LOCAL FLORA OR FAUNA
Emphasizing Insects and Other Invertebrates
BIO 225 – 001; BIO 225L – 020
Fall 2017

Welcome to BIOLOGY 225! This course will introduce you to our local habitats, flora, or fauna. In this section, we will be emphasizing insects and other invertebrates as we explore the Pineywoods ecoregion.

Catalog description: Field studies of local plants, animals, or fungi and their native habitats. Different offerings of the course will emphasize different organismal groups, e.g., plants, birds, reptiles, amphibians, arthropods, mammals, fish, or fungi.

Instructor: Dr. Dan Bennett
Department: Biology
Email: bennettdj@sfasu.edu
Phone: 936-468-5163; Office: S-210
Office Hours: W 10:00-12:30; Th 2-4:30 and by appointment. Feel free to stop by any time my door is open. I’m often in the back or in the room next door.

Lecture: Tu, Th 1:00 – 1:50 (S-211); Lab: Tu 2:00 – 4:20 (S-211)

Required texts:

GRADING SUMMARY
Exam I: 20%
Exam II: 20%
Exam III: 20%
Quiz average: 14%
Lab reports/assignments average: 20%
Attendance & participation: 6%

GRADING SCALE: ☺ A = 90–100%; B = 80–89%; C = 70–79%; D = 60–69%; < 60% = F ☹

EXAMS, QUIZZES, LAB REPORTS, AND ASSIGNMENTS: There will be three exams (including the final). Exams will cover content from both lab and lecture. Exams emphasize material since the previous exam, though there may be some comprehensive questions. Questions will consist of true/false, multiple choice, fill in the blank, and short answer questions. It is crucial that you do not miss an exam. In the event of an excused absence, makeup exams will be given prior to the regularly scheduled exam, immediately after, or during finals week, at the discretion of the instructor. Only students with an excused absence will be allowed to make up an exam.

Expect occasional quizzes to help you keep up with the material between exams. These will typically be announced at least ahead of time, though pop quizzes are a possibility. Your lowest quiz score will be dropped. There will be no makeup quizzes. If you miss a quiz due to absence or tardiness, it will comprise that which is dropped.

PARTICIPATION AND ATTENDANCE: Attendance will be taken routinely at the beginning of class. You may miss up to 5 lectures without penalty. Upon the 6th missed lecture, regardless of the reason, you will lose 1/3 of your attendance grade. Upon the 7th lecture absence you will lose another 1/3 and so on. Laboratory attendance is crucial and absences will be handled on a case-by-case basis. Unexcused absences from lab may result in loss of quiz and assignment points. There is no distinction between excused and unexcused absences for the lecture. An excused absence may be applicable to missed exams and labs for university-sponsored events, illness with a doctor’s note, or death in the family with documentation provided. Don’t be late, tardiness is considered absence.
Field trips: During lab we will often take excursions on or off campus. On such days you should dress appropriately. I strongly encourage you to wear closed-toed shoes (no flip-flops or sandals), a hat, and pants. You may also want sunscreen. Insect repellent will be provided if needed.

Student Learning Outcomes:
SLO 1. Become able to identify and describe local habitat types.
SLO 2. Become able to use technical keys and field guides to identify organisms on the basis of measurements and observations using appropriate equipment.
SLO 3. Become able to communicate the ecosystem roles of selected organisms and their significance to mankind in written form.
SLO 4. Develop an understanding of the relationship between form and function.
SLO 5. Become acquainted with current approaches to biological classification and the major lineages of organisms covered and able to express this understanding in written and visual form.
SLO 6. Become familiar with methods of biological collections and their importance to society.
SLO 7. Become able to understand and generate graphs, charts, summary statistics, and/or scientific illustrations.
SLO 8. Develop teamwork skills by working in groups to complete lab exercises, conduct fieldwork, make identifications, and resolve differences.

Biology Program Learning Outcomes:
PLO 1. The student will demonstrate a good knowledge base in biological concepts. This PLO is achieved with each of the SLOs listed above.
PLO 3. Clearly articulate scientific information in written form. This PLO is achieved with SLO 1, 3, and 5.
PLO 5. Demonstrate teamwork skills. This PLO is achieved with SLO 8.

The following General Education Core Course Objectives (COs) will be treated in this course:
CO 1. Critical thinking: to including creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information. (SLOs 1–7)
CO 2. Communication skills: to include effective development, interpretation, and expression of ideas through written and visual communication. (SLOs 3, 5, 7)
CO 3. Empirical and quantitative skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLOs 2, 4, 7)
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 8)

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). 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. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom.

Please do not carry on a separate conversation that might be distracting to other students. Keep cell phones silenced and stowed away. Texting or any use of phones may result in loss of attendance points and further reduction of one’s grade. Students arriving late or leaving early may be marked absent.

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](http://www.sfasu.edu/policies/academic_integrity.asp)

**WITHHELD GRADES (Semester Grades Policy A-S4):** 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/](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.

**TENTATIVE COURSE CALENDAR -VERSION 1**

* Current version posted on D2L

<table>
<thead>
<tr>
<th>WEEK/DAY</th>
<th>SCHEDULE OF TOPICS</th>
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| 1: Aug 29, 31 | **Lecture:** course intro, importance of invertebrates; nature of science; biology fundamentals  
**Lab:** lab intro; microscopy exercises (indoors) |
| 2: Sept 5, 7 | **Lecture:** evolutionary trees, animal diversity  
**Lab:** animalcules I (indoors) |
| 3: Sept 12, 14 | **Lecture:** insect anatomy, development, diversity overview (Evans pp. 23-29)  
**Lab:** animalcules II (indoors) |
| 4: Sept 19, 21 | **Lecture:** insect diversity cont. (Evans pp. 23-29); *Exam I Sept 21*  
**Lab:** diversity review; **textbook (Evans) needed for lab;** (indoors) |
| 5: Sept 26, 28 | **Lecture:** herbivorous insects  
**Lab:** insect orders field discovery (outdoors – dress appropriately) |
| 6: Oct 3, 5 | **Lecture:** pollinators; terrestrial predators  
**Lab:** herbivorous insects (outdoors – dress appropriately) |
| 7: Oct 10, 12 | **Lecture:** freshwater aquatic habitats, local natural areas; freshwater aquatic invertebrates – scavengers, herbivores  
**Lab:** pollinators, predators (outdoors – dress appropriately) |
| 8: Oct 17, 19 | **Lecture:** TBA; freshwater aquatic invertebrates – scavengers, herbivores  
**Lab:** TBA |
| 9: Oct 24, 26 | **Lecture:** freshwater aquatic invertebrates – predators; respiration, circulation, sensory system  
**Lab:** TBA |
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<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Lab</th>
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<tbody>
<tr>
<td><strong>10: Oct 31, Nov 2</strong></td>
<td><em>Exam II Oct 31</em>; parasites</td>
<td>freshwater macroinvertebrates sampling (outdoors – dress appropriately)</td>
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<tr>
<td><strong>11: Nov 7, 9</strong></td>
<td>Lecture: parasites; terrestrial scavengers and soil invertebrates</td>
<td>freshwater macroinvertebrates analysis (indoors)</td>
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<tr>
<td><strong>12: Nov 14, 16</strong></td>
<td>Lecture: soil invertebrates; behavior, social insects, mimicry</td>
<td>soil invertebrates (outdoors – dress appropriately)</td>
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<td><strong>13: Nov 28, 30</strong></td>
<td>Lecture: current issues</td>
<td>TBA</td>
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<tr>
<td><strong>14: Dec 5, 7</strong></td>
<td>Lecture: current issues</td>
<td>TBA</td>
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</tbody>
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*Final exam: Thursday, Dec 14, 1:00 (*Check for conflicts!*)}