

EXPERIMENTAL ARCHAEOLOGY

Montclair State University

ANTH 370-01

Fall 2007

Instructor: Dr. Peter E. Siegel
Classroom: Dickson Hall 173
Class hours: Tuesday, 10AM – 12:30PM
Office: Dickson Hall 143
Office hours: Tuesday, 2 – 3:30PM, Thursday, 10AM – noon, or by appointment.

Course description: Archaeology is the study of the human past. As such, archaeologists cannot directly observe the behavior of past peoples but must make reasoned inferences into understanding and explaining patterning in the archaeological record. Many methods are used by archaeologists to produce plausible reconstructions of past human behavior. Archaeology by experiment is one way that investigators gain valuable insights into how people did things in the past. This course introduces the concepts, methods, and theory of experimental archaeology. We will explore the history of experimental archaeology through a series of case studies. The methods and goals of experimental archaeology will be compared to the closely related field of ethnoarchaeology.

Organization of the class: The course will begin with lectures about the goals and methods of experimental archaeology. This will be followed by two to three class sessions of student presentations. Each student will be expected to **read and summarize two articles** from two different categories in the list of additional readings. **YOU MUST SIGN UP WITH ME IN ADVANCE FOR THE TWO SPECIFIC ARTICLES YOU WOULD LIKE TO READ.** If a particular article has already been selected by another student then a different article must be selected. The remainder of the course will be devoted to a set of experiments conducted by teams of students.

Student presentations: Each student will select two articles to review, in two separate categories, from the **list of additional readings**.

Presentation guidelines:

1. What is the larger research context of the investigation? In other words, why was the study conducted?
2. What questions or hypotheses did the author(s) set out to address?
3. What methods were used to answer the questions or test the hypotheses?
4. In what form were the results presented? Photographs, drawings, maps, graphs, tables, some combination?
5. What conclusions were drawn from the study?
6. What suggestions, if any, did the author(s) offer for additional studies or research?
7. What suggestions would **you** offer for additional research?

Website Activities:

Complete the four modules in the BBC History Trail Website. The modules are: Overview, Wetwang, Scottish Iron Age, and Experimental Archaeology. Take the quizzes.

<http://www.bbc.co.uk/history/trail/archaeology/>

Team Projects:

Students will pair up in teams to conduct their own experiments. Each team will be expected to write a two-page proposal for an experimental design. The experimental design should include goals, proposed methods, some discussion of expected results, and a list of appropriate references. Appropriate references include articles or books of other studies similar to your proposed experiment. Experiments include, but are not limited to, lithic usewear, ceramic reconstruction, feature formation, and trampling studies.

On completion of the experiments, **each student** will prepare a written report detailing the **goals, methods, results, conclusions, and implications** of their experiments. The report should reference other appropriate published studies. Please follow the Society for American Archaeology Style Guide when preparing your report: <http://www.saa.org/publications/styleGuide/styleGuide.pdf>. Reports are due **no later than December 13, 2007**.

Grades will be based on:

Class participation	10%
Presentations to class	25%
Midterm exam	20%
Team-project report	45%

Class Policies:

Attendance. **Attendance to class is crucial to your success.** Lateness to class is strongly discouraged.

Cell phones. Cell phones must be turned off or placed on vibrate.

Academic dishonesty. Academic dishonesty is defined as “intentionally or knowingly giving or receiving aid on any test, exam, or academic exercise ... collusion or purchase [of] term papers, and plagiarism” (*MSU University Regulations and Disciplinary Procedures* of the Undergraduate and Graduate Student handbook). A student found culpable for academic dishonesty will be subject to penalties.

Incomplete grades. Incomplete grades will be granted in cases where a student has completed most of the work for a course and extraordinary circumstances preclude her or him from finishing the required work by the end of a semester or summer session (see *Modifications to Academic Policies and Procedures for Undergraduate Students* [Nov 10, 2004]). Incomplete grades will be posted for a period of about six weeks after the submission of final grades (Feb 15 for a fall course, June 30 for a spring course, and Oct 15 for a summer course). If work is not completed and a final grade posted within that time the grade will convert to an “F.”

Required Readings:

Mathieu, James R.

2002 **Introduction – Experimental Archaeology: Replicating Past Objects, Behaviors, and Processes.** In *Experimental Archaeology: Replicating Past Objects, Behaviors, and Processes*, edited by James R. Mathieu, pp. 1-11. BAR International Series 1035. British Archaeological Reports, Archaeopress, Oxford. (pdf file on Blackboard)

R. A. Gould

The Archaeologist as Ethnographer: A Case from the Western Desert of Australia
World Archaeology, Vol. 3, No. 2, Archaeology and Ethnography. (Oct., 1971), pp. 143-177.

Ruth Tringham; Glenn Cooper; George Odell; Barbara Voytek; Anne Whitman

Experimentation in the Formation of Edge Damage: A New Approach to Lithic Analysis
Journal of Field Archaeology, Vol. 1, No. 1/2. (1974), pp. 171-196.

Beck, Margaret E.

Midden ceramic assemblage formation: a case study from Kalinga, Philippines.
American Antiquity, Vol. 71, No. 1 (Jan 2006), pp. 27-51.

Masakazu Tani; William A. Longacre

On Methods of Measuring Ceramic Uselife: A Revision of the Uselife Estimates of Cooking Vessels among the Kalinga, Philippines
American Antiquity, Vol. 64, No. 2. (Apr., 1999), pp. 299-308.

Diane P. Gifford-Gonzalez; David B. Damrosch; Debra R. Damrosch; John Pryor; Robert L. Thunen
1985 [The Third Dimension in Site Structure: An Experiment in Trampling and Vertical Dispersal](#). *American Antiquity* 50(4):803-818

Sally McBrearty; Laura Bishop; Thomas Plummer; Robert Dewar; Nicholas Conard
[Tools Underfoot: Human Trampling as an Agent of Lithic Artifact Edge Modification](#)
American Antiquity, Vol. 63, No. 1. (Jan., 1998), pp. 108-129.

Peter E. Siegel; Peter G. Roe
[Shipibo Archaeo-Ethnography: Site Formation Processes and Archaeological Interpretation](#)
World Archaeology, Vol. 18, No. 1, Perspectives in World Archaeology. (Jun., 1986), pp. 96-115.

Robert J. Jeske; Lawrence A. Kuznar
[Canine Digging Behavior and Archaeological Implications](#) (in Special Studies)
Journal of Field Archaeology, Vol. 28, No. 3/4. (Autumn - Winter, 2001), pp. 383-394.

Schedule:

<u>Date</u>	<u>Topic</u>	<u>Reading Assignment</u>
Sept 11	Introduction	
Sept 18	Experimental Archaeology, Ethnoarchaeology, and Experimental Method	Mathieu; Gould; Tringham et al.; and Beck articles
Sept 25	Experimental Method	Tani and Longacre; Gifford- Gonzalez et al.; McBrearty et al.; Siegel and Roe; and Jeske and Kuznar articles
Oct 2	Student presentations on readings	
Oct 9	Student presentations of readings Proposals for experiments due	
Oct 16	Student presentations of readings	
Oct 23	Midterm exam	
Oct 30	Student presentations of readings	
Nov 6	Student teams work on experiments	
Nov 13	Student teams work on experiments	
Nov 20	Student teams work on experiments	
Nov 27	Student teams work on experiments	
Dec 4	Student teams present experiments to class	
Dec 11	Student teams present experiments to class	
Dec. 13	Reports due	