COURSE SYLLABUS

BIO 130: Introductory Zoology

Instructor: E. Lunsford

Description: This course provides an introduction to the classification, relationships, structure and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. Laboratory dissection and a special emphasis on regional fauna will be included. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

Assumed Competencies: Successful completion of BIO 110 or BIO 111 or an equivalent course.

Methods: Students will participate in lecture and discussion activities. Group projects, laboratory and other methods of instruction will be utilized as well.

Topics and Textbook Chapter Reference (Note: these chapters are reading assignments)

1. Introduction to zoology, classification	1 (p. 32), 2 (p. 42-7)
2. Animal-like Protists	3
3. Sponges, Coelenterates, combjellies	4, 5
4. Flatworms and related groups	6
5. Rotifers, nematodes, other roundworms	7, 8 (p. 159-69)
6. Molluscs	9
7. Segmented worms	10
8. Arthropods and related groups	11, 12, 13, 14
9. Echinoderms	15
10. Primitive Chordates	17
11. Fish	18
12. Amphibians & Reptiles	19
13. Birds	20
14. Mammals	21

Evaluation: Grades for the class will be computed as follows.

Item	Weight
Homework, quizzes, lab reports	1 grade each
Tests, lab practicals	2 grades each
Project	3 grades

Grades will be assigned according to the following scale & your course average: 93-100 = A; 86-92 = B; 78-85 = C; 70-77 = D; below 70 = F

Special Policies

- **1. Tests:** Make up unit tests will be given by appointment during the last few weeks of the semester. When the course has officially ended, all missing test grades will be recorded as "zero."
- 2. Homework and Classwork: Assignments are due at the BEGINNING OF CLASS on the due date. Five points will be deducted from any late paper per school day late (school day...not class day). A paper handed in after the beginning of class on the due date is considered to be one day late. To avoid the late penalty, turn in the assignment early, send it by someone or mail it to me at the school. If you are having trouble understanding an assignment you may ask (in advance of the due date) for extra time to complete the assignment. Unless prior arrangements are made and approved missing grades will be changed to zero according to the following policies. ** If you were present when the activity was completed in class you will have ONE WEEK after the due date to hand in the assignment, with a late penalty of five points per school day (school day...not class day). After this date, missing grades are changed to "zero." ** If you were absent when the activity was completed in class you should see the instructor IMMEDIATELY UPON YOUR RETURN TO SCHOOL to schedule a time to complete any lab work or other things you can not do at home. You will have two weeks after the due date to hand in the assignment. After this date, missing grades are changed to "zero." ** When the class has officially ended, all missing grades will be changed to "zero."
- 3. Attendance: Attendance is not counted as part of your course grade. However, regular attendance is usually critical in class success. If you need to arrive late or leave early, please enter or leave the room as quietly as possible. I would much prefer that you arrive late or leave early rather than be absent for an entire class. If you miss a class, in whole or in part, it is your responsibility to be prepared for the next class meetings. Do not assume that you simply need to copy one person's notes when you are absent. Please do not ask me to photocopy notes for you when you miss a class meeting. I will, however, be happy to meet with you about a class you missed. You should not simply stop attending class at any time during the semester. If you need to drop the course, do so by filling out a drop/add form. Failure to do so will result in a course grade of "F
- **4. Scheduling Problems:** I am more than willing to work with you when you have a personal emergency or a scheduling problem. Please notify me as far in advance as possible and I will decide what I can do about working around your conflict. I reserve the right to refuse any request.
- **5. Extra Credit Work:** On some occasions I may have advanced plans to offer extra credit activities to students who are in class on any given day. Please do not ask me for individual extra credit assignments. That would be unfair to the rest of the class.
- 6. Cell phones & Other Electronic Devices: My preference is that you NOT have these in use at all during class. If you must bring a phone into the room, please have the ringer turned off. If you are expecting an urgent call, please keep the ringer volume VERY low or use the "vibrate" mode. If you receive a phone call or text message during class, please quietly leave the room if you need to respond. I think that talking on the phone and/or sending text messages during class is distracting and therefore rude. PLEASE DO NOT DO THIS!

The only thing worse (and more distracting and rude) in my opinion, is trying to hide the fact that you are using your phone in class. No electronic devices of any kind (lap top computers, cell phones, etc.) may be used during a test.

- 7. Cheating: School policy dictates that students conduct themselves in accordance with generally accepted standards of scholarship and morality. Academic honesty is vital. In cases of cheating, a grade of "zero" will be recorded for the assignment in question. I will work hard to see that any episodes of cheating are brought to the attention of school officials. I consider the following things to be cheating.
 - 1) Use of notes, text or any other source of stored information during any quiz, lab practical or test.
 - 2) Copying anything from another student's paper. This includes homework, tests and quizzes inside or outside of class. This also includes students who have taken the class previously.
 - 3) Giving or receiving any written, electronic or verbal communication about a test, quiz or individual homework assignment.
 - 4) Copying any information from any published source (print or internet) without giving proper citations. If you do not know or understand how to cite and document published references, please ask me for help or go to the Learning Assistance Center.
 - 5) Including false data in a lab report, journal or project. <u>Do not even have a dream about handing in a lab report for a lab you have not actually done.</u> I will work with you to make up the lab, and then you can hand in the report.
 - 6) Taking copies of tests from the classroom without approval.

Laboratory Topics: Each week we will complete various types of laboratory work. Follow your lab practical objectives to help alert you to especially important ideas. Lab reports are generally due one week after completion of the lab activity. I prefer that you hand in pages directly from your book. The pages are located at the end of your lab book and are called "worksheets." You may hand in photocopies of these pages if you prefer. Do not ask me to make copies for you. All microscopy drawings should be done on separate pages (notebook paper or drawing paper) and should be no less than one-fourth of one page in size. They should include a field of view, title, magnification, labeling and detailed drawing. Supplemental assignments may be included in addition to, or in lieu of, the book worksheets. I encourage group work during lab but everyone should complete their own lab reports. The lab schedule may be modified as necessary. Lab activities should be read over (skimmed) prior to entering lab.

WEEK 1	p. 334 - 9; Animal Diversity & Classification with Insects
WEEK 2	p. 82 – 4; Protozoans
WEEK 3	Supplemental Activity on Development
WEEK 4	p. 93; Poriferans
	p. 110 – 15; Cnidarians
WEEK 5	p. 133 – 138, 175; Platyhelminthes
	p. 147 - 8; Roundworms
WEEK 6	p. 200 – 13; Molluscs
WEEK 7	p. 231 – 40; Annelids; omit live leach activity and amphitrite observation
WEEK 8	p. 301 – 9, 340 – 3; Arthropods
WEEK 9	p. 362 – 4; Echinoderms
WEEK 10	INVERTEBRATE LAB PRACTICAL

WEEK 11	p. 415 - 27; Amphioxus, Chodrichthyes, Osteichthyes
	Supplemental Activity on Perch Dissection
WEEK 12	p. 454 – 60 Amphibians, Reptiles
	Supplemental Activity on Turtle Dissection
WEEK 13	p. 488 – 9; Aves Supplemental Activities on Pigeon Dissection & Owl Pellets
WEEK 14	Supplemental Activity on Mammal Dissection: Cat and/or Fetal Pig
WEEK 15	VERTEBRATE LAB PRACTICAL

Success in Class: I very much want each of my students to enjoy this class and to learn as much as possible. I spend a lot of time in an effort to keep up my share of a partnership in learning with my students. Your share of the partnership will also involve a lot of time. Most research on effective study techniques indicates that a student should spend at least 2 hours working outside of class for every hour that they spend in class. This means that the successful student should have a **minimum** of 12 hours of outside study time per week. Success is measured by understanding, learning and by grades. Twelve hours seems like a large amount of time. Here are some things that I would use my outside study time for:

Reading the Assigned Text Material: This is essential. Read your text and lab assignments before, during and after they are discussed in class. Be an active reader. Ask questions at the beginning of each section like Who? What? and How? Take notes as you read, use a highlighter and use your class objectives. Look up terms in the glossary. If your textbook is hard for you to read, look for another book in the library, or ask the instructor for suggestions.

Review Lecture Notes & Objectives Daily. No matter how busy you are, try to set aside 15-20 minutes **every day** to review your notes. This is a very effective technique. Check for missing information and be ready to ask questions in class. Keep in mind that in-class lecture is only one small part of learning class material. I will assume that you have prepared for lecture beforehand. It is a very bad idea to neglect review and studying until just before a test.

Read Over (Skim) Laboratory Exercises Before Lab. Reading over the lab exercises before class will save time, help reduce frustration, and will help you to make the most out of our limited lab time. You should have a general idea about what each week's laboratory topics will involve BEFORE you enter the classroom.

Complete Lab Reports and Other Assignments. Although you might sometimes need to consult other references, your textbook/lab manual is usually the best place to start. During lab, your goal should be to complete the lab procedures. Use remaining lab time to work on lab reports, or complete them for homework.

Make Other Study Aids. Try making up your own flash cards, study questions, reading notes, etc. People tend to remember and understand information if they see it in a variety of ways.

Participate in Study Groups. Study groups can be very effective in that students can share study ideas and hear other students' points of view. If your schedule allows for participation in a study group, this may be very useful to you.

Ask Questions. Be prepared with any questions that you have each day. Ask questions in class or come to see me for individual help as necessary.

Review Your Class Objectives. They are an effective guide for organizing your study. Tests are based directly on class objectives.

Tutoring: Ask for a tutor from the Learning Assistance Center in Oaks Hall. The service is free and can be highly useful.

Come to Class Prepared: Know what will be going on in class before you even walk through the door. Be ready to get the most out of class time.

Do Not Look for Shortcuts: If you want to learn, there are none.

Work Ahead on Major Projects: Break a project into small, manageable tasks. Work on these tasks throughout the course.

Assignment Schedule

Test 1 (topics 1-3)	
Test 2 (topics 4-7)	
Test 3 (topics 8-10)	
Test 4 (topics 11-12)	
Test 5 (topics 13 -14)	
Project presentation	
Invertebrate Lab practical	
Vertebrate Lab practical	

Note: On occasion, unannounced quizzes may be given on lecture objectives or on laboratory activities.

HOW TO CONTACT ME: You are welcome to contact me any time you like. However, please note that you are not required to do so each time you are absent or late. I do encourage you to contact me regarding any extended absences. You may leave a note in my school mailbox located on the second floor of the Balsam building. You may leave a telephone message on my voice mail here at school (EXT. 351). Also, you may contact me by electronic mail: elunsford@southwesterncc.edu. In all e-mail communication, you should use your SCC student e-mail account. Failure to do so may result in loss of your message or a delay in arriving by multiple days. Our spam filter is sensitive to external e-mail addresses.

If you have a DOCUMENTED disability and think you may need academic adjustments for this class, please visit the Student Support Services office as soon as possible. An Educational Support Plan, outlining reasonable classroom adjustments, will be initiated as soon as you present your documentation to the SSS office. **If you will not need academic adjustments, you do not have to disclose your disability**. Institutional responsibilities to provide academic adjustments, as governed by ADA and Section 504 of the Rehabilitation Act of 1973, begin after you disclose your disability to the SSS office.