Field Ornithology Syllabus

Instructor: William C. Anderson (wian6764@colorado.edu)

Email: Email exchange in the context of this class is a professional correspondence and it should be conducted as such. Writing formal emails is a great professional skill. I will be available by email during normal 'business hours' (8am-5pm Monday-Friday) before the course begins.

Course Texts: You are required to obtain a copy of ONE of the following field guides:
1) *Sibley Birds West,* David Allen Sibley, 2016 (~$25 new)
2) *The Sibley Field Guide to Birds of Western North America,* David Allen Sibley, 2003 (~$15 new).
Other field guides are unacceptable and will result in a loss of participation credit.

Readings: Readings from primary literature will be made available electronically.

Course Summary: This course will provide an in-depth exploration of field ornithology, including avian evolution, functional morphology, physiology, ecology, and behavior of birds. Field and lab-based study will emphasize ecology and behavior, taxonomy, field identification of local birds by sight and sound, and field methods (e.g., point counts, mist netting, bird banding).

This is an intensive field course that takes place at high altitude (CU Boulder Mountain Research Station is ~9500 ft). Field Ornithology includes early mornings and long days in the field and classroom. Typical days in the field will begin around 5:30 am and will end around 8:00pm with breaks for meals, studying, and rest. Students are encouraged to examine their willingness to participate in this intense schedule prior to registering for the course.

Course Objectives:
1) Learn about basic field ornithology methods (e.g., point counts, mist netting, bird banding, etc.), and how these methods are used in ecological and evolutionary studies of birds.
2) Foster an appreciation for avian Rocky Mountain diversity and the role of birds in the greater ecosystem
    - Learn form and function of major avian groups
    - Identify local bird species by sight and sound
3) Observe bird activity and meticulously log field-based observations
    - Identify common Colorado birds by sound and sight
    - Develop observational skills both with and without binoculars
    - Memorize common Colorado bird calls and recognize songs in the field
    - Learn how to properly catalog birding ventures in a field notebook
    - Sketch avian forms: unknown species and/or observed behaviors

Course Structure: This course will meet Monday-Saturday from June 29 – July 13, 2026 (12 total days of instruction). Each day will involve time in the field, and a combination of lab and lecture time. The latter part of the course will be devoted to group projects that use field methods students learn during the first two weeks.

Course schedule (subject to change)

	Topics / Activities
Week 1	- introduction to common Rocky Mountain birds (field and lab-based ID) - avian evolution and diversity - intro to field methods (bird observations, mist netting, banding, point counting, etc.)
Week 2	- intro to study design - Capstone Projects

Bring your field notebook (provided by course), field guide, and binoculars to every class. Always be prepared to spend time outside - dress appropriately for the field every day. Study songs and bird ID through repetition.

Assignments and Grading: Assignments will not be accepted after the due date (except in the cases of religious observance, see polices).

eBird species list: In addition to your field notebook, we want you to become comfortable being a contributing member to a long-term citizen science project. Every entry from your notebook should be entered as an eBird record. At the end of the course, you will turn in a hard and digital copy of your eBird species list. **20 pts**

Notebook checks: You will all receive a Rite in the Rain field notebook where you will keep detailed notes on bird activity throughout the duration of the course. Each outing in the field should be documented in this notebook. There will be 3 checks of your field notebook (15 pts each) during the course: **45 pts**.

Bird talk: At the beginning of the course you will be assigned one avian family to present to the class. Your presentation must include an overview of key characteristics of this avian family and will focus on the characteristics of one Colorado species that belongs to this family. **50pts**

Notebook final write-up: Using your detailed field notebook observations, you will create a brief (500-700 words) write-up of your field experiences. This will include a description of the sites, your observations of shifts in avian biodiversity, and other observations. This write-up must include an additional 150-200 words reflecting on your field skills and how they have progressed. Critically assess your first entry in comparison to your last entry and reflect on how skills have changed: **50 pts**

Participation and Class Discussions: Everyone will start the class with **100 pts** of participation credit. Failing to participate fully will result in the deduction of points. Missing a day (no make-ups are offered) is an automatic loss of 10 pts. Full participation requires: coming prepared, active listening (i.e., no superfluous cell phone use), asking and answering questions, engaging with the material, participation in paper discussions, fully filling out your field notebooks, completing daily reflections, and respectfully collaborating with peers. Anything less than this will result in a less than perfect participation grade: **100 pts**

ID Quizzes – sight and sound: This is a hands-on identification-based course. There will be daily ID quizzes based on the birds that we learned on previous days. You will be expected to properly identify pictures and sounds of birds. **100 pts**

Capstone project: During the final week of the course you will design and conduct a field project with a group of other students. There are several assignments associated with this project, which will culminate in a group presentation on the last day of class:

Questions, Hypotheses, and Predictions exercise: With your group, you will detail the question that your project is designed to answer, the specific hypotheses that you are testing, and your predictions associated with these hypotheses. **20 pts**

Methods: With your group, you will design and write up the methods that you will use to test your hypotheses. **20 pts**

Annotated bibliography: With your group, you will produce an annotated bibliography of sources from the primary literature that are relevant to your project. **20 pts**

Presentation: With your group, you will present your project to the class. This presentation must include an introduction, methods, results, discussion, and references. **200 pts**

Grade Breakdown:

Assignment	Points
eBird species list	20
Notebook Checks	45
Notebook Write-up	50
Participation	100
ID Quizzes	100
Bird Talk	50
Capstone project Q,H,P exercise	20
Capstone project methods	20
Capstone project annotated bibliography	20
Capstone project presentation	200
TOTAL	625

Letter Grade Assignments:
94-100 (A)
90-93 (A-)
87-89 (B+)
83-86 (B)
80-82 (B-)
77-79 (C+)
73-76 (C)
70-72 (C-)
67-69 (D+)
63-66 (D)
60-62 (D-)
< 60 (F)

In Class Use of Electronic Devices: Electronics (cell phones, laptops, ipads, etc.) can be powerful learning tools and I encourage students to use these devices appropriately to help them better learn the material in class (i.e. taking notes, Merlin, Seek). However, research has shown that students who check their cell phones during class receive, on average, half a grade lower than their peers who don't. Surfing the web or checking your email is even worse (almost a full grade lower on average). This behavior also distracts students around you and brings down their performance as well. You may be convinced that you are good at multitasking, but science shows you are not. Texting, social media, and web surfing are not appropriate during class. Please use electronic devices appropriately throughout the course. Failure to do so will result in loss of participation points.

Decorum: *Be kind.* There's no need to upset your instructor or colleagues by coming in late, by being disruptive, or flagrantly inattentive during class meetings (penalties may apply.) Nor is there any reason to be

discourteous to your fellow students. Brisk intellectual debate is a wonderful thing— personal attacks are an abomination and a drag. Unprofessional behavior is unacceptable and will not be tolerated.

Don't cheat. Any kind of cheating or plagiarism is utterly unacceptable. You are required to know and abide by the CU honor code (see the link on the last page of the syllabus). Academic dishonesty is an insult to your instructors, your fellow students, and your own abilities.

The fine print

Academic Misconduct: All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. Understanding the course's syllabus is a vital part in adhering to the Honor Code. All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: StudentConduct@colorado.edu. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy. ***You should know that we will not take violations of this policy lightly.***

Accommodation Policies: If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or DSinfo@colorado.edu for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions on the Disability Services website.

If you have a temporary illness, injury or required medical isolation for which you require adjustment, please let the course instructor know as soon as possible. Make-up assignments are generally not possible for field courses, but cases will be handled on an individual basis.

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. If you anticipate any class conflicts due to religious observance, please notify the course instructor on or before the first day of the course to arrange necessary accommodations. See policy details at http://www.colorado.edu/policies/observance-religious-holidays-and-absences-classes-andor-exams.

Preferred Student Names and Pronouns: CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

Classroom Conduct: Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, marital status, political affiliation, or political philosophy. For more information, see the classroom behavior policy, the Student Code of Conduct, and the Office of Institutional Equity and Compliance.

Discrimination and Harassment: CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits protected-class discrimination and harassment, sexual misconduct (harassment, exploitation, and assault), intimate partner abuse (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who have been subjected to misconduct can contact OIEC at 303-492-2127 or email CUreport@colorado.edu. Information about university policies, reporting options, and OIEC support resources including confidential services can be found on the OIEC website.

Please know that faculty and graduate instructors are required to inform OIEC when they are made aware of incidents related to these concerns regardless of when or where something occurred. This is to ensure that individuals impacted receive outreach from OIEC about their options and support resources. To learn more about reporting and support for a variety of concerns, visit the Don't Ignore It page.

Mental Health and Wellness: The University of Colorado Boulder is committed to the well-being of all students. If you are struggling with personal stressors, mental health or substance use concerns that are impacting academic or daily life, please contact Counseling and Psychiatric Services (CAPS) located in C4C or call (303) 492-2277, 24/7. Free and unlimited telehealth is also available through Academic Live Care. The Academic Live Care site also provides information about additional wellness services on campus that are available to students.

Use of Generative Artificial Intelligence Tools: You may NOT use gen AI tools on any assignments in this course. Generative artificial intelligence tools—software that reproduces text, images, computer code, audio, video, and other content—have become widely available. Well-known examples include ChatGPT for text and DALL•E for images. This statement governs all such tools. Keep in mind that the goal of gen AI tools is to reproduce content that seems to have been produced by a human, not to produce accurate or reliable content; therefore, relying on a gen AI tool may result in your submission of inaccurate content. It is your responsibility—not the tool's—to assure the quality, integrity, and accuracy of work you submit in any college course.

If gen AI tool use is suspected in completing assignments for this course, the course instructor will follow up with you. The instructor may contact the Office of Student Conduct & Conflict Resolution to report suspected Honor Code violations. In addition, you must be wary of unintentional plagiarism or data fabrication. Please act with integrity, for the sake of both your personal character and your academic record.