

ANT3930

PAST HUMAN ENVIRONMENTS: HOW OUR ANCESTORS TERRAFORMED THE EARTH

Course Information

Spring 2021

T 11:45-12:35 / Th 10:40-12:35

Online / LEI 0142 / TUR 1105

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Course Description

This course examines both our concepts of contemporary human-environment interaction and the many ways in which those depend on how we understand the human past. It will familiarize you with how archaeology approaches interactions between humans and their environments, covering the underlying theoretical issues, surveying the methodologies employed, and considering the narratives about past human-environment interactions that archaeologists produce. You will acquaint yourself with archaeology's long history of interest in the environments of past societies and human relationships with those environments, as well as with the renewed attention to human-environment relationships that has accompanied modern interest in climate change, sustainability, and human impacts.

We will focus on the perspectives, methods, and data that make archaeology fundamental to discussions of human-environment interactions not only in the past but also in the present – for instance, archaeology's vital contribution to ecological conservation and restoration. We will also consider the importance of paleoenvironmental data to archaeological research, the ways in which it can be used, and the various methods of recovering and analyzing such data to reconstruct human-environment interactions in prehistory. In addition to introducing these issues, we will explore them in more detail through three case studies: human colonization of the island Pacific, the florescence and decline of the pre-Columbian Central Mexican metropolis of Teotihuacan, and the reconstruction of pre-Columbian demography in the Americas.

Course Objectives

This course will familiarize students with the major theoretical concerns that drive archaeological interest in human-environment interaction, as well as with a broad sample of the methods employed in such research. While practical experience with these methods is beyond the scope of this course, students will become informed and critical consumers of the relevant data, aware of both the potentials and limitations of both paleoenvironmental and archaeological reconstructions of past human-environment interactions.

Course Structure

This course employs a hybrid lecture/seminar format to introduce students to key concepts and methods in archaeological approaches to human-environment interactions in the past. In most weeks this will entail an introductory lecture and readings for the short session (Tues), followed by a seminar-style discussion focused on more detailed readings in the long session (Thurs). Students will share responsibilities for running these seminars (details below).

Readings

There is one required text, a survey of contemporary human-environment interactions:

Moran, Emilio F. 2016 *People and Nature: An Introduction to Human Ecological Relations*, 2nd Edition. Wiley Blackwell.

We'll use this text as a thematic guide for the course, picking up the main points that Moran highlights and considering how they rely on and are shaped by our knowledge of the human past. In order to analyze those underpinnings, we will also draw from a wide variety of articles and book excerpts (listed below and available on Canvas), first to introduce a series of foundational concepts and then to move through a series of case studies. Readings are specified for each class meeting below. These consist primarily of specific applications of the theoretical approaches and methodologies that we will discuss.

Requirements and Evaluation

Attendance and active participation in discussion is mandatory. Evaluation will be based on evidence of active engagement in the class, and on two major written assignments.

Attendance

This course is primarily a seminar; since attendance is fundamental to the learning goals, it is required. Of course, life may sometimes intervene, in which case you are expected to notify the instructor ahead of time or as soon as practical afterwards. More than two absences will already constitute >10% of the course, and you should consult with the instructor about appropriate make-up activity. Excused absences must be consistent with university policies and require appropriate documentation. Additional information can be found in [UF's Attendance Policies](#).

Zoom

A virtual seminar is more challenging than an in-person one: it's harder for everyone to get and stay engaged, it's more difficult for me to tell if you are engaged (or not), and can be exhausting to feel surveilled. At the same time, it places the burden where it belongs: it is up to you to stay engaged, rather than up to the instructor to police you. Please keep in mind that we (humans) are not good at multi-tasking - however much we may think we are - and resist the temptation to check email/social media/news.

Evaluation

Your final grade will be calculated as follows:

15% Participation (participation in and engagement with class discussion, as well as attendance)

15% Facilitation of seminar and occasional written responses to readings/prompts

5% Presentation of Paper I in class

25% Paper I (~1200 words) – **due 26 Feb**

5% Outline of final paper – **due 15 April**

5% Presentation of (preliminary) Final Paper – **15 April**

30% Final Paper (~2000 words) – **due 26 April**

Participation

All students must participate in weekly discussions (15% of final grade). Participation includes attendance, active listening, and constructive contributions to discussion. We will also experiment with shared annotation of course readings; to the degree that we adopt this practice, your engagement with this discussion-in-the-margins will also constitute part of your participation in the course.

Facilitation

All students must facilitate a proportional share of the readings for the seminar portion of the course (~25 papers divided among the total number of enrolled students; 15% of final grade). The facilitator will be responsible for guiding the class in detailed discussion of the reading for which they are responsible, highlighting key questions raised, significant claims made, and the kinds of methods and evidence used. Facilitators should also produce and upload to Canvas a ½-page précis of the article at least 24 hours ahead of time.

Paper I (~1200 words)

A review of piece of recent literature (academic publication or science journalism) that makes claims about human/environment interaction. What claims does it make, with what basis, and what are the implications? The instructor will provide a list of potential articles, or you may find your own; in the latter case you should submit the article you intend to use for approval.

Final Paper (~2000 words)

The final paper for the course will consist of a research proposal in which, drawing on your own interests, you outline a project which will investigate some aspect of human-environment interactions. The setting should be a real-world one, but the specific archives that you choose to examine may be real or imagined – what, if you could choose, would be your ideal site(s) and why? Define a research question, argue for its significance, and what methods would you use and why and how they would enable you to address your question. A preliminary version of this proposal will be presented to the class for critique and feedback on **15 April**, at which point you will also turn in an outline of your proposal.

Course Schedule

Readings for each date should be completed for that date.

Week	Theme	Dates	Readings	Notes
1		12 Jan	Course Introduction	
		14 Jan	Redman et al. 2004:Introduction Andersen 2017 Pleistocene Park [also https://pleistocenepark.ru/]	
2	Nature/Culture	19 Jan	Moran Ch.1	
	Nature/Culture	21 Jan	Cronon 1996 Barry 1999:11–29	
3		26 Jan	NO CLASS	[RDMed Workshop]
	Human-environment interactions	28 Jan	Moran Ch. 2 Contreras 2017	Why and how study human/environment interactions – historical perspective
4	Archaeological and paleoenvironmental evidence	2 Feb	Kirch 2005:409–428	Underpinnings of Moran – the archaeological evidence & argument; long-term evolution of human-environment interactions
	Archaeological and paleoenvironmental evidence	4 Feb	Evans and O'Connor 1999:Ch.15 Roberts 1998:Ch.2	Underpinnings of Moran – the archaeological evidence & argument; paleoenvironmental and environmental archaeological methods
5	Foragers	9 Feb	Kelly 2013:Ch.1	Underpinnings of Moran – long forager past
	Foragers	11 Feb	Bliege Bird et al. 2008 Klein 1992 Nagaoka et al. 2018 Pyne 1993	Long forager past, Pt. 2 – ecological effects
6	Neolithic	16 Feb	Price and Gebauer 2000:3–9 Zeder 2008	Underpinnings of Moran – the Neolithic
	Neolithic	18 Feb	Köhler-Rollefson 1988 Brown 1997	The Neolithic, Pt. 2 – ecological effects
7	Neolithic	23 Feb	Barrett 2011	The Neolithic, Pt. 2 – interpreting ecological effects cont.
		25 Feb	NO CLASS	“Recharge day” – no class
26 Feb – Paper I due				
8	Broadening the base of evidence	2 Mar	Student presentations	Paper I sites/argument/evidence

		4 Mar	Student presentations	Paper I sites/argument/ evidence
9		9 Mar	Student presentations	Paper I sites/argument/ evidence
	Archaeology of Environmental change	11 Mar	Moran Ch. 3	
10		16 Mar	Smith 2017 Redman et al. 2004:Ch.8	Underpinnings of Moran – Urbanism
		18 Mar	Hoffman 2007 Chase and Chase 2016	Urbanism, Pt. 2 – ecological effects
11		23 Mar	Moran Ch. 4 & 5	
		25 Mar	Kirch 1997, 2007	Case Study I – Pacific Islands
12		30 Mar	Spriggs 1997	Pacific Islands cont.
		1 Apr	Millon 1970 Cowgill 2015:Ch.1	Case Study II – Teotihuacan
13		6 Apr	Gorenflo 2015 Biskowski 2000	Teotihuacan cont.
		8 Apr	Moran Ch. 6 Bevan et al. 2019	Demography
14		13 Apr	Chamberlain 2009	Case Study III – past demography
		15 Apr	Student presentations	Final paper outlines
15		20 Apr	Denevan 1992 Koch et al. 2019	Past demography cont.
		22 Apr	Moran Ch.7-9 Hayashida 2005	
26 April – Final Paper due				

List of Readings

- Andersen, Ross
 2017 Welcome to Pleistocene Park. *The Atlantic*, 2017.
- Barrett, John C
 2011 The Neolithic Revolution: An Ecological Perspective. In *The Dynamics of Neolithisation in Europe: Studies in Honour of Andrew Sherratt*, edited by Angelos Hadjikoimis, Erick Robinson, and Sarah Viner, pp. 66–89. Oxbow Books.
- Barry, John
 1999 Environment, Nature and the Nonhuman. In *Environment and Social Theory*, pp. 11–29. Routledge, London.
- Bevan, Andrew, Alessio Palmisano, Jessie Woodbridge, Ralph Fyfe, C Neil Roberts, and Stephen Shennan
 2019 The changing face of the Mediterranean – Land cover, demography and environmental change: Introduction and overview. *The Holocene* 29(5):703–707. DOI:10.1177/0959683619826688.
- Biskowski, M.
 2000 Maize preparation and the Aztec subsistence economy. *Ancient Mesoamerica* 11(02):293–306.
- Bliege Bird, Rebecca, Douglas W Bird, Brian F Coddling, Christopher H Parker, and James H Jones
 2008 The “fire stick farming” hypothesis: Australian Aboriginal foraging strategies, biodiversity, and anthropogenic fire mosaics. *Proceedings of the National Academy of Sciences* 105(39):14796–14801.
- Brown, T
 1997 Clearances and clearings: deforestation in Mesolithic/Neolithic Britain. *Oxford Journal of Archaeology* 16(2):133–146.
- Chamberlain, Andrew
 2009 Archaeological Demography. *Human Biology* 81(3):275–286. DOI:10.3378/027.081.0309.
- Chase, Arlen F., and Diane Z. Chase
 2016 Urbanism and Anthropogenic Landscapes. *Annual Review of Anthropology* 45:361–376.

Contreras, Daniel A.

2017 Correlation is Not Enough – Building Better Arguments in the Archaeology of Human-Environment Interactions. In *The Archaeology of Human-Environment Interaction: Strategies for Investigating Anthropogenic Landscapes, Dynamic Environments, and Climate Change in the Human Past*, edited by Daniel A. Contreras, pp. 3–22. Routledge, New York.

Cowgill, George L.

2015 *Ancient Teotihuacan: Early Urbanism in Central Mexico*. Cambridge University Press, Cambridge.

Cronon, William

1996 The trouble with wilderness: or, getting back to the wrong nature. *Environmental History* 1(1):7–28.

Denevan, William M.

1992 The Pristine Myth: The Landscape of the Americas in 1492. *Annals of the Association of American Geographers* 82(3):369–385.

Evans, John G, and Terence Patrick O'Connor

1999 *Environmental Archaeology: Principles and Methods*. Sutton Pub Limited.

Gorenflo, Larry J.

2015 Compilation and analysis of pre-columbian settlement data in the Basin of Mexico. *Ancient Mesoamerica* 26(01):197–212.

Hayashida, Frances

2005 Archaeology, Ecological History, and Conservation. *Annual Review of Anthropology* 34:43–65.

Hoffman, Richard C.

2007 Footprint Metaphor and Metabolic Realities: Environmental Impacts of Medieval European Cities. In *Natures Past: The Environment and Human History*, pp. 288–325. The University of Michigan Press, Ann Arbor, MI.

Kelly, Robert L

2013 *The lifeways of hunter-gatherers: the foraging spectrum*. Cambridge University Press.

Kirch, Patrick V.

1997 Microcosmic histories: island perspectives on “global” change. *American Anthropologist* 99(1):30–42.

2005 Archaeology and Global Change: The Holocene Record. *Annual Review of Environmental Resources* 30:409–440.

2007 Three islands and an archipelago: reciprocal interactions between humans and island ecosystems in Polynesia. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh* 98(01):85–99.

Klein, Richard

1992 The impact of early people on the environment: the case of large mammal extinctions. *Human impact on the environment: Ancient roots, current challenges*:13–34.

Koch, Alexander, Chris Brierley, Mark M Maslin, and Simon L Lewis

2019 Earth system impacts of the European arrival and Great Dying in the Americas after 1492. *Quaternary Science Reviews* 207:13–36.

Köhler-Rollefson, I.

1988 The aftermath of the Levantine Neolithic revolution in the light of ecological and ethnographic evidence. *Paleorient* 14(1):87–93.

Millon, Rene

1970 Teotihuacan: completion of map of giant ancient city in the Valley of Mexico. *Science* 170(3962):1077–1082.

Nagaoka, L, T Rick, and S Wolverton

2018 The overkill model and its impact on environmental research. *Ecol Evol* 8(19):9683–9696.

Price, T. Douglas, and Anne Birgitte Gebauer (editors)

2000 *Europe's First Farmers*. Cambridge University Press, Cambridge.

Pyne, SJ

1993 Keeper of the flame: A survey of anthropogenic fire. *Fire in the environment: the ecological, atmospheric, and climatic importance of vegetation fires*, New York, John Wiley and Sons:245–266.

Redman, Charles L, Steven R. James, Paul R. Fish, and J. Daniel Rogers (editors)

2004 *The Archaeology of Global Change: The Impact of Humans on Their Environment*. Smithsonian Institution Press, Washington, D.C.

Roberts, Neil

1998 *The Holocene: An Environmental History*. Vol. 2nd. Blackwell Publishers, Malden, MA.

Smith, Michael

2017 How can archaeologists identify early cities? Definitions, types, and attributes. In *Eurasia at the dawn of history: Urbanization and social change*, pp. 153–168. Cambridge University Press.

Spriggs, Matthew

1997 Landscape Catastrophe and Landscape Enhancement: Are Either or Both True in the Pacific? In *Historical ecology in the Pacific Islands: prehistoric environmental and landscape change*, edited by Patrick V. Kirch and Terry L. Hunt, pp. 80–104. Yale University Press, New Haven.

Zeder, MA

2008 Domestication and early agriculture in the Mediterranean Basin: Origins, diffusion, and impact. *Proceedings of the National Academy of Sciences* 105(33):11597.

University Policies

Grading

Information on UF grading policy may be found at: [UF Graduate Catalog](#) and [Grades and Grading Policies](#).

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing [online evaluations](#). Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students on the [Gator Evals page](#).

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/scr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: counseling.ufl.edu/cwc/, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

[E-learning technical support](#), 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

[Career Resource Center](#), Reitz Union, 392-1601. Career assistance and counseling.

[Library Support](#), Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](#), Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

[Writing Studio](#), 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

[Student Complaints Campus](#)

[On-Line Students Complaints](#)