



FISH, WILDLIFE, AND  
CONSERVATION BIOLOGY  
COLORADO STATE UNIVERSITY

---

**FW104 – SECTION 002 - WILDLIFE ECOLOGY AND CONSERVATION – FALL 2023**

**Instructor: Ann Randall (she, her, hers)**

- **Contact Info:** [Ann.Randall@Colostate.edu](mailto:Ann.Randall@Colostate.edu)
  - Please remember there are 200+ students in this class. I will try to respond to your emails as quickly as possible, however, it may take 24-36 hours. Canvas and your syllabus are important resources – please check for answers to your questions before sending your email and feel free to touch base after class – see note below.
- **Office Hours:** Tuesdays from 2pm – 3pm in Wagar 114
  - I will be available after class for quick questions. For questions regarding grades or assignments, please contact your Graduate Teaching Assistant (GTA), Jasmine Nelson (see information below). For more involved discussions please come by my office during the time listed above.

**Graduate Teaching Assistant (GTA): Jasmine Nelson (They/She)**

- **Contact Info:** [jazz.nelson@colostate.edu](mailto:jazz.nelson@colostate.edu)
- **Office Hours: Held in Wagar 008 or via Microsoft Teams**
  - Mondays (virtual): 1:00pm - 2:00pm
  - Wednesday (hybrid): 1:00pm - 2:00pm
  - Thursdays (hybrid): 2:00pm - 3:00pm

**Course Meeting Times:**

**Section 002:** Tuesday and Thursday 12:30 p.m – 1:45 p.m. in Johnson Hall 222

**Important information for students:**

**Course Description:** 3 credits. Essentials of wildlife ecology as a foundation for understanding issues on the origins, management, and conservation of biodiversity. (Biological & Physical Sciences AUCC category 3A; GT-SC2 - Natural & Physical Sciences lecture course without Required Laboratory).

The Colorado Commission on Higher Education has approved FW104 for inclusion in the Guaranteed Transfer (GT) Pathways program in the **GT-SC2** category. For transferring students, successful completion with a minimum C– grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to <http://higher.ed.colorado.gov/academics/transfers/gtpathways/curriculum.html>.

**Course Objectives:**

1. Students will be introduced to wildlife management including the evolutionary and ecological principles, concepts, and terminology underlying management and conservation.

2. Students will learn the biology, management, and population ecology of selected wildlife and fish species through relevant case studies and readings.
3. Students will learn historical and socio-political background of wildlife conservation in North America, sufficient to understand the constraints, traditions, and diverse viewpoints involved in modern conservation and management of wildlife.
4. Students will be introduced to various issues concerning wildlife conservation.
5. Students will be encouraged to identify their own values in wildlife conservation.

Through the lecture content of a GT Pathways science course (GT-SC1 or **GT-SC2**) – students should be able to:

- a. Develop foundational knowledge in specific field(s) of science.
- b. Develop an understanding of the nature and process of science.
- c. Demonstrate the ability to use scientific methodologies.
- d. Examine quantitative approaches to study natural phenomena.

### **Student Learning Outcomes:**

#### ***Inquiry & Analysis***

Select or Develop a Design Process

- a. Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline.

Analyze and Interpret Evidence

- a. Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus.
- b. Utilize multiple representations to interpret the data.

Draw Conclusions

- a. State a conclusion based on findings.

#### ***Quantitative Literacy***

Interpret Information

- a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).

Represent Information

- a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

### **Course Format/Organization:**

1. Course information will be posted on Canvas (<http://canvas.colostate.edu>). You will need to check well in advance of each class for updates, lecture material, new reading material, quiz and exam information, etc. We highly recommend developing a daily habit of checking Canvas for updates and announcements and keeping a copy of your syllabus handy. We would also encourage you to set Canvas to alert you to due dates and new information postings. Please make sure you forward @rams email to the email you check regularly, as we will send out updates and reminders through Canvas that will go to the email registered with CSU.
2. Please send messages to your GTA's or instructor's email addresses posted above, **not through Canvas** as this is not as reliable for effective communications and/or attachments.
3. Complete assignments and quizzes in the allotted time. Late assignments (of any kind) or quizzes will not be accepted unless you have medical or Case Management documentation for having missed class or an assignment due date. To whatever extent you are comfortable, let us know if something is going on in your lives that is affecting your ability to be successful in class. Please come talk to Jasmine or I sooner rather than later so we can discuss options and/or resources to best assist you.

4. It is your responsibility to keep up with weekly lectures, in- and out-of-class assignments, exam dates, quizzes, and readings. Deadlines will be posted on Canvas and in your syllabus. Weekly updates, lecture content, and recorded lectures will be posted each week in the weekly module of Canvas. Lecture powerpoints, recorded lectures, your notes, readings, and the posted vocabulary/terms list will then serve as the study guides for exams.
5. **Please work with CSU's Student Disability Center ( <https://disabilitycenter.colostate.edu/> ) regarding any approved accommodations you may need and let the instructor know (the SDC should provide a letter of accommodations for your instructors) as soon as possible so we can work on assisting you as effectively as possible.**

**Course Grading:**

**Deadlines, assignments, tracking your grades in Canvas, and your overall performance are your responsibility.** Make sure you understand all of the expectations outlined below, especially deadlines for checking on why a grade may not have appeared in Canvas, how your grade is attained, etc. **Consideration of missing quizzes, exams, and assignments after the allotted time identified below will not be permitted.**

**There will be a total of 1000 points available for this course. The breakdown is as follows:**

1. Three unit exams – drop the lowest test score	300 pts.
2. Cumulative/Comprehensive Final	200 pts.
3. Quizzes (include questions from weekly readings and weekly lectures)	200 pts.
4. In-class Discussions and Reflections	200 pts.
5. Life History Assignment	<u>100 pts.</u>
<b>TOTAL available</b>	<b>1000 pts.</b>

NOTE: Final letter grades will be based on the following:

A+	100 %	to 96.67%
A	< 96.67 %	to 93.33%
A-	< 93.33 %	to 90.0%
B+	< 90.0 %	to 86.67%
B	< 86.67 %	to 83.33%
B-	< 83.33 %	to 80.0%
C+	< 80.0 %	to 76.67%
C	< 76.67 %	to 70.0%
D	< 70.0 %	to 60.0%
F	< 60.0 %	to 0.0%

**Exams:**

300 points of your total 1000 points will be based on the two best scores of your three unit exams – as we will drop the lowest grade or if you miss an exam, that will be the test grade you drop. These exams will cover all class material including videos and guest lecturers, reading material, terminology, and assignments. In general, exams will have some combination of true/false, multiple choice, and matching. **If you have questions, your grade was not posted in Canvas, or want to have an exam question re-evaluated, you must make your request within one week of scores being posted.**

### **Final Cumulative/Comprehensive Final**

200 points of your total 1000 points will be based on a cumulative/comprehensive final exam. This exam will occur during finals week. Please see the course schedule at the end of this syllabus for the date and time. There are no make-up dates for the final and you will not be permitted to take the final early. If you have multiple final exams on the same day, please contact your instructor to discuss your options.

### **Quizzes:**

200 points of your total 1000 points will be based upon weekly quizzes. Quizzes will be administered through Canvas – deadlines for completing quizzes are listed in the syllabus and in Canvas. Quizzes will be posted each Thursday evening or Friday morning and will close the following Thursday evening by 11:59pm. Quizzes will have questions that refer to lecture, video, and reading materials covered each week. Quizzes will become unavailable in Canvas after the due date and time have passed. **If you run into issues while taking a quiz – please email your GTA or myself immediately so the time can be recorded when you were having an issue and then we will respond as soon as possible. If you have questions, a quiz grade is missing in Canvas, or want to have a quiz answer re-evaluated, you must make your request within 24 hours of the quiz closing.** Make sure you check Canvas directly after completing each quiz to make sure it has registered that you have successfully completed the quiz. **If you do not email Jasmine or myself immediately when you have an issue submitting a quiz, we will not be able to award credit for the quiz in order to be fair to all of those students who completed the quiz in the time allotted. Please do not wait until the last minute to take/submit your quizzes – if there is a problem (internet connectivity, wireless service), you may run out of time before the quiz closes and procrastination will not be an acceptable excuse for a missing quiz.**

### **In-class discussions, reflections and related assignments:**

200 points of your total 1000 points will be based on participation in, and contributions to, in-class activities and discussion groups. These activities and assignments represent your ability to synthesize, apply, and collaborate with your colleagues – critical skills for any field of study or discipline. We will have an in-class activity/discussion at least once a week (most weeks). For those students who are unable to attend a class in-person on a day when there is an in-class activity/discussion, you will need to upload (word document - .doc, .docx, or pdf) **both** your in-class assignment responses **AND** notes you take from reviewing the recorded lecture that you missed to Canvas within one week of the lecture recording being posted to Canvas. If you turn in the notes and in-class assignment responses more than a week after the class where the assignment was assigned, you will not be able to receive credit unless you have Case Management or medical documentation. **If your grade for a given assignment does not appear in Canvas within two weeks, please check in with your GTA after class to determine why your grade is missing. No considerations will be made after these time periods.**

### **Life History Assignment:**

100 points of your total 1000 points will be based on your Life History assignment. The due date is posted on the syllabus calendar and in Life History Canvas module. Information about this assignment will be presented in class and posted on Canvas. Information will include the assignment outline, an example, and citation requirements. The Life History assignment is due online in Canvas on the due date listed. Submitted files must be either Microsoft Word or PDF files. Microsoft Office is available free of charge to CSU students: <http://www.acns.colostate.edu/O365>. Note that your submitted assignment will be reviewed by a plagiarism check program in Canvas. **Plagiarized Life History assignments will receive a zero and may be reported to the University's Student Conduct Services. Late Life History assignments will not be accepted. Any questions or concerns you have about your Life History grade must be discussed with the instructor or GTA within one week of grades being released.**

### **Helpful Hints for Success:**

Attend class and/or watch lectures each week, ask questions, complete the readings, take notes throughout lectures, re-write your lecture notes, and make sure you keep up on assignment and exam due dates. On average, you should be studying at least 6hrs/wk and more right before exams for a 3-credit class. If you are struggling or not doing well in class – email the Instructor or your Graduate Teaching Assistant to make an appointment – please do not wait until the last week of class to try and address struggles you may be having as this is too late!

### **Academic Integrity and Professionalism:**

Professionalism and honoring of CSU's Principles of Community (see below) are expected throughout this course. Your responses to questions, interaction/communications/emails with classmates, guest speakers, or the instructor and GTA should be professional and respectful. This includes electronic etiquette such as using salutations (not "Hey!") when you send an email, signing your emails, and using respectful discourse in discussions whether online or in class. Disrespectful discourse will not be accepted and will result in being asked to leave. Note that professionalism also includes being responsible for keeping track of due dates, tracking your grades and confirming that they are showing up correctly in Canvas, and turning assignments in on time and in the appropriate format as outlined above.

This course will adhere to the [Academic Standards and Policies](#) of the [Colorado State University General Catalog](#) and the [Student Conduct Code](#). Cheating and plagiarism will not be tolerated in class. If found cheating, you will either automatically receive a failing grade for the class, or at a minimum, violations will result in a grading penalty and a report to the *Office of Conflict Resolution and Student Conduct Services* which can result in other University action. See the [Students' Rights](#) and [Students' Responsibilities](#) sections of the [Colorado State University General Catalog](#) for more information. Distractive behaviors such as talking to classmates, reading or watching materials that are not a part of the current class, texting, phone calls, inappropriate discussion posts, and regularly coming to class late or leaving early are not acceptable. **Students engaged in such activities will be asked to leave and repeat offenses may lead to a failing grade in the course. Please invest in creating a respectful and professional learning environment for everyone.**

### **Colorado State University's Principles of Community:**

The Principles of Community support the Colorado State University mission and vision of access, research, teaching, service, and engagement. A collaborative and vibrant community is a foundation for learning, critical inquiry, and discovery. Therefore, each member of the CSU community has a responsibility to uphold these principles when engaging with one another and acting on behalf of the University.

**INCLUSION:** We create and nurture inclusive environments and welcome, value, and affirm all members of our community, including their various identities, skills, ideas, talents, and contributions.

**INTEGRITY:** We are accountable for our actions and will act ethically and honestly in all our interactions.

**RESPECT:** We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

**SERVICE:** We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

**SOCIAL JUSTICE:** We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

## FW104 CLASS SCHEDULE

(Changes are may occur throughout the semester– check Canvas and lecture slides frequently for continued updates!)

Week	Month	Day	Subject – Check CANVAS Regularly	Assignments/Quizzes/Readings/Exams
1	AUG	22	Introductions, Overview, and Terminology	<b>Readings:</b> Course description, Syllabus, and review CANVAS set up (Quiz 1 content)
	AUG	24	Wildlife Values and Principles	<b>Quiz 1 opens</b>
2	AUG	29	Biology and Evolution Review	<b>Readings:</b> scientific method video(s), mule deer populations, cutthroat trout genetics
	AUG	31	Populations	<b>Quiz 1 closes and Quiz 2 opens</b>
3	SEPT	5	Basic Ecology Part I	<b>Readings:</b> biogeochemical cycles video, insect evolution/ecology
	SEPT	7	Basic Ecology Part II	<b>Quiz 2 closes and Quiz 3 opens</b>
4	SEPT	12	Catch up, Exam I Prep	<b>Study for Exam I, no new readings this week</b>
	SEPT	14	<b>Exam I</b>	<b>No Quiz this week - Quiz 3 will close next Thursday</b>
5	SEPT	19	Exam I feedback, Introduction of Life History, and Case Study	<b>Readings:</b> passenger pigeon, eradication of an ecosystem engineer, and National Parks, and review posted information regarding your Life History Assignment
	SEPT	21	Changing Times – Wildlife Realities	<b>Quiz 3 closes and Quiz 4 opens</b>
6	SEPT	26	Wildlife Categorization and Management	<b>Readings:</b> citizen science, smartphone naturalists, Conservation Detection Dogs
	SEPT	28	Wildlife Data Collection and Management Techniques	<b>Quiz 4 closes and Quiz 5 opens</b>
7	OCT	3	Fisheries Data Collection and Management Techniques	<b>Readings:</b> ESA basics, aquaculture, Supreme Court Ruling/EPA, CO Fishery Facts
	OCT	5	Endangered Species Act and other Legislation	<b>Quiz 5 closes and Quiz 6 opens</b>
8	OCT	10	Catch up and Exam II review	<b>No new readings or quiz this week – study for Exam II</b>
	OCT	12	<b>Exam II</b>	<b>No Quiz this week, Quiz 6 will close next Thursday</b> <b>Remember that your Life History Assignment is due next Thursday, October 19<sup>th</sup></b>
9	OCT	17	Exam feedback/Case Study	<b>Readings:</b> Colorado’s ecological systems, ecosystem management
	OCT	19	Ecological Systems, Ecosystem Management, and Systems Thinking	<b>Quiz 6 closes and Quiz 7 opens</b> <b>Life History Assignment DUE!</b>
10	OCT	24	Disturbance and Succession	<b>Readings:</b> fire disturbance, climate action, weather extremes and climate change
	OCT	26	Climate Change	<b>Quiz 7 closes and Quiz 8 opens</b>
11	OCT	31	Conservation of Less Popular Species (Herptiles and Insects)	<b>Readings:</b> alien vs. native species and extinctions, insect underrepresentation, Feral Swine
	NOV	2	Feral, Introduced, and Invasive Species	<b>Quiz 8 closes and Quiz 9 opens</b>
12	NOV	7	Catch up, Exam III Review	<b>No new readings or quiz this week – please attend exam review sessions and study for Exam III</b>
	NOV	9	<b>Exam III</b>	<b>No quiz this week, Quiz 9 will close next Thursday</b>

13	NOV	14	Exam Feedback/Case Study	<b>Readings:</b> marine wilderness
	NOV	16	Marine Conservation	<b>Quiz 9 closes and Quiz 10 opens</b>
14	NOV	21	FALL BREAK	<b>RELAX!</b>
	NOV	23	FALL BREAK	<b>ENJOY!</b>
15	NOV	28	Urban Ecology and Conservation	<b>Readings:</b> urban conservation, The nature gap and environmental justice, new environmental justice tool
	NOV	30	Environmental Ethics	<b>Quiz 10 closes and Quiz 11 (optional/extra credit) opens</b>
16	DEC	5	Conservation Complexities, Partners, and Involvement	No new readings this week!
	DEC	7	TBD – closing thoughts	<b>Optional Quiz 11 closes</b>
<b>FINALS WEEK!</b>	<b>DEC</b>	<b>13</b>	<b>FINAL EXAM – 6:20pm – 8:20pm</b>	Regular room – Johnson Hall 222

**NOTE:** Readings and quizzes will be posted via CANVAS. Additional readings and quizzes may be posted throughout the semester. Check CANVAS regularly for updates, new readings, materials, etc.!

***Please invest in creating a respectful and professional learning environment for everyone.***