

BIOL 2270 (4 cr.) Fall SEMESTER 2008
GENERAL ZOOLOGY
Department of Biology
College of Arts and Sciences
Valdosta State University

CLASS TIME:	Lecture: TR 9:30 – 10:45 am	Hugh Bailey Science Center 1023
	Lab: Section D: R - 1:00 - 3:50 pm	Hugh Bailey Science Center 1047
	Section E: F – 8:30 – 11:20 pm	Hugh Bailey Science Center 1047
	Section F: F - 12:00 – 2:50 pm	Hugh Bailey Science Center 1047

Dr. Colleen M. McDonough

OFFICE HOURS: T 2-4 p.m., or by appointment.
OFFICE: 2086 Hugh Bailey Science Center
PHONE: 333-5759 biology office, 333-5764 my office
Email: cmcdonou@valdosta.edu

COURSE DESCRIPTION: Survey of the animal kingdom.

PREREQUISITES: Any one of the following

- 1) BIOL 2010 with a "C" or better,
- 2) BIOL 1010/1020L and BIOL 1030/1040L with grades of "C" or better, or
- 3) permission of the instructor.

If the sections of zoology are full, then those students without the proper prerequisites will be asked to leave to make room for students with pre-requisites.

REQUIRED TEXTS:

- 1) Integrated Principles of Zoology, 14th edition; Hickman, Roberts, Larson, l'Anson, Eisenhour; 2008. (12th and 13th editions are OK – you just have to find the corresponding pages numbers for your editions).
- 2) General Zoology Laboratory Guide, 14th edition; Lytle and Meyer; 2005.

COURSE OBJECTIVES: Zoology is the study of animals that includes an incredible amount of information on processes at the cellular level up through those at the community level of organization in biology. Because of the amount of information that can be reasonably covered in a semester, the course will focus on a subset of the animal phyla. These include Porifera, Cnidaria, Nematoda, Annelida, Mollusca, Arthropoda, Echinodermata, Chordata and a few others. Material presented will stress structures in terms of their functions or roles they play in the organism. In addition, the course will cover evolutionary mechanisms for species diversity and macroevolutionary trends in animal kingdom. These trends will highlight patterns of derived characteristics or adaptations in different organ systems (i.e., circulatory, respiratory, urinary). Most animals are invertebrates. Vertebrates are one subphylum of one phylum covered. We will not get to them until the end of the semester.

In addition this course - address diversity within each phylum.

- cover major trends or adaptations within organ systems.
- identify the taxonomy and phylogeny of the different animals studied.
- expose you to the use a taxonomic dichotomous key.

Standards

VSU General Education Outcomes on webpage: (<http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml>) This course meets outcomes 4., 5. and 7.

Department of Biology Educational Outcomes (Page 108 in 2008-2009 Undergraduate Catalog). This course meets outcomes 1. and 2.

ATTENDANCE POLICY: Laboratory attendance is **required**. It is university policy that if you miss 20% of your classes you fail the course. In this case if you miss 20% of the laboratories (more than 2 absences) you will fail the lab section of this course. (It would be difficult to pass the class with a failing grade in lab.) **You must be in laboratory on time.** I will mark people absent prior to the start of my introduction to the material covered in lab. If you know that you are going to have problems getting to class on time, let me know now.

I do periodically monitor lecture attendance. **Usually students who don't attend lecture do not do as well as they would like.** It is difficult to learn lecture material from someone else's notes. If you have to miss a lecture, get the notes from someone who attended class.

GRADING POLICY: Your grade will be based on a total of **515** points;
400 points (4 lecture tests – 100 points each)
100 points (average of 3 -100 point laboratory tests)
15 points (laboratory assignment using a dichotomous key)
515 points

Lecture: There will be 4 lecture tests and a comprehensive final. I will take your test average and multiply by 400. Example: If you have a 75% average for the five tests, then you have 300 pts (.75 x400) for this section of the grading.

The exams and the final will have a mixture of multiple choice, short answer, short essay, and essay questions. Questions will be based on information given during lecture and laboratory and reading material assigned in class. Any questions, problems, or complaints about grading must be made within one week of receiving an exam back. No grade changes will be made after that time.

Laboratory: Your lab score will be worth a total of 100 grade points. There will be three laboratory practical tests. At the end you will have a certain percentage correct (for example, 85% of the lab material correct). This proportion will be multiplied by 100 and this product will be your lab grade. (If 85% in lab, $.85 \times 100 = 85$, 85 will be your lab score). Your lab score will be added to the lecture score to give the total points. A laboratory assignment worth 15 points will also be added. The total number of points again is 515 (400 +100+15).

Course Grade: Your course grade will be based on your total number of points from lecture and lab. Grades will be distributed according to the following point totals:

463-515	A	90-100%
412-462	B	80-89%
360-411	C	70-79%
309-359	D	60-69%

STUDENTS WITH DOCUMENTED DISABILITIES: Students requiring classroom accommodations or modifications because of documented disabilities should discuss this need with me at the beginning of the semester. Students not registered with Special Services Program must contact the Access Office for Students with Disabilities (1115 Nevins Hall). Their phone number is 245-2498 (V/VP) and 219-1348 (TTY).

FEDERAL PRIVACY ACT: It is illegal to release personal information about an individual to others. Therefore, grades, test cores and other personal information will not be given to anyone over the phone or email, will not be posted without permission, and will not be released to anyone but that individual in person.

CLASS BEHAVIOR: Any student engaging in disruptive behavior will be asked to leave the lecture or laboratory. They will forfeit the chance to hand in the work resulting from that class period. If disruptive behavior continues the student will be dropped from the course.

CELL PHONE POLICY: No cell phone use in lecture or lab. You must turn your cell phones **off** (not just put them on vibrate) before entering the lecture. The exiting and entering of students answering their phones is disruptive to the other students in the class. If it becomes a problem, I will lock the doors so that people cannot return if they leave. You cannot use cell phones during tests.

PLAGIARISM AND OTHER FORMS OF CHEATING: Adhere to the policy listed on the Biology Department's website (<http://www.valdosta.edu/biology/>. See list of items under "FOR STUDENTS"). If caught cheating a student will be given a zero for the assignment or test and be reported to the dean of students. If caught a second time, they will fail the course. The following are some examples of cheating (not an exhaustive list).

--If a student copies from another student (includes use of cell phones during test), brings in cheat sheets to a test, then he/she has cheated.

--If a student allows someone to copy from his/her test, he/she has cheated.

--If a student plagiarizes someone else's written assignments, he/she has cheated.

--If a student allows someone to plagiarize his/her written assignments, he/she has cheated.

Plagiarism not only includes copying something word for word, it also includes copying and paraphrasing someone else's work without citation (i.e., stealing someone else's thoughts and ideas and claiming them as your own).

DATES TO REMEMBER

Sept 1 – Labor Day – NO CLASSES

Oct 9 – Mid-Term – Last day to drop the class unconditionally with a withdraw pass (WP)

Oct 13-14 – Fall Break -NO CLASSES

Nov 26-28 – Thanksgiving Holidays – NO CLASSES

Dec 8 - Monday - Last day of class

Dec 11 Thursday - Final Exam- 10:15 – 12:15 p.m. – SAME CLASS ROOM

TENTATIVE WEEKLY LECTURE SCHEDULE – sections in book are subject to change

<u>Week of:</u>	<u>Topic</u>	<u>Chapters</u>
Aug 18	Introduction, Phylogeny of Animals	1 (in part). Fig. 3.1 pg 38 6 (in part)
Aug 25	Phylogeny of Animals;	pp. 162-170, Chap. 9, 10
Sept 2	Animal -like Protista,	Chap 11, pp. 46, 51
Sept 8	Sponges -Porifera Radiate Animals; body organization and body tissues	Chap 12 pp. 190-197, Chap. 13
Sept 11	TEST 1	
Sept 15	finish radiate animals, Acoelomates	Chap. 14, 671-672
Sept 22	Lophotrochozoans; Rotifera Molluscs; internal fluids and circulation in organisms up to vertebrates	Chap. 15 (in part – 316-319) Chap. 16, 688-692
Sept 29	Annelida; closed circulation and nervous coordination in organisms up to vertebrate, metamerism	Chap. 17, 49-50, 726-734
Oct 6	Ecdysozoans; Nematoda	Chap. 18 (in part)
Oct 7	TEST 2	
Oct 13-14	Fall Break	
Oct 15	Arthropoda; respiration;	Chap. 19, 698-699
Oct 20	Arthropoda; molting hormones; Subphylum: Hexapoda	Chap. 20, Chapter 21, 780-781
Oct 27	Echinodermata (in part)	Chap. 22,
Nov 4	TEST 3	
Nov 6	Echinodermata (in part)	Chap. 22,
Nov 10	Chordata – skeletal system, Fish; circulation and respiration, hox genes	Chap. 23, 24, 692-702, 172-175
Nov 17	Chordata – Amphibians, Reptiles; amniotic development;	Chap 25, 26; 175-178
Nov 24	Chordata – Mammals and Birds; temperature regulation, brain development; mating systems, social behavior	Chap. 27, 28 pp. 716-720 777-779,
Dec 4	TEST 4	

FINAL EXAM May 2, 12:30 – 2:30 p.m. Same room as lecture

In addition to the following schedule, we will be conducting a field trip to Gulf Specimen Aquarium and Marine Laboratory in Panacea, FL. Cost will be between \$ 7-9 and the cost of lunch. The date will be determined later.

TENTATIVE LABORATORY SCHEDULE

		Major organisms, topics	Chapters
1	Aug 21, 22	Major transformations in animal kingdom	--
2	Aug 28, 29	Animal architecture and development	4, 8
3	Sept 4, 5	Protozoa	5
4	Sept 11,12	Porifera and Cnidaria /	6
5	Sept 18, 19	Lab Practical I	
6	Sept 25, 26	Platyhelminthes and Rotifera	9, 10 in part
7	Oct 2, 3	Mollusca	11
8	Oct 9, 10	Annelida and Nematoda	12, 10 in part
9	Oct 16, 17	Lab Practical II	
10	Oct 23, 24	Arthropoda I	13 in part
11	Oct 30, 31	Arthropoda II	13 in part
12	Nov 6, 7	Echinodermata / Hemichordata / Chordata – in part	14-15
13	Nov 13, 14	Vertebrata –muscular, integumentary and skeletal systems	18
14	Nov 20, 21	Vertebrata – internal organs, circulatory &nervous systems	18
15	Nov 27, 28	Thanksgiving Break	
15	Dec 4, 5	Lab Practical III	