

**BIOL 4136 – Vertebrate Natural History Lab**

**Spring 2025**

**Meeting time:** Tuesday 2:00 PM - 4:50 PM

**Meeting classroom:** BEP 124

**Professor:**

Marsha G. Williams

Office: HPR 107 (but check in BEP 129 or 118 if I'm not in my office)

Phone: 903-566-6194

Email: mwilliams@uttyler.edu

Office Hours: Mon. and Wed. 1:00 – 2:30 P.M., or by appointment.

**Graduate Teaching Assistant:**

Addie Munn

Office BEP 118

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Office Hours: T 9:30 – 11:00 AM; TH 12:30 – 2:00 PM or by appointment.

Week of 1/13 & 4/21: T 9:30 – 11:00 AM; W 9:00 – 10:30 AM

**Catalog Description:** Taxonomy, evolution, and natural history of the vertebrates of the world with emphasis on North American and East Texas species.

**Course Objectives/Student Learning Outcomes:** By the end of the semester students should be able to:

1. Identify local species of fish, amphibians, reptiles, birds, and mammals.
2. Identify and analyze amphibian, bird, and bat calls.
3. Describe various field methods for the collection of wildlife specimens.
4. Describe how wildlife samples are processed for natural history museums.

**Required Texts: No Required Text.** We may assign primary literature for you to read throughout the semester. We will provide the readings on Canvas.

**Textbooks/Resources that will be beneficial for this course:**

**Fishes:** The Freshwater Fishes of Texas

<https://www.tamupress.com/book/9781585445707/freshwater-fishes-of-texas/Links to an external site.>

**Amphibians and Reptiles:** Amphibians and Reptiles of Texas

<https://www.tamupress.com/book/9781603447348/amphibians-and-reptiles-of-texas/Links to an external site.>

**Birds:** Below are two apps that allow you to look up specific species and identify species based on what you see and hear. These apps are free and can be downloaded through the App Store or Google Play.

<https://merlin.allaboutbirds.org/Links to an external site.>

<https://ebird.org/homeLinks to an external site.>

**Mammals:** The Mammals of Texas

<https://utpress.utexas.edu/books/schmidly-bradley-mammals-of-texasLinks to an external site.>

Free online version:

<https://www.depts.ttu.edu/nsrl/mammals-of-texas-online-edition/Links to an external site.>

**Evaluation: Students will be evaluated based on the following work:**

**Practical Exams (50%):** Two practical exams will be administered according to the below schedule. Each will be worth 25% of your final grade.

**Final Project (20%):** The final project will be a semester long project. You will create a digital collection of all the specimens you have seen/collected. The location, date, and species should be on it somewhere. The culmination of this collection should also be posted on iNaturalist throughout the semester. **ONLY NATIVE ANIMALS SHOULD BE UPLOADED (DO NOT UPLOAD A FRIEND'S EXOTIC PET).** A class presentation at the end of the semester should be comprised of your collection. Try and use animals that are not going to be common in others, if possible. This project is 20% of your grade and presentations will take place during the last two class periods (April 15<sup>th</sup> & 22<sup>nd</sup>).

**Attendance (20%):** Attendance will be taken each class period and count for 20% of your final grade.

**Caldwell Zoo (10%):** One individual evening and morning trip (in sequence) to the Caldwell Zoo in Tyler to observe mammal trapping is required (5%). This assignment and available times will be presented in a class.

**We will follow a 10-point scale for grading:**

90 - 100% = A, 80 - 89.99% = B, 70 - 79.99 = C, 60 - 69.99% = D, 0 - 59.99% = F

**IMPORTANT DATES:**

Jan 27th: Census Date

Feb 25th: Practical 1

Mar 17-21st: Spring Break (no classes)

April 8th: Practical 2

Mar 31st: Last Day to Withdraw

April 15th & April 22nd: Project Presentations

### Tentative Lab Schedule:

Day	Lab Topic
Jan 14	Introduction – Syllabus, Citi Training, and Introduce semester project
Jan 21	Fish identification lab (specimens)
Jan 28	Fish Field Trip (Black Fork Creek)
Feb 4	Amphibian identification lab (frog calls and specimens)
Feb 11	Reptile identification lab (turtle trapping and specimens)
Feb 18	Herp Field Trip (Camp Tyler)
Feb 25	<b>Practical 1 (Fish and Herps)</b>
March 4	Bird identification lab (calls and specimens)
March 11	Bird Field Trip (TBD)
March 17 – 21	Spring Break
March 25	Mammal identification lab (specimens); Mammal field trip will be when you go to the zoo.
April 1	Open Lab (Study & work on projects)
April 8	<b>Practical 2 (Birds and Mammals)</b>
April 15	<b>Project Presentations</b>
April 22	<b>Project Presentations</b>

**Academic Misconduct:** Submitting plagiarized work to meet academic requirements including the representation of another's work or ideas as one's own; the unacknowledged word for word use of another person's ideas; and/or the falsification, fabrication, or dishonesty in reporting research results shall be grounds for charges of academic misconduct. Any cheating or other type of academic misconduct will be reported to university administration and at minimum will result in automatic failure of the course. Papers will be submitted on Canvas using the Turn It In plagiarism software.