ZOO 4480 Mammalogy (4, 0)

Fall Semester 2015 Graham A.J. Worthy

Faculty office hours: Open – call for appointment if you can otherwise just come by

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Course Description:

This course will explore the diversity and biology of mammals from an evolutionary perspective. The course will consist of a survey of extant mammals and will also include discussion of mammal origins, evolution, phylogeny, paleontology, physiology, behavior, and ecology.

Time and Place:

Monday and Wednesday: 10:30 – 12:20 in BL 209

Course prerequisites:

BSC 2010C and BSC 2011C or consent of instructor.

Course Objectives:

The goal of this course is to acquaint students with the identification, systematics, life history, and adaptive strategies of the Mammalia. This will include understanding the following topics:

- 1. Characterization of Mammalogy and mammalian traits.
- 2. The evolutionary history of the various mammalian lineages
- 3. Characterization of the orders and families of the extant mammals.
- 4. Morphological adaptations of mammals for feeding, locomotion, reproduction, etc.
- 5. Physiological adaptations of mammals for homeostasis and reproduction.
- 6. Behavioral adaptations of mammals for feeding, homeostasis, reproduction, etc.

Recommended Text:

Feldhamer, G.A., L.C. Drickamer, S.H. Vessey, J.F. Merritt, and C. Krajewski. 2015. Mammalogy: adaptation, diversity and ecology. 4th edition. Johns Hopkins University Press

Supplemental Text:

Vaughan, T.A., J.M. Ryan, and N.J. Czaplewski. 2000. Mammalogy. 4th edition. Harcourt, Fort Worth.

Tentative Lecture and Exam Schedule (things can change):

August 24	Lecture 1 Study of Mammalogy (Chapter 1, 2, 3)
August 26	Lecture 2 Evolution and Dental Characteristics (Chapter 4)
August 31	Lecture 3 Biogeography (Chapter 5)
September 2	Lecture 4 Integument, Support and Movement (Chapter 6)
September 7	Labor Day holiday
September 9	Lecture 5 Modes of Feeding (Chapter 7)
September 14	Lecture 6 Sensory Systems (Chapter 8)
September 16	Exam Number 1
September 21	Lecture 7 Environmental Adaptations Part 1 (Chapter 9)
September 23	Lecture 8 Environmental Adaptations Part 2 (Chapter 9)
September 28	Lecture 9 Reproduction and Reproductive Energetics (Chapter 10)
September 30	Lecture 10 Monotremes and Marsupials (Chapter 11)
October 5	Class cancelled
October 7	Guest lecture – Dr. Hani Freeman (zoo research and bat study)
October 12	Lecture 11 Insectivora, Macroscelidea, Scandentia, and Dermoptera (Chapter 12)
October 14	Lecture 12 Chiroptera (Chapter 13)
October 19	Exam Number 2
October 21	Lecture 13 Primates (Chapter 14)
October 26	Lecture 14 Cingulosa, Pilosa, Pholidota, and Tubulidentata (Chapter 15)
October 28	Lecture 15 Carnivora (Chapter 16)
November 2	Lecture 16 Cetacea (Chapter 17)
November 4	Lecture 17 Rodentia and Lagomorpha (Chapter 18)
November 9	Lecture 18 Proboscidea, Hyracoidea, and Sirenia (Chapter 19)
November 11	Veterans Day holiday
November 16	Exam Number 3
November 18	Lecture 19 Perissodactyla and Artiodactyla (Chapter 20)
November 23	Survey of Mammalian skulls
November 25	Thanksgiving early dismissal
November 30	Lecture 20 Parasites and Diseases (Guest Lecturer – Dr. Scott
	Terrell)
December 2	Lecture 21 Communication, Aggression and Spatial Relations (Chapter 21)
December 7	Lecture 22 Sexual Selection, Parental Care and Mating Systems (Chap 22)
December 9	Lecture 23 Dispersal, Habitat Selection and Migration (Chapter
	24)
December 14	Final Exam (10:00 – 12:50)

Evaluation Procedures:

Regular attendance at class is the minimum expectation. There will be three mid-term exams and a "final" exam. Your best exam score will be worth 35%, your lowest score will be worth 15%, and the other 2 exams will be worth 25% each.

90 - 100 = A	
80 - 86 = B	87 - 89 = B +
70 - 76 = C	77 - 79 = C +
60 - 66 = D	67 - 69 = D +
$<60 = \mathbf{F}$	

Optional Assignment (worth an additional 5 points directly added to your final grade). Pick one of the following two options.

Option 1) Write a 6-8 page paper (Times Roman, 12 pt, double spaced) discussing the characteristics of a mammalian Family. This paper is due by 5:00 December 9 (no extensions). More details to follow.

Option 2) Participate in two lab exercises that will be held on two Fridays (10:30-12:20: September 18 and October 30) in BIO 104. (A maximum of 15 students can participate and you must sign up by the end of the second week).

Academic Activity Requirement:

Faculty members are required to document every students' academic activity at the beginning of each course. In order to document that you began this course, please complete the assigned academic activity by the end of the first week of classes, or as soon as possible after adding the course, but no later than August 31. Failure to do so will result in a delay in the disbursement of any potential financial aid. In our case this assignment will consist of a course pretest which I will distribute on Canvas – this score will not become part of your final grade.

Warnings:

- 1. You will receive the grade that you earn.
- **2.** Failure to show up for an exam is an automatic zero. No exceptions (except medical emergencies). If you anticipate a conflict you must inform me and make arrangements <u>at least one week</u> before the exam.
- **3.** Academic misconduct will not be tolerated. Plagiarism and cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so

please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

4. Class Decorum:

How you handle yourself reflects upon who you are, so behave in a way that shows respect for yourself and for those around you. **Please turn off your cell phone before you come to class and do not spend class time checking your social media**. You are expected to arrive on time and stay for the duration of the class. Coming late, stepping out, and leaving early are generally discourteous and can be disruptive. It is understood that urgent situations may arise which make these things necessary and excusable. In all other cases, this behavior should be avoided.

5. Disability Access Statement:

The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations in this course must contact Student Disability Services, Ferrell Commons Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.