

Lecture Information**Professor:**

Dr. Zachary Cheviron

Office: 203A HSB

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Office Hours: 3-4 Wed. or by appointment

Lectures: 10:10 AM – 11:00 PM, Chemistry 212**Course Description and Objectives:**

This course acquaints students with classification, identification, morphology, distribution, natural history and ecology of birds, with a focus on birds of Montana and northern Rocky Mountains. This description applies especially to the lab portion of the course. The lecture component will present an overview of avian diversity, evolution, ecology, physiology, and behavior. We will use lectures and readings to review and summarize this knowledge and research.

Course Web Site: Materials for the course will be posted on the course Moodle site site:<https://moodle.umt.edu/>**Required Materials:****Text:** A textbook is NOT required for this course, but I recommend *Ornithology*, 3rd edition, Frank Gill, 2007, MacMillan, ISBN-13: 978-0716749837**Field Guide:** A field guide is required. I recommend *Sibley Field Guide to Birds of Western North America* by D. A. Sibley - published 2003 (or a similar field guide or smart phone app. Clear your choice with your lab TA)**Binoculars:** Binoculars are required. See course website for more information.

Reading assignments for some lectures will also provided on the course Moodle site. Our expectation is that you will read this material before coming to class. Material from the text will be covered quickly and used as a starting point to explore topics in more detail. Similarly, all of the laboratory materials will be posted on the course website. Our expectation is that you will read the introductory material in your laboratory manual before coming to the lab each week (see below).

Point AllocationExams – 600 points; 60% of total grade; 200 pts for each of 3 examseBird checklists & in-class participation – 100 pts; 10% of total gradeLab – 300 pts; 30%Grading Scale A [1000 - 900 pts], B [899 - 800], C [799 - 700], D [699 - 600], F [< 599])

Plus/minus grades may be assigned.

Exams: Exams covering lecture material will be held during the regularly scheduled lecture period; see the lecture schedule for exam dates. Exams can be made up with proper excuse and documentation, but will be prorated. If you are ill, a doctor's or Curry Center letter. You must contact the appropriate staff member before the exam or as soon as possible after the exam to ensure that your absence is excused and that a makeup exam can be scheduled.

In-class participation: I will routinely ask questions in lecture, and your participation towards answering these questions will contribute to your grade. For the most part, these questions are aimed at assessing your understanding of the material and your ability to think critically about what we've been discussing. Your in-class participation will be evaluated in a number of formats, including short written answers and small group discussions. Your participation in these activities will contribute up to 50 pts of your final grade.

Independent Field Observations: Over the course of the semester, you can earn up to 50 pts by going out into the field and birding on your own. To earn points, you will enter your observations into a databasing tool called eBird. Learning to use eBird will benefit you after the class ends, in that it provides a web-accessible, free database for keeping your personal bird lists and records into the future. We will teach you to use eBird; you can also investigate it yourself at: <http://ebird.org>. **You will not be graded on the number of species you observe. Enter only the species that you can confidently identify.** Remember your observations are part of a large database that is used by professional scientists, land managers, and birders. You want to be sure you are entering reliable data into this database. **You can bird anywhere you want for these observations, including campus. The only requirement is that the observation period last at least 30 minutes.**

Lab Information

Location: HSB 202

TAs:

Phred Benham, phbenham@gmail.com

Riccardo Ton, Riccardo.Ton@mso.umt.edu

Cole Wolf, colejwolf@gmail.com

Lab Grade:

Your grade in the lab portion of the course will determine 30% of your overall course grade, and your lab grade will be determined by your combined performance on lab quizzes, quizzes on bird identification in the field, entries and observations in your field note book, lab write-ups, in-lab presentations and your level of participation in class discussion in the lab. The first four weeks of lab will be dedicated to familiarizing you with common birds of Montana and northern Rocky Mountains. At the end of these four weeks, you should be able to identify 160 common species by sight, and subset of these species (40) by sound. We will quiz you weekly 40 species. See lab schedule of quiz dates. These identification skills will be critical for the small group projects and field trips that follow for the last 9 weeks of lab.

In addition to being able to identify birds in the lab, this course is also designed to teach you skills for identifying birds in the field, as well as proper methods for recording observations of birds in the field. You will be assessed on these skills in weeks 7-9, and you will apply them to a small group censusing project at the end of the semester. Field quizzes will take place during organized field trips. Prior to these field trips, your TA will provide a list of species you are likely to encounter on the trip to help in preparation, but any species on the species list from the first four weeks of lab is fair game. In addition to these field quizzes, you will also record your observations in a field notebook during these organized field trips. You will be given instructions on proper methods for recording these observations in lab, and we will be graded on the quality of your notebook entries following a rubric that you will be given beforehand.

You will also perform a total of two small group projects over the course of the semester. These will be performed in weeks 4-6 and 12-14, and each will consist of three-week extended lab exercises. Each of the three-week lab exercises will follow the same schedule. **In week 1**, you will learn important background information and specific skills that will be needed to perform a guided

independent experiment of your own design in week 2. Your grade in week 1 will be given based on a brief write-up describing an experimental design for guided group project that must be turned in to your TA by the end of lab period. **Week 2** will be dedicated to performing the group experiment that you designed in week 1 and the week 2 lab period will begin with a quiz over the background material you learned in week 1. In **week 3**, you will present the results of your independent project as a 15-minute powerpoint presentation to your lab section. Your lab TA will provide detailed information on our expectations for these write-ups and presentations.

Lab Point Allocation (300 pts. total – 30% of total course grade):

Small Project Experimental Design Write-ups: 10 pts. (3%) (2 total; 5 pts. each)

Presentations of Group Projects: 120 pts. 40% of lab grade (2 total; 60 pts. each.)

Lab and Field Quizzes: 135 pts. (45%) (9 total; 15 pts. each)

Field Notebook Entries: 35 pts. (12%)

Lab Attendance Policy:

Attendance is expected at all scheduled laboratory sessions. Because of limitations on lab space and staffing, missed labs cannot be made up beyond the weeks for which they are scheduled. Limited accommodation of students with conflicts may be made in other lab sections – **this must be cleared with Dr. Cheviron at least one week in advance of the anticipated conflict.**