INTG 002 (Spring) The Anthropocene

The concept of the Anthropocene — the age of humanity — is widely and seriously debated by Earth scientists, social scientists, humanities scholars, activists, and artists. It provides a controversial but compelling lens through which to examine human-environment relationships.

Earth Science (Prof. Alain Plante): Earth System Science endeavors to understand the structure and functioning of the Earth as a complex, adaptive system. While recognition that life exerts a strong influence on the Earth's chemical and physical environment, humans have not been historically integrated in the conceptualization of the Earth system except as a minor external factor. There is now unequivocal evidence for the various ways that humans have altered the "natural" functioning of Earth systems, and out of these observations was born the term "Anthropocene". Earth scientists have increasingly debated the beginnings of the Anthropocene and whether it should be formalized as a geological time period, how and to what degree humans have altered Earth systems, and what the Earth may look like in the future - with or without humans.

History (Prof. Etienne Benson): Historical scholarship seeks to develop nuanced understandings of the complexities of the human past, but until recently has taken a fairly simplistic view of the nonhuman entities and forces that make human life possible and which, in turn, are affected by human activity. In recent years historians have begun to develop more sophisticated ways of understanding the entanglement of human and nonhuman histories through time - a project for which the concept of the Anthropocene has served as an inspiration, as well as a bridge to parallel developments in the natural sciences. Historians are increasingly crafting narratives that acknowledge the role of humans in shaping the Earth, as well as the role of the Earth in shaping human history.

Course Structure:

- Lectures: Tues 10:30-11:45am and 3:30-5pm. Synthesis sessions: Thurs, 10:30-11:45.
- Attendance is required due to the frequent use of active- and peer-learning activities.

Readings:

- One core reading for both courses: Erle C. Ellis, *Anthropocene: A Very Short Introduction*. Oxford University Press, 2018. (Online version available via Franklin.)
- Each course (Earth Science, History) also has additional readings of 2-3 articles per week.

Assignments:

- There are no structured exams or final paper for this course. Instead your grade will consist of cumulative scores on weekly assignments such as reading response papers, reading annotation and discussion, and in-class guizzes and exercises.
- Earth Science: Four reading response papers, 2-3 pages each; periodic Perusall reading annotations and graded in-class exercises
- History: Three papers, 5-7 pages each; periodic graded in-class guizzes and exercises

INTRODUCTIONS	
Week 1	Introductions: We will introduce ourselves, describe the basic questions and
(January 18)	themes of the course, and review aims, expectations, and requirements.
Week 2:	The Human Age: What is the Anthropocene? Where did the Anthropocene
(January 25)	idea come from?
Week 3	Time: How and why do we distinguish between different periods of time on
(February 1)	geological or human scales?
Week 4	Space: How did "global" scale science come to be? How can we know the
(February 8)	global environment as a whole?
Week 5	Origin Stories: When did the Anthropocene start?
(February 15)	Origin Stories. When did the Anthropocene start:
ASPECTS OF GLOBAL CHANGE	
Week 6	Climate: How have scientists developed an understanding of the global
(February 22)	climate system? How have humans altered the climate?
Week 7	Rivers: How have humans changed the flow of water in rivers? How have
(March 1)	rivers shaped human societies, and vice versa?
Spring Break (March 7-11)	
Week 8	Nutrients: How did agriculture become industrialized? How has
(March 15)	industrialized agriculture changed the global cycling of nutrient elements?
Week 9	Biodiversity: How have humans changed Earth's biodiversity? Why do
(March 22)	people value biodiversity?
Week 10	Toxics: What are the sources and impacts of toxic compounds? What are
(March 29)	the implications of their uneven distributions among human populations?
Week 11	The Earth After Us: How long will the human traces on the Earth last? How
(April 5)	have people imagined the disappearance of humanity from Earth?
RESPONDING TO THE ANTHROPOCENE	
Week 12	Representing the Anthropocene: How do scientist visualize human impacts
(April 12)	on the environment? How have artists envisioned the Anthropocene?
Week 13	Repositioning Humans in the Anthropocene: The Anthropocene as an era
(April 19)	blurring distinctions between "nature" and "culture."
Week 14	Resignation and Hope in the Anthropocene: What reasons do we have for
(April 26)	resignation? What reasons do we have for hope?