

# ORNITHOLOGY - EEB 114A

## Spring 2008

Lecture and Discussion: T, Th 12:30-1:45pm; La Kretz Hall 120

Laboratory: W 9:00-11:50pm, Life Sciences 1113

Instructor: Brenda Larison, LS 3112, Tel: 206-6599, Office Hours: T, Th 2:00-3 pm, or by appointment.

TA: Jaime Chaves, LS 5303, Tel: 895 0645, Office hours: M 2-3 pm, T 2-3 pm, or by appointment.

### LECTURE SCHEDULE

Week	Date	Topic	Chapters & Readings
Week 1	1 April 3 April	Intro; Origin and diversity of birds Origin and diversity of birds	Ch. 1-3 Reading 1
Week 2	8 April 10 April	Structures and mechanics of flight Structures and mechanics of flight	4,5 Reading 2
Week 3	15 April 17 April	Physiology and sensory systems Physiology and sensory systems	6,7 Reading 3
Week 4	22 April 24 April	Physiology II Physiology II	9,14,15,16 (to p 478) Reading 4
Week 5	29 April 1 May	<b>***Midterm Exam***</b> Guest Lecture – Special Topic	Reading 5
Week 6	6 May 8 May	Patterns and mechanics of migration Patterns and mechanics of migration	10 Reading 6
Week 7	13 May 15 May	Communication, visual and vocal Communication, visual and vocal	8, 12 (to 359) Reading 7
Week 8	20 May 22 May	Social Behavior and mating systems Social Behavior and mating systems	11,12,13 Reading 8
Week 9	27 May 29 May	Demography and life history strategies Demography and life history strategies	17, 18 Reading 9
Week 10	3 June 5 June	Competition, adaptation and speciation Conservation	19, 20, 21 Reading 10
	13 June	<b>***Final Exam***</b>	

# LABORATORY SCHEDULE

Week	Date	Topic
Week 1	2 April	External Anatomy and Functional Morphology
Week 2	<b>9 April</b>	<b>Field Trip: Malibu Lagoon</b> , Introduction to bird identification in the field
Week 3	16 April	Internal Anatomy (Part 1)
	<b>19 April</b>	<b>Saturday Field Trip: Stunt Ranch Reserve (Sta. Monica Mts.), Ornithological field techniques, mist-netting demonstration</b> <a href="http://stuntranch.ucnrs.org/">http://stuntranch.ucnrs.org/</a>
Week 4	23 April	Internal Anatomy (Part 2); Birds of the World (Ratites to Strigiformes)
Week 5	30 April	Birds of the World (Galliformes to Piciformes)
Week 6	7 May	Birds of the World (Passeriformes) – <b>bird song quiz (general and speciality)</b>
Week 7	14 May	Bird song laboratory – <b>location TBA</b> , lab instructions will be posted on Blackboard
	<b>16-18 May</b>	<b>Weekend Field Trip – Kern River Valley</b> <a href="http://kern.audubon.org/">http://kern.audubon.org/</a>
Week 8	21 May	Guest Lecturer: TBA
Week 9	28 May	<b>***Lab Practical***</b>
Week 10	4 June	Guest Lecturer: TBA

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## Exams:

Lecture: Midterm Exam: 29 April; Final Exam: Tuesday, June 10, 2008, 3:00pm-6:00pm  
Laboratory Practical: May 28

## Discussions:

For a portion of each Thursday's meeting we will discuss a paper from the primary literature. Students will team up into pairs to lead the discussion. The emphasis will be on generating discussion -- summaries of papers should be no more than 10 minutes.

## Laboratory and Field Trips:

Labs will cover a variety of subjects including:

- 1) External and internal anatomy of birds
- 2) Field identification through day and weekend field trips. **Students are required to attend all field trips.** Please make special arrangements with employers, families and friends well in advance of these events. A university van will be available for most field trips,

although students are also expected to carpool. Students will be asked to share the cost of food and fees for week-end field trips.

3) Survey of birds of the world

4) A brief survey of molecular genetic approaches and uses in the study of avian ecology, systematics and evolution.

### Required Texts:

Gill, F. B. 2007. *Ornithology, Third Edition*. W. H. Freedman and Co. New York

Sibley, D.A. 2003. *Field Guide to Birds of Western North American*, Alfred A. Knopf, New York.

Ornithology Laboratory Manual (Available at Course Reader Material, 1137 Westwood Blvd.)

### Supplementary Materials (required):

Binoculars, field notebook, basic camping equipment (tent, sleeping bag and sleeping pad)

### Useful References

Keller, G. Bird Songs of California. Compact Disc from Cornell Lab of Ornithology. 220 species. \$34.95. Orders of 5-24 \$20.90. Orders of 25 or more \$17.97.

Thayer's Birding Software: California v 3.9. Compact Disc. (photos, songs, info on 458 species) Runs on Windows. Downloadable to ipod or mp3 player. \$39.95. 40% discount on orders of 12 or more, \$20.97.

Ehrlich P. R., D. S. Dobkin, D. Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*, Simon & Schuster, New York.

Elphick, C. J.B. Dunning and D. A. Sibley. 2001. *The Sibley Guide to Bird Life and Behavior*.

Perrins, C. M. 1990. *The Illustrated Encyclopedia of Birds*. Prentice Hall. N. Y.

National Geographic Society. 2002. *National Geographic Field Guide to the Birds of North America, Fourth Edition*, National Geographic Society, Washington D. C.

Welty, J. C. and L. Baptista. 1988. *The Life of Birds, 4th ed*. Saunder College.

Brooke, M. B. and T. Birkhead. 1991. *The Cambridge Encyclopedia of Ornithology*. Cambridge University Press.

Sturkie, P. D. 1976. *Avian Physiology*. New York: Springer-Verlag.

Feduccia, A. 1980. *The Age of Birds*. Harvard University Press, Cambridge.

Pyle, P. and N. G. Howell. 1997. *Identification Guide to North American Birds. Part 1*. Slate Creek Press, Bolinas, CA.

Schram, B. 1998. *A Birders' Guide to Southern California*.

Dunne, P., D. Sibley and C. Sutton. 1988. *Hawks in Flight*. Houghton Mifflin.

### Useful WEB sites:

Birds of North America Online <http://bna.birds.cornell.edu/bna>

Cornell Lab of Ornithology <http://www.birds.cornell.edu/>

All About Birds <http://www.birds.cornell.edu/AllAboutBirds/>

McAuley Library (Bird Song) <http://www.birds.cornell.edu/macaulaylibrary/>

BIRDNET (Links to Ornithological Societies) <http://www.nmnh.si.edu/BIRDNET/>

Sutton Avian Research Center [www.suttoncenter.org](http://www.suttoncenter.org)

The Nature Conservancy-Migratory Bird Project <http://www.nature.org/initiatives/programs/birds/>

### Grading:

Your grade in the course will be based on lecture and lab exams, class participation, and attendance and participation on field trips. Exams cannot be rescheduled. Grades are based on the following percentages:

Midterm Exam	30%
Final Exam	30%

Class Discussion	5%
Lab Practical	25%
Lab Quizzes	10%