

BIOL 4763 Ornithology – 22 Jan 08 to 9 May 08

University of Minnesota Duluth
Department of Biology
SSB 115
Laboratory LSci 330

Instructor: Dr Gerald J Niemi, 720-4270, gniemi@d.umn.edu
Professor, Department of Biology
Director, Center for Water and the Environment, Natural Resources Research Institute

Class hours: 8:00 to 8:50 am, Tuesday and Thursday
Lab hours: 9:00 to 10:50 am, Tuesday or Thursday
Office hours: 11:00 to 12:00pm, Tuesday on campus in LSci 315 or at NRRI 430B, arranged

Lab asst: Ms Heidi Seeland, Graduate Research Assistant, 726.6262, see10083@d.umn.edu
Office hours: LSci 339, arranged

DATE	LECTURE		LAB
January 22	Organization Origin and Evolution	Chapters 1-3	Taxonomy of Birds-orders
January 24	Origin and Evolution		Taxonomy of Birds-orders
January 29	Avian Adaptations	Chapters 4-6	Anatomy
January 31	Avian Adaptations		Anatomy
February 5	Flight		Bird topography and feathers
February 7	Behavior and Communication	Chapters 7 and 8	Bird topography and feathers
February 12	Field trip, no lecture		Winter field trip
February 14	Field trip, no lecture		Winter field trip
February 19	Migration: Field trip notes due	Chapters 9-11	Lecture catch-up
February 21	Behavior		Lecture catch-up
February 26	Lecture exam 1	Chapters 1-11	Review of winter bird species
February 28	Avian Life Histories	Chapters 12-17	Review of winter bird species
March 4	Reproduction -Field trip notes due		Lab exam 1
March 6	Avian Populations NOTE: Proposals for research projects are due	Chapters 18-19	Lab exam 1
March 11	Field trip: Field trip notes due		Field trip
March 13	Field trip		Field trip
March 17-21	Spring break		
March 25	Metapopulations/Communities: Field trip notes due	Chapter 20	Review of common forest birds
March 27	Communities/Landscapes		Review of common forest birds

April 1	Field trip: Field trip notes due		Field trip
April 3	Field trip		Field trip
April 8	Field trip: Field trip notes due		Field trip
April 10	Field trip		Field trip
April 15	Conservation: Field trip notes due	Chapter 21	Review of birds of wetlands and raptors
April 17	Lecture exam 2		Review of birds of wetlands and raptor
April 22	Field trip: Field trip notes due		Field trip
April 24	Field trip		Field trip
April 29	Field trip: Field trip notes due		Field trip
May 1	Field trip		Field trip
May 5 - 6	Field trip. Crex Meadows, WI; NOTE leave on Monday, May 5, from Biol Dept. at 6:00 pm and return by 6:00 pm on Tuesday, May 6: Field trip notes due		Field trip
May 8	Lab review of all bird species		
May 9	FINAL EXAM (2:00 – 3:55 pm) PROJECT REPORTS DUE		

NOTE: Project reports, due on the day of final exams. 5 points will be deducted per day for each ‘working’ day (M-F) afterward

Required book:

Gill, Frank B. 2007. *Ornithology*. W.H. Freeman and Company, New York, 758 pp.

Suggested field guide:

National Geographic Society. *Field guide to the birds of North America*. 2002. 4th edition, Wash. D.C.

Optional field guides - If you are already familiar with another field guide, then you may certainly use it.

- Peterson, Roger T. 1998. *A field guide to the birds east of the Rockies*. Houghton Mifflin Company, Boston, MA.
- Robbins, Chandler S. 1983. *Birds of North America*. Golden Press, New York, NY.
- Sibley, David A. 2000. *The Sibley Guide to Birds*. National Audubon Society.

Additional projects: There are 2 options for additional projects:

- A research paper, **OR**
- 10 additional field trips.

1. Research paper

The research paper requires the development of a proposal for a field oriented research project that will be conducted during the semester. Proposals (1-2 pages including at least 5 citations) are due March 6, 2008. Proposals will be reviewed by the instructors and returned with comments and suggestions. The final paper is due by the day of the final exam on May 13, 2008. The paper is to be written in journal format (we will be using the journal *The Auk* format guidelines) complete with citations and data (see attachment).

2. Field Identification

Besides your regularly scheduled weekly field trip, you can turn in a summary of one field trip per week of the bird species that you observed. The field trip can be to any location but should be a minimum of 2 hours in duration and I suggest that most of them be in the morning. The attached field sheet summarizes each of the field trips that must be turned in on the following days (note all on Tuesday): February 19, March 4, March 11, March 25, April 1, April 8, April 15, April 22, April 29, and May 6. Please note that details for those species listed with an asterisk need to be provided. We also strongly urge you to be cautious about your observations.

Laboratory field trips:

Field trips will begin promptly at 8:00am - except for the all-day field trip when we will leave on Monday, May 5, 2008.

We strongly urge you to be on time. An instructor will be in the lab no later than 7:45 am Please dress appropriately for the weather.

GRADING STRATEGY	POINTS	PERCENT
Mid-term examination		
Lecture 1	120	18
Lecture 2	120	18
Lab exam quiz	80	12
Field identification: 4 quizzes	80	12
Final examination		
Visual and song identification	160	24
Final research paper or Summary of field observations (10x7 pts each)	100	15
	<hr/> <hr/> 660	<hr/> <hr/> 100

Promotion of bias-free instruction:

The University of Minnesota is committed to the policy that all of its students shall have equal educational opportunities. Individuals who have any disability, either permanent or temporary, which might affect their ability to perform in this class, are encouraged to inform the instructor at the start of the semester. Adaptation of methods, materials or testing may be made as required to provide for equitable participation. The University also expressly forbids discrimination on the basis of race, color, gender, sexual orientation, disability, veteran's status, ethnicity, religion, creed, national origin, or marital status. If you believe that your instructor has not upheld this policy, you are invited to bring it to the confidential attention of the biology department head (207 SSB, 726-7263) or the associate dean of the College of Science and Engineering (140 Engineering, 726-7585).

Access for students with disabilities:

Individuals who have any disability, either permanent or temporary, which might affect their ability to perform in this class are encouraged to inform me at the start of the semester. Adaptation of methods, materials, or testing may be made as required to provide for equitable participation.