

Vertebrate Biology



Dr. Jeff Kopachena
Dept. of Biological Sciences

Office Location: Science Building, Rm. 258

Office hours: MWF 10:00 – 11:00 or by Appointment

Office Phone: 903 886-5395 **(Don't try to call me on the phone)**

University Email: Jeff.Kopachena@tamuc.edu

Preferred Communication: **Email**

DON'T CALL ON THE PHONE!!

Course Information

Textbook:

This course does not have a textbook.

Attendance Policy

Any student with 5 or more missed deadlines will be dropped from the class. No prior notification will be given.



Course Catalog Description:

Vertebrate Biology Hours: 3

This course takes a systematic approach to understanding vertebrate evolution, diversity and biology. It will follow the development of each vertebrate taxon through the fossil record from late Cambrian to the present. This is followed by discussions of vertebrate zoogeography, habitat and foraging, feeding modes, dispersal and migration, mating systems and parental care. Prerequisites: BSC 301. Crosslisted with: AG 404.

Course Synopsis:

This course takes a systematic approach to understanding vertebrate evolution, diversity, and biology. We follow the development of each vertebrate taxon through the fossil record from the late Cambrian to the present. Major trends in ecological adaptations are described along with underlying structural and physiological modifications. The purposes of this course are:

- 1) To understand the origin and evolution of Vertebrate phyla
- 2) To learn about vertebrate diversity and ecology

Student Learning Objectives:



1. Students will demonstrate knowledge of the evolution of vertebrate diversity.
2. Students will demonstrate knowledge of vertebrate zoogeography and habitat relationships
3. Students will demonstrate knowledge of vertebrate use of space and foraging behavior.
4. Students will demonstrate knowledge of vertebrate mating systems and parental care

Course Requirements

Minimal Technical Skills Needed

1. Must be able to use MyLeo Online
2. Must be able to use MS-Word and MS-PowerPoint
3. Must have access to an audio player or be able to play audio files
4. Must be able to read the English language
5. Must be able to use a calendar and take tests on the appropriate date
6. Must be able to communicate via email and



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Instructional Methods

This is a face to face, lecture-based course. You are expected to attend class, view the lecture materials online, and to study the materials provided. These materials will be provided in the form of PowerPoint slide presentations that will also be available in D2L. Tests will be online.

Student Responsibilities or Tips for Success in the Course

You are responsible for ensuring that you attend class and complete all tests and assignments in a timely manner. Make sure you follow all instructions carefully and consult your instructor if you have any questions. **ALL STUDENTS MUST KEEP TRACK OF EMAILS AND CLASS ANNOUNCEMENTS**



Students are responsible for following the directions for all assignments, including instructions provided through emails and in D2L.

PLEASE NOTE: All students are responsible for having secure and reliable internet service. Nonetheless, internet services can be unpredictable at times.

For this reason, **DO NOT WAIT UNTIL THE LAST MINUTE TO TAKE ONLINE TESTS.** If you try to take a test after 11:00 PM, and your internet fails, I will not re-open the test and you will lose the points for that test.

Grading and Course Content

Grades and Grading Scheme	
Item	Percent
Test 1	10
Test 2	10
Test 3	10
Test 4	10
Test 5	10
Mini Essays	20
Final Exam	30
Total	100





****Disclaimer: The instructor reserves the right to make changes to the schedule and grading of the class. Any alterations will be announced in class, in D2L, or via email by the instructor. Students who do not attend class, check D2L, or their email assume responsibility for missing adjustments to the course.**

Bonus Points

I closely track the class averages. Bonus point assignments will be offered sporadically through the semester as warranted. The value of these will vary.

Tests

There will be 5 tests throughout the semester, each worth 10 percent of your final grade. The subject matter for each test is as follows:

Test #1

1. Introduction
2. Fishes
3. Amphibians

Test #2

4. Reptiles
5. Birds
6. Mammals part 1
7. Mammals part 2



**Test #3**

- 8. Zoogeography
- 9. Habitat and Foraging

Test #4

- 10. Feeding Modes
- 11. Use of Space

Test #5

- 12. Sex, courtship, reproduction
- 13. Parental Care

PowerPoint slides from the lectures are available in D2L

Final Exam

Thirty percent of your final grade will be based on the final exam. The final exam is comprehensive and will be administered during finals week during the scheduled time.

Mini Essays

Twenty percent of your total grade will be based on a series of mini essays that will be assigned to you. The mini-essays will be assigned at various times throughout the semester and the number of mini essays assigned has yet to be determined.

The purpose of these is to foster further interest in vertebrates and, at times, to cover vertebrate-related topics not completely covered in the course materials.

Your mini-essays must be **more than one full page**, double-spaced, using 12-point Times New Roman font with 1" margins on all sides. Failing to follow these guidelines will cause you to lose points. If the mini-essay requires that you use outside sources, then you must cite all sources of information including sources used for any figures and tables. Copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a score of zero for your mini-essay.



Important note about Written Assignments:

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the

capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented and any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

The policy of this course is to disallow entirely the use of such software for all written assignments.

Students are fully responsible for the content of any assignment they submit. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

Important Note: This course uses Turnitin plagiarism software to detect plagiarism and the use of AI-generated text. This software compares all course submissions (chapter reviews, article reviews, etc.) to all published and unpublished materials including the course textbook and other student papers. It calculates a percentage match to these materials. Any student whose assignment yields a 20% or higher match will get a zero for their assignment. In the case of a 20% or higher match among two or more students, all the individuals involved will get a zero for their assignment.

Grade Assignments are as follows: F= < 50%, D = 50 - 69%, C = 70 – 79%, B = 80 – 89%, A >90%



Scroll to the next page for the course calendar

Vertebrate Biology Calendar:

January

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
7	8	9	10 1 st Class	11	12	13
14	15  No Class	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31 Test 1			

February

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21 Test 2	22	23	24
25	26	27	28	29		

March

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11 SPRING BREAK	12 SPRING BREAK	13 SPRING BREAK	14 SPRING BREAK	15 SPRING BREAK	16
17	18	19	20 Test 3	21	22	23
24	25	26	27	28 Drop Date	29	30
31						

April

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
7	8	9	10 Test 4	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30 Test 5				

May

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1 Study Day	2 Study Day	3 Study Day	4
5	6	7	8 Final Exam Exit Test	9	10	11

Obligatory Statements:

****Disclaimer: The instructor reserves the right to make changes to the schedule of the class. Any alterations will be announced in class, in D2L or via email by the instructor. Students who do not attend class, check D2L or their email assume responsibility for missing adjustments to the course.**

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will

be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- **Ensure that your browser has JavaScript and Cookies enabled.**
- **For desktop systems, you must have Adobe Flash Player 10.1 or greater.**
- **The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.**

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.

Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.
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You will need regular access to a computer with a broadband Internet connection.

The minimum computer requirements are:

- o 512 MB of RAM, 1 GB or more preferred
- o Broadband connection required courses are heavily video intensive
- o Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

You must have a:

- o Sound card, which is usually integrated into your desktop or laptop computer
- o Speakers or headphones.
- o *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site <http://www.java.com/en/download/manual.jsp>

Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - o Adobe Reader <https://get.adobe.com/reader/>
 - o Adobe Flash Player (*version 17 or later*) <https://get.adobe.com/flashplayer/>
 - o Adobe Shockwave Player <https://get.adobe.com/shockwave/>
 - o Apple Quick Time <http://www.apple.com/quicktime/download/>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing

software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words “click here” to submit an issue via email.

System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

Interaction with Instructor Statement

Please communicate via email. I am in front of a computer almost all day long, so if you want to communicate with me, email is the best way. Generally, I can

respond within a few hours. I am generally unavailable for quick responses after 5:00 and on weekends.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Procrastination Penalty

All students are responsible for having secure and reliable internet service. Nonetheless, internet services can be unpredictable at times. For this reason, **DO NOT WAIT UNTIL THE LAST MINUTE TO TAKE QUIZZES OR TURN IN ASSIGNMENTS.** If you turn in an assignment or try to take a quiz after 11:00 PM, I will not re-open the assignment or quiz and you will lose points for that assignment or quiz.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette

<http://www.albion.com/netiquette/corerules.html>

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Graduate Student Academic Dishonesty 13.99.99.R0.10

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.