

Instructor: Nicholas A. Mason
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Office: LS130A
Office Hours: Monday 12:00 – 2:00 pm or by appointment
Course Website: <https://blackboard.sdsu.edu/webapps/login>

Section (3) 20397 Tuesday 5:00 - 7:40pm
 Section (6) 20400 Thursday 2:00 - 4:40pm

Textbooks - Mandatory and available only at KB Books.

Laboratory Manual for Animal Diversity; An Evolutionary Approach (6th Edition), adapted by Annalisa Berta.
 Originally written by Michael Simpson, Erik Gergus, & Scott McMillian.

Course Objectives

Successful completion of this course will allow you to confidently identify animals and understand their evolutionary position in the tree of life. In addition, you will learn how animal taxa are both similar and different from each other. Comparisons of anatomy, physiology, behavior, life history, and biogeography will be a part of this identification. You will also be able to place the origins of your own biology, as a member of *Homo sapiens*, and how selective pressures have the diversity of life on planet Earth.

Evaluation

Assignment	% Final Grade
1. 5 of 6 Quizzes (lowest score dropped)	50%
2. Attendance, Participation, Lab Notebook	25%
3. Pre-lab Homework	5%
4. (2) Field Trip Assignments	10%
5. (2) Other Assignments	10%
TOTAL	100%

There is no final in this class!

Grading Scale

90.0-100%	A
80.0-89.9%	B
70.0-79.9%	C
60.0-69.9%	D
≤ 59.9%	F

Quizzes

Quizzes will be given approximately every other week. You are required to look at the course schedule to make sure you know when quizzes will be scheduled. There is no excuse for not studying or missing a quiz. **There will be no make-up quizzes.** The lowest quiz score will be dropped; this includes quizzes that are missed.

Quizzes will consist of approximately 15 questions to define key terms, identify organisms and morphological traits, and answer questions from the lab manual. You are also responsible for material brought to your attention in the lecture at the beginning of each class. **Quizzes are hard. If you want to do well on quizzes...**

- Read** the lab before class (being prepared will make the material easier).
- Learn** to identify all organisms and how they differ from each other.
- Draw** the organisms and label important structures.
- Complete** all the questions from the lab manual in class. If you do not know the answer, never hesitate to ask your instructor.
- Study** before the quiz! Review lab materials, lecture notes, your drawings, and answers to questions.

Attendance

This course has a strict policy on attendance:

-Four excused absences will result in an automatic F. An excused absence means you have a doctor's note or otherwise appropriate written excuse for not coming to class.

-Two unexcused absences will result in an automatic F.

Before leaving each class, you must show your instructor your lab manual with questions answered and drawings complete. The instructor may ask you to put more effort into your manual before leaving. NOTE: if you do not complete your lab assignments, you may still not get points for attendance even though you showed up to class.

Participation: Student participation is crucial to effective laboratory sessions. Much of what we do in a lab setting involves groups; however, all members of each group must be actively engaging in lab exercises. The instructor will be continually noting those students who are engaging in lab exercises, answering the instructor's questions, asking insightful questions of their own, coming to class on time, and cleaning up after themselves. Marks will be lost for students who fail to contribute to their group, show up late to class, leave early on a regular basis, fail to clean up, or rarely speak up in class. Students are expected to help the instructor clean up at the end of class.

Pre-Lab Homework

Students are expected to read the appropriate chapter(s) of the lab manual **before** each class and hand in a brief paragraph (4-5 sentences) that summarizes the lab. This must be written in your own words (**not copied from the manual**). It should describe what we are doing for that day and several key characteristics of the organisms we will be examining. LATE PRELABS WILL NOT BE ACCEPTED.

Example: The purpose of lab #1 is to demonstrate an understanding of the concepts of evolution and systematics. In the first part of the lab, a cladogram will be constructed using pictures of organisms provided in the manual to demonstrate descent with modification, parsimony, and derived characteristics. In the second part of the lab, various live animals will be examined and we must place them into categories based on shared characteristics using a dichotomous key. (*Note: no specified organisms for lab 1 only*)

Assignments

This class includes two field trips: one to the San Diego Zoo and one to the Birch Aquarium. Each assignment will consist of a set of questions that can be answered by reading the display placards and observing animals. Students are highly encouraged to complete these assignments during class field trips; however, students may visit the zoo or aquarium individually to complete the field trip assignments.

-Two additional assignments will also be described well in advance of their due date.

-Assignments handed in late will result in the loss of one letter grade (10%) for each day late.

Safety & Decorum

SAFETY: Laboratories are full of germs, glassware, and hazardous chemicals. For your, and your classmates' safety, I will strictly enforce the following three safety rules:

- 1) You may not eat, drink (even water), chew gum, apply make-up, or remove/put on contact lenses while inside the classroom. All snacks/drinks must be consumed outside of the laboratory.
- 2) You may not wear open-toed shoes in the lab.
- 3) You must dispose of garbage properly. There are separate containers for biological waste (dissected dead animals), sharps (broken glass & scalpel blades) and normal waste like paper. If you are unsure where to place an item, please ask.

DECORUM: Please be mindful and respectful of the instructor, your peers, and any live organisms.

- 1) Cell phones, PDAs, IPODS, etc. are distracting and unnecessary in the lab. Please turn these off and put them away during lab sessions.
- 2) I encourage you to help each other out, be constructive and supportive, feel free to chat and collaborate; however, also keep non-biological conversation to a minimum.

- 3) Please treat all live animals with respect and care. Notify your instructor if you are concerned about the welfare of a live organism.

Academic Dishonesty

Do not cheat or plagiarize (or allow others to copy your work). This means that everything should be written in your own words or properly cited. Any individuals caught cheating WILL BE GIVEN AUTOMATIC ZEROS on their assignments. In addition, they may also be reported to the Office of Judicial Procedures, given an F for the class, put on probation, suspended, or even expelled. Do not risk your, or your classmates', academic careers!

Notes from Your Instructor

You will be expected to handle and manipulate live, dead, and preserved animal specimens of various sizes during class sessions. It is recommended that you not wear your nicest clothes, as lab exercises have a history of being a bit dirty at times.

My personal goal is to increase your knowledge and, perhaps more importantly, your appreciation for the diversity of life around us. By understanding life, we better understand ourselves and how we “fit” into this magnificent world. Bio101 Lab is intended to be stimulating, informative, and reasonably challenging; I will do all I can to make it so.

Other

If you have questions, please feel free to speak with your lab instructor. If your instructor is unable to resolve your concerns, you may contact the 101 lecturer:

Brad Hollingsworth

*The TA reserves the right to change the syllabus & schedule as he/she sees fit;
you will be notified of any changes.*