

VERTEBRATE NATURAL HISTORY
WILD/ECOL 3580
Syllabus, Fall 2013

Lecture: T 9:30-10:45 4-516; T 12:30-1:45 1-209

Lab: W 2:30-6:35 1-101

Instructor

Dr. Jim Beasley

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Office Hours: Tuesday – 1:45-2:45 (By Appointment)

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Course description

This course provides an introduction to the natural history and identification of vertebrates (fish, amphibians, reptiles, birds, and mammals). The emphasis in the lecture portion of the course is on systematics, life history, behavior, and ecology of each vertebrate group. Emphasis in the lab is on the identification and natural history of southeastern vertebrate species.

Course Goals

Students completing WILD/ECOL 3580 will develop a deeper understanding of the evolution and natural history of the various vertebrate groups, as well as the identifying characteristics and specific nomenclature for nearly 400 common vertebrates in the United States, with particular emphasis on southeastern species.

Learning Objectives – Students will be able to:

1. Demonstrate knowledge of the major taxa of vertebrates and the special anatomical, morphological, behavioral, and ecological features that characterize each group.
2. Know the identifying characteristics, specific nomenclature, and natural history of the common vertebrates of the southeastern United States.
3. Appreciate the geologic and evolutionary history of vertebrates.
4. Be familiar with the techniques used to study vertebrate behavior and ecology including methods of capture, marking, observation, and specimen preservation.
5. Be able to conduct a survey of the scientific literature and summarize the natural history of any vertebrate species.

Web Site

Course information will be posted on eLearning Commons. Course materials including the syllabus, lab and lecture schedules, handouts, and assigned readings will be accessible. You also will have access to your grades through the site.

Students with Disabilities

If you have a disability which requires special accommodation, please make an appointment with me within the first three weeks of the semester to discuss the appropriateness of the instructional methods in this class, or any adjustments that you may need.

Requirements

Lecture Exams—Three lecture exams will be given covering lecture notes, reading assignments, and material on handouts. The last exam will only cover material since the previous exam (i.e., it is **not cumulative**). Graded lecture exams will be returned and discussed in class, but tests must be returned to me by the end of the class period. This is the only chance to see your exam without an excuse. Make-up lecture exams will only be given to students with a legitimate, written excuse. Missed lecture exams without a documented excuse will be recorded as zero scores.

Lab Exams—Four lab practical exams will be given during the semester. Material to be covered on each lab exam will be described in the laboratory sessions preceding each exam. **Lab exams will be given either in scheduled lab sections or on Mondays from 6-9 pm; check syllabus for dates and times of exams.** Due to the time required to set up lab practical exams, make-up exams are virtually impossible and will be considered only for students who contact me before the exam with an extremely serious, documented excuse. Missed lab exams without a documented excuse will be recorded as zero scores.

Lab Quizzes—Quizzes will be given each week at the beginning of lab (except those following lab exams) covering the material since the previous exam (i.e., quizzes are cumulative up to the next lab exam). Quizzes may cover taxonomy, identification, or natural history information. Your lowest quiz grade will be dropped when calculating your final quiz average. Missed quizzes without a legitimate written excuse will be recorded as a zero.

Term Paper—You are required to select a vertebrate species from a prescribed list and compile relevant natural history information from the scientific literature into a scientific-style species account. A detailed set of instructions and an example for the paper are available on eLearning Commons. The paper must be turned in no later than 5:00 pm on December 2. **Papers turned in after the due date/time will be subject to a 10-point per day deduction.**

Assigned Readings—A list of readings relating to material covered in the course is available on the eLearning Commons site. The reading list consists of an article for each week of the semester

that is related to the material covered in lecture that week. Questions on lecture exams will be taken directly from the readings.

Attendance—Attendance will be assessed in lab and lecture throughout the semester and will constitute 10% of the final course grade. If you have a legitimate excuse, you must show written documentation no later than the next class meeting you are present. **If you are not present when attendance is taken you will be counted absent.** Attendance grades will be calculated as the percentage of times you are present out of the total number of times attendance was taken. No make-up of work (e.g., quizzes or exams) missed due to absence or tardiness will be allowed without a written excuse.

Local Field Trips—2-3 local field trips consisting of surveys for fish, amphibians, reptiles, birds, or mammals will be arranged throughout the semester. These trips are opportunities for you to see in the field some of the species learned in lab and to gain exposure to methods used for surveying, capturing, and handling vertebrates in field. Students are required to attend at least one local trip or the weekend field trip.

Grading

For students enrolled in lecture and lab, your grade in the course will be determined by the cumulative percentages on the three lecture exams (10% each), four lab practical exams (10% each), term paper (10%), lab quizzes (10%), and attendance (10%). For those enrolled only in lecture, your grade will be determined by the cumulative percentages on the three lecture exams (25% each), term paper (15%), and attendance (10%).

Grades will be assigned in the following manner:

A 92-100%	C+ 77-78%
A- 89-91%	C 73-76%
B+ 87-88%	C- 69-72%
B 83-86%	D 60-68%
B- 79-82%	F 0-59%

No extra credit will be given and final course grades are final!

I will strictly adhere to this procedure and breakdown. Be reminded there is no opportunity to have your grade changed (barring a mistake!), to retake tests, or do extra work to improve your grade. You are expected to attend all classes and labs and are responsible for their content. With **prior consent** or in **cases of documented emergencies** makeup exams will be considered. Prior consent will be granted in cases of legitimate need. **Requests for makeup status are to be made in writing prior to the official exam date.**

Textbook

There is no required text for lecture as I will supply you with a variety of assigned reading material on the eLearning Commons site. However, there are several required references you will need to purchase for lab.

Required Laboratory References

Conant, R. H., and J. T. Collins. 1998. A Field Guide to Reptiles and Amphibians of Eastern & Central North America. 4th edition. Houghton Mifflin Harcourt, Boston. (ISBN 0395904528)

Page, L. M., and B. M. Burr. 2011. Peterson Field Guide to Freshwater Fishes. 2nd edition. Houghton Mifflin Harcourt, Boston. (ISBN 0547242069)

Peterson, R. T. 2002. A Field Guide to the Birds of Eastern & Central North America. 5th edition. Houghton Mifflin Harcourt, Boston. (ISBN 0395740460)

Reid, F. A. 2006. A Field Guide to Mammals of North America. 4th edition. Houghton Mifflin Harcourt, Boston. (ISBN 0395935962)

Laboratory Requirements

Identification of specimens: You will identify each species presented in either a living or preserved form. You will be required to use the taxonomic keys provided to identify certain vertebrate groups. You will know the taxonomic characters used to distinguish the order, family, genus, and species of each specimen.

Taxonomic identification: You will learn the complete taxonomy of each species. Unless otherwise instructed, you will know the class, order, family, genus, and species of each specimen. You also may be required to know certain subcategories, such as suborders.

Natural history: You will learn the major points of the natural history of each species. You should know: where it lives, what it eats, aspects of its mating habits, features that help determine age or sex, and any unusual attributes of the species. This information will be found in the species and family accounts in your field guides and from lectures given during lab. Additionally, you should be thoroughly familiar with material on lab handouts.

Weekend Field Trip

We likely will be taking a 3-day weekend field trip to the Savannah River Site in late September or October. Activities may include carnivore and small mammal trapping, bird watching and mist netting, reptile and amphibian collection, etc. There will be a cost for the field trip (TBD) that will cover food, lodging, and transportation. You can have no more than 3 unexcused absences at the time of the field trip to attend.

Academic Honesty and Plagiarism

All academic work must meet the standards contained in the University's academic honesty policy (see "A Culture of Honesty"; www.uga.edu/ovpi). All students are responsible for informing themselves about those standards before performing any academic work and dishonesty in connection with any course exam or assignment will not be tolerated. The penalties for academic dishonesty are severe (see "Sanctions for Dishonesty"; www.uga.edu/ovpi), and ignorance is not an acceptable defense. Use of a cell phone, PDA, video phone, or other electronic communication device during a test or quiz shall be considered a violation of the University's academic honesty policy.

Changes to the Syllabus

The course syllabus is a general plan for the course. Deviations to the class by the instructor may be necessary. Changes, if necessary, will be announced in class or lab. It is the responsibility of the student to be in attendance when changes are announced or to find out about changes from the instructor or classmates.

Cell Phones and Computers

As a courtesy to your classmates and instructor, please turn off cell phones and other electronic devices before coming to class. Laptop computers may be used during class for legitimate class purposes (e.g., typing notes). Anyone using a computer for non-legitimate purposes (e.g., Facebook, playing games, etc.) will not be allowed to use their computer in class for the rest of the semester.

Laboratory Rules and Specimen Care

The laboratory for this course is located in Forestry and Natural Resources 1-101. This lab will use specimens that are irreplaceable. Some of the specimens are preserved in flammable liquids. Therefore, everyone in this course must abide by the rules established to protect the specimens and your safety. Use of any tobacco product, food, and drink are strictly prohibited in the lab. For security reasons, do not prop the outside door open at any time.

The specimens used in this course are to be handled with utmost care. Most specimens are fragile, many are quite old, and all are difficult (and in some cases, impossible) to replace. You will be shown the proper way to handle specimens to avoid damage. Proper handling techniques should be used every time the specimens are examined. Specimens may not be removed from the classroom under any circumstances. Cavalier handling of the specimens may result in the lowering of your course average. Repeated offenses may result in dismissal from the course.

Most specimens will be left in the lab after hours for you to study at your convenience. If inappropriate handling or damage to the specimens becomes frequent, this privilege will be revoked and you will only be allowed to use the specimens during lab hours.

Campus Emergencies

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances.

Tentative Course Schedule

Date			Topic
August	13	Lect.	Class introduction; Introduction to Vertebrates; Chordates
August	14	Lab	Lab requirements, Fish Characteristics; Lampreys, Hagfish, & Cartilaginous Fish
August	20	Lect.	Taxonomy, & Systematics; Geologic Eras & Biogeography
August	21	Lab	Bony Fish
August	27	Lect.	Evolution, Natural Selection, & Speciation; Intro to Fish
August	28	Lab	Lab Exam 1 (Fish – in scheduled lab period)
September	3	Lect.	Fish
September	4	Lab	Amphibian characteristics, Use of keys, Frogs & Toads
September	10	Lect.	Fish
September	11	Lab	Salamanders
September	17	Lect.	<u>Exam 1</u> ; Amphibians
September	18	Lab	Reptile characteristics, turtles, crocodilians, & lizards
September	24	Lect.	Amphibians
September	25	Lab	Snakes
September	30	Lab	Lab Exam 2; Monday, 6-9 PM (Amphibians & Reptiles)
October	1	Lect.	Amphibians; Reptiles
October	2	Lab	Characteristics of birds; loons, grebes, pelicans, herons, ducks, & geese
October	8	Lect.	Reptiles
October	9	Lab	Hawks, gallinaceous birds, rails, shorebirds, gulls, & terns
October	15	Lect.	Reptiles
October	16	Lab	Owls, nighthawks, kingfishers, woodpeckers, perching birds 1
October	22	Lect.	<u>Exam 2</u> ; Birds
October	23	Lab	Perching birds 2
October	28	Lab	Lab Exam 3; Monday, 6-9 PM (Birds)
October	29	Lect.	Birds

Date		Topic
October 30	Lab	Mammal characteristics, skulls; armadillos, opossums, insectivores, bats
November 5	Lect.	Birds; Mammals
November 6	Lab	Rodents & lagomorphs
November 12	Lect.	Mammals
November 13	Lab	Carnivores, ungulates, & aquatic mammals
November 19	Lect.	Mammals
November 20	Lab	Lab exam 4 (Mammals – in scheduled lab period)
November 26	Lect.	THANKSGIVING BREAK
November 27	Lab	THANKSGIVING BREAK
December 2	Lect.	TBD
December 3	Lab	No Lab
		Exam 3 – TBD

NOTE: This schedule is subject to change. Revisions will be made to take advantage of special events, unusual weather, or unexpected scheduling conflicts of the professor.