

## **EARTH 144: Climate Change in the Age of Humans**

**Fall 2017**

Professor: Naomi Levin, 2006 CC Little, [nelevin@umich.edu](mailto:nelevin@umich.edu), 734-615-1677

Time: Mondays and Wednesdays, 11:40am – 1:00 pm

Class Location: 3540 CC Little

Office Hours: email to make an appointment

**Attendance** and participation are critical part of the class and will be part of your grade.

\*\*\*There is a waitlist for the class. Attendance is required for the first 2 class meetings otherwise you will be dropped from the class. If your circumstances prevent you from attending the first two class meetings, email Prof. Levin ASAP.

**Description:** this first-year seminar explores how climate change and humans have influenced each other through time. Topics include the role of climate change on human evolution, the collapse of civilizations, the spread of diseases and migration. Topics also include examples of the human impact on climate and the origins of the Anthropocene.

**Class Discussion Board & Communication:** Post questions relating to course material to the class discussion board in Canvas. Students are encouraged to contribute or post answers to other student's questions. For personal or individual issues please post privately or email them. Do not count on an immediate response, especially if the message is sent outside of the normal workday (8:00am – 5:00pm).

**Announcements** will be made via Canvas

### **Books and reading material:**

#### *Required books*

- Plows, plagues, and petroleum: how humans took control of climate, by Willam F. Ruddiman, 2010 (2010 version with a new afterword by the author is preferred)
- The Sixth Extinction: An Unnatural History, by Elizabeth Kolbert, 2014 (any addition)

Other readings and resources will be posted on Canvas

### **Assessment**

10%: class participation: mini presentations, short assignments for in class reporting

20%: Plows, Plagues, and Petroleum Assignment (due in class October 11)

45%: Quizzes (Sept 27, Oct 30, December 4)

25%: Presentation (Dec 6, Dec 11)

**Digital Devices & Social Media:** Use of digital devices should be limited to what's related to class activities. Any other use is distracting and selfish. Consider turning off your phone and physically put it away for the whole class. If using a computer or tablet to take notes, turn off the WiFi unless you're doing something directly related to class. If you cannot avoid non-class related activities during class then don't attend class and get whatever you can from the posted lecture slides and notes from a classmate.

**Accommodations:** If you require accommodations due to learning disabilities, religious practices, physical requirements, medical needs, university-related travel or any other reason, get in contact with Prof. Levin as soon as you can. The sooner you get in contact, the easier a solution will be.

**Academic Integrity:** In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the internet and electronic devices, unauthorized collaboration, alteration of graded assignments, lying, facilitating academic dishonesty, and unfair competition. You must cite the work of others properly.

Consult LSA guidelines and ask for clarification if you have questions.

<https://lsa.umich.edu/lsa/academics/academic-integrity.html>

Take the LSA Academic Integrity quiz to test your knowledge!

<https://webapps.lsa.umich.edu/SAA/UGStuAdv/App/AcadInt/AcadInt.aspx>

### Tentative Schedule

Class	Day	Date	Topic
1	W	6-Sep	Introduction
2	M	11-Sep	Drought in North America
3	W	13-Sep	Big picture view of human history and climate change
4	M	18-Sep	Climate system basics
5	W	20-Sep	Behind the scenes: human evol & climate change research
6	M	25-Sep	Before <i>H. sapiens</i>
7	W	27-Sep	QUIZ 1
8	M	2-Oct	Becoming <i>H. sapiens</i>
9	W	4-Oct	First impacts on climate; fire and megafauna
10	M	9-Oct	UMNH: mammoth activity
11	W	11-Oct	PPP discussion
	M	16-Oct	NO CLASS, FALL BREAK
12	W	18-Oct	Approaches to Paleoclimate
13	M	23-Oct	Agriculture's Origins
14	W	25-Oct	Effects of Agriculture
15	M	30-Oct	QUIZ 2
16	W	1-Nov	Complex societies
17	M	6-Nov	Complex societies
18	W	8-Nov	Presentation workshop
19	M	13-Nov	Industrial Age
20	W	15-Nov	Industrial Age
21	M	20-Nov	Climate models
22	W	22-Nov	Future climate
		23-Nov	Thanksgiving
23	M	27-Nov	Conceptualizing the Anthropocene
24	W	29-Nov	Conceptualizing the Anthropocene
25	M	4-Dec	QUIZ 3
26	W	6-Dec	presentations
27	M	11-Dec	presentations