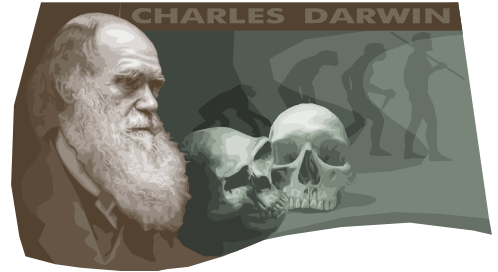


BIOL 4361 General Evolution
Class Syllabus and Course Explanation

Spring 2018
Undergraduate Syllabus

INSTRUCTOR: Dr. Sibyl Bucheli
Lee Drain Building 142
Phone: 294-1550
email: bucheli@shsu.edu
Office Hours: Tuesday 9 – 11 am or by appointment



LOCATION & TIME: LEE DRAIN BUILDING Room 213
MWF 9:00 am - 9:50 am

REQUIRED TEXT:

Text book: Evolution 2nd Edition (hardback or ebook)
Carl T. Bergstrom and Lee Alan Dugatkin

Lecture handouts: Lecture notes and other resources are available electronically via Blackboard or as a handout in class.

Additional media: Blackboard (I recommend that you use a university computer; I will not consider issues with personal machines to be valid excuses)

I TAKE ACADEMIC HONESTY VERY SERIOUSLY and will pursue any violations. All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

COURSE CONTENT: Evolution is the core theory of modern biology. Students will be introduced to the major principles of evolutionary biology, beginning with a brief history of evolutionary thought and working through the theory and current concepts of evolution. Emphasis will be placed on mechanisms of evolution, including natural selection, genetic drift, gene flow, founder effect, and speciation.

This is a “process not pattern” class.

COURSE OBJECTIVES: To learn and understand the principles of evolution through acquisition of:

1. a basic working vocabulary,
2. the knowledge of the theories and principles, and
3. the intellectual tools that allow students to apply facts and concepts to novel situations.

COURSE STRUCTURE:

1. **Lecture** will cover the basics of evolution.
2. **Attendance** to lecture is mandatory. I will cover information that is not in your book that you will be responsible for knowing.
3. **Reading** the assigned chapters and all handouts is mandatory for the class.
4. **Lecture Exams, Quizzes, and Homework** are mandatory and provide you with a gauge of your progress.
5. **Writing assignments** will challenge your ability to synthesize the important topic of evolution.
6. **Blackboard** will serve as a medium to exchange information and a means by which you may turn in writing assignments and homework.

PREPARATION AND EXPECTATIONS: You are expected to attend all lecture sessions. Evolution is an advanced course that will demand careful preparation and study, and as such, good attendance is absolutely essential for success in meeting the basic requirements in the course. Further, the lectures are drawn from a wide variety of sources including my research, experiences, and the primary literature. I will periodically provide you with reading from the literature. All material in the textbook chapters, my lecture material, as well as additional reading assignments is fair game for exams. It will make your life much easier if you read the appropriate chapters in your text before coming to class. Because of the quantity of material we cover in this class, it will be to your advantage to keep up on your readings.

LATE MATERIALS POLICY, MAKE UP POLICY, & FAILURE TO FOLLOW DIRECTIONS POLICY: I am under no obligation to provide the student with the opportunity to make-up assignments or to accept late assignments. Any make-up work will be given only for excused absences provided before the missed assignment and (Doctor's excuse, obituary, etc.) deemed valid at my discretion.

1. I will not accept any emailed documents.
2. Failure to upload due an assignment due to an issue encountered on a personal computer (as opposed to a university computer) will not be considered a valid excuse.
3. Students must be in class on the day that work is assigned to be eligible for a make-up assignment. A student who is not in attendance the day that work is assigned is ineligible for a make-up assignment.
4. No make-up exams will be given without written notification prior to the exam by the student and approval from the instructor. Make-up exams will not be the same exam given to the rest of the class. No exam will be administered to students entering the exam after the first person has turned in their exam.
5. Failure to follow instructions for assignments may result in a penalty of a loss of points.

EVALUATION METHODS: There will be three lecture exams, 4 homework assignments, and 4 macrothemes writing assignments. Details follow. I reserve the right to assign additional work as necessary. I will calculate your grade to the nearest tenth of a point (00.00%). That means if you earned 79.59%, you earned a C, not B and if you earned a 79.99%, you earned a C, not B. You can track your score throughout the semester by checking your scores on Blackboard. Adding up your total score and dividing it by the total possible (at that point) will give you're your percentage grade. *A note about "curving": the instructor reserves the right to curve the grading scale downward just as they do to curve upward.*

UNDERGRADUATE EVALUATION:

4 Lecture Exams @ 100 pts each	400 pts
14 Reading Homeworks @10 pts each	120 pts
4 Homeworks@50 pts each	200 pts
TOTAL POSSIBLE POINTS	700

GRADING:

A	90.00%&above;
B	80.00-89.99%;
C	70.00-79.99%;
D	60.00-69.99%;
F	59.99%&below

1. LECTURE EXAMS: There will be four exams during the semester (100 points each). Exams will assess your understanding of the factual material as well as your ability to understand meaning and context and to synthesize information from more than one lecture. Exams will typically (but not always) consist of definitions and concepts, short answer and two major essays. Please note, you will only have the regularly scheduled class time to complete exams.

2. READING HOMEWORK: There will be a total of 14 homework assignments throughout the semester worth 10 points each. Due dates are outlined in the syllabus. Your two lowest scores will be dropped. Assignments will be completed via blackboard. I will not accept homework turned in via email. I will not accept late homework. I will not provide make-ups for homework.

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3. HOMEWORK: There will be a total of 4 comprehensive assignments throughout the semester (at 100 points each). Due dates are outlined in the syllabus. They will be turned in via BlackBoard or by hand as designated in lecture. They will be graded based on comprehension of the question and articulation of the answer. Answers must be typed or neatly handwritten and must be in complete sentences. If I cannot understand your answer for any reason, points will be deducted even if you believe it is correct. **I will not accept homework turned in via email. I will not accept late homework. I will not provide make-ups for homework.**

TENTATIVE LECTURE SCHEDULE*

WEEK	DAY	LECTURE TOPIC	Assigned Reading	ACTIVITY
Week 1	Wednesday	IT WAS COLD AND THERE WAS SNOW AND ICE AND NO SCHOOL		
	Friday	Syllabus; Introduction		
Week 2	Monday	History of Thinkers I	Chapter 1	RHW #1 Due
	Wednesday	History of Thinkers II	Chapter 2	
	Friday	Darwin’s Thoughts I	Chapter 2	
Week 3	Monday	Darwin’s Thoughts II	Chapter 3	RHW #2 Due
	Wednesday	Darwin’s Thoughts II	Chapter 4	
	Friday	Natural Selection I	Chapter 3	
Week 4	Monday	Natural Selection II	Chapter 3	RWH 3# Due
	Wednesday	Natural Selection III	Chapter 3	Comprehensive HW #1 Due
	Friday	EXAM I		
Week 5	Monday	Adaptations I	Chapter 3	RHW #4 Due
	Wednesday	Adaptations II	Chapter 3	
	Friday	Adaptations III	Chapter 3	
Week 6	Monday	Phylogeny and Evolutionary Theory I	Chapter 4	RHW #5 Due
	Wednesday	Phylogeny and Evolutionary Theory II	Chapter 4	
	Friday	Phylogeny and Evolutionary Theory III	Chapter 4	
Week 7	Monday	Inferring Phylogeny I	Chapter 5	RHW #6 Due
	Wednesday	Inferring Phylogeny II	Chapter 5	
	Friday	Inferring Phylogeny III	Chapter 5	
Week 8	Monday	Transmission Genetics and Genetics of Populations I	Chapter 6, Chapter 7	RHW #7 Due
	Wednesday	Transmission Genetics and Genetics of Populations II	Chapter 6, Chapter 7	Comprehensive HW #2 Due
	Friday	EXAM II		
Week 9	SPRING BREAK			

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Week 10	Monday	Transmission Genetics and Genetics of Populations III	Chapter 6, Chapter 7	RHW #8 Due
	Wednesday	Evolution in Finite Populations I	Chapter 8	
	Friday	Evolution in Finite Populations II	Chapter 8	
Week 11	Monday	Sexual Selection I	Chapter 16	RHW #9 Due
	Wednesday	Sexual Selection II	Chapter 16	
	Friday	No Class		
Week 12	Monday	Sexual Selection III	Chapter 16	RHW #10 Due
	Wednesday	Origin and Evolution of Early Life I	Chapter 11	Comprehensive HW #3 Due
	Friday	EXAM III		
Week 13	Monday	Origin and Evolution of Early Life II	Chapter 11	RHW #11 Due
	Wednesday	Origin and Evolution of Early Life III	Chapter 11	
	Friday	Major Transitions I	Chapter 12, handout	
Week 14	Monday	Major Transitions II	Chapter 12, handout	RHW #12 Due
	Wednesday	Major Transitions III	Chapter 12, handout	
	Friday	Evo-Devo I	Chapter 13	
Week 15	Monday	Evo-Devo II	Chapter 13	RHW #13 Due
	Wednesday	Species and Speciation I	Chapter 14	
	Friday	Species and Speciation II	Chapter 14	
Week 16	Monday	Species and Speciation III	Chapter 14	RHW #14 Due
	Wednesday	Extinctions I	Chapter 15	
	Friday	Extinctions II	Chapter 15	Comprehensive HW #4 Due
Week 17	FINAL WEEK	LECTURE EXAM IV		

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Date	Day	Event
17-Jan	Wednesday	- Daytime on-campus and off-campus classes begin
1-Feb	Thursday	Thursday, February 1, is the 12th class day of the Spring term and represents the last day to drop a course without a "Q" grade and receive a 100% refund.
March 12 - March 16	Monday - Friday	Spring Recess for Students and Faculty
30-Mar	Friday	Good Friday - Holiday for Students and Faculty
6-Apr	Friday	Deadline to Drop 15-Week Spring Courses or Labs with a "Q" grade
4-May	Friday	Last Class Day
May 7 - May 10	Monday - Thursday	Final Exams
May 10 - May 12	Thursday - Saturday	Commencement

RESIGNATION NOTE: Students may resign with a "W" grade from the 13th class day through the last class day, but prior to any final exams being taken or course completion.

SAM POLICY

Academic Honesty: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. **Visitors in the classroom:** Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office. **Students with Disabilities:** It is the policy of the university that no otherwise qualified disabled student shall, solely by reason of his/her handicap, be excluded from participation in, or denied benefits of, or be subject to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities by contacting their instructor, school/department chair, or by contacting the university Chair of the Committee for Continuing Assistance for Disabled Students/ Director of Counseling Center (located in Lee Drain Annex, phone 936-294-1720). A student with a disability is encouraged to register with the university Counseling Center, as well as contacting their instructor about assistance needs. Accommodation cannot be made until the student has initiated the request with the Counseling Center. Every semester that the student desires accommodations, it is the student's responsibility to complete a Classroom Accommodation Request Form at the Counseling Center and follow the stated procedure in notifying faculty. Accommodations for disabled students are decided upon documentation and need on a case-by-case basis by the Counseling Center. All requests are handled with confidentiality according to university procedures. **Religious Holy Days Policy:** Section 51.911(b) of the Texas Education Code requires that the university excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University Policy 861001 provides procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first 15 days of the semester or the first 7 days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

Class Attendance

<http://www.shsu.edu/catalog/scholasticrequirements.html>

1. Regular and punctual class attendance is expected of each student at Sam Houston State University.
2. Each faculty member will keep a record of student attendance.
3. Each faculty member will announce the policies for accepting late work or providing makeup examinations. Students are expected to show appropriate cause for missing or delaying major assignments or examinations.
4. A student shall not be penalized for three or fewer hours of absences when examinations or other assigned class work has not been missed; however, at the discretion of the instructor, a student may be penalized for more than three hours of absences.
5. Each instructor is obligated to clarify in writing to each student enrolled in class at the beginning of the semester or summer session the instructor's classroom policy regarding absences.
6. Class absences will be recorded and counted only from the actual day of enrollment for the individual student in that specific class.
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