

ORNITHOLOGY
IB 174LF

Instructor: Rauri Bowie

GSI: Felix Ratcliff and Darcy Ernst

Volunteers: Stephen Long, Anna Hiller

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Rauri's Office Hours: Tuesday 3:00-4:30 PM in VLSB 3192 (in the MVZ)

Felix's Office Hours: Thursday 4-5 PM in 3083 VLSB

Darcy's Office Hours: Wednesday 12-1 PM in 3083 VLSB

Books:

Sibley, D. A. 2003. *The Sibley field guide to the birds of western North America*. Alfred A. Knopf, 1st edition. (required)

Gill 2007. *Ornithology* 3rd edition. W.H. Freeman and Company, New York. (optional)

Lecture schedule: Monday and Wednesday, 10-11 am, 110 Wheeler

Lab schedule: Wednesday and Thursday 1-4 pm, 3083 VLSB.

Lecture content: Although I have assigned an optional textbook for the lecture component of this course (Ornithology 3rd ed; Gill 2007), I have done so primarily to provide you with a valuable reference tool. Lecture exam questions will be drawn entirely from the lecture notes and will not necessarily be covered in the textbook. Therefore, it is imperative that you attend class and take comprehensive lecture notes.

Laboratory: You are encouraged to perform as much of your lab work as possible during the scheduled lab period. This is the time that the GSIs will be available to assist you. Be sure to bring your field guide to lab.

Point allocation for the course:

1 midterm theory exam	100 pts.
1 final theory exam (comprehensive)	200 pts.
2 midterm laboratory practical exams	100 pts. each
4 one-day field trips	50 pts.
1 weekend fieldtrip	50 pts.
20 species accounts	100 pts.
1 term paper	100 pts.
 Total points possible	 800 pts.

Examinations: Two lecture examinations will be given during the course of the semester. The first exam will be worth 100 points and the final exam will be worth 200. The first examination will include those topics covered since the beginning of the semester. The final exam will be comprehensive. Lecture exams will be composed of essay questions.

Two lab exams will be given over the course of the semester. Both exams will be worth 100 points.

Field Trips: Two morning-long, two full day, and one weekend field trip are scheduled. These trips are strictly required and carry a cumulative total of 100 points. It is required that you bring binoculars and a field guide on all trips. 7X-10X power binoculars with coated lenses and center focusing are best for observing birds, but other kinds may be suitable. The field trips are the most enjoyable aspect of the course.

Species Accounts: 20 required, worth 5 points each. **5 accounts due Feb. 25; all accounts due April 22.**

Research Paper: Students are required to write an 8-10 page (excluding references) research paper on a topic in ornithology. A brief (~ 1/2 page) summary with a list of 4 or 5 relevant references is due **March 16** in class. These will not be graded; rather they are to insure that paper topics are appropriate. The final paper is due in on **April 22**. Papers that are late will lose points. The research paper is a chance to explore in detail an ornithological issue that interests you. Papers can be on any question, issue, or problem either specifically about birds (example systematics and biogeography of any particular family, or genus of birds that interests you) or on a more general topic with ornithological relevancy (e.g. patterns of speciation, hybrid zones, community ecology, sexual selection, avian vision, physiology, adaptation, clutch size, etc.). Papers that are solely on natural history or a summary of a group of animals are not acceptable. This is a research paper and you are expected to read and cite primary literature (articles from research journals) on your topic. Be sure to talk to Rauri, Felix or Darcy about possible topics. We can also offer guidance on literature resources. The term paper will be worth 100 points.

Grades: Your final grade will be based entirely upon your total class score. The standard 10% cutoff between letter grades will be applied (i.e. 90%-100% = A, 80%-89%=B, 70%-79%=C, 60%-69%=D, <60=F). There are 800 total points possible.

Spring 2015

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LECTURE

LABORATORY

W	Jan 21	Intro to course	Jan 21, 22	Tinamiformes - Procellariiformes
M	Jan 26	Origin of Birds 1	Jan 28, 29	Podicipediformes- Accipitriformes
W	Jan 28	Origin of Birds 2		
M	Feb 2	Modern Orders of Birds	Feb 4, 5	Otidiformes - Charadriiformes
W	Feb 4	Feathers 1		
M	Feb 9	Feathers 2	Feb 11, 12	Pterocliiformes - Trogoniformes
W	Feb 11	Flight (R Dudley)		
M	Feb 16	No Lecture	Feb 18, 19	Leptosomiformes - Psittaciformes
W	Feb 18	Physiology & Bird Menus		
M	Feb 23	Physiology 2	Feb 25, 26	Lab Exam 1
W	Feb 25	Senses, Brains & Intelligence		
M	Mar 2	Visual Communication	Mar 4, 5	Passeriformes 1
W	Mar 4	Vocal Communication		
M	Mar 9	Annual cycles	Mar 11, 12	Passeriformes 2
W	Mar 11	Lecture Exam 1		
M	Mar 16	Migration	Mar 18, 19	Passeriformes 3
W	Mar 18	Navigation		
M	Mar 23	Spring recess	Mar 25, 26	No labs
W	Mar 25	Spring recess		
M	Mar 30	Social Behaviors	Apr 1, 2	Passeriformes 4
W	Apr 1	Mates & Mating systems		
M	Apr 6	Reproductive System	Apr 8, 9	Passeriformes 5
W	Apr 8	Eggs and Nests		
M	Apr 13	Incubation	Apr 15, 16	Passeriformes 6
W	Apr 15	Young Birds & Parental Care		
M	Apr 20	Brood Parasites & Helpers	Apr 22, 23	Dissection Lab
W	Apr 22	Life History & Demography		
M	Apr 27	Avian Diseases	Apr 29, 30	Lab Exam 2
W	Apr 29	Species & Speciation		

Field Trip Schedule 2015. Fieldtrips generally start at 8:00 am unless otherwise specified.

Date	Location
Jan 31	Arrowhead Marsh – Saturday morning (10 points)
Feb 22	Pt. Reyes – Sunday full day (15 points)
Feb 28	Central Valley – Saturday full day (15 points)
Apr 4	Tilden (Make-up Trip) – Saturday morning
Apr 10, 11, 12	Weekend away (Friday to Sunday). Note that we are camping! (50 points)
Apr 18	Sunol – Saturday morning (10 points)