

Zoo Science and Management

Short Summer (May 11 – 30, 2026)

Course Number: 3417.301

Title: Zoo Science and Management

Credit hrs: 4

Prerequisites: BIOL 1306, BIOL 1106, BIOL 1307, BIOL 1107

Time and Place: Monday through Friday @ 9a to 4p (Lunch break 12 – 1:30p)

Lecture – UT Tyler BEP 213

Lab – Caldwell Zoo (2203 W Martin Luther King Jr Blvd, Tyler, TX 75702)

Instructors: Ms. Marsha Williams (mwilliams@uttyler.edu; BEP 129A) & Ms. Jessica Coleman (jcoleman@uttyler.edu; BEP 114)

Zoo Instructor: Scott Maddox, President/CEO (Director) – (smaddox@caldwellzoo.org)

Associate Instructors:

Dwight Evans, CFO – (devans@caldwellzoo.org)

Yvonne Stainback, Animal Curator (Birds/Reptiles) - (ystainback@caldwellzoo.org)

Scotty Stainback, Animal Curator (Mammals) - (ssainback@caldwellzoo.org)

Tori Scarber, Curator of Animal Behavior and Welfare - (tscarber@caldwellzoo.org)

Jud Barneburg, Commissary Manager - (jphillips@caldwellzoo.org)

Alex Sudduth, Director of Visitor Activities/Events - (asudduth@caldwellzoo.org)

Bud Clayton, Horticulture Manager (bclayton@caldwellzoo.org)

Dr. Taylor Willis, Veterinarian - (twillis@caldwellzoo.org)

Stefanie Santee, Veterinary Services Manager/LVT – (ssantee@caldwellzoo.org)

Braydyn Spradlin, Registrar / Veterinary Assistant – (bspradlin@caldwellzoo.org)

Jimmy Brooks, Supervisor, Mammals I (Rhino, Elephant, Giraffe, Texas Hook Stock, Cheetah)

Nichole Moore, Supervisor, Birds

Katelyn Lenhart, Supervisor, Reptiles

Ricki Roemer, Supervisor Mammals II (Tigers, Ocelot, Mountain Lion, Jaguar, Bears, Otters, Fox, skunk, anteater, monkeys, African hoof stock)

Jesse Santee, Keeper III, Mammal I

Sara Walker, AZA Senior Advisor on Wildlife Trafficking

Course Objectives: This course is designed to develop familiarity with conceptual and practical elements of operating and managing a zoo, including 1) to apply biological concepts, principles, and theories that aid in the management of captive wildlife, 2) to employ techniques used in wildlife husbandry, including animal growth, development, behavior, and welfare, 3) to familiarize students with areas of specialization in zoo science and additional qualifications that are required in seeking careers in zoo science, 4) to utilize zoo science terminology accurately, and 5) to describe ethical challenges in the management and research of captive animals.

Student Learning Outcomes: After this class, you should be able to...

- Demonstrate an understanding of the current role and potential for zoos in global conservation efforts.
- Demonstrate an understanding of *ex situ* conservation strategies used by zoos, and their relevance for wild conservation, including the advantages and challenges of *ex situ* conservation.
- Demonstrate an understanding of *in situ* conservation strategies supported by zoos, both on a global scale and in East Texas.
- Demonstrate an ability to communicate science to lay audiences and appreciate the importance of informal education in community conservation messages.

Textbook and Other Materials:

Required: Journal Notebook (e.g., Rite in the Rain Weatherproof Spiral Notebook: universal page pattern)

OPTIONAL Textbook: Rees, Paul. 2011. **Introduction to Zoo Biology and Management**. Wiley-Blackwell Publishing. 432pgs.

Students will be provided with selected readings, including primary articles, for class discussions throughout the semester.

Course Format: Classes will be held at UT Tyler and at the Caldwell Zoo, and zoo professionals will serve as instructors for classroom lectures as well as ‘fieldwork’ behind the scenes at the Zoo. Students will be expected to arrange transportation to the Caldwell Zoo for their class time.

Grading: The class is letter-graded, based on the following breakdown:

1. Student Project (Written Proposal + Presentation) – 50%
2. Journal – 20%
3. Class Discussion (Primary Article or Chapter discussion) – 20%
4. Attendance and participation - 10%

Letter grades will be assigned according to the following scale:

A = above 89.5 B = 79.5 – 89.49 C = 69.5 – 79.49 D = 59.5 – 69.49 F = Below 59.5

All your course grades will be in Canvas, so you will be able to view your current course grade at any time. Please be aware that EXTRA CREDIT or WORK will NOT be available at the end of the semester. Your average shown in Canvas will determine your final grade in the course. At the end of the semester, grades will be calculated in Canvas according to the syllabus. If your average is **within 0.5 points** of the next letter grade, the grade is automatically rounded up (see the grade scale above).

Attendance/Participation: Attendance is essential to success in this class. If you miss class, it is your responsibility to contact another student (not the instructor) to get notes and announcements from class. A portion of your grade is dependent on your attendance and participation, so missing a class time will affect your overall grade for the course.

Journals: Students are expected to maintain a journal throughout the course. These journals should contain observations and notes from lectures and facility tours, impressions of the class, and information presented. Student journals will provide valuable feedback to instructors and zoo staff on the quality of the course and will be returned to students for future reference and use after a grade has been assigned.

Zoo Project: A zoo project will constitute a major portion of the grade. Students will work in groups throughout the semester to design and propose an addition or change to one of the zoo's current exhibit offerings. Groups will be required to submit a proposal that outlines and prioritizes future acquisitions, particularly with respect to Caldwell's zoos' mission and goals. All groups will be assigned by the instructors, and group size will vary depending on enrollment, but a group of five is expected

Required Information:

1. A review of current exhibits at the Caldwell Zoo
2. Identify and justify potential new animals or exhibits
3. Consideration must be taken to include conservation goals with revenue and guest experience, including a cost-benefit analysis
4. A Written Proposal
5. A Presentation of the proposal to instructors and Zoo staff

Peer Assessments will also be included in your team grade. These peer assessments may change your overall grade for the project, depending on how well you work with your group. If you do not invest time or contribute to the project, your grade will drop, and scores may vary among group members based on your contribution.

Academic Integrity: Students should be aware that absolute academic integrity is expected of every student in all courses taken at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties. For instance, submitting plagiarized work to meet academic requirements, including representing another's work or ideas as one's own, or unacknowledged word-for-word research results, shall be grounds for charges of academic misconduct. **Any cheating or other forms of academic misconduct will be reported to the university administration and, at a minimum, will result in an automatic course failure.**

WHAT IS PLAGIARISM AND HOW CAN IT BE AVOIDED?

Plagiarism may be defined as (1) presenting work, ideas or phrasing of another, in whole or part, as one's own without giving credit and proper documentation of sources; (2) copying material directly from sources (including electronic media) except when the material is enclosed in quotation marks and the source is clearly identified; (3) paraphrasing too closely to the original, even when the source is identified; and (4) claiming credit for work in any media (electronic, digital, artistic, etc.) where the student is not the original creator of said work. Work that is plagiarized will receive an automatic grade of "F". If you are unsure about this subject, please take the time talk to your instructor and /or read this:

<https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism>

You will also be required to turn your written proposal into a Word document on **CANVAS**, which will use **Turnitin** to assess your paper for Plagiarism. You will find this on your Canvas page for this course; each assignment will be compared to previous student work, the work of your classmates, and online sources!

Corrupted File Policy: Any student who submits a corrupted file will be given 24 hours to submit a file that the instructor can open successfully. Failure to do so will earn a grade of “0” (Zero) for the paper.

UNIVERSITY POLICIES - For information about university policies, [click here](#).

STUDENT RESOURCES - Resources to assist you in this course

- UT Tyler Student Accessibility and Resource (SAR) Office. (provides needed accommodations to students with document needs related to access and learning)
- UT Tyler Writing Center.
- The Mathematics Learning Center.
- UT Tyler PASS Tutoring Center.
- UT Tyler Supplemental Instruction.
- Robert Muntz Library. and Library Liaison.
- Canvas 101. (learn to use Canvas, proctoring, Unicheck, and other software)
- LIB 422 -- Computer Lab where students can take a proctored exam
- The Career Success Center.
- UT Tyler Testing Center.
- Office of Research & Scholarship Design and Data Analysis Lab.

Resources available to UT Tyler Students

- UT Tyler Counseling Center. (available to all students)
- My SSP App. (24/7 access to Student Support Program counseling through phone or chat, and online wellness resources available in a variety of languages)
- Student Assistance and Advocacy Center.
- Military and Veterans Success Center. (supports for all of our military-affiliated students)
- UT Tyler Patriot Food Pantry.
- UT Tyler Financial Aid and Scholarships.
- UT Tyler Registrar's Office.
- Office of International Programs.
- Title IX Reporting.
- Patriots Engage. (available to all students. Get engaged at UT Tyler.)

I RESERVE THE RIGHT TO MODIFY THIS SYLLABUS AT ANY TIME. THEREFORE, YOUR ATTENDANCE AND ATTENTION TO THE ANNOUNCEMENTS ON CANVAS ARE CRUCIAL BECAUSE THEY WILL ASSIST YOU IN REMAINING CURRENT ON THE MATERIAL AND KNOWING WHEN THE SYLLABUS MAY BE MODIFIED.

Zoo Biology Schedule including Meeting Times