BIOL 160 Introduction to Animal Biology (Sections 13 & 14) Fall 2012

Instructor: Dr. Daniel L. Graf Course web Desire2Learn site at Office: TNR 335 Site: http://mypoint.uwsp.edu

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(include "BIO 160" in subject) or by appointment

General Course Description. "Anatomy, physiology, adaptation, and classification of animals; morphology and anatomy of various types of animals." This is a course in zoology that examines the animal diversity and the general biology of animals. This is a required course for both Biology majors and minors.

Objectives. The objectives of this course are 1) to examine the breadth of animal diversity, 2) to introduce students to general biological principles, and 3) to provide the foundation necessary for success in future coursework in the biological sciences.

Course Objectives:

Your instructor will: 1. Compare and contrast variation in form & function among the major groups of animals.

- 2. Explain the fundamental biological principles that guide the study of zoology.
- 3. Provide hands-on experience with living and preserved organisms.
- 4. Survey the various levels of biological organization, from cells to ecosystems.
- 5. Emphasize the relevance of organismal biology to human health and happiness.

Learning Outcomes:

You will be able to: 1. Differentiate and classify animal diversity.

- 2. Understand the significance of cell theory, inheritance, evolution, and developmental biology as the foundations of zoological science
- 3. Describe the variety of animal body-plans and organ systems.
- 4. Recognize the various levels of biological organization and their emergent properties.
- 5. Demonstrate the ability to learn a large body of knowledge, including a vast terminology.

Lecture/Lab Schedule.

Session	Sec.	When	Where
lecture	13-14	T Th 2:00-3:15 PM	Sci A208
lab	13	M 8:00-10:50 AM	TNR 351
lab exam	13	M 6:00-7:00 PM	TNR 351 or 355
lab	14	W 8:00-10:50 AM	TNR 351
lab exam	14	M 7:00-8:00 PM	TNR 351 or 355

Open lab hours: M-Th 6:30-8:30 PM.

Required Materials. *Integrated Principles of Zoology*, 15th edition (2011), by Hickman, Roberts, Keen, Eisenhour, Larson & l'Andson. McGraw-Hill Higher Education, New York (ISBN 978-0-07-304050-9). This book is available for rental at the bookstore.

Introduction to Animal Biology. This is a lab manual available for <u>purchase</u> at the bookstore.

A dissecting kit (also available for <u>purchase</u> at the bookstore) is also required.

Exams, Assignments, and Grading. Your final grade for the course will be based upon 450 possible points.

There are three lecture exams (50 points each) that constitute about 33% of your total points. Lecture exams may include matching, multiple choice, true-false, or short-answer type questions. There are also three laboratory practical exams (50 points each) that comprise 33% of your final grade. None of the six lecture and laboratory exams will be cumulative — they will only include material since the previous exam, and they will only cover their respective aspects of the course (i.e., either lecture or lab).

BIO 160	points
Daily Quizzes	50
Lecture Exam 1	50
Lecture Exam 2	50
Lecture Exam 3	50
Lab Exam 1	50
Lab Exam 2	50
Lab Exam 3	50
Final Exam	100
TOTAL	450

The cumulative final exam is worth 100 points (22%) and will cover material from the entire course.

Exams will be designed to test your mastery of the material as well as your ability to use critical-thinking skills to apply that knowledge.

In addition to periodic exams, daily 2-point quizzes will take place at the beginning of each lecture and lab period. All questions will be "short answer," and topics from preceding sessions *as well as the lecture or lab scheduled for that day* are fair game. Any daily quiz points acquired above 50 are "bonus" points. Daily quizzes will constitute roughly 11% of your final grade.

Grades will be based upon the following percentages of the course total:

			100-93%	Α	92-89%	A-
8	8-87%	B+	86-83%	В	82-79%	B-
7	8-77%	C+	76-73%	C	72-69%	C-
6	8-67%	D+	66-63%	D	62-59%	D-
	<58%	F				

REQUESTS FOR EXTRA POINTS WILL NOT BE HONORED.

Exam and Quiz Rules. The following rules apply to exam periods as well as quizzes.

- If you arrive so late for an exam that anyone else has finished and left, you will not be allowed to take the exam at that time. You <u>may</u> be able to take a make-up exam (see attendance policy below).
- If you arrive late for a quiz or exam, you will not be given extra time. When the rest of the class is finished, you will need to be done. There are no make-up quizzes.
- All exams, quizzes, lab exercises, etc. <u>must</u> be completed in black or blue ink or pencil.
- MP3 players, cell phones, etc. will <u>not</u> be allowed in the testing area.
- There may be multiple forms of the same exam.

Laboratory. YOU MUST DRESS APPROPRIATELY FOR LAB.

- You MUST wear <u>shoes</u> not sandals, flip-flops, or similar options that do not protect your feet.
- It is recommended that you wear clothes that you won't mind getting grubby.
- FAILURE TO COMPLY WILL RESULT IN YOUR REMOVAL FROM LAB UNTIL YOU ARE PROPERLY ATTIRED.

Attendance. YOUR COMMITMENT TO YOUR CLASSES IS AMONG THE MOST IMPORTANT THINGS IN YOUR LIFE RIGHT NOW. You are expected to attend all lecture and lab sessions. Absences relating to a student's religious beliefs will be accommodated according to UWS 22.03 (URL below), providing the student notifies the instructor within the first three weeks of the beginning of class regarding the specific dates she/he will be absent.

http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap22.pdf

Make-Up Exams. You must make every effort to take exams at the scheduled times. MAKE-UP EXAMS WILL BE ALLOWED IN CASES OF MEDICAL EMERGENCY, FOR WHICH YOU MUST PROVIDE WRITTEN DOCUMENTATION. You must make arrangements with Dr. Graf within 24 hours of the exam to schedule a make-up exam within one week or you will forfeit the points.

- An emergency is a situation where your presence is <u>required</u> to alleviate extreme suffering (including but not limited to your own).
- Student Health Services does not handle emergencies.
- Scheduled appointments aren't emergencies.
- A good rule of thumb: *If your situation wouldn't cause you to postpone your wedding, then it isn't a good reason to miss a scheduled exam.*

Academic Integrity. Any misrepresentation of your work, including plagiarism, or cheating on exams will result in a zero (0) being recorded for that assignment. Students are encouraged to become familiar with and understand the UWS/UWSP Student Academic Standards and Disciplinary Procedures governing student academic conduct. This is available for download at:

http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf

Remember: DR. GRAF IS NOT AS DUMB AS YOU THINK HE IS.

Classroom Conduct. Student and instructor behavior should promote an environment favorable to both teaching and learning. It is disruptive to come late to class, read extracurricular media in class, or use cell phones (and other electronic devices) during class time. Students that choose to disrespect their classmates and their instructor by disrupting lectures or labs will be asked to leave.

Disabilities. Students with disabilities are welcome and encouraged in this class. Students with disabilities should contact the Disability and Assistive Technology Center during the first two weeks of the semester if they wish to request specific accommodations.

http://www.uwsp.edu/disability/Pages/default.aspx

wk.	date	#	topic	textbook	lab	manual
1	4 Sept.	0	Welcome! Introductions & Syllabus		none	_
	6 Sept.	1	The Science of Zoology	Ch. 1		
2	11 Sep.	2	The Origin & Chemistry of Life	Ch. 2	Microscopy + Rat	1-1 to 1-
-	13 Sep.	3	Cells as Units of Life	Ch. 3	Dissection I	12, 2-1 to
						2-26
3	18 Sep.	4	Cellular Metabolism	Ch. 4	Rat Dissection II	2-27 to 2-
	20 Sep.	5	Genetics I	Ch. 5		43
4	25 Sep.	6	Genetics II	Ch. 5	Rat Dissection III	2-44 to 2-
1	27 Sep.	7	Evolution I	Ch. 6	That Dissection in	62
5	1 Oct.	-	Lab Exam I (Mo			
	2 Oct.	8	Genetics II	Ch. 6	Invert. Survey I	3-1 to 3-26
	4 Oct.	-	Lecture Exam I			
6	9 Oct.	9	Animal Body Plans	Ch. 9	Invert. Survey II	3-27 to 3-
	11 Oct.	10	Phylogeny of Animals	Ch. 10		41
	1				1	
7	16 Oct.	11	Reproduction I	Ch. 7	Invert. Survey III	3-42 to 3-
	18 Oct.	12	Reproduction II	Ch. 7		59
8	23 Oct.	13	Development I	Ch. 8	Invert. Survey IV	3-60 to 3-
	25 Oct.	14	Development II	Ch. 8		67
	1		•		1	
9	30 Oct.		Lecture Exam II		Invert. Survey V	3-68 to 3-
	1 Nov.	15	Support, Protection & Movement	Ch. 29		84
10	5 Nov.	_	Lab Exam II (Me	onday evening)	Invert. Survey VI	
	6 Nov.	16	Homeostasis I	Ch. 30		3-85 to 3- 103
	8 Nov.	17	Homeostasis II	Ch. 31		
11	13 Nov.	18	Feeding, Digestion & Nutrition	Ch. 32	Chordate Survey I	4-1 to 4-15
	15 Nov.	19	Nervous System	Ch. 33		
12	20 Nov.	20	Sense Organs & Endocrine System	Ch. 33-34	TBA	
12	22 Nov.	-	THANKSGIVING (NO CLASSES)	dii. 55 5 i	1511	
13	27 Nov.	21	Behavior	Ch. 36	Chordate Survey	4-16 to 4-
	29 Nov.		Lecture Exam III		II	20
14	4 Dec.	22	Immunity	Ch. 35	Protoplasm &	5-4 to 5-19
	6 Dec.	23	Animal Ecology	Ch. 38	Enzymes	
15	10 Dec.	_	Lab Exam III (Mo	Metabolism	5-1 to 5-3	
	11 Dec.	24	Biogeography			
	13 Dec.	_	Review	Ch. 37	1	
	1				I	
16	17 Dec.	_	Final Exam (10:15-12:15 AM)			