

BIOLOGY 1313 GENERAL ZOOLOGY LAB SECTIONS L01-L05 (1 CREDIT HOUR)
SRSU Syllabus and Course Information Fall 2014

Lab Room: WSB 111

Times: Wednesday: L01 1:00 – 2:50 L02 3:00 – 4:50 L03 7:00 – 8:50
Thursday: L04 2:00 – 3:50 L05 4:00 – 5:50

Lab Instructors: Corin Olivas Office hours: M 9:00-11:30; TR 9-12
Robert LeBlanc Office hours: T 1:00-5:00; R 1-2

Course description: This class provides a general survey of the animal kingdom which considers the fundamentals of biological facts, laws, and principals as they apply to animals and the structures and functions of the organs and systems of representative animals. Specific topics are listed below.

Required Lab Manual: Smith, David G. 2002. *Exercises for the Zoology Laboratory*. 3rd Edition. Morton Publishing Co., Englewood, Colorado.

Course objectives:

1. Provide a broad overview and appreciation of animal diversity.
2. Develop an understanding of the role of evolutionary theory and its relation to animal diversity.
3. Explore the physical, morphological, and physiological characteristics of animals.
4. Develop an understanding of basic genetics and the role of genetics in natural selection.
5. Enhance critical thinking skills.

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.

Attendance: Students missing more than three labs will be dropped from the class as per university policy and receive an F in the course. Arrangements for excused absences should be made **in advance**. Exams missed for any reason must be made up within **one** week of the originally scheduled date. There are no exceptions!

Grading: Lab grades will be based on a total of 200 possible points. There will be three exams, each worth a maximum of 40 points. There will be five quizzes, worth 10 points each. There will be one written lab report worth 30 points.

Lab Report: This assignment will be submitted via blackboard and checked with plagiarism detection software. If you submit work that is not your own, you will receive an F for the lab, and possibly face disciplinary action. Zero tolerance.

Lab etiquette: Please observe the following rules during the lab.

1. Attend lab. Pay attention. Do your assignments.
2. When in doubt, ask. This guideline applies to lab protocol, quiz or exam questions, assignments, and life in general.
3. Please be on time. Quizzes will be given at the beginning of each lab and cannot be made up if you are absent or late.
4. Please silence/turn off cell phones.
5. No food, drink, or tobacco use in class.

Dissections: Students are expected to display proper laboratory safety and dissecting techniques during dissection days. If you are not comfortable with dissections or handling organisms speak to instructors for alternatives.

This lab is scheduled to dissect the follow organisms:

1. Nematoda: pig roundworm
2. Mollusca: freshwater mussel
3. Annelida: earthworm
4. Arthropoda: crayfish
5. Arthropoda: grasshopper
6. Echinodermata: sea star
7. Osteichthyes: perch
8. Mammalia: rat

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

Tentative Laboratory Schedule:

| Date | Topic | Chapter(s) |
|-------------------|---|------------|
| Sep 3, 4 | Introduction, microscopes, lab techniques, wet mounts, cells, and tissues | 1, 2 |
| Sep 10, 11 | Animal-like Protists | 4 |
| Sep 17, 18 | Porifera and Cnidaria | 5, 6 |
| Sep 24, 25 | Platyhelminthes; Introduce Planarian Project | 7 |
| Oct 1, 2 | Lab Practical #1 | |
| Oct 8, 9 | Mollusca | 8 |
| Oct 15, 16 | Annelida and Nematoda | 9, 10 |
| Oct 22, 23 | Arthropoda and Echinodermata | 11, 12 |
| Oct 29, 30 | Lab Practical #2 | |
| Nov 5, 6 | Chordata and Actinopterygii | 13, 14 |
| Nov 12, 13 | Amphibia and Reptilia ** Planarian Report due Friday, November 14th ** | 15, 16 |
| Nov 19, 20 | Aves and Mammalia | 17, 18 |
| Nov 26, 27 | NO LABS -- THANKSGIVING | |
| Dec 3 | All sections to take Lab Practical #3 on <u>Wednesday, Dec 3rd</u> | |