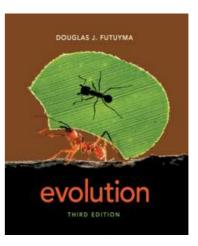
BSc 535 Evolution

Dr. Jeff Kopachena McFarland Science Building, Rm 258 Email: Jeff.Kopachena@tamuc.edu



Textbook Required:

Futuyma, D.J. 2013. Evolution, 3rd Edition. Sinauer, ISBN 978-1-60535-115-5



Marine life on a log at Corpus Christi, Texas

I. Course Material:

This course requires a basic understanding of biological processes, particularly those related to population biology, ecology, and biogeography. You should have a basic understanding of cellular and population genetics.

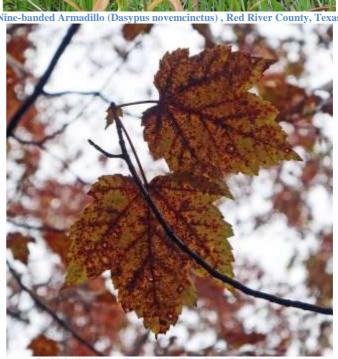
The course itself looks mainly at macro-evolution and the processes that affect the evolution of species and their geological and geographic history. There is a lot of material to cover, so students are strongly advised not to let themselves get behind in assigned reading materials. Quizzes and Final Exam must be taken on the assigned dates; there will be no make-up tests. Likewise, all assignments must be turned in on the assigned dates. There will be no tolerance of late assignments and there will be no extra credit assignments.

There is a lot of material to cover in a very short time, so you are strongly advised not to let yourself get behind in assigned reading materials. You are going to be doing a lot of reading and must read comprehensively. Tests must be taken on the assigned dates and there will be no make-up tests. Tests are open book and will consist of critical thinking questions. All assignments must be turned in at the assigned time. There will be no tolerance of late assignments and there will be no extra credit assignments. **Be sure that you are familiar with the course schedule and keep on track.**

II. Student Learning Outcomes

- 1. Students will have knowledge of the history of evolutionary theory
- 2. Students will know what a phylogenetic tree is and how they are constructed
- 3. Students will be familiar with the fossil record and the history of life on earth
- 4. Students will know what natural selection is and how it relates to adaptation
- 5. Students will know what a species is and what the mechanisms of speciation are.





Red Maple (Acer rubrum), Mt. Nebo State Park, Arkansas

Chapter	Review Due	Quiz Due
Chapter 1. Evolutionary Biology	July 16	July 16, 17
Chapter 2. The Tree of Life: Classification and Phylogeny	July 19	July 19, 20
Chapter 3. Patterns of Evolution	July 22	July 22, 23
Chapter 4. Evolution and the Fossil Record	July 25	July 25, 26
Chapter 5. A history of Life on Earth	July 28	July 28, 29
Chapter 6. The Geography of Evolution	July 31	July 31, August 1
Chapter 7. The Evolution of Biodiversity	August 3	August 3, 4
Chapter 17. Species	August 6	August 6, 7

Chapter 18. Speciation	August 9	August 9, 10
Final Exam (All Chapters)		August 12, 13
Article Review	August 13	

For each chapter, you will have to write a brief review of that chapter and there will be a quiz over that chapter. You will also need write a review of a peer-reviewed journal article covering some topic in evolution. There is a comprehensive final exam at the end of the course. More details are provided below

The grading scheme will be as follows:

III. Grading Scheme:

Chapter Reviews	9@ 4 % each	36%
Chapter Quizzes	9@ 4 % each	36%
Article Review	1 @ 8% each	8%
Final Exam	1 @ 20% each	20%

Total 100%



Red Paper Wasp (Polistes carolina), Sulphur Springs, Texas

Important note about Due Dates and Times:

Please make sure you keep close track of all due dates. You can turn in your reviews at any time up to and including the review due date. You cannot turn in the review after the due date. This will allow you to work ahead if you want. However, keep in mind that the whole purpose of writing the review is to help you study for the test, so if you work too far ahead you will probably defeat that purpose. Also, I will not grade any reviews until after the review due date.

All quizzes and tests are scheduled over two days. You can take the test on either of the two days that it is open. Please look at the schedule in the syllabus carefully. You will need to allow 30 minutes for the quizzes. You can only take the quiz once, so once you are done you are done.

<u>PLEASE NOTE:</u> 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.

IV. Chapter Reviews

For each chapter you will write, in your own words, a summary of the content of that chapter. **Do not use any quotes.** You will lose points for using quotes. Write everything out in the form of paragraphs: **Do not use point form**.

You must highlight the major points covered by the chapter and how these points are relevant to the topic of the chapter. Close each chapter review with a personal comment on what you thought about the material covered in the chapter.

Your chapter reviews must be in **MS-Word format** and submitted by the due date indicated on the course eCollege page. **Reviews not in MS-Word format will receive a grade of zero.** Put you name on your review. Reviews must be written using Times New Roman, 12 point font, double spaced, no extra spaces between paragraphs, with 1" margins on all sides. Include a title page with your name and the title of the chapter you are reviewing. You will lose points for not following this format.

Your review should be **no less than three pages and no more than five pages**, not including the title page. My experience shows that students who are closer to the 5-page limit tend to get higher grades because they cover the material more thoroughly. Having said that, excessive verbosity and padding will get you nowhere. If you wish to include figures and tables, do so by appending them to the back of the review. Figures and tables do not count toward the page limit. All chapter reviews must be submitted through the Dropbox in eCollege.





Land snail at Petit Jean State Park, Arkansas

Important Note: This course uses Turnitin plagiarism software. 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 of the individuals involved will get a zero for their assignment.

Because of this:

- 1. Do not use direct quotes
- 2. Be extremely careful about sharing your assignments with <u>anyone</u> yes, anyone. That includes friends, family

members, co-workers, etc.

3. Do not use other sites that may already contain chapter reviews as a template. If you do, you will be penalized for plagiarism, because that is plagiarism.



V. Chapter Quizzes

Each chapter will be followed by a chapter quiz. The chapter quiz will consist of 10 multiple choice questions. Quizzes will cover all material in the chapter, including information in figures and tables. Quizzes will be timed, and students will have 30 minutes to complete the quiz. You will be expected to have full comprehension of the material. As a result, some questions will require that you apply concepts covered in the chapter to examples that are not specifically mentioned in the textbook.

VI. Article Reviews

During the semester you will select a current peer-reviewed article related to the material covered in the textbook. You will be required to write a review of this article. It is extremely important that you choose a peer-reviewed journal article. To approach this assignment, flip through the various chapters in the textbook that are covered in the course. Find a topic that interests you and look for recent articles (2010 or more recent) on that subject. Google scholar can be most useful for this purpose. Once you have found an article, please let me know so that I can evaluate its suitability. You need to do this early just in case you have to use an inter-library loan to get the article.

Start with a title page that includes your name, the date, the course title, and the full citation of the article you are reviewing. Using your own words, describe the important background literature relative to the article (include citations), the purpose of the article, the methods used, and the major findings of the article. Describe the significance of the work to the field of study and in the context of existing literature on the subject. In doing so, you should read some of the background articles related to the one you are reviewing. Make sure you cite these articles in your review. Also include your opinion on the value of the article and its methodology and its level of interest to you. Your review must be in MS-Word format and submitted by the due date indicated on the course eCollege page. Reviews not in MS-Word format will receive a grade of zero. Reviews must be written using Times New Roman, 12 point font, double spaced, no extra spaces between paragraphs, with 1" margins on all sides. Include a title page with your name and the title of the paper you are reviewing.

You review should be no less than six pages and no more than 10 pages, not including the title page. If you wish to include figures and tables, do so by appending them to the back of the review. Figures and tables do not count toward the page limit. All reviews and a copy of the article must be submitted through the Dropbox in eCollege.



A Hover Fly (Helophilus fasciatus) on Heath Aster (Symphyotrichum ericoides)



Eastern Red Columbine (Aquilegia canadensis) at McGillivray Falls, Manitoba, Canada

VII. Final Exam

The final exam will be comprehensive. It will consist of 50 questions and you will have 2 hours to complete it.

VIII. Below is the course schedule in calendar format:

July						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	13	14	15	16	17	18
				Ch. 1	Ch. 1 test	
				Review Due		
				Ch. 1 test		
19	20	21	22	23	24	25
Ch. 2	Ch. 2 test		Ch. 3	Ch. 3 test		Ch. 4
Review Due			Review Due			Review Due
Ch. 2 test			Ch. 3 test			Ch. 4 test
26	27	28	29	30	31	
Ch. 4 test		Ch. 5	Ch. 5 test		Ch. 6	
		Review Due			Review Due	
		Ch. 5 test			Ch.6 test	

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Ch. 6 test
2	3 Ch. 7 Review Due Ch. 7 test	4 Ch. 7 test	5	6 Ch. 17 Review Due Ch. 17 test	7 Ch. 17 test	8
9 Ch. 18 Review Due Ch. 18 test	10 Ch. 18 test	11	12 Final Exam	13 Final Exam Article Review Due		

IX. Obligatory Statements:

A. Plagiarism is a criminal activity. You must cite all sources of information. Copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a score of zero for your assignment and can result in further disciplinary action.

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

B. TECHNOLOGY REQUIREMENTS

The following information has been provided to assist you in preparing to use technology in your webenhanced course.

The following technology is required to be successful in this course.

Internet connection – high speed recommended (not dial-up)

Word Processor (Microsoft Office Word – 2003 or 2007)

Access to University Library site

Access to an Email

Additionally, the following hardware and software are necessary to use eCollege:

Our campus is optimized to work in a Microsoft Windows environment. This means our courses work best if you are using a Windows operating system (XP or newer) and a recent version of Microsoft Internet Explorer (6.0, 7.0, or 8.0).

Courses will also work with Macintosh OS X along with a recent version of Safari 2.0 or better. Along with Internet Explorer and Safari, eCollege also supports the Firefox browser (3.0) on both Windows and Mac operating systems.

It is strongly recommended that you perform a "Browser Test" prior to the start of your course. To launch a browser test, login in to eCollege, click on the 'myCourses' tab, and then select the "Browser Test" link under Support Services.

C. ACCESS AND NAVIGATION

Access and Log in Information

This course will be utilizing eCollege to enhance the learning experience, eCollege is the Learning Management System used by Texas A&M University-Commerce. To get started with the course, go to: https://leo.tamuc.edu/login.aspx.

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc.edu.

D. COMMUNICATION AND SUPPORT

Texas A&M University-Commerce provides students technical support in the use of eCollege. The student help desk may be reached by the following means 24 hours a day, seven days a week. If you experience issues while taking your exams or at any other point, feel free to contact the support desk.

- 1. Chat Support: Click on 'Live Support' on the tool bar within your course to chat with an eCollege Representative.
- 2. Phone: 1-866-656-5511 (Toll Free) to speak with eCollege Technical Support Representative.
- 3. Email: helpdesk@online.tamuc.org to initiate a support request with eCollege Technical Support Representative.
- 4. Help: Click on the 'Help' button on the toolbar for information regarding working

E. Withdrawal Policy

Every student has the right to drop the course without penalty until the drop-date. Students dropping the course during this period will be given a DP (drop while passing). A grade of DP is GPA neutral, but a grade of DF counts as an F on your transcript.

If you choose to stop attending class, you may be dropped from the course due to excessive absences. If you are not satisfied with your grade in the course and wish you to drop, it is YOUR responsibility to drop the course. Once a grade of DP or DF has been submitted, it cannot be changed.

A student may drop a course by logging into their myLEO account and clicking on the hyperlink labeled 'Drop a class' from among the choices found under the myLEO section of the Web page.

F. Student Conduct

All students are expected to conduct themselves in a professional manner at all times. You are adults and will be treated as such. Discriminatory, rude, and inappropriate language will not be tolerated in this class and students will be asked to leave or drop the class (these same rules apply for online discussions). If a student continues to act in the same manner during future classes, the instructor reserves the right to drop the student from the course.

G. Academic Integrity

Academic integrity is the pursuit of scholarly work free from fraud and deception and is an educational objective of this institution.

Texas A&M University-Commerce has explicit rules and regulations governing academic dishonesty and academic misconduct. As the University states, "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." These policies are stated in detail in the Student's Guide Handbook. Each student is expected to read this document and abide by the contained policies. These university policies will be followed in this class. The minimum penalty for an act of academic dishonesty will be the assignment grade of 0 on the examination or homework assignment. The maximum penalty is expulsion from the University.

Texas A&M University-Commerce further does not tolerate **plagiarism** and other forms of academic **dishonesty**. Conduct that violates generally accepted standards of academic honesty is defined as academic dishonesty. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of the ideas or words of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments), and abuse (destruction, defacing, or removal) of resource material.

If you are unsure what constitutes plagiarism and how to avoid it. Visit the following websites:

http://www.plagiarism.org/

 $\underline{http://www.unc.edu/depts/wcweb/handouts/plagiarism.html}$

http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml

H. Requests for Special Accommodations

Requests from students with disabilities for reasonable accommodations must go through the Academic Support Committee. An individual instructor cannot decide to make accommodations for you without that Committee's approval.

I. ADA Statement

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 132

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

Fax (903) 468-8148

 $\underline{StudentDisabilityServices@tamuc.edu}$

Office of Student Disability Resources and Services