

**BIOLOGY 1313_002 GENERAL ZOOLOGY (4 CREDIT HOURS)
SRSU Syllabus and Course Information Fall 2014**

Instructor: Anne Marie Hilscher
Office: WSB 220
Phone: (432) 837-8820
Class time: Tues/Thurs 12:30-1:45 WSB 201

Office hours: M & W 9-11; W 2-4; by appt.
Email: ahilscher@sulross.edu or via Blackboard
(Type "Biology 1313 Lecture" in subject line)

TEXTBOOKS:

Lecture: Miller, Stephen A. and John P. Harley. 2013. *Zoology*, 9th edition. McGraw Hill.
ISBN 978-0-07-352417-7; ISBN 0-07-352417-4 **[OPTIONAL]**

Lab: Smith, David G. 2002. *Exercises for the Zoology Laboratory*, 3rd ed. Morton Publishing.
ISBN 978-1-61731-062-1 **[absolutely REQUIRED]**

COURSE DESCRIPTION

General Zoology provides a general survey of the animal kingdom, which considers the fundamentals of biological facts, laws, and principals as they apply to animals and functions of the organs and systems of representative animals.

Core Objectives addressed:

- 1) Communication Skills – Students will effectively communicate the results of scientific investigations; using oral, written, and visual communication, either in group discussions or on written exams.
- 2) Critical Thinking Skills – Students will include creative thinking, innovation, inquiry, and analysis required to relate new information with previous information in a way that demonstrates the diversity and similarity due to evolutionary ancestry.
- 3) Empirical and Quantitative Skills – Students will use basic math skills to solve problems (e.g. related to genetic outcomes, cellular energy production, and probability) resulting in informed conclusions.
- 4) Teamwork Skills – Students will work effectively with others to support a shared goal during lab sessions on activities, such as dissections, problem solving, and other experimental procedures.

ATTENDANCE. Missing any exam without notifying me in advance will result in a zero for that exam grade—no exceptions. You must call my office, leave a message, or tell me in person. You will have seven days (including weekends) from the exam date to make up a missed exam; the makeup exam will be different from the original exam. If you fail to appear (on time) for your scheduled exam or a makeup exam, you will be given a zero for that exam. **If you arrive for an exam after other students have completed and turned in their exam, you will not be allowed to take the exam.** Finally, if you miss a class, it is your responsibility to get notes and other important information from a classmate. I will not re-teach lectures on an individual basis.

GRADING

Your grade will be determined based on your performance in lecture only.

Comprehension Tests (4 @ 100 pts)	400
<u>Final lecture exam</u>	<u>150</u> (comprehensive)
TOTAL	550 points

The use of books, notes, cell phones, etc. during exams is not permitted. The only item allowed at your desk during an exam is a writing implement.

PROGRAM LEARNING OUTCOMES (PLOs):

1. Demonstrate a mastery of aerobic respiration and its significance for living organisms.
2. Be able to identify evolution and the processes that influence it.
3. Be able to identify the components of cell structure and their functions.
4. Compare the fundamental concepts of Mendelian genetics.
5. Compare and contrast the process of photosynthesis to other cellular processes.
6. Be able to identify the processes of molecular biology.

COURSE OBJECTIVES

- 1) Students will identify, recall, and label basic cellular structures and processes.
- 2) Students will identify animal-like protists and classify organisms within the kingdom Animalia
- 3) Students will be able to summarize and explain the processes of evolution.
- 4) Students will be expected to demonstrate understanding of the genetic code and how it relates to protein synthesis.
- 5) Students will understand physiological systems, such as aerobic respiration and reproduction

WK	DATE	TR 12:30am-1:45am	This week in LAB
1	T Aug 26	Ch 1 Zoology: The Evolutionary & Ecological Perspective	**NO LABS WEEK 1**
	Th Aug 28	Ch 7 Animal Classification	
2	T Sep 02	The Chemistry of Life (<i>not in text</i>)	Ch 1 Lab Skills; Ch 2 Cells & Tissues
	Th Sep 04	Ch 2 Cells, Tissues, Organs, etc.	
3	T Sep 09	Ch 3 Cell Division (Mitosis); Ch 3 Inheritance (Meiosis)	Ch 4 Animal-like Protists
	Th Sep 11	Comprehension Test #1	
4	T Sep 16	Ch 3 Inheritance (DNA Structure & Protein Synthesis)	Ch 5 Porifera; Ch 6 Cnidaria
	Th Sep 18	Cellular Respiration (<i>not in text</i>)	
5	T Sep 23	Ch 4 Evolution: History & Evidence	Ch 7 Platyhelminthes
	Th Sep 25	Ch 5 Evolution: Gene Frequencies	
6	T Sep 30	Ch 5, cont.	Lab Practical #1
	Th Oct 02	Comprehension Test #2	
7	T Oct 07	Ch 29 Reproduction & Development	Ch 8 Mollusca
	Th Oct 09	<i>Rosalind Franklin and Photo 51 (not in text)</i>	
8	T Oct 14	Ch 9 Poriferans	Ch 9 Annelida; Ch 10 Nematoda
	Th Oct 16	Ch 9 Cnidarians	
9	T Oct 21	Ch 10 Platyhelminthes	Ch 11 Arthropoda & Ch 12 Echinodermata
	Th Oct 23	Comprehension Test #3	
10	T Oct 28	Ch 11 Mollusks	Lab Practical #2
	Th Oct 30	Ch 12 Annelids; Ch 13 Nematodes	
11	T Nov 04	Ch 14 Intro to Arthropods	Ch 13 Chordata; Ch 14 Actinopterygii
	Th Nov 06	Ch 15 Hexapods (Insects)	
12	T Nov 11	Ch 17 Chordates	Ch 15 Amphibia; Ch 16 Reptilia; Planarian Report due Fri., Nov 14
	Th Nov 13	Ch 17 Chordates, cont. [<i>Friday, Nov 14th is the last day to drop with a "W"</i>]	

13	T Nov 18	Comprehension Test #4	Ch 17 Aves; Ch 18 Mammalia
	Th Nov 20	Ch 18 Fishes	
14	T Nov 25	Ch 19/20 Amphibians/Reptiles	Thanksgiving Break – NO LABS
	Th Nov 26	THANKSGIVING BREAK – NO CLASSES	
15	T Dec 02	Ch 21 Aves	Lab Practical #3 (<i>All lab sections to take this practical on Wednesday, December 03.</i>)
	Th Dec 04	STUDY DAY – NO CLASSES	
16	FINAL EXAMS DECEMBER 08-11 (Time TBA)		

Students with disabilities will be provided reasonable accommodations. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility at 837-8203, FH 112.