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

Dr. Jerry Jessee Office: CCC 467

Office Hours: T-Th 10:00-11:00

jjessee@uwsp.edu

Location/Time: Tuesday & Thursday 2:00-3:15

CCC 224



Course Description:

We are living in a new epoch of planetary history marked by rapid global environmental degradation and radical social inequality. Scientific and technological advancement have revealed the depth of the crisis—a warming planet, biodiversity loss, ecosystem collapse. At the same time, science and technology have simultaneously driven much of that environmental and socially unsustainable change by empowering human societies—through knowledge and tools—to remake the natural world and control human beings. 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 cars to surveillance systems designed to "monitor" human movement and behavior.

Recently, scientists have argued 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. Human history and natural history, put another way, are inextricably intertwined.

This course approaches this science of the Anthropocene from the perspective of history. Scientists have given us a lot of information on the means by which humans have altered the Earth System. But if you want a fuller understanding of how we got to where we are, you must turn to the Humanities and Social Sciences, for they reveal the underlying values, institutions, structures, and belief systems that undergird the current crisis. History, not science, provides the political imagination to solve the current crisis. Our entry point into the Anthropocene thus revolves around two essential questions:

How can understanding the past help us build a more environmentally sustainable and social just future in the Human Age?

Has scientific and technological advancement resulted in historical progress for humankind?

By the end of this course, you will be able to fully describe the science of the Anthropocene and provide an answer to these questions. This course is thus, by its very nature, inherently interdisciplinary, which is why it fulfils the Interdisciplinary Studies (IS) General Education requirement. It does so by combining approaches in the natural science and historical perspectives.

Our method for investigating these questions will be through in-depth reading seminars and lecture discussions. This is <u>not</u> a lecture course that simply requires you to sit passively and listen. I have structured the course around critical readings, questions, and learning opportunities that facilitate your ability to make meaning out of issues related to the science of the Anthropocene and history. I am a guide, not a knowledge faucet. You are a seeker, not a vessel waiting to be filled with knowledge. Your success in this course thus requires that you not only attend class, but also complete the readings and come prepared to discuss and work through them with me and your peers. Your active engagement in your own learning will make this a much more rewarding experience.

Note that each lecture listed in the schedule below contains a question that the readings and or/lecture material is designed to answer. Use this question to give you purpose as you read. You should be able to address the question by the time we are through with that day's class.

Learning Objectives:

Essential Questions:

How can knowing about the past help us build a more environmentally sustainable and social just future in the Anthropocene?

Has scientific and technological advancement resulted in historical progress for humankind?

Enduring Understandings:

The Anthropocene is not solely, or even fundamentally, a scientific and technological problem, but a social, political, economic, and cultural one that historical perspective can provide vital insights into.

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

To foster understanding, students by the end of 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 past scientific, technological, and environmental change can help citizens engage with current scientific debates about the Anthropocene.
- 3) *Analyze* how past social organization, political institutions, economic systems, and cultural beliefs have shaped the social and environmental present.
- 4) Analyze the notion of historical progress in relation to scientific and technological change and evaluate whether historical change is fundamentally progressive.
- 5) Apply understanding of the history of the Anthropocene by creating a podcast on a contemporary problem related to the Anthropocene that explains how historical perspective can contribute to solving or remediating global environmental problems.

Required Reading:

Books:

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

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

Robert B. Marks, *The Origins of the Modern World: A Global and Environmental Narrative from the Fifteenth to the Twenty-First Century*, Fourth Edition, 2020. Available for text rental at the UWSP Bookstore. You must be sure you have the fourth edition.

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

Stephen J. Macekura, Of Limits to Growth: The Rise of Sustainable Development in the Twentieth Century, 2015. Available for purchase at the UWSP Bookstore or online.

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

Articles on Canvas: 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 Canvas. 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/rent 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:

<u>Participation:</u> 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.

<u>Book/Reading Reviews:</u> You are required to write **four** 2-3 page book reviews on each of the books that we are reading throughout the semester (minus Marks, *The Origins of the Modern World* and *Cat's Cradle*, which you will write on for the final. See below.) Because we are reading these books in sections, your book review will focus on that particular section. You will be assigned which book section to review, with the exception of the first part of Noble, *The Religion of Technology*, which everyone will review. These will be due on the day we discuss that section of the book and you will turn it in on Canvas. A prompt is available on Canvas (I'll also provide a hard copy) but for now know that your reviews should engage in some way with the learning objectives listed above.

<u>Pop Reading Tests:</u> There will be a series of tests on the book sections and articles we are reading in this class. The tests will be short answer and will be given at the beginning of class and at random. Questions will query you on the contents and arguments of the readings and ask you to provide specific textual evidence in support of your answers.

<u>The Anthropocene Chronicles Podcast</u>: 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 historical 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.

Your podcast (including the script) will be due the day you present it to class. I will randomly assign presentation dates.

<u>Final Essay:</u> There will be a short final analytical paper on Vonnegut's *Cat's Cradle* (2-3 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

	Excellent "A"	Proficient "B"	Developing "C"	Unacceptable ">C"
Frequency	Student frequently initiates conversation in every 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.
Quality	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.
Listening	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: 35%

Book Reviews: 20% Final Paper: 10%

Grading Scale (percentage):

А	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	60-66
B+	87-89	С	73-76	F	59 and below
В	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. I cannot, in fairness to the class, accommodate a student for missed work and/or absences when I am notified toward the end of the semester.

Early Finals/Midterms: I do not allow students to take early/late exams except in extremely rare occasions (like you are going to have brain surgery on the scheduled exam day).

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 (6th 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.

Class Schedule:

WEEK 1

Tuesday – Course introduction.

Unit 1: Deep Views (The Origins of Humanity to 1300)

Thursday – Seminar: What Scientists Tell us about the Global Environment: The Anthropocene Idea (What is the scientific evidence for the Anthropocene and what might the future hold for humanity?) *Readings:*

- * Steffan, Crutzen, and McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?"
- * Rockstrom, et al., "A Safe Operating Space or Humanity."
- * Wallace-Wells, "The Uninhabitable Earth."

WEEK 2

Tuesday – Seminar: The Anthropocene in Historical Perspective (Why do we need the liberal arts to understand the Anthropocene?) *Readings:*

- * Bostic and Howey, "To Address the Anthropocene, Engage the Liberal Arts."
- * Sabin, "'The Ultimate Environmental Dilemma': Making a Place for Historians in the Climate and Energy Debate."
- * Macfarlane, "Generation Anthropocene."

Due: Annotated syllabus assignment on Canvas (counted towards pop tests on readings)

Thursday – Seminar: Human Evolution (What makes us human? Are humans natural?) *Readings:*

- * Ambrose, "Paleolithic Technology and Human Evolution."
- * Brown, et al., "Fire as an Engineering Tool of Humans."
- * Krech, "Pleistocene Extinctions."

* MacGregor, "Olduvai Stone Chopping Tool" & "Olduvai Handaxe."

WEEK 3

Tuesday – Seminar: The Agricultural Revolution

(How did the invention of agriculture transform human society and its relationship to the environment?)

Readings:

Scott, Against the Grain, beginning – chapter 3.

Due: Book Review #1a.

Thursday – Seminar: Ancient Irrigation States

(What is a state and how did it transform human society?)

Readings:

Scott, Against the Grain, chapter 4 – end.

Due: Book review #1b.

WEEK 4

Tuesday – Lecture and Discussion: The Greek Miracle?

(What is natural philosophy and why do we credit the ancient Greeks with inventing it?)

Unit 2: The Invention of Modernity (1300-1945)

Thursday – Seminar: Early Modern Empires: The Rise of the West?

(Is the story of modernity about the rise of the West? What is modernity?)

Readings:

Marks, The Origins of the Modern World, beginning – chapter 3.

WEEK 5

Tuesday – Lecture and Discussion: The Scientific Revolution I: Mechanical Philosophy

(How and why did scientists in the 17th century come to think of the natural world as a machine?)

Thursday – Seminar: Scientific Revolution II: The Religious Roots of Technology (How and why did scientists see the technological remaking of the natural word as a religious pursuit?) *Readings:*

Noble, The Religion of Technology, part 1.

Due: Book review #2 (everybody).

WEEK 6

Tuesday – Workshop: Listening to Podcasts

(What makes a good podcast?)

Thursday – Seminar: The Industrial Revolution

(Why did the Industrial Revolution occur in Europe and how does industrial power confer political power?)

Readings:

Marks, The Origins of the Modern World, chapter 4.

WEEK 7

Tuesday – Seminar: Industrial Consequences I, a Case Study: Early Modern Japan

(How do nature and society intersect to shape history?)

Readings:

Walker, Toxic Archipelago, beginning – chapter 2.

Due: Book review #3a.

Thursday – Lecture and Discussion: Humboldtian Science and the Cosmos (What is Humboldtian Science and how did it influence concepts of global environmental interconnection?)

WEEK O

WEEK 8

Tuesday – Lecture and Discussion: Conservation

(Why and how did moderns come to see the environment as in need of conservation and protection?)

Due: Podcast Proposal.

Thursday – Seminar: Industrial Consequences II, a Case Study: Modern Japan

(What were the environmental and social consequences of Japanese industrial modernity?)

Readings:

Walker, Toxic Archipelago, finish.

Due: Book review #3b.

WEEK 9

Tuesday – Seminar: Global Capitalism and Global Inequality

(How did global capitalism and European imperialism remake the social and natural world?)

Readings:

Marks, The Origins of the Modern World, chapter 5 (up to page 159).

Thursday: Lecture and Discussion: Machines as the Measure of Progress

(How did Europeans come to see technology as a marker of social and historical progress? And, how did it influence ideas of racial and cultural inferiority?)

Readings:

Marks, The Origins of the Modern World, chapter 5 (159-73).

Unit 3: The Human Age (1945 to Present)

WEEK 10

Tuesday – Seminar: The Great Acceleration

(How did events following World War II accelerate global environmental change and social inequality?)

Readings:

Marks, The Origins of the Modern World, chapter 6.

Thursday – Lecture and Discussion: Cold War Science and Technology

(How was the Cold War a battle over competing ideas of modernity? How did rapid scientific and technological change contribute to the modern national security state?)

Readings:

Pick a chapter in "Part II" of Noble, The Religion of Technology, and read.

WEEK 11

Tuesday – Lecture and Discussion: Nuclear Bombs and the Invention of the Earth System (How did nuclear bomb tests give rise to new ideas about the global environment as an Earth System?

Due: Podcast Annotated Bibliography.

Thursday – Overpopulation Concerns: The Technological Wizards vs. the Cassandras (How did overpopulation concerns shape environmental thinking and foreign policy during the Cold War? Does the Earth have a carrying capacity?)

WEEK 12

Tuesday – The Origins of Sustainable Development I

(What were the origins of postwar sustainable development activism and what was its relationship to decolonization and international development in the postwar world?)

Readings:

Macekura, Of Limits and Growth, Part I.

Due: Book review #4a.

Thursday – The Origins of Sustainable Development II (How have NGOs attempted to reform international development and policy to be ecologically sustainable?) *Readings:*

Macekura, Of Limits and Growth, Part II.

Due: Book review #4b.

WEEK 13

Tuesday – Lecture and Discussion: Global Climate Change

(How did scientists "discover" global warming and why haven't we done anything about it?)

Readings:

Macekura, Of Limits and Growth, finish.

Thursday – Film: *Transcendent Man*

WEEK 14

Tuesday – Film: Transcendent Man

Thursday – Podcast Presentations

WEEK 15

Tuesday: Podcast Presentations

Thursday: Podcast Presentations

Final: Thursday, May 14, 8:00 – 10:00 am.

(Why are we reading a novel in a history class? Does Cat's Cradle offer a solution to the Anthropocene?)

Readings:

Vonnegut: Cat's Cradle, all. (We will discuss).

Due: Final Paper on Cat's Cradle.