Anthropology 2589

Topics in Archaeology: Environmental Archaeology

Mon., Wed., Fri. 10-10:50AM, New Cabell Hall Rm. 315

Instructor: Kyle Edwards

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Office: Brooks Hall 311

Office Hours: Monday 11:30AM-1:30PM or by appointment

**Course Description**: Environmental Archaeology addresses the approaches used by archaeologists to analyze how past peoples interacted with and shaped their environments. The course begins with a survey of methods employed to collect environmental data, followed by the analysis of case studies illustrating the relationships between cultural practice and ecology. Key topics include climate change, agricultural systems, nutrition, colonialism, and urban development.

**Honor Code:** Students are responsible for following the University of Virginia’s Honor Code. Any viloation of these policies will result in a failing grade for the assignmnet in question and an official report to the honor committee.

**Course Policies:**

* Class attendance is required. Repeated absences or tardiness will affect your overall participation grade.
* Please silence your phone and keep them stowed during section. If you need to use your laptop during class, please do so responsibly and refrain from browsing the internet or checking social media. Repeated violations of this policy will affect your participation grade.
* In this class, we want to encourage open and productive discussions, so please respect your classmates and their views. Disagreements are ok, and debate is encouraged; however, this must occur in a respectful environment.
* Please do not hesitate to ask questions about a topic that interests or confuses you. This helps me identify concepts that may be unclear to the class and can make an important contribution to our discussions.
* **LATE ASSIGNMENTS:** Late assignments will not receive full credit. Anything turned in late will lose a full letter grade for everyday that it is late. If there are extenuating circumstance, please contact me prior to the due date and not after the assignment has already been deemed late.
* If you have any issues with the course, course materials, classmates etc., please come to office hours or schedule an appointment.

**Grading:**

20% Participation and Attendance

25% Homework and in Class Assignments

25% Midterm

30% Final

**FINAL EXAM: THURSDAY May 11th, 9:00AM-12:00PM**

**Required Text:**

Cronon, William

2003 *Changes in the Land: Indians, Colonists, and the Ecology of New England*. New York: Hill and Wang.

\*Referred to as Cronon

Reitz, Elizabeth, C. Margaret Scarry, and Sylvia J. Scudder, eds.

2008 *Case Studies in Environmental Archaeology, 2nd. edition*. New York: Springer.

\*Referred to as Text

\*All other required course readings will be provided on Collab or be available through the UVa Library.

**Part I: Environmental Archaeology: Historical and Theoretical Underpinnings**

**Week 1** (1/18-1/20): Archaeology as Anthropology and the Origins of Environmental Questions

*Readings*:

Text Ch. 1

Dincauze, Dena F. 2000 Environmental Archaeology: Principals and Practice. New York: Cambridge University Press. [Excerpt]

**Week 2** (1/23-1/27): Approaches and Perspectives in Environmental Archaeology

*Readings:*

Mauss, Marcel 2008 [1906] Seasonal Variations of the Eskimo: A Study in Social Morphology *In* Environmental Anthropology: A Historical Reader, Michael R. Dove and Carol Carpenter, eds., pp 157-180. Malden: Blackwell.

McC. Netting, Robert 1977 *Cultural Ecology*. Menlo Park: Cummings Publishing Company. [Excerpt]

Crumley, Carole, ed. 1994 *Historical Ecology: Cultural Knowledge and Changing Landscapes*. Santa Fe: School of Advanced Research. [Excerpt]

**Part II: Methodology and Application:**

**Week 3** (1/30-2/3): Geoarchaeology and Geographic Methods:

*Readings:*

Text Ch. 4 and 5

Johnson, Katherine M. and William B. Ouimet 2014 Rediscovering the archaeological landscape of southern New England using airborne light detection and ranging (LiDAR).  *Journal of Archaeological Science* 43: 9-20.

Chase, Arlen et al. 2010 Airborne LiDAR, archaeology, and the ancient Maya landscape at Caracol, Belize. *Journal of Archaeological Science* 38: 387-398.

**Week 4** (2/6-2/10): Macrobotanical and Wood Analysis

*Readings:*

Text Ch. 13

Bowes, Jessica 2011 Provisioned, Produced, and Procured: Slave Subsistence Strategies an Social Relations at Thomas Jefferson’s Poplar Forest. *Journal of Ethnobiology* 31(1):89-109.

Marston, John M. 2009 Modeling wood procurement strategies from archaeological charcoal remains. *Journal of Archaeological Science* 36: 2192-2200.

Douglass, Andrew E. 1929 The Secret of the Southwest Solved by Talkative Tree-rings. *National Geographic Magazine* December 1929: 736-770.

**Week 5** (2/13-2/17): Microbotanical Analysis: Pollen, Phytoliths, and Starch (lab)

*Readings*:

Dull, Robert A. 1999 Palynological Evidence for 19th Century Grazing-Induced Vegetation Change in the Southern Sierra Nevada, California, U.S.A. *Journal of Biogeography* 26(4): 899-912.

Jacobucci, Susan, Heather B. Trigg, and Stephen W. Silliman 2007 Vegetation and Culture on the Eastern Pequot Reservation: Interpreting Millennia of Pollen and Charcoal in Southeastern Connecticut. *Northeast Anthropology* 74:13-39.

Piperno, Dolores R. et al. 2009 Starch grain and phytolith evidence for early 9th millennium B.P. maize from the central Balsas River Valley, Mexico. *Proceedings of the National Academy of Sciences* 106(13): 5019-5024.

**Week 6** (2/20-2/24): Faunal Analysis and Bioarchaeology (Lab)

*Readings:*

Text Ch. 6, 12, 17, and 18

Hutchinson, Dale L. et al. 2009 Regional Variation in the Pattern of Maize Adoption and Use in Florida and Georgia. *American Antiquity* 63(3): 397-416.

**Part III: Themes and Issues:**

**Week 7** (2/27-3/3):Archaeology of Diet and Health

\***MIDTERM EXAM WED. 3/1\***

*Readings*:

Text Ch. 9, 10, 11, and 14

Mrozowski, Stephen A., Maria Franklin, and Leslie Hunt 2008 Archaeobotanical Analysis and Interpretation of Enslaved Plant Use at Rich Neck Plantation (44WB52). *American Antiquity* 73(4):699-728.

**Week 8** (3/13-3/17): Climate Change and Culture

*Readings*:

Text Ch. 8

Pederson, Neil et al. 2014 Pluvials, droughts, the Mongol Empire, and modern Mongolia. *Proceedings of the National Academy of Sciences* 111(12): 4375-4379.

Robinson Brian S. et al. 2009 Atlantic Salmon, archaeology, and climate change in New England. *Journal of Archaeological Science* 36: 2184-2191.

TBD

**Week 9** (3/20-3/24): Landscapes Approaches to Environmental Archaeology

*Readings:*

Text Ch. 7

Deetz, James 1990 Prologue: Landscapes as Cultural Statements. In *Earth Patterns: Essays in Landscape Archaeology*, William M. Kelso and Rachel Most, editors, pp. 1-4. Charlottesville: University of Virginia Press.

Fish, Suzanne K., and Paul R. Fish 1992 Prehistoric Landscapes of the Sonoran Desert Hohokam. *Population and Environment* 13(4):269-283.

Gary, Jack and Eric Proebsting 2016 The Multiple Landscapes of Thomas Jefferson’s Poplar Forest. *Historical Archaeology* 50(1): 61-79.

Cronon Ch. 1-2

**Week 10** (3/27-3/31): Hunters and Gatherers and Horticultural Societies

*Readings:*

Text Ch. 3, 15 and 20

Cronon Ch. 3-4

**Week 11** (4/3-4/7): Agricultural Societies

*Readings:*

Text Ch. 16

Benson L.V. et al. 2013 Some thoughts on the factors that controlled prehistoric maize production in the American Southwest with application to southwester Colorado. *Journal of Archaeological Science* 40: 2869-2880.

Neiman, Fraser 2008 The Lost World of Monticello: An Evolutionary Perspective. *Journal of Anthropological Research* 64(2): 161-193.

TBD

Cronon Ch. 5-6

**Week 12** (4/10-4/14): Colonialism

*Readings:*

Edwards, Kyle W. 2015 *Environmental Dimensions of Colonial Settlement: A Palynological Study of La Cienega, New Mexico.* M.A. Thesis, Department of Anthropology, University of Massachusetts, Boston. [Excerpts]

Liebmann, Matthew et al. 2015 Native American depopulation, reforestation, and fire regimes in the Southwest United States, 1492-1900 CE. *Proceedings of the National Academy of Sciences* 113(6): 696-704.

Spielmann, Katherine A. et al. 2009 “… Being Weary, They Had Rebelled”: Pueblo Subsistence and Labor under Spanish Colonialism. *Journal of Anthropological Archaeology* 28:102-125.

Cronon Ch. 7-8

**Week 13** (4/17-4/21): Urban Environments

*Readings:*

Text Ch. 19

Mrozowski, Stephen A. 2006 *Archaeology of Class in Urban America*. New York: Cambridge University Press.

Landon, David Landon et al. 2016 Urbanization and Landscape Change in Early-Eighteenth-Century Boston: The Environmental Archaeology of Town Dock. *Historical Archaeology* 50(1): 80-93.

**Week 14** (4/24-4/28): TBD

\***SHORT PAPER ON CRONON DUE**

*Readings*: Text Ch. 2

**Week 15** (5/1): TBD

**FINAL EXAM: THURSDAY May 11th, 9:00AM-12:00PM**