Principles of Ecology and Evolution Lab Syllabus and Policy
Spring 2020
Bio 125.001

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* All contact via e-mail should be professional in manner with proper punctuation and grammar. Your name and your lab section should be included in the body of any email correspondence. E-mails sent in an unacceptable format will not be answered.
* Do not contact me through D2L, I will not respond. Only use my SFA email (sullivanjb@sfasu.edu).

Phone: (936) 468-5987
Office: S108
Office Hours: M 10:00 A.M. - 12:00 P.M., T 9:00 A.M. - 10:00 A.M., W 10:00 A.M. - 11:00 A.M., F 10:00 A.M. - 11:00 A.M. or by appointment.
Class Meeting Time & Place: MWF 9:00 A.M. - 9:50 A.M. S139

Required Materials: Biological Science, Volume 2 Freeman 5th edition. Lab Subscription to SimBio is required. Information will be available on D2L

Course Description: One semester hour, two hours lab per week. Fundamental principles of animal life, including invertebrate and vertebrate animals. Required lab fee.

Pre-requisites: None

Co-requisite: BIO 125 Lecture

Grading Policy:

Your final grade in this course is determined by grades from the laboratory, lecture exams, quizzes and participation.

3 Mid-term exams 30%
1 Final Exam 15%
Quizzes 10%
In-class work/participation 5%
Group Project 15%
--individual grade is 5%, group grade is 10%
--Groups may elect to have a single grade
Lab Grade 25%

Your grade is determined by earning 90%, 80%, 70% and 60% of the available points for the associated traditional letter grade.

Exams: There will be 3 midterm exams. All exams will consist of 80% scantron questions (Multiple Choice, Matching, True/False) and 20% essay answer, which may include diagramming and calculation. There are no dropped grades in this course. THE FINAL EXAM WILL BE CUMULATIVE.

Starting Exams On Time: All students must be there to start the exam at the start of the normal time whether in the lecture hall or Disability Services. No students will be allowed to leave exam
until 30+ minutes of the exam period have passed. (Also, all Disability Services students must email the professor at least 24 hours in advance before the exam to confirm arrangements.)

**Quizzes:** Quizzes are designed to encourage you to keep up with the material and be ready for in-class activities. There will be no make-up for missed quizzes.

**Group Project:** Groups will research and present a final project orally and with computer-generated visual aids during the last week of class on special topics related to course material. This will account for 15% of your grade. They will be graded for content, as well as participation in self and group assessments. More details will be given during the semester and on D2L. **Mr. Sullivan will provide additional information about the group project in a separate document.**

**Evaluations and surveys:** It is now departmental policy to require students to fill out online class evaluations at the semester’s end (instructions will be provided at a later date).

**Program Learning Outcomes:**

- PLO 1. The student will demonstrate a good knowledge base in biological concepts. (SLOs 1, 5, 6)
- PLO 2. Clearly articulate scientific information in oral form. (SLOs 3-6)
- PLO 3. Clearly articulate scientific information in written form. (SLO 3-6)
- PLO 4. Be able to design, carry out, and analyze experiments to answer biological questions. (SLOs 1, 2)
- PLO 5. Demonstrate teamwork skills needed to coordinate diverse multidisciplinary teams to solve challenges in the biological world. (SLOs 2-4)

**General Education Core Curriculum**

The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

By enrolling in Principles of Ecology and Evolution you are also enrolling in a Core Curriculum Course that fulfills the Teamwork requirement. You will see this course on your D2L list. At one point during the semester, you will receive an assignment that fulfills both the requirements of this course and the needs of Stephen F. Austin State University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board. When you complete this one assignment, you need to upload the assignment to both your standard course dropbox determined by your Instructor and the “Core Curriculum” dropbox. The Core Curriculum dropbox will be identified by the Objective for which work is being collected. (Examples: Critical Thinking, Teamwork, Social Responsibility Empirical & Quantitative Skills, Personal Responsibility, Communication Skills-Written, Communication Skills-Written & Visual, and Communication Skills-Oral & Visual.) Please note that this only applies to the approved assignment. All other assignments should be submitted according to regular class operations.

When you complete the assignment mentioned above, you will upload the assignment to both the Principles of Ecology and Evolution Dropbox and the Teamwork Dropbox.

Please note that this only applies to the specific assignment listed in the matrix below. All other assignments should be submitted according to regular class operations.
If you have any questions, please see your instructor, or contact the Office of Student Learning and Institutional Assessment at (936) 468-1130.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Teamwork dropbox this semester, and the date the assignment(s) should be uploaded to the D2L Teamwork dropbox. Not every assignment will be submitted for core assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Teamwork dropbox.

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Course Assignment Title</th>
<th>Date Due</th>
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<tbody>
<tr>
<td>Teamwork</td>
<td>To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.</td>
<td>TBA</td>
<td>TBA</td>
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**Student Learning Outcomes:**

- SLO 1. Demonstrate understanding of the process of science by distinguishing between science and non-science and designing experiments that address testable hypotheses.
- SLO 2. Use quantitative reasoning to interpret evolutionary and ecological data (tables, figures and graphs).
- SLO 3. Demonstrate understanding of the skills and attitudes necessary for effective teamwork in collaborative learning activities and a semester-long project.
- SLO 4. Critically assess the interrelationship of human dimensions and ecology/evolution and communicate resulting conclusions in oral, visual and written formats.
- SLO 5. Understand evolution as the unifying concept in biology.
- SLO 6. Understand the factors that govern interactions between organisms and their environments.

**Determination of Lab Grade:**

BIO 125 lab comprises 25% of your combined lecture & lab score. Combined lecture and lab grades and applied to both BIO 125 & 125L. For example, if you earn an A in lecture, a C in lab, and a B overall, your transcript will record a B for both lecture (125) and lab (125L).

**Grading scale:**

A = 90–100%; B = 80–89%; C = 70–79%; D = 60–69%; < 60% = F

**Graded items:**

Your grade is based solely on weekly activities and assignments.
Attendance Policy:

Attendance will be taken at the beginning of every lab meeting. Failure to attend lab, arriving late to lab, or leaving lab early will result in the reduction of your participation grade and zeroes on any daily work or assigned material. You must have an excused absence to make up any assignment. If you have an excused absence you may make up your missed assignments before the next class meeting. Attendance points will be returned to you, after the missed lab has been made up. Missed assignments, including missed group work, will be completed by you and without assistance from your normal group members. Excused absences include:

- **Sickness** - If you are sick you must notify me through email within 24 hours of your lab or recitation, as well as, provide a doctor’s note upon return. If you do not contact me within 24 hours of your lab you will not be allowed to make up the assignment.
- **Family emergency or death** - If there is a family emergency or death in the family you will need to contact the Office of Student Rights and Responsibilities ((room) 315 Rusk Building, (telephone) 936-468-2703) and request an absence notification be sent to your instructors. The Office of Student Rights and Responsibilities will notify all your instructors of your absence.
- **School function** - If you will be absent due to a school related function you need to notify me at least 24 hours in advance and provide a signed note from the facility member in charge of the function.

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 (see the Student Conduct Code, policy D-34.1, http://www.sfasu.edu/policies/student_conduct_code.asp). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. If you are asked to leave, you must schedule a time to meet with me before you are allowed to attend another lab. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Academic Integrity (A-9.1):

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.
Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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| 1 (Jan. 20 – Jan. 24) | Introduction  
Critical Skills in Science |
| 2 (Jan. 27 – Jan. 31) | Scientific Inquiry  
Scientific Method  
Intro to Evolution & Evidence |
| 3 (Feb. 3 – Feb. 7) | Heredity & Mendelian genetics |
| 4 (Feb. 10 – Feb. 14) | Hardy Weinberg Equilibrium  
Exam 1 |
| 5 (Feb. 17 – Feb. 21) | Microevolution: Natural Selection  
Microevolution: Sexual Selection |
| 6 (Feb. 24 – Feb. 28) | Microevolution: Genetic Drift  
Microevolution: Migration & Mutation |
| 7 (Mar. 2 – Mar. 6) | Macroevolution: Species Concepts  
Macroevolution: Speciation  
**SPRING BREAK** |
| 8 (Mar. 9 – Mar. 13) | Macroevolution: Phylogenies & Phylogeography  
Exam 2  
Climate |
| 9 (Mar. 16 – Mar. 20) | Biomes  
Population Ecology: Distribution & Life History |
| 11 (Mar. 30 – Apr. 3) | Community Ecology: Species interactions  
Community Ecology: Biodiversity  
**EASTER HOLIDAY** |
| 12 (Apr. 6 – Apr. 10) | Succession  
Community Ecology: Competition  
Exam 3 |
| 14 (Apr. 20 – Apr. 24) | Ecosystem Ecology: Nutrient Cycling  
**Student Presentations** |
| 15 (Apr. 27 – May 1) | Final Exam |
| 16 (May 4 – May 8) | }