Course description

This course examines the confluence of two fields: environmental history and the social and historical studies of science, technology, and medicine (STS). Although preliminary scholarship has begun to explore the fruitful integration of these fields, a number of methodological and theoretical tensions remain. Some of these tensions include the social construction of “nature”; nature as a historical actor or agent; accounts of the emergence of “environmental” “problems”; constructivist models of science and technology; and scholars’ use of scientific and technical sources to assess environmental change. This reading-intensive seminar examines a number of scholarly debates about key terms, definitions, and categories (both historical actors’ and analysts’), knowledge-making about “nature” and human interactions with non-human nature, and the concept of agency.

Weekly seminars are organized around readings in environmental history, science studies, and/or their intersection—a nexus that has flourished over the past 5-10 years—that explore these issues in diverse ways. For instance, conservation science and the space sciences help us consider the conceptualization and construction of distinct environments; diseases such as malaria in colonial Egypt and the Panama Canal Zone raise vital questions about the nature of agency and the agency of nature; other diseases such as sick-building syndrome push us to consider various kinds of borders and boundaries both historically and theoretically; and scientific disciplines such as forestry, glaciology, and seismology invite us to explore the making of both environmental knowledge and ignorance.

Required reading

The following books are required. They are available at the Cornell Store. One copy of each book has also been placed on reserve at Olin Library. Please note: Because library copies of these books have been put on reserve, you are not able to request the books through Interlibrary Loan. However, you can request them through Borrow Direct, which is a better and faster library service anyway.

• Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014);
• Lisa Messeri, *Placing Outer Space: An Earthly Ethnography of Other Worlds* (Duke University Press, 2016);
• Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Duke University Press, 2006);
• Miles A. Powell, *Vanishing America: Species Extinction, Racial Peril, and the Origins of Conservation* (Harvard University Press, 2016);
• Tiago Saraiva, *Fascist Pigs: Technoscientific Organisms and the History of Fascism* (MIT Press, 2016);
• Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (University of Chicago Press, 2011);

Required articles can be accessed through Cornell Library’s e-journals collection. These readings are preceded by [EJ] on the syllabus. Book chapters are available through Blackboard. These readings are preceded by [BB] on the syllabus.

Some additional readings are listed on the syllabus under FFR (“for future reference”). These lists are merely suggestive, not exhaustive. They may be useful starting points for the final paper.

**Assignments and grading**

The following assignments are required:

**Critical reading responses (9 x 2.5% each = 22.5%)**

For nine of the thirteen substantive weeks of the course, please submit a reading response that engages with the required reading(s) for that week. Each response should be no more than two typed, double-spaced pages with normal font and font size. The papers should be completed before the class session on which they comment. You are asked to submit nine entries over the semester, but you can choose which sessions/readings.

Responses are not just summaries of the readings, but opportunities to reflect upon them, forge connections, raise questions, dig into one or more issues, etc. They don’t need to be the final word on a given book or theme, but they should go beyond stream of consciousness or a laundry list of potentially interesting ideas.

**Book review (7.5%)**

The syllabus lists required and “for future reference” (FFR) readings each week. You are asked to pick one week during the semester when you read one FFR book in addition to the required reading(s) for that day. You can also propose an alternative book; just email me and ask. It should, however, be approved in advance. Please write a book review (1,000 words max) of that FFR book.
In general, book reviews offer both summaries and evaluations of a given text. They typically start with a succinct overview. You may want to keep in mind the following questions: What is the main argument? Is it new? In what ways? What does the author (not) address? In what scholarly communities or (sub)fields is this book situated? In terms of making a broader argument about the strengths, weaknesses, and contributions of the book, you might want to consider the following: Are the author’s claims persuasive? Why or why not? How does this book engage with other literatures and texts? How is this book significant? Remember to assess the book on its own merits, not what you think the author should have written. Beyond these few remarks, I encourage you to read Bruce Mazlish’s essay, “The Art of Reviewing” (https://www.historians.org/publications-and-directories/perspectives-on-history/february-2001/the-art-of-reviewing).

You are encouraged to share ideas from your supplemental reading during that week’s discussion. You are also encouraged to pick a week/theme/recommended reading that is especially relevant to your research, teaching interests, and/or final paper for this seminar. In other words, ideally the book review should do double duty (book review + part of bibliography for final paper).

Please note: Between the reading responses and book review, you will have a grand total of three “freebie” weeks during the semester when you do not need to complete some sort of written response. I suggest that you save at least two of your freebie weeks for the second half of the term. ☺

Discussion (35%)

This is a graduate seminar so class meetings will be organized around discussion. We will generally meet as an entire class, but we may occasionally break into smaller groups. All students are expected to participate in discussion, but discussion grades are based primarily on quality and secondarily on quantity. In addition, I value students who listen to one another, ask follow-up questions, synthesize others’ comments, and pose questions to the entire class. I expect constructive, generative, respectful, regular engagement from all members of the seminar in our discussions.

Final paper (35%)

More information will be distributed later in the semester, but the final paper is 10–12-page paper that allows you to explore some of your specific intellectual interests. It does, however, need to engage with and build on the major themes of the class. You will draw primarily upon course readings for the paper, but identify several supplemental readings (3–4 books or the equivalent) to help you develop your particular question, issue, or theme that is rooted in the seminar. Please note that this is not a traditional research paper. Rather, think of this paper as a deeper engagement with and exploration of a central concern that emerges from our seminar, but hopefully dovetails with your own interests. Depending on your year and impending requirements (A-exams, dissertation prospectus, grant proposals, etc.), we can refine this assignment to help you meet your professional goals and deadlines.

Your final paper is due during our university-scheduled final exam time slot, which will be announced by the University Registrar in February. Everyone will also give short presentations about their papers during finals. To encourage progress on the paper, I have developed several intermediate deadlines. They are listed on the course schedule.
Academic conduct

This is a graduate seminar. Issues of academic integrity should be a non-issue. That said, all students are expected to abide by the Cornell University Code of Academic Integrity. The complete Code is available online (http://www.cuinfo.cornell.edu/Academic/AIC.html).

COURSE SCHEDULE

Week 1 (Jan 25)  No class [Sara giving talk at NYC History of Science Consortium; please review syllabus and these recommended readings on your own; be ready to discuss the readings next week!]
Michel Foucault, “Polemics, Politics, and Problematization” (http://foucault.info/foucault/interview.html).
Joe Dumit, “How I Read” (http://dumit.net/how-i-read/).

Week 2 (Feb 1)  Welcome and introductions! The ocean in/as environmental history

FFR (historiographical reviews, overviews, etc.):
Chris H. Lewis, “Telling Stories About the Future: Environmental History and Apocalyptic Science,” Environmental History Review 17 (Fall 1993).


FFR (the ocean):


**Week 3 (Feb 8) Introduction to (environmental) STS**


Week 4 (Feb 15) Constructing (the) environment(s), I


Week 5 (Feb 22) Constructing (the) environment(s), II


Week 4 (Feb 15) Constructing (the) environment(s), I


Week 5 (Feb 22) Constructing (the) environment(s), II


FFR:


Week 6 (Mar 1)  The agency of nature and the nature of agency

Week 7 (Mar 8)  Human/nonhuman/posthuman, I: Cyborgs and companion species
⇒ Prospective final paper topic due (one paragraph!)

FFR (Because, Haraway):
Donna J. Haraway, When Species Meet (University of Minnesota Press, 2007).

Week 8 (Mar 15)  Human/nonhuman/posthuman, II: Organisms
FFR (organisms):

FFR on model organisms:

**Week 9 (Mar 22)  **Borders and boundaries, I: Body/environment/technology
Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Duke University Press, 2006).

⇒ *Revised final paper topic and tentative “bibliography” (remember—3 to 4 books!) due.*
FFR on body/environment/technology:
Michelle Murphy, Sick Building Syndrome and the Problem of Uncertainty (Duke University Press, 2006).
Gregg Mitman, Breathing Space: How Allergies Shape our Lives and Landscapes (Yale University Press, 2008).
Nancy Langston, Toxic Bodies: Hormone Disruptors and the Legacy of DES (Yale University Press, 2010).

FFR on hybridity:


**Week 10 (Mar 29)**  *No class [Sara at ASEH conference]*

**Week 11 (April 5)**  *No class [Happy spring break!]*

**Week 12 (April 12)**  *Borders and boundaries, II: Mobility(ies)*


**FFR:**

See *Transfers: Interdisciplinary Journal of Mobility Studies*.

**Week 13 (April 19)**  *Not knowing nature(s), I: Forests and glaciers*


**FFR:**


Week 14 (April 26)  (Not) knowing nature(s), II: Earthquakes

Week 15 (May 3)  Knowledge, environment, empire, I: Discipline(s), expert(ise)(s), and imperialism(s)

Week 16 (May 10)  Knowledge, environment, empire, II: Africa(ns) and ornithology

Study period and finals week (specific deadlines TBA in February 2017)
 ➔ Peer review of rough drafts (probably during study period).
 ➔ Presentations of papers and final drafts due during university-scheduled final exam slot.