

Syllabus for Natural History of Vertebrates

Biol 3420: Spring 2017

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<http://wtamu.edu/~rmatlack/bio3420.htm> (under revision and being updated this semester, check back regularly!)

Social media @TexasWildEdu (Facebook and Instagram required)

Personal sites: Facebook @Ray Matlack and Instagram@unlikelyprofessor

I am available most of the day and most days via any of the above contacts. I am happy to visit with you electronically (text, email, message), by phone (audio or video), and in person as soon as we can make the arrangements. Making use of technology expands greatly the speed at which you can reach me and seems appealing to many. Don't hesitate to take me up on my offer to meet face to face!

HYBRID COURSE: First in-person meeting is 20 March; check your WTAMU email regularly!

Meeting times: Lecture – MW 1:30-2:45 (ANS 320); Labs – Tuesday 3:00-4:50 (ANS 304)

Texts and other materials: *no text required based on Vertebrate Life, 7th Ed. Pough, Janis, and Heiser and others texts.*

Course description: This course will provide students with a detailed understanding of the biology, ecology, diversity and natural history of vertebrates. Students will become familiar with the characteristics of the different groups of vertebrates. Students will learn to identify species of vertebrates common to the Panhandle of Texas and will examine morphological adaptations of vertebrates in the laboratory portion of the course.

Course Objectives:

1. To gain a sense of the diversity of vertebrates including the characteristics of each major group of vertebrate
2. To understand the environmental adaptations that allow survival and reproduction in vertebrates
3. To learn about the biology, ecology, conservation, and behavior of vertebrates
4. To be able to identify the common vertebrates of Texas

Course Requirements and Evaluation:

Grading:

Grade Scale: A= 90-100%
B= 80-89%
C= 70-79%

D= 60-69%

F= 0-59%

Points available

Pre- post-course ID assessment	2 @ 10 participation pts	20 pts
Quizzes	11 (drop lowest grade) @20pts	200 pts
Photo quizzes	7-12 @ 10 points	70-120 pts
Bison, Balls and Bats field trip	Social media participation	50 pts
Mammal trapping/birds	Social media participation	50 pts
Midterm (cumulative)		200 pts
Final Exam (cumulative)		250 pts
*Evaluation is subject to change		

Assessment/assignment Calendar (subject to change)

Week 1: 17-22 January		
Week 2: 23-29 January		
Week 3: 30 January – 5 February		
Quiz 1	5 February started by midnight	Covers quiz material from start of class through 29 January
Week 4: 6-12 February		
Pre- post-quiz (10 points for completion)	7 February	
Quiz 2	12 February started by midnight	30 January through 5 February
Week 5; 13-19 February		
Photo quiz PQ1	14 February	
Quiz 3	19 February started by midnight	6 through 12 February
Week 6; 20-26 February		
PQ2	21 February	
Quiz 4	26 February started by midnight	13 through 19 February
Week 7; 27 February – 5 March		
PQ3	28 February	
Quiz 5	5 March started by midnight	20 through 26 February
Week 8; 6-12 March		
No quiz	12 March	
Week 9; 13-19 March	Spring Break	
No quiz	19 March	

Week 10; 20-26 March		
20 March, Monday	First in-class lecture	
PQ4	21 March	
Quiz 6	26 March started by midnight	27 February through 19 March
Week 11; 27 March – 2 April		
PQ5	28 March	
Mid-term (in-class and cumulative)	Wednesday, 29 March	
31 March, Field trip “Bison, Balls, and Bats, Respectively”	Caprock Canyons State Park depart WT at 11:00 am	Return to canyon about 1.5 hours after sunset
Quiz 7	2 April started by midnight	20 through 26 March
Week 12; 3-9 April		
PQ6	4 April	
4 April, Lab meeting	Campus wildlife crawl	Lab period 3:00-4:50
Quiz 8	9 April started by midnight	27 March through 2 April
Week 13; 10-16 April		
PQ7	11 April	
15 April field trip (Saturday)	Mammal trapping and bird ID	~7:30-12:00
Quiz 9	16 April started by midnight	3 through 9 April
Week 14; 17-23 April		
PQ8	18 April	
21, 22 April	Field Trip weather delay if needed	
Quiz 10	23 April started by midnight	10 through 16 April
Week 15; 24-30 April		
Quiz 11	30 April started by midnight	17 through 23 April
TBA	Final Exam (in-class and cumulative)	

*Additional assignments will be given, as necessary, to facilitate learning of the material or to help meet the course objectives.

NOTE: Please be quiet and attentive during field trips. Large groups are detrimental to seeing a lot of birds so it is imperative that everyone be conscious of this and do their best to keep disturbances to a

minimum. Avoid talking loudly, fast movements when birds are close, and pay attention to me so I can convey information to you in a quiet voice. Disruptive or inconsiderate behavior will not be tolerated. **Ten points will be deducted from your laboratory grade for disruptive behavior during field trips (for each offense!). If you continue to be disruptive you will not be allowed to participate in field trips.**

Explanation of evaluation:

Pre-, Post-course ID assessment will assess your knowledge of bird identification before and after the course. You will not be graded on accuracy, only on completing the assessments.

Quizzes will cover all material provided or discussed during the time period listed in the assignment calendar above. Be sure to look over all notes, readings, guest speakers and social media sites including live broadcasts, videos, photographs etc. You will take your quizzes on WTClass and **missed quizzes cannot be made up for any reason** so use the week quizzes are available very carefully and avoid waiting until the last minute to take quizzes. Your lowest quiz grade will be dropped.

Photo quizzes will help you learn bird identification. You will find photographs for species you are responsible for on each PQ on the course web site at wtamu.edu/~rmatlack/biol4433. Photo quizzes will be conducted on WTClass and you will be presented a photograph of a bird to identify. It is expected that you will study identifying characters for each species using your field guide before the quizzes. I suggest making notes of characteristics for help on the quizzes.

The **midterm exam** is cumulative and will cover all material to this point in the course including the order of birds.

Field trip and online work will largely replace standard lab meetings because two hours of lab per week is too little to allow field trips. You will have assignments associated with each field trip listed in the syllabus.

The **final exam** in lecture is cumulative and will consist mostly of short answer, multiple choice, fill in the blank, matching, etc.

Policies and Responsibilities:

Cursing and adult language may be used by me to express enthusiasm, disbelief or other emotions when lecturing. I will make use of humor, make fun of myself and do just about anything to make lecture fun and educational for you and me. Further, comedic video containing profanity may be used to demonstrate lecture topics. I will not curse at or disrespect you!

Attendance - I cannot imagine that you will find it possible to master this material without regular class attendance in the lecture and the laboratory. Regardless of whether you are in class or not, you are responsible for everything which is discussed in lecture, any announcements made in class, everything that is assigned as class reading, and any handouts given out in class. If you miss class, you must make your own arrangements for access to class notes or handouts from classes that you miss.

I will not provide copies of my class notes except under very rare circumstances (serious injury, surgery, etc.) and by PRIOR arrangement only.

Hybrid course design and reasoning:

It's been said that lecturing is not the most efficient way to educate students and in some ways I've come to accept portions of this statement. A hybrid course, portions delivered online and portions delivered in person, for my teaching style, seem ideal in a number of ways. Basically, you get up to speed on course content and then we come together for lecture/discussion and more, as an informed group. Lab time is concentrated in blocks for field trips and field time with less in-lab time with specimens in most cases. You will be following along, via technology and social media, with me on my trips exploring a different part of Texas each semester. I'll bring to your attention wildlife, habitats, conservation and management issues as I travel and we will discuss its relevance to your particular course(s) and wildlife in general.

A big change you will see is on-line evaluation and an increased opportunity for points in my courses. These exercises are designed to prepare you for your in-class evaluation later in the semester, much of which will be CUMULATIVE!

Field trips:

Field trips are a very important part of the laboratory portion of this class. Please dress for the weather conditions and be sure to wear sturdy and comfortable footwear as we will be hiking across rugged terrain. If the weather is hot, bring water, sunscreen, and a hat. If you arrive late for lab there is a good chance that you will be left behind. Please do not request that we return early from a field trip – keep the entire lab period free in your calendar!

Packing lists and additional trip information will be provided prior to field trips.

Makeup exams – All exams must be taken at the times announced in class or in the syllabus. Make up exams will NOT be given. If the student has a doctor's letter or letter of absence for a school-sponsored event, the exam missed will be replaced with their score from their cumulative final exam. If you have a serious reason for missing an exam, you must contact me **BEFORE** the scheduled exam period to notify me that you cannot take the exam. **If you are late to an exam and students have completed their exam and left the classroom you have missed the exam.** If you miss a laboratory quiz or exam you may not be able to make up the assignment or you may be given a test or quiz that differs in format, number of questions, etc. from that given to the rest of the class on the assigned date.

Note: Exams are subject to change and I reserve the right to change any and all information contained in the syllabus.

Academic Integrity

All work must be completed individually unless otherwise stated. Commission of any of the following acts shall constitute scholastic dishonesty: acquiring or providing information for any assigned work

or examination from any unauthorized source; informing any person or persons of the contents of any examination prior to the time the exam is given in any subsequent sections of the course or as a makeup; plagiarism; submission of a paper or project that is substantially the same for two courses unless expressly authorized by the instructor to do so. For more information, see the [Code of Student Life](#)ⁱ.

Acceptable Student Behavior

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (*Code of Student Life*). Unacceptable or disruptive behavior will not be tolerated. Students engaging in unacceptable behavior may be instructed to leave the classroom. Inappropriate behavior may result in disciplinary action or referral to the University's Behavioral Intervention Team. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc.

ADA Statement

West Texas A&M University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to register with [Student Disability Services](#)ⁱⁱ (SDS) and to contact faculty members in a timely fashion to arrange for suitable accommodations. Contact Information: Student Success Center, CC 106; phone (806) 651-2335.

Title IX Statement

West Texas A&M University is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect in an environment free of sexual misconduct and discrimination. Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. Harassment is not acceptable. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:

- WTAMU Title IX Coordinator Becky Lopez – Kilgore Research Center 147, **or** call 806.651.3199
- WTAMU Counseling Services – Classroom Center 116, **or** call 806.651.2340
- WTAMU Police Department – 806.651.2300, **or** dial 911
- 24-hour Crisis Hotline – 800.273.8255, **or** 806.359.6699, **or** 800.692.4039
<https://www.notalone.gov/>

For more information, see the [Code of Student Life](#)ⁱⁱⁱ.

Evacuation Statement

If you receive notice to evacuate the building, please evacuate promptly but in an orderly manner. Evacuation routes are posted in various locations indicating all exits, outside assemble area, location of fire extinguishers, fire alarm pull stations and emergency telephone numbers (651-5000 or 911). In the event an evacuation is necessary: evacuate immediately do not use elevators; take all personal belongings with you; report to outside assembly area and wait for further information; students

needing assistance in the evacuation process should bring this to the attention of the instructor at the beginning of the semester.

WT Attendance Policy for Core Curriculum Classes

For the purposes of learning assessment and strategic planning, all students enrolled in Core Curriculum or developmental courses at West Texas A&M University must swipe their Buff Gold cards through the card reader installed in the classroom/lab for each class/lab meeting.

Chemical and Equipment Safety Statement

Safety is everyone's responsibility. Material Safety Data Sheets (MSDSs) are provided for all chemicals used in this class. MSDSs provide information about physical properties, health risks, fire explosion data, and other important information associated with these chemicals. Before handling or using a chemical, you should refer to the MSDS for that chemical. It is your responsibility to inform the instructor in writing of any health conditions that may prevent you from safely using a chemical (pregnancy, auto immune deficiency, etc.). It is also the responsibility of the student to report any spill or problems found while storing or using a chemical. If you are unsure about a chemical, always ask. If you see any unsafe condition, notify your instructor immediately. If you are unsure about the proper and safe operation of any piece of equipment, ask your instructor for proper instruction. All injuries, spill of materials and unsafe conditions must be reported to the instructor immediately. Any pregnant students, or students planning to become pregnant, should consult their health care provider to determine what, if any, additional precautions are needed based on their individual situation. It is the responsibility of the student to communicate their needs to the Vice President for Student Affairs as soon as possible in order for risk-reduction to begin when it can be most effective, and to determine if additional modifications are necessary. While the university cannot mandate that the student notify that she is pregnant or is planning to become pregnant, the university strongly recommends that students provide notification so appropriate steps can be taken to ensure the health of both parent and child. To communicate health circumstances or to request additional information, please contact the Vice President for Student Affairs.

Student Laboratory Safety Training

An online Student Laboratory Safety Training may be required and assigned through WTClass upon registration for this class. By registering for this class, the student agrees to complete the assigned training (if needed), no later than 12th class day for fall/spring terms or 5th class day for summer terms and acknowledge non-participation in activities if not completed by 18th class day for fall/spring terms; 10th class day for summer terms.

Tentative lecture content:

LECTURE SUBJECT

Diversity, Classification, and Evolution of Vertebrates

BIRDS

Characteristics of birds

Evolution of birds and flight
Avian specializations

MAMMALS

Characteristics of mammals
Mammalian specializations
Endothermy
Body size, ecology, and sociality of mammals

HERPETOFAUNA

Living on land
Salamanders, anurans, and caecilians
Turtles
Tuataras, lizards, and snakes
Endothermy

FISHES

Living in water
Cartilaginous fishes
Bony fishes

ⁱ <http://www.wtamu.edu/webres/File/Student%20Life/2014-15CodeOfStudentLife.pdf>

ⁱⁱ <http://www.wtamu.edu/student-support/disability-services.aspx>

ⁱⁱⁱ <http://www.wtamu.edu/webres/File/Student%20Life/2014-15CodeOfStudentLife.pdf>