Rocky Mountain Wildlife Course Summer 2025

Instructor: Dr. Savannah Troy, savannahrtroy@gmail.com

Class meets in front of RMBL visitor's center at times listed in schedule

Course description:

This course will explore two key themes: 1) how naturalist skills contribute towards the creation of high-quality ecological science; and 2) the historical and ongoing stewardship context of lands in and around RMBL. We will explore the life history, ecology, and conservation of vertebrates in the Rocky Mountains with a focus on species interactions and biodiversity responses to a changing world. Students will have the opportunity to shadow professionals including land managers and the expert scientists at RMBL; will learn how to survey and monitor wildlife populations; record quality ecological data; leverage natural history collections; and communicate scientific results.

Course Credits: This course is 2 credit hours and is included as an option in the RMBL Summer Research Experience/Education Program. Please visit this page for details- Course Credits – Rocky Mountain Biological Laboratory (rmbl.org)

Learning objectives:

- Develop competency in naturalist skills for montane and alpine wildlife in the Colorado Rocky Mountains
- Learn a variety of field techniques used in the study of wildlife ecology
- Learn to read scientific literature and understand the scientific method as it applies to ecological inquiry

Expectations:

This course strives to be an inclusive and respectful learning environment. The instructional team for this course values the diversity of backgrounds in our community including identities of race, disability, ethnicity, socio-economic status, religion, gender identity or sexual orientation. We expect both students and instructors to engage with one another respectfully and mindfully, and if there are any concerns to this point, you are encouraged to reach out to Dr. Troy to discuss how to resolve them. Further, this course affirms all gender identities. There will be an **optional** survey administered at the beginning of the class asking that you provide the name and pronouns that you use. This information is how your instructional team will refer to you throughout the semester unless you request a change.

Students are expected to come to class prepared, including by reading assigned materials and being ready/willing to participate in group discussions. Students are expected to behave respectfully and be engaged when guest speakers/scientists speak to the class. Students will be given advance notice of any special preparations needed for a class meeting including (but not limited to): packing a sack lunch, preparing for hiking or other physical activities, and potentially overnight camping. Your instructor will always have a first aid kit on hand and students are **not** expected to complete physical activities outside their ability or comfort level. Please communicate any concerns regarding outdoor activities with Dr. Troy at the beginning of the class so that everyone is able to participate safely and securely in learning exercises.

Grading scheme:

Participation and Preparation	Percent of grade
Attendance	*15*
Paper discussions participation	*5*
Paper summaries	*5*
Guest speaker preparation	*10*
Assignments	
Natural observations journal	*20*
Birdsong quiz	*12.5*
Mammal specimen ID quiz	*12.5*
Final reflection assignment	*20*
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90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, 59 and below = F.

Class schedule and required equipment.

Dr. Troy will communicate with the class using a group chat and/or email thread. Please come to class prepared by having read any assigned documents and bringing supplies. Assigned documents will be available for download in the class google drive, which Dr. Troy will share with students via email. **Every class day,** you are expected to come with:

- Field notebook (any kind of journal with at least 30 pages is fine)
- Pencil or pen
- Water
- Hat and/or sunscreen

If any additional supplies are required for a given class day, Dr. Troy will give students advance notice using the email thread/group chat.

Schedule- subject to change

Date & Time	Activities	Readings/assignments
June 9 & 10 (all day)	Student program orientation: follow RMBL main scheduling	
June 11 (all day)	Student-mentor day: follow RMBL main scheduling	
June 12 (1-5pm)	Introduction & scientific method lesson Mammal ID with museum specimens	Daily journal entry
June 13 (6-7:30am)	Birding morning	Daily journal entry
June 16 (6-7:30am)	Shadow a Scientist: small mammal trapping with Dr. Rosemary Smith	Read paper by guest speaker Prepare questions for guest speaker

		Daily journal entry
June 17 (9-4:30pm)	Sampling design lesson Camera trap study setup	Daily journal entry
June 19 (7:30-11am)	Shadow a Scientist: Yellow-bellied Marmots with Dr. Dan Blumstein and team	Read paper by guest speaker Prepare questions for guest speaker Daily journal entry
June 20 (7:30am-12pm)	Field ornithology techniques Species interactions lesson	Daily journal entry
June 21 (6:30pm-11pm)	Nocturnal ecology and Gunnison Valley Observatory field trip	Daily journal entry
June 24 (7:30-11am)	Wildlife tracking	Daily journal entry
June 25 (9-5pm)	Check camera traps and start data analysis	Daily journal entry
June 26 (8-5pm)	Colorado Parks and Wildlife field trip	Read paper by guest speaker Prepare questions for guest speaker Daily journal entry
June 27 (6:30-7am)	Bird ID quiz	Bird ID quiz
June 28 (6am-12pm)	Gothic Breeding Bird Survey	Daily journal entry
July 1 (7:45-11am)	Shadow a Scientist: Hummingbirds with Dr. David Inouye	Read paper by guest speaker Prepare questions for guest speaker Daily journal entry
July 2 (3-4pm)	Mammal ID quiz	Mammal ID quiz
July 3 (9-5pm)	Pull camera traps, complete data analysis	Daily journal entry
July 7 (7:30-4pm)	Shadow a Scientist: Mexican Cut field trip with Drs Hamish Grieg and Howard Whiteman	Daily journal entry
July 8 (3-5pm)	Course conclusions	Final reflection assignment

Blue days are those when you should plan to pack a sack lunch. All others, we will be back at the dining hall for regular mealtimes.