

Taphonomy/Paleoecology - GEOS 417 SYLLABUS - Spring 2013

Description and Objectives

Taphos = Death, so taphonomy is the study of death, or more specifically, Taphonomy is the science that examines skeletal remains to determine such things as the cause of death, the environment in which the remains finally came to rest, and what happened to the remains in the sediment.

The course is meant to be an introduction to Taphonomy and will explore vertebrate, invertebrate, and plant taphonomy, as well as both paleontological and archeological applications. We will examine some of the recent literature, and there will be both laboratory exercises and a group project on the taphonomy of a fossil deposit.

Course Information

Instructor: Dr. Karl W. Leonard

Office: King 204

Lab: King 116

Phone: (218) 477-2682

e-mail: leonardk@mnstate.edu

url: <http://www.mnstate.edu/leonard>

office hours: M,W,F 10:30- 12:30, T, Th 10:30-11:30 am, and 1:30 to 2:30 pm or whenever I'm in my office

Textbooks: R. E. Martin, 1999, Taphonomy – A process approach (First Edition), Cambridge Paleobiology Series 4.

Supplemental Textbook: R.L. Lyman, 1994, Vertebrate Taphonomy, Cambridge Manuals in Archeology

Class web page can be found on: <http://www.mnstate.edu/leonard>

Papers for the reading assignments will be made available as PDFs on the class web site

Building and Room #: King Hall 118

Grades and Exams

The total grade is calculated from a standard 100% scale. The grade will be determined from:

lecture quizzes (50%): There will be 2 lecture quizzes, each worth 15% of the lecture grade. Students will take a comprehensive final exam worth 10% of the total grade. No make-up exams will be offered.

In class discussion of assigned papers (15%): Students will moderate the discussion of assigned papers

in class exercises and discussions (25%): Short exercise and discussion reports will comprise 5% of the grade, and lab activity reports will be worth 20% of the total grade.

Project and Paper (10%): Students will work in groups on a short research project and present the results on the last several days of the course

Policies

Attendance: Students are expected to attend all class meetings.

Special Accommodations: Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Coordinator of Disability Services at 477-4318 (Voice) or 1-800-627-3529 (MRS/TTY), FR154 as soon as possible to ensure that accommodations are implemented in a timely fashion.

Academic Honesty: (See MSUM Student Absence Policy, Student Handbook:

<http://www.mnstate.edu/sthandbook/> under bookmark Student Policy Info).

Courtesy: Be courteous to your neighbors – limit chatting during lectures, and turn your !!\$@\$%!!
CELL PHONES OFF!!

Lecture Schedule (Tentative)

Week	Topic	Reading
1 Jan. 15	T - Introduction and logistics Th – What is Taphonomy	Martin Ch. 1
2 Jan. 22	T – What is Taphonomy Th – Biostratinomy – Fluid and Sediment Movement	Martin Ch. 1 Martin Ch. 2.1-2.2
3 Jan. 29	T – Biostratinomy – Invertebrates Th – Paper Assignment and Discussion 1	Martin Ch. 2.3 – 2.7
4 Feb. 5	T – Death and Vertebrates Th – Biostratinomy – Vertebrates	Lyman Ch. 5 Martin Ch. 2.8
5 Feb. 12	T - Biostratinomy – Vertebrates Th – Paper Assignment and Discussion 2	Martin Ch. 2.8
6 Feb. 19	T- Other Biostrat. Factors Th – Exam 1 – Feb. 21st	Lyman Ch. 9
7 Feb. 26	T – Human Influences on Biostrat. Th - Paper Assignment and Discussion 3	Lyman Ch 7 & 8
8 Mar. 5	T- Bioturbation Th- Paper Assignment and Discussion 4	Martin Ch. 4
March 11 - 15 Spring Break		
9 Mar. 19	T – Diagenesis Th – Diagenesis	Martin Ch. 3 Lyman Ch. 11
10 Mar. 26	T – Time Averaging Th- Paper Assignment and Discussion 5	Martin Ch. 5
11 April 2	T – Paleoecology Th – Paleoecology	supplemental supplemental
12 April 9	T – Paleoecology Th – Paleoecology	supplemental
13 April 16	T – No class - SAC Th- Paleoecology	
14 April 23	T – Paleoecology Th - Exam 2 – Apr. 25th	
15 April 30	T – Group Project Th - Group Project	
16 May 7	T – Group Project	
Final Exam – Wednesday May 15th – 3:00 pm		