## HIST 2062 Global Environmental History University of Virginia Session III, Summer 2015 Instructor: Justin McBrien Office Hours: Mondays and Thursdays, 3:30-5:00, Nau 396

## **Description**

This course will examine the relationship between humanity and the global biosphere from the prehistoric era to present. We will focus less on comparative regional histories and more on processes of environmental change at the planetary scale. The goal is to impart a general understanding of the concepts, methods, and ideas of environmental history. It will take a world-systems approach, analyzing the global interdependency of social, economic, and environmental changes over the long duration of human history through the use of primary sources, fiction, films, scientific articles, and basic ecological and climate models.

This is an introductory course, presuming no previous knowledge of environmental history or science. The long-term project will be to trace both the history and future of a global environmental topic of the student's choice. Through history, we construct the possibilities of future actions as much as the narrative of the past. The study of global environmental history requires reckoning with the overlapping nature of historical, geological, and biological time. The twentieth century witnessed the convergence of these different temporal scales due to human action—humanity has now become the central *geological* actor determining the environmental future of the earth. How we conceive our agency and responsibilities in this age of global ecological interdependency is one of the great question marks of our time. It is the hope of this course to show how environmental history can help affect what might happen as much as explain what has happened before.

## **Books:**

#### **Required:**

• Naomi Oreskes and Erik Conway, *The Collapse of Western Civilization: A View from the Future*. Columbia University Press, 2014. (\$9.95)

#### Suggested:

- David Christian, *Maps of Time: Introduction to Big History* University of California Press; First Edition, With a New Preface edition, 2011. (\$16.95)
- J.R. McNeill, Something New Under the Sun: An Environmental History of the Twentieth-Century World. W. W. Norton & Company; Reprint edition, 2001. (\$15.90)

## **Readings:**

Due to the topic's interdisciplinary nature and the short duration of a summer course, a textbook has not been assigned. Instead, we will make use of a variety of scholarly articles and book chapters in order to examine different perspectives on topics. General narrative surveys will be given in lectures. Suggested books make for great general references on environmental themes and historiographical trends, but they are not essential for participation in the course. All of the pdfs will be available on Collab. All of the books will be available in the textbook department of the UVA bookstore.

The course will employ several types of sources that require different approaches. Secondary literature may seem like a lot of technical details and historical facts to sift through and remember. The best strategy is to read the introduction and conclusion first to determine the author's primary thesis and then examine the footnotes to see the types of sources employed (i.e. oral histories, secondary literature, government documents, etc.). Ask what the author's main argument is, how she or he is constructing this argument, and what sources are used to support it.

Primary sources require a different approach. One must identify the historical logic of the argument rather than the logic of the historical analysis. Why is this person saying this at this point in time? What is their perception of a problem at that moment? What are the differences between our perceptions today of such a problem and then? Here students must pay attention to linguistic and conceptual differences. Someone in the early 20<sup>th</sup> century talking about the "environment" is very different from the way this term is used today, but why? How can that be explained historically?

Within primary sources, the course will use media of different eras to see how people interpreted the natural world and attempted to represent it. In this regard, we must have one more level of analysis: what unconscious or conscious ideas, metaphors, and tropes of its time are embodied in this work?

We will learn to interpret primary sources through source analysis exercises. These readings will be provided in class. They will be "blind" readings, unknown beforehand, in which small groups will together interpret the source in context of the course readings and lectures.

## Assignments:

#### + Take-Home Short Answer Exams (30%):

The two open book take-home exams are meant to assess your progress at the end of course units. The goal will be to synthesize the larger themes of the unit.

#### + Discussion (30%)

Daily active participation is required. Two unexcused absences are allowed. Discussion grade drops one grade thereafter.

#### + Temporalities Project: (40%)

The major project will be a group effort to imagine the environmental history of the future to 2100. The goal of this project will be to prioritize risks and prescribe solutions for contemporary global environmental problems. Students will write their own history of the future modeled on the book by historians Naomi Oreskes and Eric Conway, *The Collapse of Western Civilization: A View from the Future*. This means the prediction cannot be purely speculative; students must justify their predictions through the use of sources in order to integrate scientific predictions with socio-historical trends. Throughout this process we will have workshops to help hone topics and learn methods of primary source research. Students will present their story to the class on the final day. All the accounts will be compiled into a larger volume.

This project has three parts:

#### PART I: Prospectus: (5%)

In the first week, students will choose a general field of interest: i.e., the history of infectious disease. They will then choose a special topic within your field that is a relevant contemporary environmental problem, i.e., malaria control.

In the second week, students will begin exploratory research of their topic and write an annotated bibliography and a prospectus. The prospectus must have a 500-word analysis of the historical literature of general field (history of infectious disease) as well as brief explanations on 3 secondary sources and 3 primary sources intended for use in their papers.

#### Part II: Historical Analysis (15%):

In the third week, students will write a 1000 word historical analysis of their special topic.

#### **Part III: Future Prediction (20%)**

In the fourth week, students will write a 1500 word history of the future of their topic to 2100 and present their narratives in a five-minute presentation on the final day of class at the Future History Conference. Final submission will be due on Saturday 8/8.

## **Schedule**

# <u>UNIT I: The Return of Pangaea or The "Short" Second Millennium (1212-1945)</u>

## <u>Week I</u>

## → Monday, 7/13—Introduction: "Global" "Environmental" "History"

## **Readings:**

- Linda Nash, "The Agency of Nature and the Nature of Agency," *Environmental History* (Jan, 2004) pp. 67-70. [Collab]
- J. Donald Hughes, "The Global Dimensions of Environmental History," *Pacific Historical Review*, (Feb 2001), pp. 91-101. [Collab]
- Simon Lewis and Mark a. Maslin, "Defining the Anthropocene," *Nature*, (March 2015) pp. 171-177. [Collab]

## → Tuesday, 7/14—Big History: Airs, Waters, Places (500 mya to 1212 CE):

## **Readings:**

- David Christian, *Maps of Time: An Introduction to Big History* (2011) ch. 10, "Trends in the Era of Agrarian Civilizations" p. 283-328. [Collab]
- Vaclav Smil, "World History and Energy" in Encyclopedia of Energy, vol.6 (2004) p. 549-560. [Collab]
- Sungmin Hong, Jean-Pierre Candelone, Clair C. Patterson, Claude F. Boutron, "Greenland Ice Evidence of Hemispheric Lead Pollution Two Millennia Ago by Greek and Roman Civilizations." Science, New Series, Vol. 265, no. 5180 (Sep. 23, 1994) pp. 1841-1843. [Collab]

## → Wednesday, 7/15—Plagues and Peoples: The Unification of the Globe by Disease (1212-1647)

## **Readings:**

- David Jones, *Virgin Soils Revisited*, The William and Mary Quarterly, Vol. 60, No. 4 (Oct., 2003), pp. 703-723. [Collab]
- Alfred Crosby, "Ecological Imperialism: The Overseas Migration of Western Europeans as a Biological Phenomenon" (2001) 11 pgs. [Collab]
- Heinrich Kleist, The Earthquake in Chile (1807) 12 pgs. [Collab]

## →Thursday 7/16— Inventing the Tropics: Imperial Expansion and the Geographies of Empire (1647-1883)

#### **Readings:**

- Locher, Fabian and Jean-Baptiste Fressoz, "Modernity's Frail Climate: A Climate History of Environmental Reflexivity." *Critical Inquiry* 38, no. 3 (Spring 2012), pp. 579-590. [Collab]
- David Arnold, *The Problem of Nature: Environment, Culture, and European Expansion* (1996), ch.8, "Inventing Tropicality," p.142-168. [Collab]
- Gregory Cushman, *Guano and the Opening of the Pacific World* (2013), ch.2 "The Guano Age" p.38-74. [Collab]

## → Friday, 7/17— Future Project Workshop I: Historicizing the Future

## **Readings:**

• Naomi Oreskes and Erik Conway, *The Collapse of Western Civilization: A View From the Future* (2015)

#### Assignment:

• Select field and topic of interest for workshop discussion.

## WEEK II

## → Monday, 7/20— Global Industrialization: Colonizing "Nature" (1883-1914)

#### **Readings**:

- Carolyn Merchant, *Reinventing Eden: The Fate of Nature in the Western World* (2003), Introduction, "A Garden Planet" p.1-10. [Collab]
- Karl Marx, *Capital vol. I* (1867) ch.7, section 1, "The Labor Process" p.283-292; ch.15, section 10, "Large Scale Industry and Agriculture," p.636-638
- James Webb, *Humanity's Burden: A Global History of Malaria*, ch.4, "Bitter Medicines" p. 92-126. [Collab]
- Michel Foucault, *History of Sexuality vol. I* (1978), part V, "The Right of Death and the Power over Life," p.135-145.

## → Tuesday, 7/21—Global Crisis: The World War of Energy (1914-1945)

#### **Readings:**

- Timothy Mitchell, *Rule of Experts: Egypt, Techno-politics, and Modernity* (2002), ch.2 "Can the Mosquito Speak?" p.20-53. [Collab]
- Edmund Russell, *War and Nature: Fighting Humans and Insects with Chemicals from WWI to Silent Spring* (2001), ch.7 "Annihilation" (119-144). [Collab]

Exam I distributed at 3:15 pm

## **UNIT II: Inventing Spaceship Earth: The Great Acceleration (1945-1986)**

→ Wednesday, 7/22: Film: Soylent Green (1973)

#### Exam I due by 1:00 pm

## → Thursday, 7/23— Global Catastrophe: The Ecology of the Bomb

#### **Readings:**

- Susan Sontag, "The Imagination of Disaster" in *Commentary* (October, 1965) p. 42-48. [Collab]
- Jacob Hamblin, *Arming Mother Nature* (2013) ch.3 "Earth Under Surveillance," p.86-107. [Collab]
- Rachel Carson, *Silent Spring*, (1962), ch. 1 "Introduction: A Fable For Tomorrow" p.1-3, ch.2, "The Obligation to Endure" p. 5-13. [Collab]

## → Friday, 7/24— Future Workshop II: Research

#### Assignment:

• *General Circulation Model Exercise:* Use NASA Godard Institute of Space Studies general atmosphere circulation model to highlight one risk factor of climate change you believe requires particular attention in the future.

## → Monday, 7/27— Global Development: The Triumph of the Expert

Film: [Outside Class] The Emerald Forest (1985): TBD

#### Assignment:

• Paper Prospectus Due by 1:00 pm

## **Readings:**

- Judith Shapiro, *Mao's War Against Nature: Politics and the Environment in Revolutionary China* (2001), ch.2 "Deforestation, Famine, and Utopian Urgency" p. 67-95. [Collab]
- Alison Bashford, "Population, Geopolitics, and IGOs in the mid-twentieth century" (2008) 327-348. [Collab]
- Richard Tucker, "Containing Communism by Impounding Rivers: American Strategic Interests and the Global Spread of High Dams in the Early Cold War" in *Environmental Histories of the Cold War* (2010) p. 148-163. [Collab]

## → Tuesday, 7/28— Global Health: Eradication and Exacerbation

## **Readings:**

- Christian McMillen and Niels Brimnes, "Medical Modernization and Medical Nationalism: Resistance to Mass Tuberculosis Vaccine in Postcolonial India, 1948-1955" in *Comparative Studies in Society and History* 52 (1) 2010, p. 180– 209. [Collab]
- Sunil Amrith, *Decolonizing International Health* (2006), ch. 3, "The Political Culture of International Health, p. 73-90; ch.6, "The Triumph of Population Control," p. 170-175. [Collab]

Guest Speaker: Christian McMillen, University of Virginia

## → Wednesday, 7/29— Global Famine: The Green Revolution

## **Readings:**

- Nick Cullather, *The Hungry World* (2008), ch. 1, "The World Food Problem" p. 12-44. [Collab]
- David Kinkela, *DDT and the American Century: Global Health, Environmental Politics, and the Pesticide That Changed the World* (2011) ch. 6, "Green Revolutions in Conflict: Debating Silent Spring, Food, and Science during the Cold War" p. 107-135. [Collab]

Guest Speaker: Benjamin Davison, University of Virginia

## → Thursday, 7/30: Global Environmentalism: The Growth of Limits

#### **Readings:**

- Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (2011), ch.4, "Slow Violence, Gender, and the Environmentalism of the Poor" p.128-146. [Collab]
- Arne Naess, "The Third World, Wilderness, and Deep Ecology" (1995) p. 282-291. [Collab]
- Jose Auyero, *Flammable: Environmental Suffering in an Argentine Shanty Town*. ch.4 "The Social Production of Toxic Uncertainty" p.140-153. [Collab]

#### Exam distributed at 3:15 pm

## <u>UNIT III: The Anthropocene? The Future Past of Planet Earth (1986-2100</u> <u>CE)</u>

#### → Friday, 7/30—The Anthropocene

**Guest Roundtable:** Bill Eichbaum, World Wildlife Foundation, John Wing Wilson, Environmental Protection Agency.

#### Exam Due: 1:00 pm

#### → Monday, 8/3— Film (In-Class): Darwin's Nightmare (2007), (1hr). Cane Toads: The Conquest (2010), (20 min) Climate Refugees (2010), (10 min)

#### Assignment:

• *Historical Analysis Due at 1:00 pm* 

#### → Tuesday 8/4— Global Extinction: Invasions and Disappearances

#### **Readings:**

- Eric McLamb, "The Global Impact of Feral Cats" (2012) [Collab]
- Leif Fredrickson, "From *Ecocide* to Eco-ally: Picloram, Herbicidal Warfare, and Invasive Species, 1963-2005" in *Global Environmental History* (January, 2014) [Collab]

Guest Speaker: Leif Fredrickson, University of Virginia.

## → Wednesday, 8/5— Global Pollution: Risk Assessment in a Modified World

## **Readings:**

- Adriana Petryna, Life Exposed: Biological Citizens After Chernobyl (2013), ch. 1, "Life Politics After Chernobyl" (10-32) [Collab]
- Christopher Sellers et al., "A Cloud Over History: The Asian Brown Cloud" (1-12)
- Ken Kalfus, *PU-239* (10 pages) [Collab]
- Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (2006), ch. 3 "Feminism, Surveys, and Toxic Details" (p. 57-75) [Collab]

## → Thursday, 8/6—Global Climate Change: Discovering Global Warming

- Spencer Weart, "The idea of anthropogenic global climate change in the 20th century." *Wiley Interdisciplinary Reviews: Climate Change* 1, no. 1 (January 2010): 67-81. [Collab]
- Joseph Masco, "Bad Weather: On Planetary Crisis" in *Social Studies of Science* 40: 7 (2010), p. 9-31. [Collab]
- Paul Edwards, A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming (2010), Introduction, p. 1-11. [Collab]

## → Friday, 8/7—Global Environmental History: 2100 C.E.

#### Future Histories Conference

→ Saturday, 8/8 12:00 pm—Paper Due (Grade drops a step every 2 hours after. Papers NOT accepted after Sunday 8/9 @ 12:00 am).