

MAMMALOLOGY Fall 2011

(NRES 476/876, BIOS 476/876; 4 credit hours)

Location: East 535, Nebraska Hall. Lec: 9:30-10:45 TT; Lab: 2:30-5:30 F

Professor: Dr. Patricia Freeman, 428 Hardin Hall, ext. 2-6606, pfreeman1@unl.edu

Teaching Assistant: Jeanne Miller, by appt. only, jeanneno@gmail.com

Prerequisites: 12 hours of Biological Sciences with Vertebrate Zoology required.

WEEK 2009	MAMMALOLOGY LECTURE	Book* Chap.	Lab Pg.	MAMMALOLOGY LAB
22 August	Introduction/ Diseases Origins/Age of mammals Derivations from reptiles/	28 online 1 - 4	Lawlor & Vaughan – Ch. 2	Bones in skull and teeth Net bats nearby Thurs. night
29 August	Biogeography/ Vicariance/ Ecology Modern mammals /Locomotion and feeding	23 (493-501) 25	Lawlor & Vaughan	Bones in skull and teeth Net bats nearby Thurs. night
5 Sept	Mammalian Diversity Monotremes /Metatheria/ Theria reproductive differences	5 6 20 (383-407)	Genoways et al.	ORAL PRACTICAL (skulls/ teeth) Nebraska Mammals Lecture keying skins and skulls #1 – 18 Trapping Friday evening/Sat. morning
12 Sept	Eutheria /Modern primitives Afrosoricida, Macroscelidea, Tubulidentata, Dermoptera, Scandentia, Erinaceomorpha, Soricomorpha,	7 8, 11 14	Genoways et al.	Nebraska Mammals- skins and skulls - #19 - 50 Trapping Friday evening/Sat. morning
19 Sept	<i>Lecture exam around this time</i> Chiroptera/ diversity	15	Genoways et al.	Nebraska Mammals - #19 - 50 Trapping Friday evening/Sat. morning
26 Sept	Chiroptera/flight/ echolocation	22 20 (407-411) 21 (422-441)	Genoways et al.	Safari Park
3 Oct	Chiroptera/physiological tricks Primates	12	Genoways et al	Nebraska Mammals - #51 – 68 Trapping Friday evening/Sat. morning
10 Oct	Primates		Genoways et al	No Lab
17 -18 Oct	Fall Break – Thurs. lecture, Fri. lab only	10	Genoways et al.	Nebraska mammals -#69 - 79 Trapping Friday evening/Sat. morning
20 Oct	Cingulata, Pilosa, Pholidota			
24 Oct	Carnivora/ adaptations for predation	16		Nebraska Mammals REVIEW
31 Oct	Carnivora/ aquatic adaptations Rodentia			LAB PRACTICAL: Nebraska Mammals
7 Nov.	<i>Lecture exam around this time</i> Rodentia	13	Martin and DeBlase, Lawlor	World Orders and Suborders Skinning
14 Nov	Rodentia/ Lagomorpha Paenugulata: Proboscidea, Hyracoidea, Sirenia, Perissodactyla,	13 21 (441-465) 9, 17	Martin and DeBlase, Lawlor	World Orders and Suborders Skinning
21-27 Nov	Thanksgiving break			No Lab
28 Nov	Artiodactyla	18	Martin and DeBlase, Lawlor	World Orders and Suborders Skinning
5 Dec	Artiodactyla Cetacea	19		LAB PRACTICAL: World Orders and Suborders
12 Dec	Final Exam 10:00-12:00 A. M. Wednesday, 14 December 2011 Cumulative but with concentration on last 5 wks.			

* Additional readings from different chapters in the book or other sources may be assigned during class.

DETAILS

Description: An introduction to mammals of the world, where they live and how they are adapted to their environment, zoogeography and evolution. Recent research in ecology, echolocation, behavior, functional morphology, and natural history will be presented. We have excellent study material, both recent and fossil, in the collections of the University of Nebraska State Museum to accompany the course. Lab is a hands-on with these materials to key and identify orders and suborders of mammals of the world and species of mammals found in Nebraska. Field work for the study of native mammals means traps are set in the evening during or after lab time and have to be checked the next morning. Typically this is why we have a Friday lab – we set traps on Friday nights and pick up traps on Saturday morning conflicts.

I expect you to take notes in class and supplement lecture with reading the book. Lectures will not be identical to the book nor will I be able to cover as much material as the book. They are both important in getting the maximum out of this class. Many students like to form study groups for the exams. I encourage this. Visuals will be posted on Blackboard before the relevant lecture in class.

Texts: Vaughan, Ryan, and Czaplewski 2010; **Mammalogy 5th Edition**
 Genoways et al. 2008. **Mammals of NE: Key checklist, bibliography** (handout provided)
 Lawlor, **Living Mammals** (available on Blackboard as PDF files)

Grades: Undergraduates: Lecture exams, essays, lab practicals, and cumulative final (counts double). (Lec1 + Lec2 + lab + Final + Final = grade). Graduate students see below.

Scale:

A+	A	A-	B+	B	B-	C+	C PASS	C- NO PASS	D+	D	D-	F
97 to 100	93 to 96.99	90 to 92.99	87 to 89.99	83 to 86.99	80 to 82.99	77 to 79.99	73 to 76.99	70 to 72.99	67 to 69.99	63 to 66.99	60 to 62.99	0 to 59.99

Examinations: There will be 2 exams on lecture material during the semester spaced at approximately 10-lecture intervals and a final cumulative exam. These will have short answer or matching and essay exams. Review questions will be posted on Blackboard. In lab there will be a lab practical on bones of skulls and teeth; practical on Nebraska mammals where you will be expected to identify the mammal to order, genus and species; and practical on orders and suborders of mammals and why a mammal is in a certain order. You will need to make good use of lab time or plan on coming in during non-class hours.

Graduate Students taking this course will be expected to turn in a paper with literature cited during the semester so that I will have time to edit it and return it to you for a final copy by the end of the semester. I will try to accommodate your semester schedule. Please see me. Your grade comprises lecture exams, lab practicals, your term paper, and cumulative final (counts double).

Field work is difficult to plan for because of weather and I want to stay flexible about where to trap/net. Be sure to check your e-mail right before field trips for anything unexpected. You must go on at least 2 trapping trips and one netting trip. Netting bats is early in the semester. If you want to handle rodents and shrews you must have leather gloves. I suggest deerskin or split leather cowhide (suede) which are both inexpensive at Menards or Home Depot.

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

Emergency procedures accompany this syllabus or located it on the internet:

http://emergency.unl.edu/doc/Emergency_Procedures_Quicklist.pdf