

Wildlife 365 - Ornithology
Lecture: 11:00 Tues/Thurs (NHE 102)
Lab: 7:00 - 11:00 Wed/Thurs/Fri (MWCC 5)

Dr. Luke George
Sci. A 468A1, x3430, tlg2@axe.humboldt.edu
Office Hrs. Tues. 1400-1600, Wed. 1400-1600
Web page: www.humboldt.edu/~tlg2

Course Objectives: To familiarize students with avian biology, including anatomy & physiology, behavior, ecology, and evolution. Lab exercises emphasize taxonomy and identification of N. American birds (especially those occurring locally) through use of study skins and field labs.

Texts: 1) Gill, F. B. 1994. Ornithology, 2nd Edition. W. H. Freeman and Co., New York.; 2) National Geographic Society. 1987. Field Guide to the Birds of North America. National Geographic Society, Washington, D.C. Recommended: Harris, S. H. 1991. Northwestern California birds. Humboldt State University Press, Arcata, California.

Grading: Grades are based on 600 points, split between 2 lecture exams (100 pts. each), a final exam (150 pts.), 2 lab practical exams (50 pts. each), 2 lab quizzes (10 pts each), 2 evaluations of field notes (15 pts. each), and a research paper (100 pts.). Grades are based on the following standards: $\geq 90\%$ = A; 80% = B; 70% = C; 60% = D; and $< 60\%$ = F (+ and - grades are assigned).

Paper: Each student will work independently on a research project focusing on a topic of their choice. A proposal, outlining the nature of the question, review of literature, and methods is due **12 February** and will count for 10 points toward your grade on the paper. Papers are due **30 April**. If you turn in your papers by **16 April** I will give you a free reading. See section on papers in lab manual for more details.

<u>Date</u>	<u>Topic</u>	<u>Reading and Chapter(s)</u>
Jan. 19	Introduction & General Avian Characteristics	Intro (History section), 1, Korpimaki et al.*
21	Feather structure and Integument	4
26	Skeletal & Muscular Systems	5
28	Circulatory & Respiratory Systems	6
Feb. 2	Digestive, Reproductive & Excretory Systems	6, 7, 15
4	Neural Systems	8
9	Endocrine Systems and Annual Rhythms	11
11	Flight	5
16	Flight	5
18	Origin & Evolution of Birds	2
23	EXAM 1	
25	The Species Concept	22, McKintrick and Zink (1988)*
March 2	Taxonomy and Systematics	3
4	Avian Biogeography (Dr. Steve Zack)	Appendix I
9	Evolution and Speciation	22
11	Demography	20
16 & 18	SPRING BREAK	Nada mucho
23	Life History Strategies	20
25	Community Ecology	23 (pp. 553-571)
30	Communication	9,10
April 1	EXAM 2	
6	Song Development	10
8	Song Dialects	10
13	Social Systems: Mating Systems	17
15	Social Systems: Mating Systems	17
20	Social systems: Cooperative Breeding	19
22	Migration & Orientation	13
27	Migration & Orientation	13
29	Conservation	24
May 4	Conservation	24
6	Conclusion	
13	Final Exam: 10:20-12:10 in NHE 102.	

*- On reserve in the library.

Lab Expectations: Lab and field exercises will emphasize avian anatomical structures and identification of N. American birds. For species listed on the accompanying handout, you will be responsible for knowing the following: 1) order, 2) family, and 3) common names. Students are responsible for any material presented in lab exercises.

Instructors: Wednesday and Friday labs will be taught by Dr. George, Thursday labs will be taught by Dr. Yerkes (House 90 rm 4, x3951). Paul Brandy (Sci A 468A, x3435) will be the graduate assistant for the lab.

<u>Week of</u>	<u>Topic/Location</u>	<u>Time</u>	<u>Lab/Field</u>
Jan.18	Avian Topography & Anatomy	0800	Lab
25	Arcata Marsh	0700	Field
Feb. 1	Avian Skeleton, Discuss Projects	0800	Lab
8	Arcata Bottoms	0700	Field
15	Skeletal & Anatomical Features, Review Proposals	0800	Lab
22	King Salmon and HBNWR	0700	Field
March 1	Review for Lab Practical	0800	Lab
8	LAB EXAM 1	0800	Lab
15	Spring Break		
22	Pigeon dissection	0800	Lab
29	Fickle Hill	0700	Field
April 5	Trinidad	0700	Field
12	Molt, Aging and Sexing	0800	Lab
19	Mistnetting at the Wright Wildlife Refuge	0700	Field
26	Ornithology techniques/ Review	0800	Lab
May 3	LAB EXAM 2		

Field trips depart from the Wildlife Building parking lot promptly at 07:00. We may cancel the trip if there is a heavy downpour but that decision will not be made until just prior to departure so come prepared to go in the field on every scheduled trip. It often is cool and breezy at our destinations so bring an extra layer of clothes. We will be walking on trails at most locations so wear appropriate shoes.

One or two pelagic field trips on the HSU vessel the Coral Sea are scheduled for late April or early May. I will provide exact dates when the boat schedule is finalized. We will sail out of Humboldt bay to the Eel River Canyon (approximately 16 km offshore). These trips are optional but you are strongly urged to attend. You are responsible for getting to Woodley Marina on your own. If you do not have transportation, please try to carpool. **Please read the section in the laboratory packet regarding how to prepare and what to bring on the pelagic trip.** I will post a sign up sheet on my door when the dates are determined. You may substitute the pelagic trip for one of the regularly scheduled field trips but you must inform me ahead of time if you plan to do so.

Binoculars & spotting scopes for use during field trips and projects may be checked out from the Wildlife stockroom. **Binoculars must be checked out the day before the field trip is scheduled. The stockroom will not be open in the morning before the field trip. Please return binoculars immediately after the field trip so others can check them out.**