



Each species, to put the matter succinctly, is a masterpiece.

E.O. Wilson

Vertebrate Zoology

Biology 485, 485L, Fall 2009

Lecture: TTh 8:30 – 9:45, SCX 5

Lab: Wed 2:30-5:20, Sci 205

Instructor: Dr. Sharon Gilman

Office: Sci. 221C

Office Hours: MW 8:30-12:30, TTh 11:30-12:30 & by appointment

Phone: 349-2248

E-Mail: sgilman@coastal.edu

Text: Pough, et al. 2005. *Vertebrate Life*, 7th ed. Pearson/Prentice Hall. (required)

Web Page: <http://kingfish.coastal.edu/biology/sgilman/bio485.htm>

Course Description:

The classification and natural history of vertebrates with additional emphasis on adaptive features of the functional morphology and ethology of animals.

Course Objectives:

This course surveys the phylogenetic relationships, diversity, and biology of the vertebrates. This will include the following topics: (1) characterization of the classes and orders of the extant vertebrates; (2) the evolutionary history of the various vertebrate lineages; (3) morphological adaptations of vertebrates for feeding, locomotion, reproduction, etc.; (4) physiological adaptations of vertebrates for homeostasis and reproduction; and (5) behavioral adaptations of vertebrates for feeding, homeostasis, reproduction, etc.

My Job:

I am committed to helping you learn material as described above. To do this I will be on time, prepared, accessible, respectful, fair, and enthusiastic. I will provide suitable assessments of your learning and get feedback to you in a timely manner. Please do not hesitate to ask about your grades or anything else related to class.

Your Job:

You should be committed to learning the material, and you should expect to have to work at this.

1. Have a good attitude, even if you have to fake it—I hate whining!
2. Be on time to class and prepared.
3. Be respectful of both your instructor and your classmates.

4. If you miss class, it's **your** responsibility to find out what you missed.
5. Take exams when they are scheduled.
6. Remember that I can't learn this stuff for you.
7. Turn off your cell phone when you arrive in class!

Learning Outcomes:

Upon completion of this course, the successful student will be able to describe all the major vertebrate groups as follows:

- (1) general appearance and distribution
- (2) taxonomic status
- (3) evolutionary history
- (4) morphological, physiological, and behavioral adaptations

Assessment

Student's abilities to do this will be assessed through traditional exams, in-class activities and homeworks, lab work, and a research project as described below.

Grades

"You got what you settled for." Thelma and Louise, 1991

The lecture and lab grades will be combined such that the same grade will appear for both on your transcripts. The point distribution is described below.

The exams are scheduled on the syllabus. Lecture and lab assignments will consist of both in class and out of class activities. There may be quizzes. The critter design project will involve research and a presentation and will be a team project. Lab assignments will be based on work done in the lab other than the critter design.

In the Field Notebook, you will chronicle species observations and collections. Part of this will be a Species List which will consist of every local species you observe over the course of the semester. You should note date, time, location, and species names. Signs of species count too. This will be turned in late in the semester and will be graded based on the List, plus volume, detail, and thoroughness of the journal entries. This will be worth 25 points.

If you miss an exam, in-class assignment, there will be no make-ups except with a doctor's excuse or written evidence of a death or other crisis (this is clearly explained in your catalog). we can probably work something out. Late assignments will lose 10% of their point value per day. See me **ahead of time** if you anticipate a scheduling problem. Confirmed cheating on an exam or assignment, or plagiarism in your research will result in a total loss of points for **everyone** involved.

Grades are based on accumulated points with 100-90% an A, 89-85% a B+, 84-80% a B, 79-75% a C+, 74-70% a C, 69-65% a D+, 64-60% a D, and below 60% an F.

Point Distribution:

2 exams @ 100	200 points
final exam	100 points
class assignments/quizzes	75 points
Lab field notebook	30 points
Critter Design	30 points
Lab assignments	100 points
Total Possible	535 points

Attendance, Late Assignments, Cheating, and Plagiarism:

Coastal Carolina University is an academic community that expects the highest standards of honesty, integrity and personal responsibility. Members of this community are accountable for their actions and reporting the inappropriate action of others and are committed to creating an atmosphere of mutual respect and trust.

If you miss an exam or in-class assignment there will be no make-ups except with a doctor's excuse or written evidence of a death or other crisis (this is clearly explained in your catalog). Late assignments will lose 10% of their point value per day. See me **AHEAD** of time if you anticipate a scheduling problem. Confirmed cheating on an exam or assignment, or plagiarism will result in a total loss of points for **everyone** involved.

Students with Disabilities: If you have a disability and feel that you may have need for some type of academic accommodation order to participate fully and succeed in this class, please feel free to discuss your concerns with me in private and also contact the Office of Disability Services 843-349-2307.

Course Schedule:

This schedule is somewhat flexible-except for exams! Reading assignments refer to the text. There may be others.

Week	Date	Lecture Topic/Reading	Lab
1	8/20	Ch 1 Diversity, Classification and Evolution	No lab this week
2	8/25	Ch. 2-3 Relationships and Origins	CCU's Wild Side
	8/27		
3	9/1	Ch 4-6 Fish	Classification
	9/3		
4	9/8		Reptile Day
	9/10	Ch 7 Geography	
5	9/15	Ch 8 Living on Land	Critter Design I
	9/17	EXAM	
6	9/22	Ch 9-10 Tetrapods/Salamanders	Amphibians (Rachel)
	9/24	Ch 11 Sauropsida	
7	9/29	Ch 12 Turtles	TBA
	10/1		
8	10/6	Ch 12-15 Lizards, Snakes and Tuatura	Dissection I
	10/8		
9	10/13	Ch 16-17 Dinosaurs and Birds	Critter Design II
	10/15		
10	10/20		Dissection II
	10/22	EXAM	
	10/23	Last Day to Withdraw	
11	10/27	Ch 18-19 Evolution and Geo-graphy of Mammals	Birds (Alex)
	10/29		
12	11/3	Ch. 20 Characterisites-Diversity	TBA
	11/5		
13	11/10	Ch 21 Mammal Specializations	Seagulls: Mine!Mine!Mine!
	11/12		
14	11/17	Ch 22-23 Endothermy, Ecology and Sociality	Critter Design III Notebooks Due
	11/19		
	11/23	Thanksgiving Break	
15	12/1		Critter Presentations
	12/3		

Final Exam:
Thursday, Dec 10
8:30, SCX 5

