

Mammalogy, Fall 2015
WIS 4934, Zoo 4926, Zoo 5486c

PROFESSORS

Dr. Bob McCleery- email: ramccleery@ufl.edu, phone: 352-214-3073, office: 314 Newins-Zeigler Hall
Office hours: Tuesday 1:00 pm to 2:00pm and Thursday 10:45 -11:45 or by appointment

Dr. David Reed- email: dreed@ufl.edu, phone: 352-273-1971, office: 346 Dickinson Hall
Office hours: by appointment

TEACHING ASSISTANTS

Wesley Boone Greene - email: wwboone@ufl.edu, Office: basement (B2) Newins-Zeigler Hall
Office hours: Wednesday 9:00 am – 11:00 am or by appointment

Harlan Gough- email: goughh@ufl.edu, phone: 352-273-2114, office: 331 Dickinson Hall
Office hours: Thursday 10:00 am to 12:00pm or by appointment

COURSE

Lectures: Tuesday and Thursday, period 3, 9:35 am – 10:25 am, 0130 Psychology Building

Labs: Fridays (2 sections) either periods 2-4 or 6-8, 109 Carr Hall

Texts Required:

1. Feldhamer, Drickamer, Vessey and Merritt: *Mammalogy* (Main text for lecture); 3rd edition

Texts Recommended:

2. Martin, Pine, and DeBlase: *A manual of Mammalogy*, 3rd edition
3. Jones, J.K, and R.W. Manning. *Illustrated Key to the Skulls of General of North American Land Mammals*, Texas Tech Univ. Press

Course Description:

This course is intended to be a general introductory course to the vertebrate class Mammalia. It attempts to provide information related to the diversity of mammals as well as unique and biologically significant characteristics of mammals. The easiest approach for teaching mammalogy is to adhere to strict taxonomic diversity. The problem with this approach is that biological concepts related to mammals, as well as some exciting mammalian adaptations (associated with nutrition, locomotion, behavior, thermoregulation, genetics, etc.) and issues related to the conservation of biodiversity (e.g., processes of extinction, causes of extinction, conservation genetics, etc.), are often slighted. Through the laboratory exercises and lectures, it is our goal to provide you with equal exposure to both mammalian diversity and conceptual issues in mammalian biology and conservation.

Course Goal: The goal of this class is to provide students with the broad understanding of the diversity (in form and function), distribution, ecology and evolution of the vertebrate class Mammalia.

Specific objectives are for students to:

1. Be able to identify all the orders and many families of mammals,
2. Know features common to particular genera and species of North American and Southeastern US,
3. Appreciate morphological, physiological, ecological and behavioral variation among mammals,
4. Be able to describe and analyze attributes pertinent to the origin, evolution, zoogeography, ecology, behavior, physiology, digestion, reproduction, and morphology of mammals and the interrelationships of these features, and
5. Become familiar with the current research and research techniques used to study mammals.

Examinations and Grading:

The lecture exams will be 100 pts a piece (200 for graduate students) and may contain multiple choice, short-answer, matching, and essay questions. Lab exams will also be 100 pts and consist mostly of short answer question at multiple stations. The practical will be timed with a specific time interval allotted at each station. You will need to be able to identify specimens without the aid of keys etc. Lecture and Lab Exams will be cumulative, but more emphasis will be placed on material covered since the previous exam(s). Exams are closed book. No books, notes, papers, computers or other electronic devices (headphones, earpieces, and other listening devices) are and maybe in sight during an exam. Students must work alone.

Lab assignments:

Starting in week 2 there will be a 10 point quizzes or assignment each week in lab administered by the teaching assistants. There will be a total of 11 quizzes/assignments but we will take the top 10 scores to count for 100 pts toward the overall grade.

Graduate students will be asked to make a detailed Lab Study Guide to be placed online for the entire class. The study guide is due on the Tuesday after that lab. This will allow students ample opportunity to use the guide prior to the quiz the following week. The guide should include 1) pictures of all species, 2) diagnostic characteristics of all families, 3) diagnostic characteristics of species from Florida

Grading For Undergraduates

First Lecture Exam = 100 pts

Final Lecture Exam = 100 pts

First Lab Practical = 100 pts

Final Lab Practical = 100 pts

Lab Assignments and Quizzes = 100 pts

Total = 500 pts

Grades: Final course grades will be assigned as follows:

A (≥ 460), A- (459-450), B+ (435-449 pts), B (410-434 pts), B- (400-409 pts), C+ (385-399), C (360-384), C- (350-359), D+ (335-349 pts), D (310-334 pts), D- (300-309 pts), E (< 300)

Grading For Graduate Students

First Lecture Exam = 200 pts

Final Lecture Exam = 200 pts

First Lab Practical = 200 pts

Final Lab Practical = 200 pts

Lab Assignments and Quizzes = 100 pts

Lab Study Guide = 100 pts

Total = 1000 pts

Grades: Final course grades for graduate students will be assigned as follows:

A (≥ 930), A- (929-900), B+ (899-870 pts), B (869-830 pts), B- (829-800 pts), C+ (799-770), C (769-730), C- (729-700), D+ (699-670 pts), D (669-670 pts), D- (629-600 pts), E (< 600)

Grading Policy: If there is a summation error on any exam, quiz, or assignment, see your teaching assistant or instructor immediately so they correct your score/points. If you believe that an exam question, or other assignment was improperly graded, you must bring it to us for reevaluation within 1 week of the time that the grade was returned or posted. In such cases, the entire exam, quiz, or assignment will be reevaluated, and a new grade assigned for the entire exam, quiz, or assignment. Please regularly check the grades for exams, quizzes, and other assignments on the course website, and notify me immediately if a grade is incorrectly recorded.

Information on the UF grading policy for assigning grade points can be found at: <http://www.registrar.ufl.edu>

Required Readings: You will be assigned readings from the Feldhammer text and outside readings (posted on the web or given as handouts) for lecture. You will be responsible for these on exams. You are also required to read the lab handouts and look over the chapters in Martin et al. for lab each week prior to coming to lab.

Field Trips. There is one fieldtrip, **typically in October (TBD)**, to the Ordway Preserve. You are encouraged to participate. There may be additional field trips that we organize based on student interests. The times and dates will be announced in class.

ATTENDANCE POLICY

Students are expected to attend all classes and laboratories. No make-up examinations will be given without providing **evidence** to the instructor that substantiates the reason for any absence. Absences will be excused with a doctor's note provided within 1 week or if **previously arranged** with the instructor. If a student is absent for more than 3 classes (labs and lectures) as a result of illness, **a physician's note is required**. In addition, there will be no switching of lab sections without permission.

TENTATIVE LECTURE and READING SCHEDULE

Aug. 25 Introduction to Mammalogy, (Chapters 1 and 2)
Aug. 27 Mammalian characters (A Manual of Mammalogy Chapter 1)
Sept. 1 Mammalian phylogeny and systematics (Chapter 4)
Sept. 3 Early mammals (chapter 5)
Sept. 8 Dentition (chapter 5)
Sept. 10 Mammalian biogeography and major regions (chapter 6)
Sept. 15 Interchanges, Historic extinction, Ecological Biogeography (chapter 6)
Sept. 17 Mammalian radiations (Chapter 4)
Sept. 22 Feeding modes and adaptations (Chapter 8)
Sept. 24 Locomotion on land (Chapter 7)
Sept. 29 Locomotion (air and sea), aquatic adaptations (Chapter 7)
Oct. 1 Metabolism/Environmental adaptations/ Thermoregulation (10)
Oct. 6 Control systems and bio rhythms: Hibernation (9)
Oct. 8 Manatee ecology and conservation
Oct. 13 Exam I

Oct. 15 Sensory systems and echolocation (chapter 9 and 14)
Oct. 20 Reproduction (chapter 11)
Oct. 22 Mating systems, sexual selection (chapter 23)
Oct. 27 Social behaviors (Chapter 22, 24)
Oct. 29 Habitat use and movements (Chapter 25)
Nov. 3 Community dynamics and functions (Chapter 26)
Nov. 5 Recent extinctions, conservation (Chapter 29, see website for addition readings)
Nov. 10 Urban mammals (see website for addition readings)
Nov. 12 Conservation genetics of mammals
Nov. 17 Ecology and conservation of Florida's endemic mammals
Nov. 19 Ecology and conservation of Florida's endemic mammals
Nov. 24 review

Dec. 1 Final Exam

Tentative Lab Schedule

Aug. 28 Skeletal Anatomy and Tour of Mammal Collection
Sept. 4 Mammal Dentition, and Review of Soft Anatomy?
Sept. 11 Paleomammals, Monotremata, Marsupials
Sept. 18 Insectivora, Dermoptera, Edentata, Pholidota
Sept. 25 Chiroptera
Oct. 2 Lab exam
Oct. 9 Primates, Scandentia
Oct. 16 Rodentia (Sciuromorpha and Myomorpha)
Oct. 23 Rodentia (Hystricomorpha and Caviomorpha), Lagomorpha
Oct. 30 Carnivora
Nov. 6 **Museum Assignment**
Nov. 13 Cetacea, Tubulidentata, Sirenia, Proboscidea, Hyracoidea
Nov. 20 Perissodactyla and Artiodactyla
Nov. 27 NO LAB—Thanksgiving Holiday
Dec. 4 Practical Exam

NOTES TO STUDENTS:

Plagiarism: As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writing etc., which belong to another. In accordance with this definition: THE STUDENT IS COMMITTING PLAGARISM IF HE OR SHE COPIES THE WORK OF ANOTHER PERSON AND TURNS IT IN AS HIS OR HER OWN, EVEN IF PERMISSION BY THAT PERSON HAS BEEN GRANTED. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. Plagiarism will not be tolerated in this course. Offenders of this policy will be punished according to University policies. In addition, there will be no cheating of any type tolerated in this course.

Academic Honesty: You are expected to become familiar with and follow current University Policy (see <http://www.dso.ufl.edu/sccr/>).

Counseling: If you are having class-related problems, please regularly meet with me, or the TAs during office hours or make special appointments. Additionally, there are resources on campus if you are having various personal, career, or academic problems: <http://www.counsel.ufl.edu/> & <http://www.hsc.ufl.edu/shcc/>.

Students with Disabilities: Every possible accommodation will be made to allow students with disabilities to successfully complete the course (see <http://www.dso.ufl.edu/drc/>). Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this to me when requesting accommodation.

Sexual Harassment: It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly report sex discrimination and sexual harassment. If you believe you have been subjected to sex discrimination or sexual harassment please report the incident to me or any University official, administrator, or supervisor. **The Office of Human Resource Services investigates all complaints.** Incidents should be reported as soon as possible after the time of their occurrence (larry-ellis@ufl.edu).