

Syllabus BIOL 4335 – Vertebrate Natural History

Spring 2025

Meeting time: Tues/Thurs 11:00 AM - 12:20 AM

Meeting classroom: RBN 3039

Professor:

Marsha G. Williams, HPR 107 (but check in BEP 129 if I'm not in my office), Phone 903-566-6194, Email – mwilliams@uttyler.edu

Office Hours: T, TH 9:30 – 11:00 A.M., or by appointment.

Undergraduate Teaching Assistant (VNH Lab):

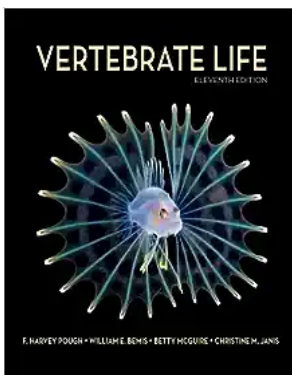
Addie Munn, BEP 118, Phone 903-566-5887, Email – mmunn4@patriots.uttyler.edu

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. Describe the adaptations of the major lineages of vertebrates.
2. Describe the features and their function of each major lineage of vertebrates.
3. Describe the geography and ecology of the Mesozoic and Cenozoic Eras.

Required Texts:



Pough, F. Harvey, Christine M. Janis, William E. Bemis, and Betty Anne McGuire. 2022. *Vertebrate Life*, 11th Edition. Oxford University Press, New York.

I may also assign primary literature for you to read throughout the semester. I will provide the readings on Canvas.

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

Examinations (60%): Two midterm exams and a final exam will be administered according to the below schedule. Each will be worth 20% of your final grade.

A review will be given before each exam. This review does not constitute the exact exam questions you will be given on exam day. The review is meant to give you an idea of how to

study the material and the types of questions you may find on the exam. All material covered for each exam module is possible for an exam question.

In the event you wish to dispute an exam question, an essay outlining your argument must be submitted within one week of the exam being handed back to you.

Assignments (20%): There will be 3-6 assignments throughout the semester which will cumulatively be worth 20% of your grade. These assignments will be randomly assigned throughout the semester and will be started during class time but may require students to complete them for homework.

Attendance (20%): Attendance will be taken every class period.

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

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.

Tentative Class Schedule:

| <u>Week</u> | <u>Lecture Topics:</u> |
|-------------|---|
| Jan 13 | Diversity, Classification, and Evolution of Vertebrates (Ch. 1), What is a Vertebrate? (Ch. 2) |
| Jan 20 | Jawless Vertebrates and the Origin of Gnathostomes (Ch 3); Living in Water (Ch. 4) |
| Jan 27 | Geography and Ecology of the Paleozoic (Ch. 5), Origin and Radiation of Chondrichthyes (Ch. 6) |
| Feb 3 | Origin of Osteichthyes and Radiation of Actinopterygians (Ch. 7) |
| Feb 10 | Sarcopterygians and the Origin of Tetrapods (Ch. 8) Exam 1: Thursday, Feb 13th |
| Feb 17 | Origins of Lissamphibia and Amniota (Ch. 9), Geography and Ecology of the Mesozoic (Ch. 10) |
| Feb 24 | Living on Land (Ch. 11), Lissamphibians (Ch. 12) |
| Mar 3 | Synapsids and Sauropsids (Ch. 13), Ectothermy and Endothermy (Ch. 14) |
| Mar 10 | Lepidosaurians (Ch. 15), Turtles (Ch. 16) |
| Mar 17 | Spring Break (no classes) |
| Mar 24 | Crocodylians (Ch. 17), Exam 2: Thursday, Mar 27th |
| Mar 31 | Avemetatarsalia and the Origin of Dinosauria (Ch. 18) Theropods and the Origin of Birds (Ch. 19) |
| Apr 7 | Geography and Ecology of the Cenozoic (Ch. 20), Extant Birds (Ch. 21) |
| Apr 14 | Synapsida and the Evolution of Mammals (Ch. 22), Therians (Ch. 23) |
| Apr 21 | Primate Evolution and Emergence of Humans (Ch. 24), Review for Final Exam |
| | Final Exam: Tuesday, Apr 29th 11:00 – 1:00 p.m. |

Important Dates:

*Jan 20th – Martin Luther King, Jr. Day (no classes)

*Mar 31st – Last day for W

* Apr 28th-30th – Final Exam Week

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 the representation of another's work or ideas as one's own; the unacknowledged word-for-word research results shall be grounds for charges of academic misconduct. **Any cheating or other types of academic misconduct will be reported to the university administration and at minimum will result in an automatic failure of the course.**

Use of an AI Generator such as ChatGPT, iA Writer, MidJourney, DALL-E, etc. is **explicitly prohibited** unless otherwise noted by the instructor. The information derived from these tools is based on previously published materials. Therefore, using these tools without proper citation constitutes plagiarism.

Additionally, be aware that the information derived from these tools is often inaccurate or incomplete. **It is imperative that all work submitted should be your own.** Any assignment that is found to have been plagiarized or to have used unauthorized AI tools may receive a zero and/or be reported for academic misconduct.