Spring 2015 HST 585 Science, Technology, and the Environment Dr. Emily Wakild

Mondays 4:30-7:15 emilywakild@boisestate.edu

Library 194 Office Hours: W 4:15-5:15

Science, Technology, Engineering and Math, or STEM, dominate and drive the research agendas of most Universities. They form part of our cultural backbone and are often above question or criticism. This has not always been so and the elevation of STEM over other disciplines is a new social phenomena. Indeed, the process of valuing STEM is a cultural process, one that has occurred differently in different parts of the world. That is to say, STEM has a past.

This course is based on the premise that history is crucial to understanding the relationships between science, technology, and society. It seeks to meld environmental history and history of science approaches to understanding the past by taking people in the larger Americas as the point of departure. Students from disciplines other than history, including but not limited to anthropology, geography, and literature, are both welcome and encouraged to take part. While the potential topics are extensive, a semester is somewhat limited. We will cover a broad span of time and place with three persistent questions in mind.

* How are history of science and environmental history approaches to the past different?
* Have scientists or engineers (technology) been more influential in shaping the environment in the Americas? What are the results of these differing influences?
* What is the appropriate scale for examining transformations to the natural world? Local? Ecological? National? Transnational? Global?

The course is designed to introduce you to historiographical traditions in the study of science and the environment as well as to expose you to excellent works in these fields. You will notice a preference for life sciences (biology, ecology, forestry, etc.) and for the field over the laboratory. Similarly, we will draw upon social and cultural history more than political or military history. We will read a combination of historiographical and research articles and books. While some of these works are explicitly bounded by nations, others have more wide-ranging scopes. We will keep an eye towards the transnational and also question the use of this lens.

**Assignments**:

Participation and Attendance = 40%

Short Essays: 3 X 10% each = 30%

Research proposal (in three parts) for a project in an area of your choosing = 30%

You must complete ALL assignments in order to earn credit for the class.

**Participation and Attendance**: You are expected to contribute no fewer than 5 (five) substantive and original comments during each discussion. I suggest you write them out before class and bring them with you. It is likely that someone else might have the same thought or idea, so prepare more than 5! Your comments should convey that you have not only completed all the readings but have thoroughly and thoughtfully digested them to a point where you can discuss them cogently. Pay attention to the dates of publication, the styles of prose, the research questions proposed, and the methods of execution. Put the texts in conversation with each other and imagine you could ask each author about their choices. Some weeks will be easier than others; some topics will be more familiar. If you have questions of context, ask them and ask them early. I can help. Do not use unfamiliarity as an excuse not to fully engage with a text.

**Short Essay 1**: Historiographical Analysis

Historiography is the history of how history has been written. Historians never start from zero; they begin by looking at what has been written before. Getting a handle on this context sets you up for more interesting research work and more comprehensive conclusions. To these ends, we will jump in head first to the murky land of field definition with several articles and conversations in the first three weeks. After discussing seven articles laying out the groundwork of environmental history and history of science, write an analysis of the major methods, ideas, and trends in these fields. This should be more than a summary of the articles—engage with the critiques and approaches discussed. The paper is strictly limited to 4 pages in length.

**Short Essay 2**: Theme Analysis

Choose a specific theme that is explored by the authors of the readings from week 4 through week 8. Articulate the theme you have chosen and compare and contrast how different authors approach that theme. There is no limit to the variety of themes that you might select but you must clearly articulate and define the theme you choose. Themes may include things like race, class, gender, age, and experience. They may involve intellectual, political, economic, cultural, or social lenses. Themes might engage specific ideas (conservation, revolution, industrialization) or technologies (cities, farms, roads). Be creative. This paper is limited to 4 pages in length.

**Short Essay 3**: Methodological Analysis

Drawing upon all the texts read in class, compare and contrast how historians “do” history. What source materials do they use, how do they use them, and what are the results? Be specific. Mine the footnotes and bibliography, think about the processes involved. Which texts have similar approaches and which differ dramatically? Why have the authors chosen the sources they have?

**Research Proposal**:

Using the texts we read as a guide, write a research proposal in three parts. First, identify a collection of primary sources and compose a research question that can be answered using these sources. Write a 200 word abstract describing this topic. Next, identify the secondary literature on that topic, in particular the journals and journal articles that come close to the topic. Write a 500 word discussion of this literature. Finally, write a five page proposal outlining why this research question is necessary, how you would go about doing it, and what the results might tell us. This is not only practice articulating why historical research matters, it gives you the tools to explain why your particular line of research matters.

Please note: in each essay and in your proposal you should cite all materials using footnotes according to the Chicago Manual of Style guidelines. An additional bibliography is not necessary. You should get to know this format and practice using it correctly.

**Books**: The following texts should be purchased or otherwise located and read by the date they are listed in the syllabus. Many of them are available as electronic books through Albertson’s library.

Neil Safier, *Measuring the New World: Enlightenment Science and South America,* (Chicago, 2008)

Lee Alan Dugatkin, *Mr. Jefferson and the Giant Moose: Natural History in Early America* (Chicago, 2009)

Laura Dassow Walls, *The Passage to Cosmos: Alexander von Humboldt and the Shaping of America* (Chicago, 2009)

Christopher R. Boyer, *Political Landscapes: Forests, Conservation, and Community in Mexico* (Duke, 2015)

Nancy Langston, *Where Land and Water Meet: A Western Landscape Transformed* (Washington, 2003)

Thomas Rogers, *The Deepest Wounds: A Labor and Environmental History of Sugar in Northeast Brazil* (UNC, 2010)

Angus Wright, *The Death of Ramón Gonzalez: The Modern Agricultural Dilemma* (Texas, (1990)2005)

Mark Carey, *In the Shadow of Melting Glaciers: Climate Change and Andean Society* (Oxford, 2010)

Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Harvard, 2013)

**Course Schedule:**

1. January 12 M On Writing

Jonathan Lethem, “The Ecstasy of Influence: A Plagiarism,” *Harper’s Magazine*, February 2007, 59–71. <http://harpers.org/archive/2007/02/the-ecstasy-of-influence/>

Anne Lamont, “Shitty First Drafts” from *Bird by Bird (1995)* online here: <http://mrhauserswebsite.weebly.com/uploads/8/3/1/8/8318158/annelamott-shittyfirstdrafts.pdf>

Adam Przeworski and Frank Salomon “On the Art of Writing Proposals” <http://www.ssrc.org/publications/view/the-art-of-writing-proposals/>

January 19 M NO CLASS—Martin Luther King Day

1. January 26 M Grappling with the Field 1: Environmental History
2. J.R. McNeill, “The State of the Field of Environmental History” *Annual Review of Environment and Resources* 35 (November 2010): 345-74.

American Historical Review Conversation, “Environmental Historians and Environmental Crisis,” *American Historical Review* 113:5 (December 2008): 1431-1465.

Richard White, “From Wilderness to Hybrid Landscapes: The Cultural Turn in Environmental History,” *Historian* 66, no. 3 (Fall 2004): 557–64

Germán Palacio, “An Eco-Political Vision for an Environmental History: Toward a Latin American and North American Research Partnership” *Environmental History* 17(Oct 2012): 725-743.

1. February 2 M Grappling with the Field 2: History of Science and Technology

Marwa Elshakry, “When Science Became Western: Historiographical Reflections” *Isis,* 101:1 (March 2010) 98-109.

Bruno Strasser, “Collecting Nature: Practices, Styles, and Narratives,” *Osiris* 27:1 (2012), 303-340

Sara Pritchard, “Joining Environmental History with Science and Technology Studies: Promises, Challenges, and Contributions,” in *New Natures: Joining Environmental History with Science and Technology Studies,* eds. Dolly Jorgensen, Finn Arne Jorgensen, and Sara B. Pritchard (Pittsburgh: University of Pittsburgh Press, 2013), 1-20.

1. February 9 M Scientific Knowledge—Neil Safier, *Measuring the New World*

**First Essay Due**

February 16 M NO CLASS-Presidents Day

1. February 23 M Animals—Lee Alan Dugatkin, *Mr. Jefferson and the Giant Moose*

Erica Fudge, “A Left-Handed Blow: Writing the History of Animals,”

**Research Proposal Abstract Due**

1. March 2 M Exploration—Laura Dassow Walls, *The Passage to Cosmos*
2. March 9 M Forests—Christopher R. Boyer, *Political Landscapes*
3. March 16 M Water— Nancy Langston, *Where Land and Water Meet*

**Second Essay Due**

**SPRING BREAK MARCH 23-27 NO CLASS**

1. March 30 M Labor—Thomas Rogers, *The Deepest Wounds*

**Research Proposal Journal Review Due**

1. April 6 M Agriculture—Angus Wright, *The Death of Ramón Gonzalez:*
2. April 13 M Mountains—Mark Carey, *In the Shadow of Melting Glaciers*
3. April 20 M Environmentalism—Rob Nixon, *Slow Violence*
4. April 27 M The Anthropocene?

Will Steffen, Paul J. Crutzen, and John R. McNeill, “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?” *Ambio* 36 (2007): 614-621.

Dipesh Chakrabarty, “The Climate of History: Four Theses,” *Critical Inquiry* (2009): 197-222.

Browse the various exhibitions and research projects from the Rachel Carson Center on the Anthropocene especially the Cabinet of Curiosities: <http://www.carsoncenter.uni-muenchen.de/outreach/research_collab/anthropocene/index.html>

Jonathan Franzen, “Carbon Capture” *New Yorker,*  <http://www.newyorker.com/magazine/2015/04/06/carbon-capture>

Mark Jannot, “Friends like These” <https://www.audubon.org/news/friends-these>

**Third Essay Due**

**May 4th 5:30 pm Final Research Proposal Due**