

**BIOLOGY 1313\_002 TR GENERAL ZOOLOGY (3 CREDIT HOURS)**  
**Spring 2020 Sul Ross State University - A**

**Instructor:** Anne Marie Hilscher, Sean P. Graham  
**Office:** WSB 314A  
**Lecture:** TR 11:00-12:15 WSB 101  
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**Office Hours:** MWF 9:00-9:50  
Tues/Thurs 10:00-10:50  
or by appt.

**TEXTBOOKS:**

Lecture: Miller, Stephen A. and John P. Harley. 2013. *Zoology*, 9<sup>th</sup> edition. McGraw Hill.  
ISBN 978-0-07-352417-7; ISBN 0-07-352417-4 **OPTIONAL, NOT REQUIRED**

Lab: *If you are taking the lab, your lab requirements will be given by your lab TA.*

Field Trip: Field trip to Musquiz Mexico

**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.

**STUDENT LEARNING OUTCOMES (SLOs)**

The graduating biology student graduating with a BS in Biology should be able to:

- 1) The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.
- 2) The student will be able to demonstrate utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include, but are not limited to, plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.
- 3) The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.
- 4) The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

**ATTENDANCE. Missing any test/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 before the test/exam. **You will have FIVE days (including weekends) from the test date to make up a missed test;** often, the makeup will be different from the original exam. If you fail to appear (on time) for your scheduled test or a makeup test, you will be given a zero. **\*\*If you arrive for test/exam after other students have completed and turned in their exam, you will not be allowed to take the test/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**

Comprehension Tests (3 @ 100 pts)	300
Assignments (2 @ 50 pts ea)	100
Quizzes (4 @ 20 ea)	80
Field Notebook	
<u>Final lecture exam</u>	<u>120 (comprehensive)</u>
<b>TOTAL</b>	<b>600 points</b>

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.
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**TENTATIVE COURSE SCHEDULE (SUBJECT TO CHANGE)**

WEEK	DATE	Tues/Thurs 11:00-12:15
1	Jan 14	Ch 1 Zoology & Ecological Perspective
	Jan 16	The Chemistry of Life ( <i>not in text</i> )
2	Jan 21	Ch 2 Cells, Tissues, Organs
	Jan 23	Ch 3 Cell Division (Mitosis)
3	Jan 28	Ch 3 Inheritance (Meiosis and DNA Structure)
	Jan 30	Cellular Respiration ( <i>not in text</i> )
4	Feb 04	Ch 7 Animal Taxonomy; <b>A#1 due</b>
	Feb 06	Ch 4 Evolution: History & Evidence
5	<b>Feb 11</b>	<b>Comprehension Test #1</b>
	Feb 13	Ch 5 Evolution: Gene Frequencies
6	Feb 18	Ch 29 Reproduction & Development
	Feb 20	Ch 29, cont.
7	Feb 25	Ch 9 Poriferans & Cnidarians
	Feb 27	Ch 10 Platyhelminthes
8	Mar 03	Ch 11 Mollusks
	Mar 05	Ch 12 Annelids
9	<b>Mar 09-13</b>	<b>SPRING BREAK – MEXICO FIELD COURSE</b>
10	Mar 17	Ch 13 Nematodes
	Mar 19	Ch 14 Intro to Arthropods
11	<b>Mar 24</b>	<b>Comprehension Test #2</b>
	Mar 26	Ch 15 Crustaceans & Hexapods
12	Mar 31	Ch 15 Crustaceans & Hexapods, cont.
	Apr 02	Ch 17 Chordates; Ch 18 Fishes
13	Apr 07	Ch 18 Fishes, cont.
	Apr 09	Ch 19 Amphibians; <b>A#2 due</b>
14	Apr 14	Ch 20 Reptiles
	Apr 16	Ch 21 Birds
15	Apr 21	Ch 22 Mammals
	<b>Apr 23</b>	<b>Comprehension Test #3</b>
16	Apr 28	Wrap-up and Review
	<b>Apr 30</b>	<b>SRSU STUDY DAY -- NO CLASSES</b>
17	<b>Monday, May 04</b>	<b>Final Exam 10:15-12:15</b>

**CORE OBJECTIVES ADDRESSED (ASSESSED ARE BOLDED):**

- 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.

**MARKETABLE SKILLS:** A student getting a degree in the Biological sciences would be expected to acquire the following marketable skills by graduation.

- 1) Students will be able to organize, analyze, and interpret data.
- 2) Students will be proficient at using presentation software.
- 3) Students will acquire experience in managing time and meeting deadlines.
- 4) Students will gain the ability to speak effectively and write concisely about scientific topics.
- 5) Students will acquire experience and guidance in the development of professional email correspondence.

**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

*Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the Student's responsibility to initiate a request. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.*