Texas A&M University – San Antonio Department of Arts & Sciences Biology 4429: Mammalogy Fall 2024

Instructor: Ms. Marie Tipps

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Office hours: Monday/Wednesday 1:00-3:00 p.m.

Class Meeting Times and Locations

Lecture Tues/Thurs 2:00-3:15 p.m. – CAB 337

Lab Thurs. 11:00-1:45p.m. -

Required Materials for this Class

Textbook for Lecture:

Feldhamer et al. Mammalogy: Adaptation, Diversity, Ecology. Hopkins University Press 4th or 5th edition ISBN: 4th ed. – 9781421415888; 5th ed. - 9781421436524

Lab Exercises will be provided by instructor via Blackboard before the scheduled lab time.

Course Description:

The main goal of this course is to provide the student with an overview of mammalogy, the study of mammals, through the introduction of topics including mammal classification, physiology, adaptations, and ecology. The laboratory experience will expose students to a wide range of tools used in mammalogy, including mammal identification, field and data collection methods, and specimen preparation.

Course Objectives:

- 1) Understand the defining characteristics of a mammal.
- 2) Appreciate the diversity of mammals found worldwide, with an emphasis on identification of Texas fauna.
- 3) Evaluate primary literature in order to comprehend techniques and topics that are currently being studied in the field of mammalogy.
- 4) Use current laboratory techniques to review evolutionary, physiological, and systematic relationships between mammalian groups

<u>Course Design:</u> This course has two separate sections, a laboratory and a lecture portion, that will comprise your final grade. The lecture section will be worth 75% of your total average, while the laboratory will account for 25% of your final grade.

Lecture

Lecture days will consist of discussions, possible guest lecturers, reviews, and other activities pertaining to the material we are covering for each week. You will be expected to have read the material before your course day; however, lectures will be posted as well. Each week there will be a quiz with questions based on the lectures AND the activity we complete during the lecture time period.

<u>Attendance Policy</u> – Lecture attendance is crucial to receiving a good grade in this class. I will be taking attendance for all lectures. While I will not be assigning a certain percentage of your final grade to attendance, realize that attendance will be used as an additional evaluation of your performance at the end of the semester. Additionally, in-class assignments may randomly be assessed for points – if you miss class, you miss this assignment, and there is no way for you to earn those points. However, if you must miss a class due to some form of emergency, YOU are responsible for getting lecture information (including notes, assignment due dates, handouts, etc.) from a fellow student.

<u>Notes in class</u> – Each student is responsible for taking their own notes during a lecture/activity. You may record the lecture or use a laptop/tablet to take notes BUT any Power Point notes will be made available on Blackboard.

Exams:

Three regular exams (100 points each)

- Will be taken individually during lecture time.
- Material covered in lectures up to the day of the exam is fair game for questions however, if there is a lecture topic scheduled after the exam on the schedule below, that material goes on the next exam.
- Each exam will consist of a variety of question types, ranging from multiple choice to short answer to identify the taxa, etc.

Final Exam (200 points)

- 100 points of the exam will cover new material presented since Exam III
- 100 points of the exam will be a cumulative final, covering material from the entirety of the course, with an emphasis on big picture questions. <u>This portion of the test will replace your lowest grade</u> from the previous three tests.

Quizzes (100 points)

- 11 quizzes at 10 points each; lowest quiz grade will be dropped
- Quizzes are scheduled throughout the semester. They will vary in format but will always cover concepts already discussed in lecture.

Activities/Assignments (100 points)

• Activities and assignments will vary throughout the semester, as will the point value assigned to each activity. These will be short assignments that are applicable to the topic being studied at hand-for example, you may be asked to draw a phylogeny or write a short paragraph summarizing a current issue in mammalogy. Instructions for these assignments will be posted on Blackboard if they can be completed outside of class. The point value will total more than 100 points so you will have to add up the total number of points earned, divide by the total number of points available, and then multiply by 100. For example, if we end up with a total of 240 points for the semester, and you earned 230 of them, you would figure this score as follows: (230/240)*100 = 95.8 points of 100 for this category.

Journal Club

 We will be reading and evaluating peer-reviewed journal articles about current techniques used in mammalogy throughout the semester. Each person will be responsible for a different topic. More information will be presented in the first weeks of the semester.

Podcast Assignment (50 points)

Throughout the semester, you will be instructed to listen to several different podcasts of different types. You will be responsible for creating your own "episode" to fit into one of these podcast series. While some episodes may be long – your podcast does not need to be longer than 10 minutes. There will be some research required but this is meant to be a fun activity to get your brain thinking about mammals!

<u>Lab</u>

<u>General lab instructions</u> – you will be required to attend a briefing of the lab activity during your scheduled lab time. We may combine Lecture and Lab one day if the overview is a quick overview – however, there may be some weeks where the introduction to the lab will take a little bit of time; therefore, we will have a break in between lecture and lab. Most of the lab activities will be asynchronous

<u>Lab Attendance</u> – You will receive a grade of "0" for the lab section of your final grade if you miss more than 3 labs. Missing a lab will be considered as either not showing up for the introductory part of the online lab or not turning in an assignment.

<u>Lab Assignments/Activities</u> (600 points) – you will have 12 lab assignments throughout the course of the semester; the two lowest activity grades will be dropped.

<u>Mammal Project Proposal</u> – (100 points) – Your final lab project of the semester will culminate in developing a project that could be completed on campus, using methods we discuss throughout the course. You will be able to study the organism of your choice – but make sure you can find it in Texas, specifically Bexar County! You will receive more information on this throughout the semester.

Make-up Policies

Exams & Quizzes:

- You may make up an exam or quiz ONLY if
 - You contact me within ONE day of the scheduled exam
 - Your absence is due to one of the approved A&M-SA excused absences (illness, death in the family, other immediate family emergencies). Documentation will be required.

Activities/Assignments:

- Remember it is YOUR responsibility to find out about any missed assignments
- o Take-home assignments are the only ones you will be allowed to make up
- You may NOT make up any in-class activities NO EXCEPTIONS
- Due dates on any assigned work will be strictly enforced
- Any late work will receive a 5 point deduction. Late work is defined as being turned in at any point
 after the instructor has already collected the assignment (i.e. if asked for at the beginning of the class,
 turning the assignment in at the end of class will result in a 5 point deduction)

Grading:

Grades will be posted on Blackboard as assignments are graded and returned throughout the semester. However, remember these are your raw scores. They are not calculated based on the percentages previously mentioned for lab and lecture assignments. In order to determine your grade – use the following equation:

Lecture = (total number points YOU earned / 750) * 100 * 0.75 For example: (685/750) * 100 * 0.75 = 68.5

Lab = (total number points YOU earned / total number of points possible) * 100 * 0.25

For example: (580/700) * 100 * 25 = 20.7

Lecture + Lab = Total grade for the semester

For example: 68.5 + 20.7 = 89.2 - you would earn a B for the semester.

Grade Scale: 90-100 = A 80-89 = B

I will consider scaling your grade from a B to an A if you have earned an 89.6 AND you have great attendance.

70-79 = C 60-69 = D ≤59.5 = F

I will NOT scale from a B to an A if you have earned an

89.1%. That is an earned B all the way.

****ALL schedules subject to change****

Week	Dates	Topic Covered in Lecture	Chapter	Scheduled	Lab Topics
				Quiz/Exam	Thursday
1	T: 8/27	Syllabus Discussion/Introduction to Mammalogy	1/2		No Lab
	R: 8/29	History of Mammalogy/Methods of Studying Mammals			
2	T: 9/3	Mammal Origins – Evolution and Phylogeny	3/4	R: Quiz 1	Phylogeny Reconstruction
	R: 9/5	Mammalian Characteristics			
3	T: 9/10	Sexual Selection, Parental Care, Mating Systems	9/22	R: Quiz 2	Skull/Dentition &
	R: 9/12	Reproduction			Skeleton
4	T: 9/17	EXAM I	EXAM I	R: Exam I	Using a Key
	R: 9/19	Physiology Highlights	6-8		
5	T: 9/24	Monotremata & Metatheria	10	R: Quiz 3	Identifying Mammalian
	R: 9/26	Intro to Eutherian Mammals/Physiology	6-8		Orders
6	T: 10/1	Afrosoricida, Macroscelidea, & Tubulidentata	11	R: Quiz 4	Intro to Mammal Project
	R: 10/3	Paenungulata	12		Trapping Methods
7	T: 10/8	Cingulata and Pilosa	13	R: Quiz 5	Radio-tracking
	R: 10/10	Dermoptera and Scandentia	14		
8	T: 10/15	Primates	15	R: Exam II	Scent Stations
	R: 10/17	EXAM II	EXAM II		
9	T: 10/22	Rodentia and Lagomorpha	16	R: Quiz 6	Camera Trapping
	R: 10/24	Eulipotyphla	17		
10	T: 10/29	Carnivora & Pholidata	18	R: Quiz 7	Specimen Prep & Virtual
	R: 10/31	Chiroptera	21		Museum Tour
11	T: 11/5	Perissodactyla and Cetartiodactyla	19	R: Quiz 8	Ethograms
	R: 11/7	Cetacea	20		
12	T: 11/12	Exam III	EXAM III	R: Exam III	**Field Trip – Zoo**
	R: 11/14	FIELD TRIP - ZOO			
13	T: 11/19	Movement/Spatial Patterns	24	R: Quiz 9	Annotated Bibliography
	R: 11/21	Communication	23		for Mammal Project
14	T: 11/26	Social Behavior	23	R: Quiz 10	NO LAB – THANKSGIVING
	R: 11/28	NO CLASS – THANKSGIVING BREAK			BREAK
15	T: 12/3	Conservation Biogeography	28	R: Quiz 11	Mammal Project Proposal
	R: 12/5	Parasites and Disease	27		Due
16	T: 12/10	COMPREHENSIVE FINAL EXAM – 2:00-3:50 PM			
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IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us https://www.tamusa.edu/Disability-Support-Services/index.html or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

<u>Academic Learning Center:</u> The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

<u>Counseling/Mental Health Resources:</u> As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit tamusa.edu/studentcounseling

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer to peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.



<u>Emergency Preparedness:</u> JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com/.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: https://www.tamusa.edu/about-us/emergency-management/.

Download the SafeZone App (https://safezoneapp.com/) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

<u>Financial Aid and Verification of Attendance:</u> According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended the first week of class. Any student receiving federal financial aid who does not attend the first week of class will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on "Writing, Language, and Digital Composing Center" to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at https://www.tamusa.edu/academics/.

<u>Meeting Basic Needs:</u> Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

<u>Military Affairs:</u> Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots' Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

<u>Religious Observances:</u> Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

<u>The Six-Drop Rule:</u> Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or

pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

<u>Students' Rights and Responsibilities:</u> The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

- 1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
- 2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.

- 3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
- 4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

- 1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
- 2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, <u>Student Code of Conduct</u>, on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
- 3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
- 4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
- 5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct (https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html).

No Use of Generative AI Permitted

BIOL 4429 assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment for them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.