

## Arch 4620: ZOOARCHAEOLOGY

Spring 2012

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This class introduces the archaeology of animal remains or “zooarchaeology” (aka “archaeozoology”). This is not a class in “faunal identification” but instead covers relevant literature in the field in order provide a sound coverage of the kinds of research that zooarchaeologists do. Zooarchaeologists tend to have one of several purposes of their research; a few important general areas include: 1) studying past subsistence adaptations of humans; 2) studying past environmental conditions; 3) the evolution of human hunting, amongst other topics. We will also cover literature in the area of taphonomy (a word that you should look up if it is unfamiliar).

All members of the class are expected to have read, and **be prepared to discuss**, all assigned chapters and articles each week. Class participation counts heavily in my assessment of your performance and your final grade (see below). Copies of articles are available through blackboard.

Each day there will be an in-class reading quiz and a small group discussion exercise, both of which will be handed in and graded.

The rest of the grade centers on three essay exams and on attendance and class participation. Grading of class participation is totally subjective on the part of the instructor and will be graded as one of three categories A = superlative effort (150 pts), B = average effort (125 pts), D = little to no effort (90 pts). The way to find out how you are doing is to ask me: “how am I doing in terms of participation?” If my answer is “your participation is great!” that’s means you are working at A level. If it is, “you are doing OK.” That’s B level. If it’s “you need to work on it.” That’s D level. You should ask me this regularly to maintain a consistent level of awareness about my impression of your class participation.

Class attendance is simply a reward for being present. There are *no makeups*, excused or unexcused (as each class is worth very little). However, together, multiple absences can hurt your grade as they pile up. *A total of 5 absences, excused or not, will result in a WF for the class.*

### Grading:

Exams	3 @ 200 pts each =	600 pts
Reading Quizzes	26 @ 5 pts each =	130 pts
Group discussion exercises	26 @ 5 pts each =	130 pts
Attendance	30 @ 5 pts each =	150 pts
Participation (subjectively graded)	1 @ 150 pts =	150 pts
<b>Total</b>		<b>1160 pts</b>

Course grade: 90% + = A, 80 to 89 % = B, 70 to 79% = C, 60 to 69% =D, below 60% = F

## **Block 1: Fundamentals**

### Goals:

- 1) Understand the basic research topics of zooarchaeology
- 2) Understand the faunal identification process

### Readings:

Week 1 (Jan 17 & 19): Zooarchaeology – Stahl 2011, Lyman 2005, Lyman 2010a

Week 2 (Jan 24 & 26): Identification and data quality – Driver 2011, Gobalet 2001, Wolverton in review

Week 3 (Jan 31 & Feb 2): Taphonomy – Barnosky 1985, Wolverton 2006, Lyman 2010b

Week 4 (Feb 7 & 9): Lab 1: Identification, Driver 1992 & **Essay Exam 1, Feb 9<sup>th</sup>**.

### **Block 1 Readings:**

Barnosky, A. D. 1985. Taphonomy and herd structure of the extinct Irish elk, *Megaloceros giganteus*. *Science* 228:340-344.

Driver, J. 2011. Identification, Classification and Zooarchaeology. *Ethnobiology Letters* 2:19-39.  
<http://www.ethnobiology.org/publications/ethnobiology-letters>.

Gobalet, K. W. 2001. A Critique of Faunal Analysis; Inconsistency Among Experts in Blind Tests. *Journal of Archaeological Science* 28:377-386.

Lyman, R. L. 2005. Zooarchaeology. In *Handbook of Archaeological Methods*, edited by H. D. G. Maschner and C. Chippendale, pp. 835–870. AltaMira Press, Lanham, Maryland.

Lyman, R. L. 2010a. What Taphonomy Is, What It Isn't, and Why Taphonomists Should Care about the Difference. *Journal of Taphonomy* 8:1-16.

Lyman, R. L. 2010b. Taphonomy, Pathology and Paleoecology of the Terminal Pleistocene Marmes Rockshelter (45FR50) "Big Elk" (*Cervus elaphus*), Southeastern Washington State, USA. *Canadian Journal of Earth Sciences* 47:1367–1382.

Stahl, P. 2011. Ethnobiology, Historical Ecology, the Archaeofaunal Record, and Interpreting Human Landscapes. In *Ethnobiology*, edited by E. N. Anderson, D. M. Pearsall, E. S. Hunn, and N. J. Turner, pp. 97-113. Wiley Blackwell Press, Hoboken, NJ.

Wolverton, S. 2006. Natural-Trap Ursid Mortality and the Kurtén Response." *Journal of Human Evolution* 50:540-551.

Wolverton, S. In Review. Data Quality in Zooarchaeological Faunal Identification. *Journal of Archaeological Method and Theory*.

## **Block 2: Quantification**

### Goals:

- 1) Understand the basic quantitative units of zooarchaeology
- 2) Understand the basic analytical approaches of zooarchaeology

Week 5 (Feb 14 & 16): Lyman Chapters 1 & 2

Week 6 (Feb 21 & 23): Lyman Chapters 3 & 4

Week 7 (Feb 28 & Mar 1): Lyman Chapters 5 & 6 (part 1, pp. 214 – 241)

Week 8 (Mar 6 & 8): Lyman Chapters 6 (part 2, pp. 241 – 263) & 7

Week 9 (Mar 13 & 15): Lab 2: Quantification, & **Essay Exam 2, May 15<sup>th</sup>**

### **Block 2 Book**

Lyman, R. L. 2008 Quantitative Paleozoology. Cambridge University Press, Cambridge.

[http://www.amazon.com/Quantitative-Paleozoology-Cambridge-Manuals-Archaeology/dp/0521715369/ref=tmm\\_pap\\_title\\_0?ie=UTF8&qid=1325711152&sr=1-1](http://www.amazon.com/Quantitative-Paleozoology-Cambridge-Manuals-Archaeology/dp/0521715369/ref=tmm_pap_title_0?ie=UTF8&qid=1325711152&sr=1-1)

Spring Break

### **Block 3: Case Study**

Goal: to review a synthetic case study in zooarchaeological research.

Week 10 (Mar 27 & 29): Stiner Chapters 1 through 3

Week 11 (Apr 3 & 5): Stiner Chapters 4 & 5

Week 12 (Apr 10 & 12): Stiner Chapters 6 through 8

Week 13 (Apr 17 & 19): Stiner Chapters 9 & 10

Week 14 (Apr 24 & 26): Stiner Chapters 11 through 13

Week 15 (May 1 & 3): Stiner 14 & 15.

### **Block 3 Book**

Stiner, M. C. 1994. *Honor Among Thieves: A Zooarchaeological Study of Neanderthal Ecology*. Princeton University Press, Princeton, NJ.

[http://www.amazon.com/gp/offer-listing/0691034567/ref=dp\\_olp\\_used?ie=UTF8&condition=used](http://www.amazon.com/gp/offer-listing/0691034567/ref=dp_olp_used?ie=UTF8&condition=used)

### **DISABILITY ACCOMMODATION**

The Department of Geography, in cooperation with the Office of Disability Accommodations, complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request by the second lab.

### **EXTRA CREDIT**

The Department of Geography does not allow extra credit assignments (work not specified on a course syllabus).

### **ACADEMIC DISHONESTY**

Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam. Additionally, the incident will be reported to the Office of Student Rights and Responsibilities for further penalty. According to the UNT catalog, the term "cheating" includes, but is not limited to: (a) use of any

unauthorized assistance in taking quizzes, tests, or examinations; (b) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (c) the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; (d) dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or (e) any other act designed to give a student an unfair advantage. Altering a returned test and claiming a grader or scanning machine made an error is also considered cheating. The term "plagiarism" includes, but is not limited to: (a) the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and (b) the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

### **CLASSROOM/OFFICE COURTESY**

Please follow these guidelines to avoid disrupting the class:

- (1) Turn off cell phones before arriving.
- (2) Do not arrive late or leave early (except for a bathroom break or emergency).
- (3) Do not sleep or eat during class.
- (4) Do not work on other assignments during class.
- (5) Do not talk when the instructor is lecturing, unless prompted for feedback by the instructor.

### **ATTENDANCE/TARDINESS POLICY**

After missing (unexcused or excused) 5 class periods a student will receive a WF (F if after the WF deadline) for the course. Students who are greater than 5 minutes late should come to class so as not to miss the material, but they will be counted absent for the period.

### **MISSED-CLASS POLICY**

The professor does not re-teach the course outside of lecture or lab; I am happy to answer questions, clarify content, and provide guidance for those who attend class and come in with informed questions after they have attempted the work themselves. Students who miss class must secure notes and other materials from another student in the class; notes will not be provided by the instructor.