will draw on readings from the following two textbooks. If you need assistance acquiring the texts due to affordability, please let us know and we will do our best to help.

1. Kai N. Lee, William R. Freudenburg, and Richard B. Howarth, *Humans in the Landscape: An Introduction to Environmental Studies*, W.W. Norton, 2013.
2. Michael E. Kraft, *Environmental Policy and Politics*, 7th edition, Routledge, 2018.

In addition, the course will engage frequently with supplementary readings, which may be accessed by following the hyperlinks provided in this syllabus.

Academic Integrity

Under Dartmouth's [Academic Honor Principle](#), it is impermissible to give or receive assistance during an examination. In addition, papers must be written by the student and reflect their own interpretation of the subject matter with careful attention to the attribution of sources.

Accessibility Needs

Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to contact us privately as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the [Student Accessibility Services](#) office (Carson Hall, Suite 125, 646-9900). Once SAS has authorized services, students must show the originally signed College Policy on the Academic Honor Principle, Accessibility Services, Mental Health and Religious Observances SAS Services and Consent Form and/or a letter on SAS letterhead to their professor. As a first step, if students have questions about whether they qualify to receive academic adjustments and services, they should contact the SAS office. All inquiries and discussions will remain confidential.

Behavioral Health

The academic environment at Dartmouth is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including [your undergraduate dean](#), [Counseling and Human Development](#), and the [Student Wellness Center](#).

Religious Observances

Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the second week of the term to discuss appropriate accommodations.

Course Schedule

Introduction & Week 1: 9/14-9/23

Synchronous meetings:

- W 9/16, 1:10 - 2:15 PM Eastern Standard Time (EST)
- W 9/23, 1:10 - 2:15 PM (EST)

Lectures:

1. Introduction to ENV5 3 (Howarth/Erbaugh)
2. The state of the environment (Howarth)
3. The market mechanism and the “Invisible Hand” (Howarth)

Readings:

- Lee *et al.*, chapter 1
- Lee *et al.*, chapter 2
- Paul J. Crutzen, “Geology of Mankind,” *Nature*, Vol. 415, p. 23, 2002. ([link](#))
- Lee *et al.*, chapter 13
- Michael Spence, “The Inequality of Nations,” *Project Syndicate*, August 1, 2019. ([link](#))

Assignments:

- Course information form
- Weekly assignment #1

Week 2: 9/24-9/30

Synchronous meeting:

- W 9/30, 1:10 - 2:15 PM (EST)

Lectures:

4. Commons dilemmas (Erbaugh)
5. Common Property Regimes (Erbaugh)

Readings:

- Lee *et al.*, chapter 3
- Elinor Ostrom, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky, “Revisiting the Commons,” *Science*, Vol. 284, pp. 278-282, 1999. ([link](#))
- Rights and Resources Initiative. 2018. *At a Crossroads. Consequential trends in recognition of community-based forest tenure from 2002-2017*. Washington, DC. ([link](#))

Assignment:

- Weekly Assignment #2

Week 3: 10/1-10/7

Synchronous meeting:

- W 10/7, 1:10 - 2:15 PM (EST)

Lectures:

6. The role of the state (Erbaugh)
7. The policy process (Erbaugh)
8. Case Study: Reducing forest cover change in Indonesia (Erbaugh)

Readings:

- William Ophuls and A. Stephen Boyan, Jr., “The Politics of Scarcity,” Chapter 4 in *Ecology and the Politics of Scarcity*, W.H. Freeman, 1992. ([link](#))
- Kraft, chapter 3
- Lee *et al.*, chapter 12

Assignment:

- Weekly assignment #3

Week 4: 10/8-10/14

Synchronous meeting:

- F 10/16, 1:10 - 2:15 PM (EST)

Lectures:

9. Pollution control policy (Howarth)
10. The Clean Air Act (Howarth)

Readings:

- Kraft, pp. 148-173
- Kraft, pp. 173-198
- Amelia T. Keyes, Kathleen F. Lambert, Dallas Burtraw, Jonathan J. Buonocore, Jonathan I. Levy, and Charles T. Driscoll, “The Affordable Clean Energy Rule and the Impact of Emissions Rebound on Carbon Dioxide and Criteria Air Pollutant Emissions,” *Environmental Research Letters*, Vol. 14, pp. 1-10, 2018. ([link](#))

Assignment:

- Essay Examination 1 (Weeks 1 through 4)

Week 5: 10/15-10/21

Synchronous meeting:

- W 10/21, 1:10 - 2:15 PM (EST)

Lectures:

11. Disproportionality, environmental racism, and environmental justice (Erbaugh)
12. Conservation, resource management, and political ecology (Erbaugh)

Readings:

- R.P. Neumann, “Political Ecology,” in the *International Handbook of Human Geography*, 6 pp., 2009. ([link](#))
- Lee *et al.*, chapter 4
- Amy Krings, Dana Kornberg, and Erin Lane. “Organizing Under Austerity: How Residents’ Concerns Became the Flint Water Crisis.” *Critical Sociology* 45(4–5): 583–597, 2019. ([link](#))
OR
- *Al Jazeera*. “The Stream – Flint’s Poisoned Water.” *Youtube* 21 Jan. 2016. ([link](#))
- Purdy, J. “Environmentalism’s Racist History.” *The New Yorker*, August 13th, 2015. ([link](#))
- Kraft, pp. 221-253.

Assignment:

- Weekly Assignment #4

Week 6: 10/22-10/28

Synchronous meeting:

- W 10/28 1:10 - 2:15 PM (EST)

Lectures:

13. The Land Ethic and the Endangered Species Act (Howarth)
14. Ecosystem services (Howarth)
15. Fisheries management and international governance (Professor D.G. Webster)

Readings:

- Aldo Leopold, “The Land Ethic,” pp. 237-264 in *Sand County Almanac*, Oxford University Press, 1949. ([link](#))
- Walter E. Westman, “How Much Are Nature's Services Worth?” *Science*, Vol. 197, pp. 960-964, 1977. ([link](#))
- Robert Costanza, Rudolf de Groot, Paul Sutton, Sander Van der Ploeg, Sharolyn J. Anderson, Ida Kubiszewski, Stephen Farber, and R. Kerry Turner, “Changes in the Global Value of Ecosystem Services,” *Global Environmental Change*, Vol. 26, pp. 152-158, 2014. ([link](#))

Assignment:

- Weekly Assignment #5

Week 7: 10/29-11/4

Synchronous meeting:

- W 11/4, 1:10 - 2:15 PM (EST)

Lectures:

16. Limits to Growth? (Howarth)
17. Sustainable development (Howarth)

Readings:

- Lee *et al.*, chapter 10
- Donella H. Meadows, Dennis L. Meadows, and Jørgen Randers, “Beyond the Limits: An Executive Summary,” *Bulletin of Science, Technology, and Society*, Vol. 13, pp. 3-14, 1993. ([link](#))
- Chris Sneddon, Richard B. Howarth, and Richard B. Norgaard, “Sustainable Development in a Post-Brundtland World,” *Ecological Economics*, Vol. 57, pp. 253-268, 2006. ([link](#))

Assignments:

- Weekly Assignment #6
- Final Paper Proposal

Week 8: 11/5-11/11

Synchronous meeting:

- No Synchronous Meeting this week

Lectures:

18. Resilience and Planetary Boundaries (Howarth)
19. Topics in polar governance and science diplomacy (Presented by Hunter Snyder, Melody Burkins, and Ross Virginia)

Readings:

- Kate Raworth, “A Safe and Just Space for Humanity: Can We Live Within the Doughnut?” Oxfam Discussion Papers, 2012. ([link](#))
- Ross A. Virginia, “The Arctic Environment in the Age of Man,” *Wilson Quarterly*, Summer/Fall 2017. ([link](#))
- Charles Norchi, “The Arctic in the Public Order of the World Community,” *Ocean and Coastal Law Journal*, Vol. 22, pp. 3-21, 2017. ([link](#))
- Heather Exner-Pirot et al. “Form and Function: The Future of the Arctic Council,” The Arctic Institute, February 15th, 2019. ([link](#))
- The Antarctic Treaty ([link](#))

Assignment:

- Essay Examination 2 (Weeks 4 to 8)

Week 9: 11/12-11/17

Synchronous meeting:

- M 11/17, 1:40 - 2:30 PM (EST)

Lecture topics:

20. Climate change: economics and ethics (Howarth)
21. Globalization and the environment (Erbaugh)
22. Wrapping up and the road ahead (Howarth/Erbaugh)

Readings:

- Lee *et al.*, chapter 7
- [Optional] R.B. Howarth, “Intergenerational Justice,” *Oxford Handbook on Climate Change and Society* (John S. Dryzek, Richard B. Norgaard, and D. Schlosberg, editors). Oxford University Press, 2011. ([link](#))
- Lee *et al.*, chapter 8
- Jonathan A. Foley, et al. “Solutions for a cultivated planet.” *Nature* 478 (7369): 337–342, 2011. ([link](#))
- Kris A. Murray and Peter Daszak. “Human ecology in pathogenic landscapes: Two hypotheses on how land use change drives viral emergence.” *Current Opinion in Virology* 3(1):79–83, 2013. ([link](#))

Assignment:

- Weekly Assignment #7

Final Examination Period: 11/30-12/4

Assignment:

- Final Paper due 11/30/2020 at 5:00 PM EST