Syllabus BIOL 4335 – Vertebrate Natural History Fall 2021

Meeting time: Tues/Thurs 8:00 AM - 9:20 AM
Meeting classroom: Ratliff Building South 02019

Professor:
Marsha G. Williams, HPR 107 (but check in BEP 118 or 129 if I’m not in my office), Phone 903-566-6194, Email – mwilliams@uttyler.edu
Office Hours: Mon. 2:00 – 4:00 P.M. and Wed. 2:00 – 3:00 P.M., or by appointment.

Professor:
Dr. Matthew Greenwold, HPR 117, Phone 903-566-6303, Email – mgreenwold@uttyler.edu
Office Hours: Tues. 10:00 A.M. – 1:00 P.M., or by appointment.

Undergraduate Teaching Assistant:
Mercedes Delgado, BEP 118, Phone 903-566-5887, Email – mdelgado6@patriots.uttyler.edu
Office Hours: Thurs. 9:30 – 11:00 A.M. or by appointment.

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:

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

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

Examinations (75%): Two midterm exams and a final exam will be administered according to the below schedule. Each will be worth 25% of your final grade.

Assignments (15%): There will be 3-6 assignments throughout the semester which will be worth 15% 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 (10%)**: Attendance is mandatory and is worth 10% of your final grade. Attendance will be taken every class period.

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.

**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:**

<table>
<thead>
<tr>
<th>Week (Instructor)</th>
<th>Lecture Topics</th>
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<tbody>
<tr>
<td>Aug. 23 (Williams)</td>
<td>Introduction: Evolution, Diversity, and Classification of Vertebrates (Ch. 1), What is a Vertebrate? (Ch. 2)</td>
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<td>Aug. 30 (Williams)</td>
<td>Jawless Vertebrates and the Origin of Jawed Vertebrates (Ch 3); Living in Water (Ch. 4)</td>
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<td>Sept. 6 (Williams)</td>
<td>Geography and Ecology of Paleozoic Fish (Ch. 5), Radiation and Diversity of Chondrichthyes (Ch. 6)</td>
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<td>Sept. 13 (Williams)</td>
<td>Extant Chondrichthyes (Ch. 7)</td>
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<td><strong>Exam 1: Thursday, Sept. 16th</strong></td>
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<td>Sept. 20 (Williams)</td>
<td>Radiation and Diversity of Osteichthyes (Ch. 8), Extant Bony Fishes (Ch.9)</td>
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<td>Sept. 27 (Greenwold)</td>
<td>Origin and Radiation of Tetrapods (Ch. 10), Extant Amphibians (Ch. 11)</td>
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<td>Oct. 4 (Greenwold)</td>
<td>Living on Land (Ch. 12), Geography and Ecology of the Mesozoic Era (Ch. 13)</td>
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<td>Oct. 11 (Greenwold)</td>
<td>Synapsids and Sauropsids (Ch. 14), Ectothermy: A Low-Energy Approach to Life (Ch. 15)</td>
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Oct. 18 (Greenwold)  Turtles (Ch. 16), Lepidosaurs (Ch. 17)

**Exam 2: Thursday, Oct. 21st**

Oct. 25 (Greenwold)  Crocodylians (Ch. 18), Mesozoic Diapsids: Dinosaurs and Others (Ch. 19)

Nov. 1 (Greenwold)  Endothermy: A High-Energy Approach to Life (Ch. 20), The Origin and Radiation of Birds (Ch. 21)

Nov. 8 (G & W)  Greenwold: Extant Birds (Ch. 22), Williams: Geography and Ecology of the Cenozoic Era (Ch. 23)

Nov. 15 (Williams)  Synapsida and the Evolution of Mammals (Ch. 24), Extant Mammals (Ch. 25)

Nov 22  No Classes—Thanksgiving Holidays

Nov 29 (Williams)  Primate Evolution and Emergence of Humans (Ch. 26), Review for Final Exam

Dec 6  Study Day (Dec 6)

**Final Exam: TBA**

*Nov 1st – Last day for W*
*Final Exam – TBA*