

Course title: Anthropocene – how people are transforming the planet

Language of instruction: English

Professor: Marco Madella

Professor's contact and office hours: Normally the one hour before class

Course contact hours: 45

Recommended credit: 6 ECTS credits

Course prerequisites: There are no prerequisites for this course.

Language requirements: Recommended level in the European Framework B2 (or equivalent : Cambridge Certificate if the teaching language is English, DELE or 3 semesters in the case of Spanish)

Course focus and approach:

Archeology and history have been expressing a growing interest in incorporating future-oriented perspectives and the use of the past in planning a better future. Concern for the issues associated with the "Anthropocene" debate is a clear example. Scientists have argued that the Anthropocene is a useful concept to denote the measurable impact of humanity on the planet. In the Anthropocene, planetary and human time scales converge and there is an interrelation between geology and the human being. The study of the Anthropocene proposes a radical reassessment of the role of humanity in the world (past, present and future). How, then, does the concept of Anthropocene change the archaeological and historical understanding of human relations with the vital environment, and with ecology in a broader sense?

Course description:

The course involves working on the connections between nature and human beings (socio-ecological dynamics) and the concept of "entanglement" of societies (as seen through the lens of archaeology and history), global climate change and environmental change, and our ability to measure and understand these changes. This course will address the theoretical perspective of the Anthropocene and how archeology/history can significantly contribute to this discussion, not only in terms of ideas and arguments, but also in terms of a large body of material evidence, in the form of the archaeological/historical record, against which the specific arguments of the Anthropocene can be verified and evaluated. In addition, the course will address, across a broad disciplinary range, how a deep history approach can contribute in finding solutions to some of the most pressing current problems and to design more sustainable and resilient livelihoods.

Learning objectives:

The student will acquire a set of learning skills and he/she will be able to:

- Identify and evaluate the great debates and theories within the fields of Social and Climate Change.
- Understand the consequences of using various methodologies (from humanistic disciplines to social and natural sciences) when studying historical phenomena.
- Explain the cultural and social dynamics from multidisciplinary studies focused on material culture, natural resources and landscape.
- Identify the central social and ecological issues that underlie a particular local or regional historical problem.
- Explain how the local or regional study can be a support in the analysis of macro-regional and / or global problems.
- Know how to integrate theoretical, quantitative and qualitative information when proposing interpretations of historical-archeological or socio-ecological problems both global and local.

Course workload:

Readings (suggested bibliography), lectures, student presentations (preparation of the presentations outside class time), one/two essays, final exam.

Teaching methodology:

The course will start through theoretical classes that will allow the students to create a framework for then discussing real-life examples taken from current project at UPF or from other key projects at international level. The students will be guided to critically assess data and to be able to understand the results of a diverse array of methodological approaching, spanning geology, anthropology, archaeology and climate change. The teaching approach will include lectures delivered by the teaching staff, seminars with active participation of the students, and student presentations with open discussion from fellow students and teacher(s).

Assessment criteria:

Class participation	30%
Mid-Term essay	20%
Presentation in class	20%
Final exam	30%

Absence policy

Attending class is mandatory and will be monitored daily by professors. Missing classes will impact on the student’s final grade as follows:

Absences	Penalization
Up to two (2) absences	No penalization
Three (3) absences	1 point subtracted from final grade (on a 10 point scale)
Four (4) absences	2 points subtracted from final grade (on a 10 point scale)
Five (5) absences or more	The student receives an INCOMPLETE (“NO PRESENTADO”) for the course

The BaPIS attendance policy **does not distinguish between justified or unjustified absences**. The student is deemed responsible to manage his/her absences.

Only absences for medical reasons will be considered justified absences. The student is deemed responsible to provide the necessary documentation. Other emergency situations will be analyzed on a case by case basis by the Academic Director of the BaPIS.

The Instructor, the Academic Director and the Study Abroad Office should be informed by email without any delay.

Classroom norms:

- No food or drink is permitted in class
- No use of phones or phones on desk
- Students will have a ten-minute break after each one-hour session

Weekly schedule

WEEK 1

Session 1 – Course description: Why a course on the Anthropocene? Introduction to the course, description of the syllabus, method of assessment and expected readings. Questions from students.

Session 2 – An introduction to the Anthropocene – what’s behind a name and origins.

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 1)

WEEK 2

Session 1 – Earth system - our place on our planet – Part A

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 2)

W Steffen et al 2007. The Anthropocene: Are human now overwhelming the great forces of nature? *AMBIO* 36:614-621.

Session 2 – Earth system - our place on our planet – Part B

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 2)

W Steffen et al 2007. The Anthropocene: Are human now overwhelming the great forces of nature? *AMBIO* 36:614-621.

WEEK 3

Session 1 – Human time versus Geologic time – a quick review on time at planetary level

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 3)

Session 2 – The transition to the Anthropocene – The Great Acceleration? Part A

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 4)

Steffen et al 2015. The Trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review* 1-18.

WEEK 4

Session 1 – The transition to the Anthropocene – The Great Acceleration? Part B

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 4)

Steffen et al 2015. The Trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review* 1-18.

Session 2 – When humans achieve dominance of the Earth's environments? Archaeology and the Anthropocene – Early humans

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 5)

B Smith & M Zeder 2013. The onset of the Anthropocene. *Anthropocene* 4:8-13.

WEEK 5

Session 1 - When humans achieve dominance of the Earth's environments? Archaeology and the Anthropocene - Farming and the first energy revolution – Part A

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 5)

E Ellis et al 2013. Used Planet: A global history. *PNAS* 110:7978-85.

Boivin et al. 2016. Ecological consequences of human niche construction. *PNAS* 113/23:6388-96

Session 2 – When humans achieve dominance of the Earth's environments? Archaeology and the Anthropocene - Farming and the first energy revolution – Part B

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 5)

E Ellis et al 2013. Used Planet: A global history. *PNAS* 110:7978-85.

Boivin et al. 2016. Ecological consequences of human niche construction. *PNAS* 113/23:6388-96

WEEK 6

Session 1 – The firsts globalizations (prehistoric exchanges and the Columbus exchange) – new resources, new challenges, new transformations

Readings

MK Jones et al 2011. Food globalization in prehistory. *World Prehistory* 43(4):665-675

N Nunn & N Qian 2010. The Columbian Exchange: A History of Disease, Food, and Ideas. *The Journal of Economic Perspectives*, 24(2): 163-188

N Boivin, DQ Fuller & A Crowther 2012. Old World globalization and the Columbian exchange: comparison and contrast. *World Archaeology* 44(3):452-469

Session 2 – The firsts globalizations and an excursus on food

Readings

F Fernandez-Armesto & D Lord Smail 2011. Food, in (eds.) A Shyrock & D Lord Smail, *Deep History*. Berkeley: University of California Press, pp 131-159

WEEK 7

Session 1 – Human versus Non-Human, a real divide? Part A

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 6)

Denevan 1992. The pristine myth: the landscape of the Americas in 1492. *Annals Association American Geographers* 82:369-385

C Clemens et al 2020. Domesticated Nature: The Culturally Constructed Niche of Humanity, in C. Baldauf (ed.), *Participatory Biodiversity Conservation*, Springer (in press, no pages)

Session 2 – Human versus Non-Human, a real divide? Part B

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 6)

J Rockström et al 2009. A safe operating space for humanity. *Nature* 461:472-475

WEEK 8

Session 1 – Mid-term essay results – class discussion

Session 2 – Speed presentations (a set of 10 minutes presentation plus class discussion)

WEEK 9

Session 1 – Speed presentations (a set of 10 minutes presentation plus class discussion)

Session 2 – Anthropocene, politics and policies – Whose Anthropocene

Readings

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 6)

D Chakrabarty 2018. Anthropocene Time. *History and Theory* 57(1):5-32

K Morrison 2015. Seminar: *A journal of Germanic studies* 673:75-80

WEEK 10

Session 1 – Anthropocene, politics and policies – Critics

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 6)

J Moore 2017. The Capitalocene, Part I: on the nature and origins of our ecological crisis. *Journal of Peasant Studies* 44(3).

Session 2 – Anthropocene, politics and policies – Traditional Ecological Knowledge, Geoengineering, and the Good Anthropocenes

EC Ellis 2018. Anthropocene, a very short introduction (Chapter 6)

C Hamilton 2015. The theodicy of the “Goof Anthropocene”. *Environmental Humanities* 7:233-238

WEEK 11

Session 1 – Exam

Session 2 – Exam results and discussion

Required readings:

All listed in the lectures “Readings” – further readings might be added during the course and given at least a week in advance of the session for which they are meant.

Recommended bibliography:

ELLIS, EC. 2018. Anthropocene – a very short introduction. Oxford: Oxford University Press.

McNEILL, JR and ENGELKE, P. 2016. The Great Acceleration. Boston: Harvard University Press.

PURDY, J. 2015. After Nature: A Politics for the Anthropocene. Boston: Harvard University Press.

RUDDIMAN, WE. 2005. Plows, Plagues, and Petroleum: How Humans Took Control of Climate. Princeton: Princeton University Press.

SCHWÄGERL, C. 2014. The Anthropocene: The Human Era and How It Shapes our Planet. London: Synergetic Press.

SCELLENGBERGER, M. and NORDHAUS, T. 2011. Love your Monsters: Post-environmentalism and the Anthropocene. Breakthrough Institute (kindle edition).