

BIOL 388: Ornithology
Spring 2018; TuTh 10:00–11:15am ISC 137
Lab Th 1:00–3:50pm

Course Objectives:

This course will survey the evolution, ecology, anatomy, physiology, and behavior of birds. The material is presented through lectures and accompanying labs, with supplemental field trips sometimes scheduled outside the regular class period.

Learning Outcomes:

- Understand the evolutionary history of birds and the factors influencing their continued evolution
- Analyze form-function relationships and recognize and explain examples of adaptation and constraint
- Develop observational skills and understanding their application to field science
- Be able to identify common birds of western New York

Instructors:

Dr. Sara H. Burch, ISC 358, burch@geneseo.edu

Dr. Jacob McCartney, ISC 139C, mccartneyj@geneseo.edu

Office Hours:

Dr. Burch: Monday 9:30–11:30 AM and Thursday 9:00–10:00 AM, or by appointment.

Dr. McCartney: Monday 1:30–3:30 PM and Wednesday 2:30–4:30 PM, or by appointment.

Required Textbooks:

- **The Cornell Lab of Ornithology Handbook of Bird Biology** 3rd Ed (2016). Lovette & Fitzpatrick, editors; ISBN: 1118291050
- **Field Guide of Your Choice.** We will go over options in the first lab; please do not purchase a field guide until after we discuss them.

Lecture Notes and Additional Lab Handouts:

Powerpoint slides from the lectures will be placed on the course website 24 hours prior to class time. Additional handouts for labs will be placed on the course website at least 24 hours prior to the first lab day. You are responsible for printing out these handouts and bringing them to your lab section.

Assignments:

READINGS: The readings relating to each lecture are given in the schedule below. You should attempt to read through the sections given and study the figures and tables before each lecture.

TAXONOMY PRESENTATIONS: Twice during the semester you and a partner will be responsible for doing a short (10–15 minute) presentation on a taxonomic group of birds. Sign ups for groups and dates will take place during the first week of class. These presentations will take place at the end of the lecture period.

Grades:

Exams for the lecture portion of this course will include a midterm and a non-comprehensive final exam. Quizzes are designed to provide self-evaluation throughout the semester. There will be 4 quizzes given during the semester. Only 3 of these quizzes will count toward your grade, and 1 will be dropped.

The lab is considered to be part of your entire grade for this course and makes up about 35% of your total points. Lab grades are determined by a lab practical, lab worksheets for each on-campus lab, a field notebook for off-campus labs, and one group presentation.

Final Paper	100 pts	
Exams (2)	200 pts	(100 pts each)
Quizzes (3)	60 pts	(20 pts each)
Taxonomy Presentation (2)	20 pts	(10 pts each)
Labs (8)	40 pts	(5 pts each)
Field Notebook	50 pts	
Practical Exam	50 pts	
Group Presentation	50 pts	
Total Points	570 pts	

The grading scale for this course is the following:

A: 93%–100%	A–: 90%–92.9%	B+: 87%–89.9%
B: 83%–86.9%	B–: 80%–82.9%	C+: 77%–79.9%
C: 73%–76.9%	C–: 70%–72.9%	
D: 60%–69.9%	E: <59.9%	

Excuse Policies:

NO MAKE-UP EXAMS will be given except in cases of extenuating circumstances (a direct and unavoidable conflict of an academic or professional nature). If you can't make the scheduled exam date you must contact the instructor at least **ONE WEEK PRIOR** to the exam time. In cases of severe illness or family affairs, written documentation must be provided. Contact the instructors as soon as possible about these circumstances to make arrangements and provide documentation. Exams and quizzes will not be curved. Exam dates are final and will not be changed.

Cell Phone & Computer Policies:

Lecture slides will be posted online prior to each class session, and students are welcome to download the slides and bring them to class on a laptop to take notes. However, out of respect

for your fellow classmates and the instructor, laptops are **NOT** to be used to check email, play games or other activities unrelated to the class during the entire 50 minute class period. Cell phones will not be permitted in lecture or lab. In lab, texting will result in loss of points for participation score. Anyone seen with a cell phone out during an exam or quiz will immediately be given a zero (0) for that exam or quiz.

Accommodations:

SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities, or for medical conditions related to pregnancy or parenting. Students should contact Dean Buggie-Hunt in the Office of Disability Services (tbuggieh@geneseo.edu or 585-245-5112) and their faculty to discuss needed accommodations as early as possible in the semester.

Lecture Schedule

DATE			TOPIC	READING (HBB)
Jan	16	Tu	Introduction – Why Study Birds?	Chapter 1
	18	Th	Classification & Phylogeny	Chapter 2
	23	Tu	Origin of Birds	Chapter 2
	25	Th	Speciation & Diversification	Chapter 3
	30	Tu	Bird Anatomy	Chapter 6
Feb	1	Th	Bird Anatomy	Chapter 6
	6	Tu	Feathers and Plumage [QUIZ DAY]	Chapter 4
	8	Th	Feathers and Plumage	Chapter 4
	13	Tu	Flight	Chapter 5
	15	Th	Flight	Chapter 5
	20	Tu	Physiology [QUIZ DAY]	Chapter 7
	22	Th	Physiology	Chapter 7
	27	Tu	Food & Foraging	Chapter 8
Mar	1	Th	Food & Foraging	Chapter 8
	6	Tu	EXAM 1	
	8	Th	Mating & Social Behavior	Chapter 9
	13	Tu	NO CLASS – SPRING BREAK	

DATE			TOPIC	READING (HBB)
	15	Th	NO CLASS – SPRING BREAK	
	20	Tu	Mating & Social Behavior	Chapter 9
	22	Th	Vocal Behavior	Chapter 10
	27	Tu	Vocal Behavior	Chapter 10
	29	Th	Breeding Biology [QUIZ DAY]	Chapter 11
Apr	3	Tu	Breeding Biology	Chapter 11
	5	Th	Migration & Dispersal	Chapter 12
	10	Tu	Migration & Dispersal	Chapter 12
	12	Th	Population Ecology [QUIZ DAY]	Chapter 13
	17	Tu	NO CLASS – GREAT DAY	
	19	Th	Community Ecology	Chapter 14
	24	Tu	Community Ecology	Chapter 14
	26	Th	Braddock Bay Bird Observatory Field Trip	
May	1	Tu	Conservation	Chapter 15
	7	M	FINAL EXAM: 12:00–3:20pm	

Ornithology Lab Information

Required Materials

- **Field Guide of Your Choice.** We will go over options in the first lab; please do not purchase a field guide until after we discuss them.
- **Binoculars.** Purchase or borrow binoculars, or you may borrow a pair for observation days from the SUNY Geneseo Biology Department.

Assignments:

The labs for this course will be divided between on-campus labs and off-campus field trips. Most field trips will occur during our scheduled lab time, but one (April 26th, Braddock Bay Bird Observatory) leave in the morning and take most of the day. On-campus labs will each have a worksheet to complete; for off campus labs, you will be responsible for keeping a field notebook. How to keep a field notebook will be discussed in lab.

It is important that you understand what plagiarism is and that if you do plagiarize in this course the consequences are very serious. Punishments range from receiving a failing grade on

the plagiarized assignment to failing the course and having your name sent to the Dean. The following link explains plagiarism. http://library.geneseo.edu/~elmore/Types_plagiarism.htm
If you have questions please feel free to ask the faculty or someone in the library.

Lab Schedule

DATES	WEEK	TOPIC	MATERIALS
January 18	1	Introduction to Field Identification	
January 25	2	Bird Diversity & Phylogenetics	
February 1	3	External Anatomy & Topography	
February 8	4	Skeletal Anatomy	
February 15	5	Soft Tissue Anatomy	
February 22	6	Conesus Lake Field Trip	
March 1	7	Arboretum / Feeder Survey	
March 8	8	Practical / Bird Songs	
March 15	9	NO LAB – SPRING BREAK	
March 22	10	eBird Data Analysis	
March 29	11	Letchworth Park Field Trip	
April 5	12	Nests & Eggs	
April 12	13	Genesee Valley Conservancy Field Trip	
April 19	14	Group Presentations	
April 26	15	Braddock Bay Bird Observatory Field Trip	