

Ornithology (BIOL 3600) – Spring 2019

Instructor: Dr. David DesRochers Office: Peeples Hall 224
Phone: 272-2165 E-mail: ddesrochers@daltonstate.edu
Office hours: Monday & Tuesday: 11–12, Monday–Wednesday: 3–4 or by appointment

Student learning outcomes: Birds have been the subjects of scientific investigation for centuries, and research on birds has contributed much to our modern understanding of morphology, physiology, behavior, ecology, evolution, and global change. The purpose of this course is to investigate these myriad but interrelated topics with birds as our focus. Upon completion of this course, the student should be able to develop and demonstrate a firm understanding of knowledge about ornithology in these broad areas:

- 1) macro-evolution, diversity, and distribution of birds
- 2) structure and function in the avian body including processes that maintain homeostasis
- 3) reproduction and communication
- 4) life-history diversity
- 5) ecology and conservation

Course Policies

Assignments: There will be a mixture of course assessments involving individual and group activities. Individual activities include lecture exams. You will be assessed on text and lecture material in three exams during the semester. Group activities include most lab assignments. I likely will give smaller assignments occasionally. Detailed descriptions of the lab assignments are located below the lab syllabus.

Grading: Your grade will be based upon the following (there are 680 points total):

3 exams: 100 pts each: 300 pts
8 eBird Lab Group data submissions @ 10 pts each: 80 pts
Final Bird list: 50 pts
4 field quizzes (in lab) @ 20 pts each: 80 pts
Behavioral Observation write-up: 20 pts

Final Presentation Components

Presentation (rubric-based): 100 pts
Research Hypothesis: 10 pts
Plan out-line: 20 pts
Literature cited: 20 pts

90–100%: A, 80–89%: B, 70–79%: C, 60–69%: D, <60: F

Extra Credit: I do make extra credit available throughout the semester, but keep in mind that there are 800 regular points to earn. Anyone asking for extra credit, at any time, will activate a two-week period on extra credit during which time no extra credit will be available.

Attendance: You are expected to be on time for all class periods. If you miss a class, YOU are responsible for finding out about missed assignments, announcements, and material covered. If you unexpectedly miss a day with group activities, please contact me as soon as possible, so we can work out a make-up solution. If you know you are going to miss a day due to a school-sponsored event, jury duty, etc., then you must schedule a make-up date with me prior to your absence. **Late assignments will lose 10% of the earned score daily up to three days late. They will not be accepted after that.**

Drop: The last day to drop this class without penalty is **March 22**. You will be assigned a grade of W. After this date, withdrawal without penalty is permitted only in cases of extreme hardship as determined by the Vice President for Academic Affairs; otherwise you earn a WF. The proper form for withdrawing from all classes at the college after the official drop/add period but before the published withdrawal date is the Schedule Adjustment Form. Students must

meet their advisor to initiate the withdrawal process. Students who fail to complete the official drop/withdrawal procedure will receive the grade of F. Withdrawal from class is a student responsibility. The grade of W counts as hours attempted for the purposes of financial aid.

Inclement weather: If classes are cancelled due to inclement weather, please complete the reading assignment for the date(s) that we miss class. Complete review questions at the end of the chapter(s), and check your e-mail for additional instructions. Make-up days may be required, so please be flexible.

Field Trips & Travel: We will be heading into the field quite often. If it is raining/snowing heavily, then we likely will do an alternative lab based activity. Otherwise, plan on being outside. This means dressing appropriately. Bring layers! It is easier to shed layers if you have extra. Warm hats, gloves, hoods, water-proof boots. Bring a thermos of coffee or cocoa. Bring food and water as well. Always be prepared for when you head into the field. In addition to being prepared, we will be travelling off-campus several times. You need to have a travel waiver and release form filled out for the semester. Traveling also has some logistical challenges. When we are off-campus, we will need to coordinate more efficiently especially since it may make more sense for some of you to travel directly to the meeting site rather than meeting on campus.

Academic Honesty: Cheating and plagiarism are a part of the Dalton State Code of Student Conduct, which can be found in its most updated form at <http://daltoncampuslife.com/student-conduct/>. ANY assistance provided or given in any way toward work in a class constitutes cheating, unless such behavior is authorized by your instructor. Additionally, any use of the ideas or words of others should be noted, or this will constitute plagiarism. For more details on what Dalton State considers to be Academic Dishonesty, please review the Code of Student Conduct. Instructors will assign grades based on classroom performance. Additional sanctions may be provided as a learning experience from the Student Conduct process.

Classroom Behavior: Dalton State is committed to respect via the Roadrunner Respect pledge. To learn more, please visit <http://daltoncampuslife.com/roadrunner-respect/>. "I pledge to show my fellow Roadrunner students, faculty, staff, and administration respect by treating others the way they want to be treated and by thinking about others first before making decisions that might affect them."

Students with disabilities or special needs are encouraged to contact Disability Access. In order to make an appointment or to obtain information on the process for qualifying for accommodations, the **student** should visit the Disability Access Library Guide at <http://libguides.daltonstate.edu/c.php?g=24716&p=149663> or contact the Disability Access office. Contact information: Andrea Roberson, Associate Director of Disability Access and Student Support Services Pope Student Center, upper level, Dean of Students Office 706-272-2524, aroberson@daltonstate.edu

For information regarding HB 280 (campus carry) please visit the following website: [Campus Carry Link](#)



Title IX Information

Student Sexual Misconduct Policy

(Last Modified on August 9, 2017)

In accordance with Title IX of the Education Amendments of 1972 ("Title IX"), the University System of Georgia (USG) does not discriminate on the basis of sex in any of its education programs or activities or in employment. The USG is committed to ensuring a safe learning and working environment for all members of the USG community. To that end, this Policy prohibits sexual misconduct, as defined herein.

In order to reduce incidents of sexual misconduct, USG institutions are required to provide prevention tools and to conduct ongoing awareness and prevention programming and training for the campus community. Such programs will promote positive and healthy behaviors and educate the campus community on consent, sexual assault, alcohol use, dating violence, domestic violence, stalking, bystander intervention, and reporting.

When sexual misconduct does occur, all members of the USG community are strongly encouraged to report it promptly through the procedures outlined in this Policy. The purpose of this Policy is to ensure uniformity throughout the USG in reporting and addressing sexual misconduct.

How to Report

Please note that although you have the option to make a report anonymous, doing so may limit the College's options for response. **Call 911 if you are in an emergency situation**

If you would like to report to a Police Agency:

Dalton State Public Safety

Health Professions Building- Upper Level

706-272-4461

Online Sexual Assault Report [HERE](#)

If you would like to report to Dalton State Administration:

[DSC Online Reporting Form](#)

Title IX Coordinator

Lori McCarty

Director of Human Resources

Phone: 706-272-2034

Email: lmccarty@daltonstate.edu

Deputy Title IX Coordinator

Assistant Director for Student Conduct

Phone: 706-272-2999

Email: bwhitehead@daltonstate.edu

If you would like to talk with someone confidentially:

[The Counseling Center](#)

Health Professions 266 (Inside Health Center)

Phone: 706-272-4430

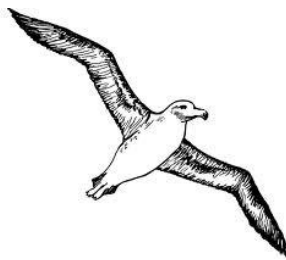
Lecture Schedule (tentative):

T/R: 8–9:15 a.m. in Peeples Hall 111

Textbook: Ornithology 3rd Ed. (Gill 2007)

Dates	Topics	Notes
Jan. 8, 10	Course Introduction, What is a bird? Ch. 1: Diversity of Birds, Ch. 2: History	
Jan. 15, 17	Ch. 2: cont., Ch. 3: Systematics	eBird post due
Jan. 22, 24	Ch. 3: cont., Ch. 4: Feathers	
Jan. 29, 31	Ch. 4 cont., Ch. 5: Flight	eBird post due
Feb. 5, 7	Ch. 6: Physiology,	Exam 1 (Ch. 1–5) Feb. 7
Feb. 12, 14	Ch. 7: Senses, Brain, & Intelligence	eBird post due
Feb. 19, 21	Ch. 8: Vocalizations, Ch. 9: Annual Cycles	
Feb. 26, 28	Ch. 9 cont., Ch. 10: Migration & Navigation	eBird post due
Mar. 5, 7	Ch. 10 cont.	Exam 2 (Ch. 6–10) Mar. 7
Mar. 12, 14	Spring Break	eBird post due
Mar. 19, 21	Ch. 11: Social Behavior, Ch. 12: Mates	
Mar. 26, 28	Ch. 13: Breeding Systems	eBird post due
Apr. 2, 4	Ch. 14: Bird Sex, Ch. 15: Nests & Incubation	
Apr. 9, 11	Ch. 16: Parents & Offspring	eBird post due
Apr. 16, 18	Ch. 18 Populations	
Apr. 23, 25	Catch up	Exam 3 (Ch. 11–16, 18) Apr. 25, eBird post due
Apr. 30, 8–10	Research Presentations	Group bird lists due

**** The last day to drop without penalty is Mar. 22. ****



Laboratory Schedule (tentative):

F: 8–10:40 a.m. in Peeples Hall 116

Dates	Topics	Notes
Jan. 11	Introduction to Field Ornithology I & Species Identification & Field Notebooks	On campus
Jan. 18	Field Ornithology II	On campus & field quiz
Jan. 25	Field Ornithology III - Day trip	Off campus & field quiz Lakeshore Wetland
Feb. 1	Avian anatomy & Adaptations – Lab specimens	Avian Art & Dissections
Feb. 8	Field Ornithology IV	Off campus, field quiz Hiawassee Wildlife Refuge
Feb. 15	Field Ornithology V	Off campus - Lakeshore & Behavioral Observation Write-up
Feb. 22	Mist-netting Demo	
Mar. 1	Field Experiment Design I	Hypothesis Due
Mar. 8	Field Experiment Design II	Draft Plan Due
Mar. 15	Spring Break – go birding!	
Mar. 22	Field Experiment Implementation I	
Mar. 29	Field Experiment Implementation II	
Apr. 5	Field Experiment Implementation III	
Apr. 11	Field Experiment Implementation IV (if needed) Work Day I	
Apr. 18	Work Day II	
Apr. 26	Field Ornithology VI – Day trip	Off campus field quiz (20 pts)

Note: Apr. 11 may not be needed as an Implementation Day IF the weather has been good the previous lab days. If you have collected all of your data, then using it as a work day is very helpful.



Descriptions of assignments are below. More details will follow where necessary.

eBird & Observational data:

Getting good at identifying birds is like anything else in life at which you want to become skilled. You have to practice. So you will be working in groups of 3–4 students throughout the semester. Spend time together and go birdwatching a few times per week. I encourage each student/group to maintain an individual field notebook. Field notebook data should include: date, time, location, weather, species and behaviors observed. You will not be turning these in because you need to hold on to them in order to continue using them. In addition to your own personal notebook, you will be working in groups to identify birds and to keep track of your sightings using a public database of bird observational data. This database is maintained at a website called eBird (<http://ebird.org>). Each group will be responsible for creating an account on the website and posting their observations every other week (More are allowed). You must tell me what your group name is and where you have birded each week so I know how to find your posts. I will check these posts on Friday afternoons after lab. These lab group data posts are worth 10 points each. For each bird species you record, you should record estimated abundance (number of individuals) and any interesting behaviors. There is a way to add notes so look for this. **Post without notes will lose 3 points, and late posts only will be worth 5 points.** As incentive for identifying species, at the end of the semester I will award bonus points to groups based on the total number of bird species identified throughout the semester. The total number of available points will be based on how many groups we have, and bird identifications only count if, at least, two group members are together. The group that sees the most species will earn the most bonus points. Therefore, get out into different habitats! More habitats = more bird species! Bird species we see as a group also count towards your semester lists. You must submit your final, group bird list to me on Apr. 30 by 5 p.m. This list must be in taxonomic order based on the American Ornithologists' Union Checklist ([Checklist Link](#)). Lists not in taxonomic order will lose 5 points.

When we are together as a class and recording species we will post our observations to ebird as a single group. I already have created a class account: **USERNAME:** DSC_Ornithology_Class, **PASSWORD:** RoadRunner2019. One lab group per week will be responsible for posting the class data. The group posting class data will not have to post their separate data that week. I will assign which lab group is responsible each week.

Field Quizzes

We will have four field quizzes (20 points each) throughout the semester. You will work in pairs for these assignments. While we are out, either on campus or at another location, I will point out birds (visually or aurally) and you will have a few minutes to work with your **one** partner to identify the bird(s). You will work quietly so other groups cannot eavesdrop. Once we have worked through about 20 bird species, I will offer you a bonus species to identify, and then you will turn in your sheet.

Behavior Write-up

This assignment involves more detailed observations of birds. You will be exploring avian behavior and learning how to collect behavioral data. These activities will also be group-based work. I will have a handout for you later on.

Field Experiment

By early-March we will have spent a lot of time in the field and in the classroom learning about birds and making many observations. In your lab groups you will develop a research hypothesis for which you will design and carry out an experiment/study. You have six weeks to design and implement the project and we will be using lab time for this. I encourage you to work outside of lab as well. Here is a breakdown of what I expect.

Field Experiment Design I: You will work in your groups to select an observation for which you need to develop a research hypothesis. You need to be able to practically test your hypothesis either through experimentation or observation. It does not need to be complicated...merely creative and practical. Think of where you will do this. On campus? Off? You will have the full lab time to begin working out the details, and your hypothesis is due by the end of lab on this day.

Field Experiment Design II: You will continue to work out the details of the study. Perhaps you can do a dry run of your project to deal with any unexpected issues. Your plan is also due at the end of lab so that I can begin thinking of any issues you might have. You will create an outline of the plan.

Field Experiment Implementation I, II, III, IV (if needed): Carry out your experiment.

Field Experiment Work Day I & II: On this day you will work on summarizing/analyzing your data and begin putting together your PowerPoint presentation for the following week.

Presentation Day – Apr. 30 (Final Exam period): Each group will prepare a **10–12 min PowerPoint presentation**. During the presentation each group member is expected to contribute to the presentation. I will provide a grading rubric for you when you begin working on the project design, so you should have a very clear understanding of my expectations.

PROOFREAD YOUR PRESENTATION & PRACTICE. I guarantee that if you wait until the last minute to do this project it will show in the quality of your work.

Presentation Tips

Your goal for a presentation is to distill the information for your management plan in clear slides with illustrations, text, and/or tables.

- 1) Everything should be easily readable by your audience. I like using Calibri font (approx. 24 pt.)
 - a) Think of reducing the amount of text on your slides as much as possible!
- 2) If you are having trouble making everything fit, look to see if you have included irrelevant information.
- 3) Graphs, figures, and tables provide excellent means of conveying information. You should clearly describe what each figure or table is showing. What is the “take home” message?
- 4) Choose fonts that are easy to read, don’t overuse bold or italics. Background colors should draw attention to material, but not detract from presentation – avoid fluorescent colors.
- 5) Avoid unnecessary details in preparing figures, drawings or illustrations. Try to keep everything straight forward. If you are copying a figure and the font is too small, rewrite it!
- 6) Ideally, your slides should be self-explanatory so that you are free to supplement and discuss particular points.
- 7) If you use a picture or diagram from the Web or other sources, be sure to attribute it (i.e., cite its source!).

A presentation is a story and should be well put together – a big picture introduction that narrows to the specific problem that you will be addressing. Work on the flow of the presentation and the timing. If you practice the talk and it goes well beyond the 12 minutes, then you have revising to do in order to shorten the talk.

