COURSE CATALOG DESCRIPTION: one semester hour, two hours laboratory per week. Fundamental principles of biological inquiry, scientific analysis and concepts in ecological and evolutionary biology. Required lab fee. Co-requisite: BIO 125.

Instructor: Dr. Dan Bennett
Department: Biology; Phone: 468-5163; E-mail: bennettdj@sfasu.edu
Office: S-210; Office hours: W, 9:00–12:30; 1:00–2:30 and by appointment.

Required Materials
Subscription to SimUText computer simulations. Registration information will be provided on D2L. Students must be registered by the first lab meeting.

Course Website: https://d2l.sfasu.edu/
Check this site regularly for announcements regarding upcoming labs.

GRADING POLICY
BIO 125 lab comprises 25% of your combined lecture & lab score. Combined lecture and lab grades are 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 13 weekly activities/assignments. Each week counts roughly 7.1% of the total grade except week 5, which counts double. There is not a final exam or class meeting during finals week.

ATTENDANCE AND ASSIGNMENT POLICY: Attendance is typically mandatory. Unexcused absences, instances of tardiness, and disruptive behavior will incur penalties on graded assignments (20% unexcused absence, 5% tardiness, 5% disruptive behavior). If you miss a lab with an excusable absence (as determined by the instructor and University policy; e.g., illness with doctor’s note, University sponsored event, death in the family with documentation provided) consult your instructor ASAP (within 24 hours of the missed class) to discuss options for makeup work. Makeup work will not be allowed for unexcused absences. Late assignment submissions will be penalized 10% per day. If extraordinary circumstances lead to absences and or inability to get assignments in on time, communicate with the instructor ASAP regarding the situation.

LAB SCHEDULE (SUBJECT TO CHANGE, CHECK D2L FOR CURRENT INFORMATION)

*BIO 125 lab begins the 2nd week of the semester.

Week 1: no lab
Week 2 (Jan. 31): SimUText simulation – experimental design and data analysis
Week 3 (Feb. 7): Mendelian genetics
Week 4 (Feb. 14): Hardy-Weinberg (breeding bunnies)
Week 5 (Feb. 21): SimUText simulation (guppies) (counts twice as much as other labs towards grade)
Week 6 (Feb. 28): SimUText simulation (sickle cell disease)
Week 7 (Mar. 7): Species concepts
Week 8 (Mar. 14): Building phylogenies
Week 9 (Mar. 28): Ecology
Week 10 (Apr. 4): Anthromes
Week 11 (Apr. 11): SimUText simulation (population growth)
Week 12 (Apr. 18): No class; Easter break
Week 13 (Apr. 25): SimUText simulation (keystone predator)
Week 14 (May. 2): Food webs
Week 15 (May. 9): TBA

STUDENT LEARNING OUTCOMES/OBJECTIVES (SLOs)
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.

PROGRAM LEARNING OUTCOMES (PLOs)
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 OBJECTIVES
Texas State Core Objectives and associated Student Learning Outcomes.
CO 1. Critical Thinking: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. (SLOs 1-6)
CO 2. Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication. (SLOs 3-6).
CO 3. Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs 1,2)
CO 4. Teamwork: to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal. (SLO 2-4)

ACADEMIC INTEGRITY: Academic integrity is expected of everyone in this course. Any form of academic dishonesty will lead to the student receiving a failing grade for the entire course. Additionally, a Report of Academic Dishonesty form will be submitted to your Dean’s office.

SFA Policy A-9.1 is summarized as follows: 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. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

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, 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 accommodation. For additional information, go to http://www.sfasu.edu/disabilityservices/. Please note that you must visit with me outside of class time concerning your request before I will be able to provide the accommodations described in the notification from ODS.