

BIOL 388: Ornithology
Spring 2020; TuTh 11:30am–12:45pm ISC 137
Lab Th 8:30–11:25am
4(3-3)

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 Wednesday 3:00–5:00 PM

Dr. McCartney: Mon 1:30–3:30 PM, Wed 10:30–11:30 AM and Thu 2:00–3:00 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	
<u>Group Presentation</u>	<u>50 pts</u>	
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). Vacations, weddings, and leaving early for holidays are not acceptable excuses for taking an exam early or late. 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 instructor as soon as possible about these circumstances to make arrangements and provide documentation. 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 class period. 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. Accommodations will be made for medical conditions related to pregnancy or parenting. Requests for accommodations including letters or review of existing accommodations should be directed to Ms. Heather Packer in the Office of Disability Services in Erwin Hall 22 or disabilityservices@geneseo.edu or 585-245-5112. Students with letters of accommodations should submit a letter to each faculty member at the beginning of the semester and discuss specific arrangements.

Lecture Schedule

DATE		TOPIC	READING (HBB)
Jan	23 Th	Introduction – Why Study Birds?	Chapter 1
	28 Tu	Classification & Phylogeny	Chapter 2
	30 Th	Origin of Birds	Chapter 2
Feb	4 Tu	Speciation & Diversification	Chapter 3
	6 Th	Bird Anatomy	Chapter 6
	11 Tu	Bird Anatomy	Chapter 6
	13 Th	Feathers and Plumage [QUIZ DAY]	Chapter 4
	18 Tu	Feathers and Plumage	Chapter 4
	20 Th	Flight	Chapter 5
	25 Tu	Flight	Chapter 5
	27 Th	Physiology [QUIZ DAY]	Chapter 7
Mar	3 Tu	Physiology	Chapter 7
	5 Th	Food & Foraging	Chapter 8
Mar	10 Tu	Food & Foraging	Chapter 8
	12 Th	EXAM 1	

DATE		TOPIC	READING (HBB)
	17 Tu	NO CLASS – SPRING BREAK	
	19 Th	NO CLASS – SPRING BREAK	
	24 Tu	Mating & Social Behavior	Chapter 9
	26 Th	Mating & Social Behavior	Chapter 9
	31 Tu	Vocal Behavior	Chapter 10
Apr	2 Th	Vocal Behavior	Chapter 10
	7 Tu	Breeding Biology [QUIZ DAY]	Chapter 11
	9 Th	Breeding Biology	Chapter 11
	14 Tu	Migration & Dispersal	Chapter 12
	16 Th	Migration & Dispersal	Chapter 12
	21 Tu	Population Ecology [QUIZ DAY]	Chapter 13
	23 Th	Community Ecology	Chapter 14
	28 Tu	Community Ecology	Chapter 14
	30 Th	Braddock Bay Bird Observatory Field Trip	
May	5 Tu	Conservation	Chapter 15
	8 F	FINAL EXAM: 8:00–10:30am	

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 30th, Braddock Bay Bird Observatory) will 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
January 23	1	Introduction to Field Identification
January 30	2	Bird Diversity & Phylogenetics
February 6	3	External Anatomy & Topography
February 13	4	Skeletal Anatomy
February 20	5	Conesus Lake Field Trip
February 27	6	Soft Tissue Anatomy
March 5	7	Practical / Bird Songs
March 12	8	Arboretum / Feeder Survey
March 19	9	NO LAB – SPRING BREAK
March 26	10	eBird Data Analysis
April 2	11	Letchworth Park Field Trip
April 9	12	Nests & Eggs
April 16	13	Genesee Valley Conservancy Field Trip
April 23	14	Group Presentations
April 30	15	Braddock Bay Bird Observatory Field Trip