



Biology 3454 - 001 – General Zoology, Spring 2012

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MWF 11:00-noon, CH 101

<http://www.natureboy.com>



Prerequisites: General Zoology is a major's course in the Biology Undergraduate Teaching Program. Cell and Molecular Biology (Biol. 1441) and Structure and Function of Organisms (Biol. 1442) or their transferred equivalents must have been taken by a student before enrolling for this course. All students who do not have the appropriate prerequisite courses should drop this course and take Biol. 1441 and/or 1442 as necessary or, if they are not Biology Majors, an appropriate non-majors Biology course such as Biol. 2311 (Man and Environment), Biol. 2317 (Human Sexuality), or Biol. 1301 (Nutrition) should be taken.

As the material presented in General Zoology will be basic to many upper division Biology Major's courses, instructors in those courses will assume that you have the foundation of zoological knowledge covered in this course.

Description of course content:

Lecture: The General Zoology course is designed to introduce students to the study of zoology at the organismal and organ function levels. The lecture section of the course will review the general principles of modern zoological theory and provide the student with an introduction to the recent advances in zoology in the areas of systematics, evolution, reproduction, development, animal diversity, and animal ecology. The lectures will reinforce and occasionally expound on subjects covered by assigned reading in the textbook. Supplementary info and material may be made available at the website <http://www.natureboy.com>. *You will need to take notes in class. You should take notes about what I say, not just copy what you see in the slideshow. I will actually make slides available, so it makes no sense to spend time trying to copy down everything on the slide. **Keep in mind, I will tell you things in class that are not in the book.***

Laboratory: The laboratory section of the course is designed to allow students to become familiar with the form and function of major animal phyla through observation of living animals, study of prepared slides, examination of model specimens and museum mounts and dissection of preserved specimens. The laboratory will allow students to become familiar with animal classification and systematics. The beginning of each laboratory period will be devoted to a discussion of the form, function and classification of the animal groups covered in that laboratory exercise. The remaining portion of the laboratory exercise will be devoted to the examination of living and preserved specimens. Students should come to laboratory equipped with a dissecting kit, their Laboratory Note Book and Lecture Text, and a #2 pencil for laboratory drawings and labeling of diagrams provided in the Laboratory Notebook. A dissecting kit can be purchased from the UTA Bookstore and would be equivalent to that used in the laboratory of the Structure and Function of Organisms (Biol. 1442) course.

Student Learning Outcomes:

The specific learning goals for General Zoology are to provide students with a working knowledge of fundamental principles in zoology that will provide a foundation for their later advanced course work in more specific biological subjects. Thus, this course will provide students with an opportunity to gain information regarding animal classification and systematics, animal structure and function relationships, evolution between and within major animal groups, human evolution and animal reproduction and development. As General Zoology is a basic course, students will become familiar with animal classification schemes and associated taxonomic group diagnostic characteristics as well as developing an understanding of and ability to apply basic zoological principles. The laboratory and lecture sections of the course are highly integrated and directed toward teaching students the principles of animal evolution, classification, form and function.

Required texts:

GENERAL ZOOLOGY, Matthew Nelson, ISBN: **9781121068827** (available as ebook from <http://create.mcgraw-hill.com/shop/>)

Laboratory exercises available online. <http://www.natureboy.com/3454/index.html>

optional: A PHOTOGRAPHIC ATLAS FOR THE ZOOLOGY LABORATORY, 4th ed. K. M. Van De Graaff and J. L. Crawley. This optional text contains labeled photographs of many of the specimens that will be studied in the laboratory. It should prove very useful to students in completing their laboratory exercises and preparing for laboratory exercises and is **strongly recommended**.

Attendance Policies:

Students are very strongly encouraged to attend all classes. **Attendance will be taken during each laboratory period.** Students not attending class are unlikely to pass the course.

Lecture Topics:

(There is an updated class calendar available on <http://www.natureboy.com>)

target	TOPIC	
jan 17	INTRODUCTION TO ANIMAL LIFE	
	Introduction, Evolution, and Classification	chapters i, ii, iii, iv
	ANIMAL STRUCTURE, FUNCTION AND CLASSIFICATION	
feb 3	Porifera	chapter 1
feb 6	Cnidaria and Ctenophora	chapter 2
feb 10	Test 1	
feb 13	Acoelomates (Platyhelminthes)	chapter 3
feb 15	other Pseudocoelomates / lophotrochozoa	chapter 5
feb 20	Mollusca	chapter 6
mar 5	Annelida	chapter 7
mar 19	Ecdysozoa, nematoda	chapter 8
mar 26	Arthropoda	chapter 9, 10, 11
mar 9	Test 2	
mar 19	Echinodermata and Hemichordates	chapter 12
mar 26	Chordates	chapter 13
mar 30	Fishes	chapter 14, 15
apr 2	Amphibians	chapter 16
apr 9	Mammals	chapter 17
apr 16	Reptiles	chapter 18, 19
apr 27	Test 3	
apr 30	Birds	chapter 19
May 9, 11 am	Final Exam	

Grading policy:

Lecture Grading: The lecture portion of the course will account for **60% of the final grade**. The tests in the lecture portion of the course will consist of multiple choice and short answer questions. There will be 3 lecture tests, together accounting for **45%** of the lecture grade. The final examination will consist of around 40 questions, and will be comprehensive over the entire semester. You will have approximately 1 hour to complete the exam. The final examination will account for 15% of the final grade. **All students will be required to provide their own Scantron form 882-ES answer sheets and #2 pencils for each examination. Scantron answer sheets can be purchased at the University Bookstore.**

Note about this class: I do not teach to the test. You are not in high school any more. I will expect you to learn the material. That is what I care about. Learning is paramount. If you gain access to old tests, I advise you not to try to use them as a study guide. The tests are different each semester. If you have learned all the material, you will do well on the test. If you studied tests, you will not do well.

Laboratory Grading: The laboratory portion of the course will account for **40% of the final grade**. This grade will come from a combination of unannounced lab quizzes, occasional lab hand-ins, two practical tests, and the laboratory notebook. Laboratory grading will be fully described in an outline to be given out during the first laboratory period.

Course Grading Summary:

Source of Grade	Percentage of the Final Grade
Lecture Tests 1-3	45%
Laboratory Grade	40%
Final Examination	15%
TOTAL	100%

Final grades will be assigned on a standard 90-80-70-60 percent scale.

Make-up Examination Policy:

Students are required to attend all examinations. Only valid, documented, excuses will be accepted for missing an examination. Without a valid excuse for missing an examination, a student will be assigned a grade of 0% for that examination. A test that was missed for a legitimate reason will be replaced with the grade on the final exam. **SEE ME WITHIN ONE WEEK OF MISSING THE TEST TO QUALIFY! (see me the day you return to class)**

THERE WILL BE NO EXTRA CREDIT, SO DON'T ASK.

Important University Policies:

Undergraduate Teaching Assistants: There may be undergraduate teaching assistants working with the graduate instructor in the teaching of the laboratories. Students carry out this teaching under Biol. 4388 (Instructional Techniques in Biology) and have received a grade of A or B in the General Zoology Course. Please contact the Instructor as soon as possible if you are interested in being an undergraduate teaching assistant in General Zoology after completing the course.

Drop Policy: If you choose to drop the course, you have to do so by Mar 30. However, I am not expecting you to drop. I am not going to remind you. Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period

through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/ses/fao>).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: At UT Arlington, academic dishonesty is completely unacceptable and will not be tolerated in any form, including (but not limited to) "cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts" (UT System Regents' Rule 50101, §2.2). Suspected violations of academic integrity standards will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting www.uta.edu/resources.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.