# **ZOO4480** Mammalogy (4, 0)

Fall Semester 2013 Graham A.J. Worthy

#### Contact information:

Office Hours: Monday and Wednesday: 10:30 – 12:20

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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: 1030 - 1220 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.

## Required Text:

Feldhamer, G.A., L.C. Drickamer, S.H. Vessey, J.F. Merritt, and C. Krajewski. 2007. Mammalogy: adaptation, diversity and ecology. 3rd 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):

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Lecture 1 Study of Mammalogy (Chapter 1, 2, 3)
August 19
August 21
             Lecture 2 Evolution and Dental Characteristics (Chapter 4)
August 26
             Lecture 3 Biogeography (Chapter 5)
August 28
             Lecture 4 Integument, Support and Movement (Chapter 6)
September 2
             Labor Day holiday
September 3 Lecture 5 Modes of Feeding (Chapter 7)
September 9 Lecture 6 Control Systems and Biological Rhythms (Chapter 8)
September 11 Exam Number 1
September 16 Lecture 7 Environmental Adaptations Part 1 (Chapter 9)
September 18 Lecture 8 Environmental Adaptations Part 2 (Chapter 9)
September 23 Lecture 9 Reproduction and Reproductive Energetics (Chapter 10)
September 25 Lecture 10 Monotremes and Marsupials (Chapter 11)
September 30 Lecture 11 Insectivora, Macroscelidea, Scandentia, and Dermoptera (Chapter 12)
October 2
             class cancelled
October 7
             Lecture 12 Chiroptera (Chapter 13)
             Exam Number 2
October 9
October 14
             Lecture 13 Primates (Chapter 14)
             Lecture 14 Cingulosa, Pilosa, Pholidota, and Tubulidentata (Chapter 15)
October 16
             Lecture 15 Carnivora (Chapter 16)
October 21
             Lecture 16 Cetacea (Chapter 17)
October 23
             Lecture 17 Rodentia and Lagomorpha (Chapter 18)
October 28
October 30
             Exam Number 3
November 4 Lecture 18 Proboscidea, Hyracoidea, and Sirenia (Chapter 19)
November 6 Lecture 19 Perissodactyla and Artiodactyla (Chapter 20)
November 11 Veterans Day holiday
November 13 Lecture 20 Skull demonstration lab
November 18 Lecture 21 Communication, Aggression and Spatial Relations (Chapter 21)
November 20 Thanksgiving early dismissal
November 25 Lecture 22 Sexual Selection, Parental Care and Mating Systems (Chap 22)
November 27 Lecture 23 Dispersal, Habitat Selection and Migration (Chapter 24)
December 2 Lecture 24 Parasites and Diseases (Guest Lecturer)
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December 9 Final Exam (10:00 – 12:50)

#### **Evaluation Procedures:**

Regular attendance at class is the minimum expectation. There will be four exams, each counting for 25% of the final grade.

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 on final grade)

Write an approximately 6 page paper (Times Roman, 12 pt, double spaced) discussing the characteristics of a mammalian Family. This paper is due by 5:00 December 2 (no extensions).

#### 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</u> <u>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. 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.