

Flora of the Mountains
University of Colorado Mountain Research Station
Field Course
July 6th – July 18th, 2026



Instructor

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They/Them/Theirs
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This edition of the syllabus was last updated on the January 15th, 2026, and is subject to change, update, or revision at any time. This syllabus is not a legal contract; it is a document that clarifies and guides our roles in this learning community.

Overview

This field course will serve as taxonomic survey of the vascular plants of Colorado, with emphasis on the angiosperms distributed from the plains to the high alpine. The primary components of this course include lectures, discussions, and field excursions. Field exclusion will serve to provide students with the opportunity practice plant identification in the field and vegetation monitoring techniques. This class is recommended for students interested in plants, the outdoors, place-based knowledge, taxonomy. Additionally, this class will give you highly desired skills for seasonal field technician positions. [Knowing plants is critical for natural scientists!](#)

Learning Goals

This course has been created and modified in a way to develop a range of skills that will serve not only in advancing your knowledge of the field of plant taxonomy but also contribute to your overall professional development. These skills include:

1. Become familiar with a local flora: species diversity, biogeographical patterns, rarity, natural history, and ethnobotany
2. Learn skills of identifying organisms, using keys and manuals – for use anywhere in the World!
3. Develop and answer scientific questions related to plant diversity and distributions.
4. Integrate diverse forms of knowledge and dismantle western/settler, cisnormative, patriarchal perspectives in ecology and botany

5. Collaborate with people of diverse backgrounds and experiences toward shared goals.
6. Communicate verbally and in your writing for brevity, clarity, and scientific persuasion.

Grading and Policies:

Species List: 15%

Plant Talk: 10%

Field Notebook Checks: 10%

Final Field Notebook Write Up: 5%

Participation and Respect: 20%

Identification Quizzes: 20%

Capstone Project: 20%

- **Species List:** You will create a running list of all plants identified throughout the entire course, including genus, species and family. Botanical illustrations are required for roughly a quarter of your observations.
- **Plant Talk:** At the beginning of the course, you will be assigned one plant family to present to the class. Your presentation must include an overview of key characteristics of this plant family and will focus on the characteristics of one Colorado species that belongs to this family.
- **Field Notebook:** You will all receive a Rite in the Rain field notebook where you will keep detailed notes on plant diversity 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.
- **Final Field Notebook 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 plant biodiversity with elevation, and other observations. This write-up must include an additional 150-200 words reflecting on your field skills and how they have progressed.
- **Participation and Respect:** 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
- **Identification Quizzes:** This is a hands-on identification-based course. There will be daily ID quizzes based on the plants that we learned on previous days. You will be expected to properly identify pictures and/or life specimens. Expect 15-20 plants a day (common name, scientific name, and family)
- **Capstone Project:** Details coming soon but will involve working with vegetation data collected at Niwot Ridge in conjunction with data collected during the field course.

Class Materials: Two books will be immensely helpful in your navigation of this course, listed below. It is highly recommended you acquire these to maximize your experience in the course. These will serve as useful tools for your future in ecology, vegetation sciences, taxonomy, and ethnobotany. There will be some copies available at the MRS.

1. Ackerfield, J. **Flora of Colorado**. 2nd Edition (2022, ISBN 978-1889878898). BRIT Press, Botanical Research Institute of Texas, Fort Worth, TX. *Or, ok to use 1st Edition (2015)*.
2. Kindscher, K. **Edible Wild Plants of the Prairie: An Ethnobotanical Guide**. 2nd Revised & Expanded Edition (2024, ISBN 978-0700637034). University Press of Kansas, Lawrence, KS.

In addition to these books, I recommend you download some phone apps that will help you with you in your quest to identify the flora of the mountains:

1. Seek by iNaturalist: https://www.inaturalist.org/pages/seek_app
2. Colorado Wildflowers: <http://www.highcountryapps.com/ColoradoWildflowers.aspx>
3. Colorado Wetlands: <https://itunes.apple.com/us/app/colorado-wetlands-mobile-app/id1077511822?mt=8>

*For other great apps that help with field identification, see this Boulder County List: <https://bcna.org/apps/>

Honor Code

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.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

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,

Accommodation for Religious Obligations

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in a timely manner. In this class, your attendance grade is based on participating in in-class activities. The lowest 8% of these will be dropped to allow for fluidity related to needing to miss class. See the [campus policy regarding religious observances](#) for full details.

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 Behavior

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](#).

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

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.

Use of Generative AI

While generative AI is a powerful tool and can be of great use in terms of problem-solving during coding or looking for synthesized knowledge about a topic, it is not a substitute for original thought. Students are not allowed to use AI (like Chat GPT) to generate written responses. If the instructor believes you have used AI, you will be given an opportunity to redo the assignment for partial credit.

EBIO 4100 Class Schedule - Summer 2026

WEEK	DATE	DAY	TOPICS	DAILY BREAKDOWN	
				AM	PM
1	July 6 th	Monday	1. Nomenclature and Classification 2. Seed-Free Vascular Plants 3. Gymnosperms	Lecture + Discussion	Field – MRS/Work Time
	July 7 th	Tuesday	1. Colorado Vegetation 2. Ethnobotany 3. Flower and Fruit Morphology 4. Capstone Overview	Lecture + Discussion + Botanical Illustration	Field – MRS
	July 8 th	Wednesday	1. Water Lilies and Buttercups 2. Spring Beauties and Sundews 3. Currents and Raspberries 4. Elms, Mulberries, and Legumes	Lecture + Discussion + Presentations	Field – Wetlands
	July 9 th	Thursday	Field – Sub-Alpine		
	July 10 th	Friday	1. Violets, Aspens, and Gourds 2. Oaks, Birches, Evening Primroses 3. Mustards and Mallows 4. Blueberries and Gentians	Lecture + Discussion	Field – Wetlands
	July 11 th	Saturday	Field – High Alpine		
2	July 12 th	Sunday	DAY OFF		
	July 13 th	Monday	1. Mints and Snapdragons 2. Honeysuckles and Carrots 3. Bellflowers and Asters	Lecture + Discussion	Field
	July 14 th	Tuesday	Field – Foothills and Ponderosa Savannas		
	July 15 th	Wednesday	1. Lilies and Orchids 2. Spiderworts 3. Grasses, sedges, rushes, oh my!	Lecture + Discussion	Field
	July 16 th	Thursday	Field - Grasslands		
	July 17 th	Friday	1. Capstone Work Time	Work Time	Field – DBG
	July 18 th	Saturday	1. Invasive Flora of CO 2. Rare and Endemic Flora of CO 3. Capstone Presentations	Lecture + Discussion + Presentations	Field