



**BSC/AG 406 Mammalogy**

**I. General Information**

Course syllabus: Fall 2024

Credits: 3

Instructor of record: Archana Srinivas, Ph.D.

Office: Science Building (STC) 235

Webinars: Monday, Wednesday, Friday: 12:30 PM to 1:20 PM via Zoom in D2L.

Office hours: By appointment scheduled via email

Web page: TBA

eCompanion Site: D2L Brightspace @ MyLeo

Phone: TBA

Email: [Archana.Srinivas@tamuc.edu](mailto:Archana.Srinivas@tamuc.edu)

**Book:** Feldhamer, G.A., drickamer, L.C., Vessey, S.H., Merritt, J.F., Krajewski, C. 2015. Mammalogy: adaptation, diversity, ecology. Fourth Edition. Johns Hopkins University Press, Baltimore, Maryland, USA. **NOT REQUIRED!**

**II. Course Description**

Mammalogy - Three semester hours. The objective of this course is to survey the phylogenetic relationships, diversity, biology, and ecology of mammals, including an understanding of the characterization of the orders and families of the extant mammals based on morphological traits and evolutionary history.

**III. Student Learning Objectives**

To understand phylogenetic relationships, diversity, biology, and ecology of mammals.

To understand and apply basic concepts of mammals' taxonomy.

To collaborate and work on teams.

To develop a reading tradition.

To develop communication skills and clarity to present ideas and explain them in public.

**IV. Learning strategies**

Reading assignments

Analysis of scientific literature

Individual work, analysis of free reading

Written synthesis of information

**V. Assumptions, Expectations, Philosophy**

University students are a select group of students soon to be professionals.

Instructors can have high expectations of student performance.

Demanding courses benefit students more than easy courses.

Assignments are due on time unless you have made a prior arrangement with me (only granted for unusual or extenuating circumstances and in case of health



issues proper medical excuse is required.

Reading and assimilating information is a critical part of your current and continuing education. This will help you become a better writer, a more rounded individual, and expose you to subjects outside of your immediate knowledge

## VI. **Tentative schedule**

Date	Topic
WEEK 1	<b>Introduction</b> The study of mammals History of mammalogy Methods for studying mammals
WEEK 2	<b>Classification</b> Phylogeny and diversification of mammals Evolution and dental characteristics (Exam 1)
WEEK 3	Biogeography
WEEK 4	<b>Structure and function</b> Integument, support and movement Modes of feeding
WEEK 5	Control systems and biological rhythms (Exam 2)
WEEK 6	<b>Adaptations and Reproductive Physiology</b> Environmental adaptations
WEEK 7	Reproduction
WEEK 8	<b>Adaptive radiation and biodiversity</b> Monotremes and marsupials Tenrecoidea, Macroscelidae, Scadentia, Dermoptera, Solenodonta, Soricomorpha, and Erinaceomorpha Chiroptera (Exam 3)
WEEK 9	<b>Biodiversity cont'd</b> Primates, Pilosa and Cingulata (Xenarthans), Pholidota, and Tubulidentata Carnivora, Rodentia and Lagomorpha Proboscidea, Hyracoidea, and Sirenia
WEEK 10	<b>Behavior and Ecology</b>



Communication, aggression and spatial relations  
Sexual selection, parental care and mating systems

WEEK 11 Social behavior  
Dispersal, habitat selection and migration  
Populations and life history  
Community ecology  
(Exam 4)

WEEK 13 **Special topics**  
Parasites and diseases  
Domestication and domesticated mammals

WEEK 14 Conservation  
Research Projects and presentation

WEEK 15 Final Exam (Exam 5)

## VII. **Course Requirement and Evaluation Method**

Assignments, quizzes, and research paper are required. I encourage interactive participation even though is an online class. It is necessary that students have a professional and ethical behavior through the entire course.

Homework, quizzes, exams, concept implementation project and term paper are required.

It is necessary that students have a professional and ethical behavior through the entire course.

Grade basis:

5 Short exams (500 points)

5 assignments (50 points)

1 research project (60)

Total 610 points

Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).

Make-up quizzes will only be given if arrangements are made with the instructor before missing the scheduled quiz. A documented excuse will be required.

Otherwise, missing quizzes will be counted as zeroes in the overall grade



computation.

**Grading Scale:**

90.0 - 100% = A

80.0 - 89.9% = B

70.0 - 79.9% = C

60.0 - 69.9% = D

<60.0% = F

**Short exams (5)**

Short exams will cover material discussed each week. Each exam will be conducted Monday of the following week.

**Assignments (5)**

**Journal articles**

Reading and assimilating information is a critical part of your current and continuing education. For each assign date, a journal is named in the right column of the table, choose and read a paper from that journal that you find interesting or relevant. These journals are available in our library (online resources). On that date, provide me a citation and a short description of the paper (10 sentences). Each summary will follow the format of Journal of Mammalogy.

Date	Journal
WEEK 1-3	Journal of Mammalogy
WEEK 3-6	Wildlife Society Bulletin
WEEK 6-9	Wildlife Research (open source)
WEEK 9-12	The Journal of Wildlife Management
WEEK 12-15	Animal Behavior

**Research project and presentation:**

You will develop a research project (literature review) on a specific technique or set of techniques to study Mammals. You should include an introduction, methodologies used to study your topic, results, and discussion. The research project will have at least 2,500 words including references. The project will be due the last day of class. You will present your research project in a 5-minutes video-presentation and submit it in the assigned dropbox along with the written part.

**VIII. Course and University and Policies**

*Responsible Use of Technology* — It is expected that all students will only use cellphones, PDAs, laptop computers, MP3 players and other technology outside



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of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class and/or other penalties. Students are not allowed to use image, video, nor audio recording devices of any kind during class time without prior consent of the instructor.

*Use of AI:*

The critical work of creativity and original writing relies on integrity, originality, and ethical conduct in regard to appropriate representation as an author or creator. Thus, submitting work with a significant percentage of AI-generated content, unless otherwise permitted, can be considered academic misconduct under Texas A&M University Student Rule 20. Students must therefore cite the use of Generative AI tools and document what they have contributed to an assignment.

*University Specific Procedures:*

*ADA Statement-Students with Disabilities:*

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M-Commerce  
Gee Library  
Room 132  
Phone (903) 886-5150 or (903) 886-5835  
Fax (903) 468-8148  
[StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu)

*Nondiscrimination Notice*

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

*Student Conduct*

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

*Campus Concealed Carry* - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement



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officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.