

## History 306: The Human Age, or Living and Dying in the Anthropocene

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Location/Time:  
Tuesday & Thursday  
3:35-4:50  
CCC 231



### Course Description:

This course explores how human societies from the advent of the Stone Age to the present have utilized science and technology to understand and control their physical environment. Today, evidence of this control abounds in all facets of our lives from how we prevent bacteria and viruses from killing us to large-scale mega-dams to climate-controlled homes and cars. Recently, however, some scientists argue that human society, through its knowledge and tools, has so altered the global environment to suit our needs that we have now entered a new geological era. They call this era the Anthropocene, or the “Human Age.” Their argument is relatively straightforward: with human alteration of the global environmental cycles of the planet (e.g. global climate change) we have become a planetary geophysical force whose impacts are being etched into the very fabric of the geological record. Think of it this way: should some intelligent being visit our planet millions of years after we have long since gone, the biogeochemical signature of our planetary changes will be readily recognizable in the nature left behind. If human society has now indeed begun to re-engineer the planet, they argue, perhaps we ought to recognize this new geological reality for what it truly is: a human geological age.

This course approaches this science of the Anthropocene from the perspective of history. Our primary questions for the course are these: what can we learn about this human age by

studying past human societies and their use of tools and knowledge to transform their physical environment? And how might we use this historical knowledge to inform current debates about how we ought to remedy this changed planet that have scientists so worried? Our answers to those questions will, I think, force us to reconsider the interplay of science and technology in our own society and to rethink what it means to be human in a natural world remade by us.

Our method for investigating these questions will be through in-depth reading seminars and lecture discussions.

### **Learning Objectives:**

#### **Enduring Understandings:**

Human society is richly interconnected with the global environment, despite commonly held beliefs that our tools and scientific knowledge put us above it.

Science and technology shape not only what we know about the environment, but also enables society to control it to suit human needs.

#### **Course Objectives:**

Any engaged student who works assiduously in this course will be able to:

- 1) *Describe* scientific theories about the onset of the Human Age, or Anthropocene.
- 2) *Analyze* how historical perspective on science and technology contributes to a greater understanding of the social and environmental causes and costs of living in the Human Age.
- 3) *Analyze* how historical processes related to scientific, technological, and environmental change have a) shaped and been shaped by society, and b) contributed to uneven relationships within and between peoples across the globe.
- 4) *Explain* the notion of historical “progress” and *evaluate* its cultural impact on understandings of contemporary civil society and its relationship to the global environment.

### **Required Reading:**

#### *Books:*

James C. Scott, *Against the Grain: A Deep History of the Earliest States*, Yale University Press, 2017. Available for purchase at the UWSP Bookstore or online.

David F. Noble, *The Religion of Technology: The Divinity of Man and the Spirit of Invention*, Penguin Books, 1999. Available for purchase at the UWSP Bookstore or online.

Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan*, University of Washington Press, 2010. Available for text rental at the UWSP Bookstore.

Kurt Vonnegut, *Cat's Cradle*, 1963. Available for text rental at the UWSP Bookstore.

*Articles on Desire2Learn (D2L)*: In addition to the books above, you will also be required read articles and bring them to class to discuss. These will be available on D2L. They are noted in the schedule below with an asterisk (\*).

A really important note about the reading materials in this course: You have one of two reading choices for the readings in this course: You can 1) print out the articles in hard copy and physically purchase the books, or 2) obtain and read electronic versions of the articles and books. If you choose option number 2 there are caveats. First, the only electronic devices permissible for the readings are laptops or ipad-type readers. No cell phones! I am strict of this. Second, you must bring your device with you on the day that we discuss those readings. This is the price you pay for going electronic. Understand? Good.

**You must bring these readings to class on the days they are assigned.** Students who fail to bring their readings to class for discussion will be docked attendance.

#### **Assignments:**

Participation: This course is reading-heavy and requires serious analytical thinking. Consequently, it is imperative that you attend class and actively engage in discussions, lecture, and group work. For each class, you will be required to complete all the readings and come prepared to discuss them cogently with your peers.

Short Essays: You will be required to write **two** short essays (3-4 pages) during the semester. The essays serve two purposes. One, they will require you to grapple with some of the themes and ideas in class and analyze their significance to the learning objectives of this course (i.e. notions of progress; the relationship between science, society, and environment). Two, they will provide intellectual scaffolding for you as you begin to develop your podcast (see below). I will provide prompts and guidelines for these. Their due dates are listed in the schedule below.

Reading Tests: There will be a series of tests on the books we are reading in this class. The tests will be short answer and will be given at the beginning of class on the day those books are assigned. Questions will query you on the arguments of the book and ask you to provide specific textual evidence in support of your answers.

The Anthropocene Chronicles Podcast: The main assignment for this course requires you to create a 5-6 minute podcast on a socio-environmental-scientific topic regarding the Anthropocene. This assignment will require you to 1) select an interesting topic whose investigation will reveal some insight into the Anthropocene; 2) gather sources about that topic, including books, articles, interviews, oral histories, and media clips (from YouTube, for example), music and/or pertinent sound effects; 3) write a script of the podcast; and 4) create the podcast (software is available through the university).

There are three graded components to the assignment, each with a due date listed in the schedule: 1) podcast topic proposal; 2) annotated list of relevant lists and media sources; 3) as script of the podcast; 4) presentation of the podcast to the class. I will provide guides for each of these components in class and a grading rubric for the final podcast.

Final Essay: There will be a short final analytical paper on Vonnegut’s *Cat’s Cradle* (2 pages) due during our final exam period (see schedule below.) I will provide a prompt toward the end of the semester. We will be discussing the book and your analyses during the final exam period.

**Note: You must complete all assignments for this class or you will receive an “incomplete” or fail this class.**

**Note 2: Late assignments will be docked a third of a grade for every day late.**

**Rubric for Discussion Participation in Class**

	<b>Excellent “A”</b>	<b>Proficient “B”</b>	<b>Developing “C”</b>	<b>Unacceptable “&gt;C”</b>
<b>Frequency</b>	Student frequently initiates conversation more than once in class.	Student initiates contribution once in each class.	Student contributes only every few classes.	Student does not initiate contribute and requires professor to solicit input.
<b>Quality</b>	Comments are always insightful, constructive, and demonstrate clear engagement with class material. Always employs appropriate terminology.	Comments are mostly insightful, constructive, and demonstrate engagement with class material. Frequently employs appropriate terminology.	Comments are sometimes constructive with signs of engagement and insight. Terminology and comments not always relevant to discussion.	Comments are uninformative, lacking appropriate terminology, and demonstrate lack of engagement with class material.
<b>Listening</b>	Student listens attentively and builds upon remarks of others.	Student mostly attentive and usually builds upon remarks of others.	Student is often inattentive and requires reminders to stay focused. Student sometimes disruptive.	Student does not listen to others, does not pay, attention, and/or detracts from the discussion.

**Grades:**

- Class Participation: 15%
- Readings Tests: 20%
- Anthropocene Chronicles Podcast: 30%
- Papers: 25%
- Final Paper: 10%

**Grading Scale (percentage):**

A	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	60-66
B+	87-89	C	73-76	F	59 and below
B	83-86	C-	70-72		

**Other Stuff:**

*Attendance:* I will record attendance. Students who miss 3 classes will be docked a 1/3 of a grade from their final grade. Students who miss 4-5, 2/3rds of a grade, 6+ a full grade (and so on). For example, if you were to earn a B in this class, but missed 3 classes, your final grade would be a B-. Absences will be unexcused except in extraordinary circumstances, which will require a note from an authority explaining the absence. If you miss an assignment for a class in which you have an excused absence, you must make every effort to make up any missed assignments within a reasonable amount of time.

Related to absences: I find it incredibly rude for students to leave in the middle of class. If, for some legitimate reason, you need to leave class early, I would appreciate the common courtesy of letting me know before class begins. Students who leave class without permission will be docked attendance for that class.

*Late Work:* Stuff happens. Sometimes life takes priority over schoolwork. If something comes up and you need to miss a class or cannot finish an assignment on time, let me know immediately. I do not always grant extensions on assignments, but I do try to be flexible. It is imperative, therefore, that when incidents arise you do your diligent best to keep me informed.

*Electronics:* All electronics must be turned off during class, unless instructed by me to use them. These include cell phones, laptops, and tablets. In some cases, laptop use may be permitted if the student has an accommodation approved by the Disability Services Office (see below).

*Plagiarism:* For information on plagiarism, consult <http://www.uwsp.edu/centers/rights>. See Chapter 14, **Student Academic Standards and Disciplinary Procedures**, pages 5 -10, for the disciplinary possibilities if you are caught cheating. I will vigorously pursue all incidents of plagiarism. Also I use turnitin.com for the essays.

*Equal Educational Opportunities:* If you have a learning or physical challenge which requires classroom accommodation, please contact the UWSP Disability and Assistive Technology Center (6<sup>th</sup> Floor of the Learning Resources Center) with your documentation as early as possible in the semester. They will then notify me, in a confidential memo, of the accommodations that will facilitate your success in the course. Voice: (715) 346-3365, TTY: (715) 346-3362, <http://www.uwsp.edu/special/disability/studentinfo.htm>.

*Writing/Reading Help:* This is a reading and writing intensive course. If you need help you can visit the Tutoring and Learning Center in the basement of the Library. They are there to help you with papers etc. This is totally free! Their webpage is <http://www.uwsp.edu/tlc/Pages/writingReadingTutorials.aspx>. You can also call them to make an appointment at (715) 346-3568.

*Notice on Copyright of Course Material:* As the instructor, I retain all copyright on lectures, slides, assignments, and other course materials. I do not allow anybody to photograph, film, or otherwise record lectures without my express permission. I do not allow anybody to distribute course materials or otherwise send audio or visual recordings of lectures to people not currently enrolled in this class without my express permission. Posting course material that I have created onto course-sharing websites directly violates my copyright on my academic materials.

**\*Note: I reserve the right to alter this syllabus for any reason.**

## Schedule:

Week	Topic	Readings	Assignments
<b>Unit 1: Deep View(s)</b>			
1	Course Introduction		
	Seminar: <i>What Scientists Tell Us about the Global Environment: The Anthropocene Idea</i>	<ul style="list-style-type: none"> <li>* Steffan, Crutzen, and McNeill, “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?”</li> <li>* Syvitski, “Anthropocene: An Epoch of Our Own Making.”</li> <li>* Vitousek, et al., “Human Domination of Earth’s Ecosystems.”</li> <li>* Rockstrom, et al., “A Safe Operating Space or Humanity.”</li> </ul>	
2	Seminar: <i>What Can History Tell Us about Science, Technology, and the Environment? Two Case Studies</i>	<ul style="list-style-type: none"> <li>* Schiebinger, “Gender and Natural History.”</li> <li>* Cronon, “The View from Walden.”</li> </ul>	
	Seminar: <i>Human Evolution</i>	<ul style="list-style-type: none"> <li>* Ambrose, “Paleolithic Technology and Human Evolution.”</li> <li>* Brown, et al., “Fire as an Engineering Tool of Humans.”</li> <li>* Krech, “Pleistocene Extinctions.”</li> <li>* MacGregor, “Olduvai Stone Chopping Tool” &amp; “Olduvai Handaxe.”</li> </ul>	
3	Seminar: <i>Agricultural Revolution</i>	Scott, <i>Against the Grain</i> , beginning – chapter 3.	
	Seminar: <i>Ancient Irrigation States</i>	Scott, <i>Against the Grain</i> , Ch.4-end.	

4	Lecture & Discussion: <i>The Greek Miracle?</i>		
	Seminar: <i>Collapse</i>	* Diamond, sections from <i>Collapse</i> : “The Ancient Ones” and “The Maya Collapses.” * Optional: Diamond, “Prologue.”	<b>Paper 1 Due:</b> Friday by 5 pm on D2L
5	Lecture & Discussion: <i>Columbian Exchange and the “New” World</i>	* Mann, “1491.”	<b>Podcast Topic Due:</b> In class.
	Lecture & Discussion: <i>Colonial Exploitation</i>	* Crosby, “Ecological Imperialism.”	
<b>Unit 2: Modernity</b>			
6	Lecture & Discussion: <i>Scientific Revolution I: Mechanical Philosophy and the Problem of Social Order in Reformation Europe</i>		
	Seminar: <i>Scientific Revolution II: The Religious Roots of Technology</i>	Noble, <i>Religion of Technology</i> , Part I	
7	Lecture & Discussion: <i>Natural History I: Humboldtian Science</i>	* Dettelbach, “Humboldtian Science”	
	Lecture & Discussion: <i>Natural History II: Ecology, Biogeography, and Empire</i>	* Beinart, “Imperial Scientists, Ecology, and Conservation”	
8	Lecture & Discussion: <i>Industrial Revolution I: Machines and Energy</i>	* Marks, “The Industrial Revolution and its Consequences.”	<b>Podcast Annotated Sources Due:</b> In class.
	Seminar: <i>Industrial Consequences I: Early Modern Japan</i>	Walker, <i>Toxic Archipelago</i> , beginning through chapter 2.	



9	Seminar: <i>Industrial Consequences II: Toxicity</i>	Walker, <i>Toxic Archipelago</i> , ch. 3 - finish.	
	Lecture & Discussion: <i>Machines as the Measure of Progress</i>		
10	Seminar: <i>(Un)natural Disasters</i>	* Mikhail, "Ottoman Iceland: A Climate History." * Davis, "Victoria's Ghosts."	
	<b>Unit 3: The Human Age</b>		
	Seminar: <i>Cold War Science and Technology</i>	Noble, <i>Religion of Technology</i> , Part II and Conclusion (optional: ch. 8 and Appendix)	
11	Lecture & Discussion: <i>Biodiversity Loss and the Sixth Extinction</i>	* Kolbert, "The Sixth Extinction" * Quammen, "Planet of Weeds"	<b>Paper 2 Due:</b> Friday November 23 on D2L by 5pm.
	Lecture & Discussion: <i>Overpopulation Concerns</i>		
12	Seminar: <i>Global Environmental Consciousness and the Modern Environmental Synthesis</i>	* Jessee, "Radiation Ecologies" manuscript selections	
	No Class: Thanksgiving!		
13	Lecture & Discussion: <i>Global Climate Change</i>	* Fleming, "The Climate Engineers."	
	Film: "Transcendent Man"		<b>Podcast Scripts Due:</b> In class.
14	Film: "Transcendent Man"		
	Podcast Presentations		
15	Podcast Presentations		
	Podcast Presentations		
<b>Final: Kurt Vonnegut, <i>Cat's Cradle</i>. Tuesday, December 18, 12:30-2:30</b>			