



Class Syllabus: Biology 3454 Sec. 001 – General Zoology Spring 2009

M/W/F 11:00-12:00, LS 119

Instructor: Dr. Matthew Nelson

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**Required Lecture Text:** *INTEGRATED PRINCIPLES OF ZOOLOGY*, 14<sup>th</sup> ed., C. P. Hickman, L. S. Roberts, A. Larson, and H. I'Anson.

**Required Laboratory Text:** *GENERAL ZOOLOGY LABORATORY MANUAL*, STEPHEN MILLER.

*Laboratory supplement* available through phi sigma.

**Optional Laboratory Text:** *A PHOTOGRAPHIC ATLAS FOR THE ZOOLOGY LABORATORY*, 4<sup>th</sup> 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**.

**Prerequisites:** General Zoology is a major's course in the Biology Undergraduate Teaching Program. The undergraduate major's courses in 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. Previous experience has indicated that without these prerequisites, a student's chances of receiving a good grade in this course are not the best. 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. Without having the foundation of the information provided by Biol. 1441 and 1442, students are unlikely to gain the information in General Zoology required for success in upper division zoology courses. Therefore if a student does not have the specific prerequisite courses, they cannot enroll in General Zoology without the specific consent of the Instructor.

#### **COURSE DESCRIPTION**

**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 expand on subjects covered by assigned reading in the textbook. Supplementary info and material may be made available at the website <http://www.natureboy.com>. However, I do not post notes. You will need to take notes in class.

**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.

**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 questions. There will be three semester tests, together accounting for **45%** of the lecture grade or 15 points each of the final grade out of 100 points. The final examination will consist of around 50 questions, and will be comprehensive over the entire semester. The final examination will account for count like a regular test, but will also replace your lowest test grade (grades of zero will not be replaced). **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.**

**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% and replaces lowest test grade (but not a zero)
<b>TOTAL</b>	<b>100%</b>

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

**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.

**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!**

**Lecture Topics:**

TOPIC	
INTRODUCTION TO ANIMAL LIFE	
Introduction, Evolution, and Classification	chapters 1,6, and various other stuff
ANIMAL STRUCTURE, FUNCTION AND CLASSIFICATION	
Porifera	chapter 12
Cnidaria and Ctenophora	chapter 13
Acoelomates (Platyhelminthes)	chapter 14
Pseudocoelomates (Rotifera)	chapter 15
<b>Test 1</b>	
Mollusca	chapter 16
Annelida	chapter 17
Ecdysozoa, nematoda	chapter 18
Arthropoda	chapter 19,20,21
<b>Test 2</b>	
Echinodermata and Hemichordates	chapter 22
Chordates	chapter 23
Fishes	chapter 24
Amphibians	chapter 25
Mammals	chapter 28
Reptiles	chapter 26
<b>Test 3</b>	
Birds	chapter 27

**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.

## **Important University Policies:**

**Americans With Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability). Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

**Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is 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." (Regents' Rules and Regulations, Series 50101, Section 2.2)

**Student Support Services Available:** The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

**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 syllabi. 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. Classes are held as scheduled during this week and lectures and presentations may be given.

**Drop for non-payment of tuition:** Payment must be received by the term due date of January 14, 2009 or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes but only if seats are available.

**Bomb Threats:** If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

**After Hours Safety Escort:** The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. 817-272-3381

**MavMail:** All students are assigned an email account and information about activating and using it is available at [www.uta.edu/email](http://www.uta.edu/email). New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.