
Diversity and Ecology of Birds –
21:120:328
Tu 8:30-11:30 – Fall 09 – Boyden 421



Fulfills *Laboratory/Field Experience*
requirement towards B.A. in Biology

Instructor: Dr. Claus Holzapfel
Department of Biological Sciences
Rutgers University Newark, 195 University Ave., Boyden 408
Newark, NJ 07102-1811
Fax: 973 - 353 5518, phone: 973 -352 5385
holzapfe@andromeda.rutgers.edu
lab website: <http://newarkbioweb.rutgers.edu/Holzapfel Lab>

Description

Designed as introduction to aspect of the biology of birds, this class will combine field trips with lectures and a student seminar. Students will be exposed to current themes in evolution and ecology of birds and will also learn how to actively study birds in their habitats and thereby understand and appreciate the high diversity of birds.

Objectives

Students will be introduced to selected, current topics in bird Study (Ornithology). Besides providing a modern background in evolution and ecology of birds, students will practice field study of birds and expected to build a basic knowledge of local bird diversity (i.e., they will know and be able to identify about 50 bird species).

Format and Requirements

Limit: 20 students

Prerequisite: Undergraduate evolution, plant ecology, or ecology. The class is open to a limited number of graduate students (see instructor)

This class is field oriented and will combine lectures with **required** field trips. Three of the trips will take place during the week during the class periods, the other two of these trips will be longer than the class period (approx. 5 hours) and therefore will have to take place on Saturday (class during the preceding week will be canceled).

Enrolling students have to make sure that they are able to participate (see schedule, there can be no replacement dates).

Students will be required to prepare and deliver a 15 minutes presentation on particular topics that will distributed at the beginning of the class. We will conduct small “field trips” to observe birds on campus (see: <http://newarkbioweb.rutgers.edu/Holzapfel Lab> and go to “Birds on Campus”).

There will be weekly short on-line quizzes (Blackboard) based on lecture and field trip material and selected weekly readings.

Text:

Sibley, David Allen (2003): The Sibley Field Guide to Birds of Eastern North America. Knopf, New York
ISBN 0-679-45120-X, \$19.95, reduced prices online!

Selected readings will be posted weekly on the class site (Blackboard)

Grade evaluation

2 Exams:	35% of class grade each
Weekly quizzes	10 %
Project Presentation:	20%

Grading system	75-76 %	C+	
90-100 %	A	67-74	C
85-89	B+	60-66	D
77-84	B		

(fractions are rounded e.g., 89.5=90, 89.4=89)

Students are bound by the Rutgers or NJIT policies on Academic Integrity; see: <http://academicintegrity.rutgers.edu/integrity.shtml> or <http://www.njit.edu/academics/honorcode.php>.

The presented paper consists of a short (15 minutes) presentation on selected topics (topics will be drawn by lot!).

Schedule and Topics (Fall 09)

Date	Activity	Topic and Field Trip Locations
Sept 1	Lecture	1. Introduction: What makes a bird?
15	Lecture	3. Observing birds
22	Field trip	Meadowlands
26	Saturday field Trip	Sandy Hook
29	Lecture	3 Flight and Migration 4 Behavior & Vocalization
Oct 6	No class	
13	Lecture and review	5. Evolution and Speciation 6. Biogeography
17	Saturday field trip	... Destination to be announced
20	Field trip	Garrett Mountain, Montclair Hawk Watch
27	Midterm and Lecture	7. Community and Populations
Nov 3	Lecture	8. Breeding Biology
10	Field trip	Great Swamp, Watchung
17	Lecture and Student Presentation	9. Ecology of Feeding
24	No class	
Dec 1	Lecture and Student presentations	10. Conservations, humans, and birds
8	Student presentations and Review	
?18?	Final exam	Date will be determined