

**FW 375: Field Wildlife Studies**  
**Updated Syllabus – Summer 2020**

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**GENERAL COURSE INFORMATION**

This course has historically been taught as a field course with mandatory one-day field trips and a week-long field trip over spring break. With the emergence of COVID19 this past spring the course was altered to an online only format. Our field trips were cancelled but replaced with assignments and activities that promoted students getting out into the field themselves while still being able to maintain social distance. Please read the entire syllabus and corresponding content on Canvas and let me know if you have any questions.

**COURSE WEBSITE**

Canvas will be the primary content delivery/tracking tool for this class. Make sure to check Canvas regularly to check grades, calendars, assignments, announcements, and updates. I will be using the announcements feature to send you periodic updates so either make sure that your Canvas setting have been set up to send you an email when there is an announcement or make sure to check your Canvas page and announcements regularly.

**COURSE OBJECTIVES**

This course is intended to provide students the resources, opportunities and experience in improving their skills in species identification, conducting scientific observations and recording natural history examinations. Additionally, this course will provide insight into current local wildlife management challenges and the field research that is being conducted to address these problems.

**REQUIRED "TEXTBOOK"**

The only required textbook for this course is a field guide of your choice. In order to begin understanding the natural world you first need to be able to identify what you are observing, and field guides are essential to this task. If you do not own many field guides, I would highly encourage you to buy a few of them, possibly starting with a bird guide and a plant guide. If you already own several personal field guides then I would challenge you to broaden your knowledge base and purchase a field guide focused on species you may know little about (wildflowers, insects, fish, fungus, etc.).

**REQUIRED AND RECOMMENDED GEAR**

The main piece of gear that is required for this course is a pair of binoculars. Wildlife is often viewed at a distance and binoculars are a necessity. Binoculars are rated by their magnification power, and the size of the lens (measure of light-gathering capacity): 10x42 are 10-power binoculars with 42 millimeter lenses. Smaller lenses are lighter and cheaper, but drastically reduce the light gathered, making objects seem dim and colorless. I recommend 8-10 power with a minimum 30 mm lens size. A decent pair can be found for \$80-100. You will use them every day that you're in the field and you will be disappointed if

yours are not adequate. If you continue to work in the natural resources field, you will never regret this purchase.

The other gear I would highly recommend is a field notebook. At bare minimum you will need one small portable notebook that you'll carry with you throughout the day to take notes in about what you observe and identify.

Small notebook examples:

<http://www.riteintherain.com/mini-stapled-book-universal-3-1-4x4-5-8>

<http://www.riteintherain.com/pocket-top-spiral-universal-green-3-x-5>

## **ASSIGNMENTS**

Each of the assignment headings listed below will correspond with a separate "Module" in Canvas. Each heading will be described briefly here but more information on each assignment will be given in Canvas, including an Overview, Objectives and detailed instructions for each assignment.

### **Introduction Video: (10 pts)**

To start the class each of you will create a short video clip to introduce yourself to all of us and give us some background information about your interests, both academically and personally. This assignment will also help you work through the kinks of creating and uploading a video to Canvas, which will be required for other course assignments as well.

### **Citizen Science Activity: (10 pts)**

Citizen Science is fast becoming an import tool for researchers and the general public, both locally and globally. Additionally, it can be a great way to get involved in important field projects during these challenge times of Covid19. At the beginning of the course all of you will be required to sign up for the eBird and iNaturalist programs if you don't already have an account. The programs are a wonderful way of documenting species that you observe in the field, which can provide critical data on population trends, abundance and range of numerous species. These programs are also a great way to explore the data to see what interesting species can be found in your area. We will be using both programs throughout the course to enter the species we encounter (see Species List below).

### **Species List: (30 pts)**

Throughout the summer you will maintain an ongoing list of the species you identify on all your hikes. You will enter these species in eBird and iNaturalist and at the end of the course you will share your checklists with me.

### **Species Observations: (40 pts: 10 pts each)**

Throughout the summer you will conduct 4 separate species observations on a single species or individual. You will choose a species that you are unsure of and use these observations to describe the morphology, behavior and habitats of your focal species, allowing you to identify what species it is. This activity will hone your identification and observation skills and can be paired with your "Supplemental Species" assignment (see below).

## **Field Journal**

*Journal Entries:* (40 pts: 10 pts each)

Throughout the summer you will record 4 separate natural field journal entries of 4 different hikes or locations you visit. These entries will focus on the overall landscape and habitats of the area, as well as the species you encounter. This assignment will sharpen your skills in observing an overall landscape and its changes. It will also require you to practice recording natural history observations in a useful and productive manner.

*Evaluation:* (10 pts)

Learning how to write a productive field journal entry comes from practice but also from reading and evaluating other people's entries. After everyone submits their 1<sup>st</sup> journal entry you will read and evaluate the other students' entries. This will provide you insight on how to craft a better journal entry as well as how to critique and evaluate another students' work.

## **Taxonomy Project**

*Assignment:* (30 pts)

At the beginning of the course you will each chose a taxonomic family that will include 2 individual focal species. You will research the full taxonomic name, ecology, conservation status, evolution and field characteristics of the taxonomic family as a whole and for your individual species.

*Presentation:* (20 pts)

After completing and submitting your written taxonomic assignment you will create a 12-15-minute presentation summarizing and highlighting information from your assignment. For this assignment you will record an audio file of your presentation that you will then upload to Canvas.

*Supplemental Species:* (10 pts)

Throughout the course you will be observing and identifying numerous species that are in addition to your assigned species. You will choose 3 additional species that you have seen, identified and observed throughout the summer and write up a brief "supplemental species" assignment about them highlighting their ecology, conservation status and field characteristics. Many of you will be outside of Colorado this summer and this is a great way to focus on local species in your area and broaden the knowledge of all of us in the class. This assignment pairs well with your "Species Observations" assignment.

*Quizzes:* (10 pts)

Once all of you have submitted your audio taxonomic presentations, I will post them on Canvas for all of you to listen to. After listening to the presentations, you will be required to take a short quiz on each taxonomic family. All your taxonomic quiz scores will be averaged and adjusted to a 10-point scale.

## **Ecological Topic**

At the beginning of the course you will choose a relevant ecological topic from a list provided and this will become the focus of several different assignments (below). For each ecological topic you will be paired with another student and you will complete the assignments together. For each of the ecological topics I will also include a few readings that everyone will be responsible for.

### *Presentation: (40 pts)*

Together the two of you will create a 20-25-minute power point video that will cover all necessary information on your ecological topic (background, ecological concepts, research, management, etc.).

### *Article Presentation: (30 pts)*

Once you have chosen your ecological topic, I will provide you several research articles on the topic. Some of the articles can be used to help you create your ecological topic presentation, but 2 articles will be the focus for your scientific article presentation. For this presentation together you will create a 15-20-minute power point video file that will cover all the major points of the two scientific articles.

### *Discussion Lead: (10 pts)*

After you've created your ecological topic and scientific article presentations you will submit 4 discussion questions that will be utilized to stimulate discussion with the rest of the students. I will create a discussion thread on Canvas and all students will be required to make comments.

### *Discussion Participation: (10 pts)*

Once I have created the discussion thread for each ecological topic all students, except the discussion leaders, will be required to provide insightful comments that will enhance dialogue of the topic. Following the discussion thread, we will attempt at having a live Zoom or Teams meeting where we can all get together to discuss the topic. Grades for the Discussion Participation will be based on your involvement in the discussion thread and Zoom/Team meeting.

### *Quizzes: (10 pts)*

Once all of you have submitted your ecological topic and scientific presentations, I will post them on Canvas for all of you to watch. After watching the presentations and reading the group readings you will be required to take a short quiz on each ecological topic. All your ecological topic quiz scores will be averaged and adjusted to a 10-point scale.

### **Lab Practical: (30 pts)**

At the end of this course you will complete an online Lab Practical that will evaluate your knowledge and ability to identify important species (mostly coming from the assigned and supplemental species).

### **Course Evaluation: (10 pts)**

As part of this class you will complete an end of course evaluation. This is a course evaluation that I have created and is in addition to the standard course evaluation for every class you take. This evaluation is for me along and provides me with important insights and feedback on the effectiveness and usefulness of the course assignments and activities.

## **COURSE GRADING**

<b>Assignment</b>	<b>Points</b>	<b>Percent Weight</b>
Introduction Video	10	2.9%
Citizen Science Activity	10	2.9%
Species List	30	8.6%
Species Observations	40	11.4%
Field Journal		
Journal Entries	40	11.4%
Evaluation	10	2.9%
Taxonomy Project		
Assignment	30	8.6%
Presentation	20	5.7%
Supplemental Species	10	2.9%
Quizzes	10	2.9%
Ecological Topic		
Presentation	40	11.4%
Article Presentation	30	8.6%
Discussion Lead	10	2.9%
Discussion Participation	10	2.9%
Quizzes	10	2.9%
Lab Practical	30	8.6%
Course Evaluation	10	2.9%
	<b>Total</b>	<b>350</b>
		<b>100%</b>

Pass/Fail is not a grading option for this course and final letter grades are based on the following scale:

A+ = 96.7 – 100%

A = 93.3 – 96.6%

A- = 90.0 – 93.2%

B+ = 86.7 – 89.9%

B = 83.3 – 86.6%

B- = 80.0 – 83.2%

C+ = 76.7 – 79.9

C = 70.0 – 76.6%

D = 60.0 – 69.9%

F = < 60.0%

## **ACADEMIC INTEGRITY**

This course will adhere to the CSU Academic Integrity Policy as found in the General Catalog (<http://www.catalog.colostate.edu/Content/files/2012/FrontPDF/1.6POLICIES.pdf>) and the Student Conduct Code (<http://www.conflictresolution.colostate.edu/conduct-code>). At a minimum, violations will result in a grading penalty in this course and possibly a report to the Office of Conflict Resolution and Student Conduct Services