

Biology 2270 General Zoology
Section D (CRN 81592)

Fall Semester, 2009

Instructor - Dr. J. Mitchell Lockhart

Office – Biology-Chemistry Building, Room 2029

Phone: 333-5767, 333-5759 (Biology office)

Email: jmlockha@valdosta.edu

Office Hours: As posted or by appointment

Course hours: Lecture – **2:00** – 3:15 PM, Tuesday and Thursday, Biology Building, Room 2022

Lab – Sec. D – 9:00 – 11:50 PM on Wednesday, Biology Building, Room 1047

Textbook - *Integrated Principles of Zoology*, Hickman, Roberts, Larson, I'Anson, and Eisenhour, 14th Edition. **(Required)**

Laboratory Textbook – *General Zoology Laboratory Guide*, Lytle and Meyer, 15th Edition. **(Required)**

Other Supplies – Laboratory Kit - containing microscope slides, cover slips, lens paper, scissors, scalpel, dissecting needle, and probe (required).

Course Objectives: As your bulletin states, zoology is a survey of the animal kingdom. This course is a cornerstone of your future studies in Biology and will include information concerning processes from the cellular to community levels. We will mention most animal phyla in General Zoology and focus not only on taxonomy, but also on structures and how they compare among various animal taxa.

Prerequisites: Any one of the following 1) BIOL 2010 with a “C” or better or 2) BIOL 1010/1020L (BIO 101/102) and BIOL 1030/1040L (BIO 103/104) with grades of “C” or better, or 3) permission of the instructor.

Attendance: MANDATORY! I do keep track of who is and isn't attending lecture and laboratory. This course has a tremendous amount of new concepts and terminology and it serves your best interest to attend class regularly. Any student disrupting the classroom and affecting the learning experience of others will be asked to leave. Along these lines, **NO** cell-phones, beepers, and/or associated earpieces are allowed either in the lecture room or laboratory. My policy is not to give a warning, rather, if a cell-phone or beeper activates during lecture/laboratory, I pursue **permanent** removal of the individual from my class. Viewing a cell-phone or pager that activates on “silent” mode during a quiz or exam will be treated as an instance of **CHEATING** and handled accordingly. Those wishing to utilize laptop computers as part of the class are required to sit in the first 3 rows of the classroom.

Students With Documented Disabilities: Students requiring accommodations or modifications because of documented disabilities should discuss this need with Dr. Lockhart at the beginning of the quarter. Students not registered with Special Services Program must contact the Access Office for

Students with Disabilities in Farber Hall. Their phone number is 245-2498.

Grades: For the lecture grade, four exams (tentative) plus a comprehensive final will be given. Each exam will be worth 100 points. Exam questions will be in a variety of formats including (but not limited to) essay, short answer, multiple choice, fill in the blank, drawings, etc...Any questions concerning grading should be brought to the attention of the instructor **NO LATER** than one week following return of the exam. You are allowed to drop your lowest written exam score **OTHER THAN THE FINAL. NO make-up exams will be given.**

For the laboratory grade, 3 lab practicals (tentative) will be given. The **Lab practicals cannot be made up. If a lab practical is missed, you will receive a zero for that lab grade.**

The final grade will be a combination of your final lecture exam score and laboratory exam score. Lecture exams will comprise 65% and lab exams will comprise 35% of your final score.

Grade Scale: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Privacy Act: Because of the Buckley Amendment or Privacy Act, grades will not be discussed over the phone, given to friends, or given to relatives. Final grades will be posted, only at your request, under an anonymous 6 digit number which you choose later in the semester.

Cheating: Refer to the Student Code of Ethics in the Valdosta State University Student Handbook. A student caught cheating will be penalized ranging from receiving a zero for that assignment or test to failing the class.

Important Dates: Midterm – Thursday, October 8; Final Exam – Wednesday, December 9, 2:45 – 4:45 PM

*** The Instructor reserves the right to modify the above contents with proper notification.**

Course Outcomes:

Course:

By the end of BIOL 2270, students who successfully complete the course should have:

1. Gained factual knowledge, to include general zoological terminology, methods, and principles, about General Zoology. (DO – 2,3,5; VSUGEO – 5)
2. Learned fundamental principles, generalizations, or theories of general zoology. (DO – 2,3,5; VSUGEO – 5)
3. Learned to apply course material (to improve thinking, problem-solving, and decisions) in general zoology. (DO – 2,3,5; VSUGEO – 5)
4. Developed specific skills, competencies and points of view needed by professional in the fields most closely related to general zoology. (DO – 2,3,5; VSUGEO – 5)
5. Acquired an interest in learning more by asking questions and seeking answers about general zoology. (DO – 2,3,5; VSUGEO – 5)

Department:

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.
2. Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and the function of DNA/RNA to the development of form and function of the organism and to heredity.
5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; and to human impacts on these systems and the environment.

Valdosta State University General Education Outcomes:

1. Students will demonstrate understanding of the society of the United States and its ideals. They will possess the requisite knowledge of the society of the United States, its ideals, and its functions to enable them to become informed and responsible citizens. They will understand the connections between the individual and society and the roles of social institutions. They will understand the structure and operational principles of the United States government and economic system. They will understand United States history and both the historical and present role of the United States in the world.
2. Students will demonstrate cross-cultural perspectives and knowledge of other societies. They will possess sufficient knowledge of various aspects of another culture, including the language, social

and religious customs, aesthetic expression, geography, and intellectual and political history, to enable them to interact with individuals within that society from an informed perspective. They will possess an international viewpoint that will allow them to examine critically the culture of their own nation and to participate in global society.

3. Students will use computer and information technology when appropriate. They will demonstrate knowledge of computer concepts and terminology. They will possess basic working knowledge of a computer operating system. They will be able to use at least two software tools, such as word processors, spreadsheets, database management systems, or statistical packages. They will be able to find information using computer searching tools.
4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments based on quantitative data.
6. Students will demonstrate knowledge of diverse cultural heritages in the arts, the humanities, and the social sciences. They will develop understanding of the relationships among the visual and performing arts, literature and languages, and history and the social sciences. Students will be versed in approaches appropriate to the study of those disciplines; they will identify and respond to a variety of aesthetic experiences and engage in critical thinking about diverse issues. They will be able to identify the components of and respond to aesthetic experiences in the visual and performing arts. They will develop knowledge of world literature within its historical and cultural frameworks. They will understand modern issues within a historical context and the role of the individual in various forms of societies and governments.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written, and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis. They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.
8. Students will demonstrate knowledge of principles of ethics and their employment in the analysis and resolution of moral problems. They will recognize and understand issues in applied ethics. They will understand their own value systems in relation to other value systems. They will judge values and practices in a variety of disciplines.

BIOL 2270 Sections D
Fall Semester, 2007
General Zoology
Dr. J. Mitchell Lockhart

Tentative Lecture Outline - This is the order in which we will cover topics.

TOPIC	TEXT CHAPTERS
Animal Architecture/Reproduction and Development	8, 9
Taxonomy and Phylogeny of Animals	10
Protozoan Groups	11
Sponges and Placozoans	12
Radiate Animals	13
Flatworms, Mesozoans, and Ribbon Worms	14
Gnathiferans and Smaller Lophotrochozoans	15
Molluscs	16
Annelids and Allied Taxa	17
Smaller Ecdysozoans	18
Arthropods	19-21
Chaetognaths, Echinoderms, and Hemichordates	22
Chordates	23
Fishes	24
The Early Tetrapods and Modern Amphibians	25
Amniote Origins and Nonavian Reptiles	26
Birds	27
Mammals	28

Lecture Exams:

- 1 – September 8
- 2 – October 6
- 3 – November 3
- 4 – December 3

Final Exam: Wednesday, December 9, 2:45 – 4:45 PM

TENTATIVE LABORATORY SCHEDULE

Week of	Major organisms, topics	Chapters
1 August 17 4	Intro to animal phyla and development	1,
2 August 24	Protozoa	5
3 August 31	Porifera and Cnidaria	6, 7
4 Sept 7	Platyhelminthes/ Pseudocoelomates	9, 10
5 Sept 14	Lab Practical I	
6 Sept 21	Pseudocoelomates / Mollusca	10, 11
7 Sept 28	Annelida	12
8 Oct 5	Arthropoda	13
9 Oct 12	Arthropoda	
10 Oct 19	Fall Break – NO LAB	
11 Oct 26	Lab Practical II	
12 Nov 2	Echinodermata / Hemichordata / Chordata – in part	14-15
13 Nov 9	Chordata –in part for following two laboratories Vertebrata - integumentary and skeletal systems,	16, 18, 20
14 Nov 16	Vertebrata –muscular system, internal organs	16, 18, 20
15 Nov 23	Thanksgiving – No lab	
16 Nov 30	Lab Practical III	