Instructor: Erica Sokoloski (she/her/hers)
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Office hours:
I do not have scheduled office hours, but I am happy to meet with you using Microsoft Teams as needed. For questions that do not need a meeting, please email me. I check email several times a day and will answer as messages are received (24 hours maximum). Please note that I am in the Eastern time zone, so questions received late in the day will be answered the following day. I want you to be successful in this class. If you are struggling, please let me know!

Course Description and Objectives:
• Learn basic plant identification terminology and how to identify plants using a dichotomous key and a basic dissecting microscope.
• Learn to identify basic and modified vegetative and reproductive plant parts, and how they are used in identification.
• Learn the characteristics of plant families most often encountered in the United States, with emphasis on the angiosperms (flowering plants). The Colorado flora will be used as a starting point, but the skills learned in this class will be useful no matter where in the world you end up living and working.
• Learn correct botanical nomenclature, including family, genus, specific epithet, authority, infraspecific rank, infraspecific epithet, and infraspecific authority.
• Collect, identify, and properly label your own plant specimens in a collection. This involves learning how to responsibly collect plants, and how to preserve, identify, and mount them to create herbarium quality specimens.

Required Text (even if you are taking this class from another state):
• There is an eBook version of this text available from the publisher ($24.95, link on Canvas “Start Here” page). It takes some practice to use a dichotomous key in a PDF, but if you prefer eBooks, and are okay with lots of navigation within the book, it’s an option.
• Note: there is also a "Western Slope" version of this book. Make sure you don't accidentally purchase that one, as it will not work for your assignments or collection identifications.

Optional Text:

Additional Required Supplies (for labs and plant collection):
• BZ223 Supply Kit (~$68, CSU Bookstore, can be shipped if needed), which includes 6 sheets of herbarium paper, 6” ruler, dissection kit, 10x magnifier, and a digital USB microscope.
• Cardboard, newspaper, plastic/paper/reusable bags, small glass jars/containers, isopropyl/rubbing alcohol, school glue, wax paper (see collection instructions for specifics).
Accommodations:
If you need accommodations to make this class accessible for you, please email me as soon as possible to discuss your needs and/or send me a letter from the Student Disability Center.

Colorado State University Land Acknowledgement:
Colorado State University acknowledges, with respect, that the land we are on today is the traditional and ancestral homelands of the Arapaho, Cheyenne, and Ute Nations and peoples.

Grading:
Grading is as follows (89.5% or higher - A, 79.5% or higher - B, 69.5% or higher - C, 59.5% or higher - D, below 59.5% - F). All exams are untimed and are open book/open note. All assignments and exams are due by 11:59 pm on the due date. Late work will be accepted up to two days (48 hours) after the due date, with a 10% penalty for each day. Work will not be accepted later than that, unless you have made arrangements with me prior to the original due date.

This course will adhere to the CSU Academic Integrity/Misconduct policy as found in the Student Conduct Code. Submitting any work fully or partially generated by AI (ChatGPT etc) constitutes Academic Misconduct and Plagiarism under the Student Conduct Code.

Course Mode and Meeting Times:
This course is online and asynchronous. The course material is organized into modules, with one module per week. Lecture and lab material for each week will be posted the Friday before. Exams and quizzes will be posted 3 days before they are due (generally posted Tues and due Fri). All lab assignments are due by Sun 11:59 pm each week. Within each week, there is a lot of flexibility in when you watch lectures and complete assignments, but I recommend sticking to a schedule as if this was an in-person class, so that things don’t get too overwhelming. Make sure you are budgeting time wisely and keeping up with your plant collection. Please check that your Canvas account is set to receive assignment comment notifications, because this is where I leave feedback.

Point Distribution:
Exams (3, 100 points each): 300 points
Vegetative terminology quiz: 30 points
Reproductive terminology quiz: 30 points
Lab activities (varying points): 350 points
Plant collection: 250 points
Total points available: 960
**Schedule** (subject to minor revision):

| Module 1 | Lecture: Class Introduction  
Overview of Plant Collection Project  
Vegetative Terminology Part 1  
Pre-Course Survey (5 pts)  
Course Introductions Discussion (5 pts)  
Plant Collection Guidelines Quiz (5 pts)  
| Lab: Get your book(s) and supply kit |

| Module 2 | Lecture: Vegetative Terminology Parts 2 and 3  
Overview of Plant Groups  
Taxonomy and Botanical Nomenclature  
| Lab: Vegetative Terminology Activity (20 pts)  
How to collect and press plants  
How to Take Field Notes (10 pts)  
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| Module 3 | Lecture: Reproductive Terminology Parts 1, 2, and 3  
| Lab: Set up your USB microscope  
Vegetative Terminology Quiz (30 pts) (posted 9/5, due 9/8)  
Reproductive Terminology Activity (20 pts)  
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| Module 4 | Lecture: Reproductive Terminology Part 4  
Fruit Terminology  
Floral Formulas  
Monocots vs Dicots  
| Lab: Floral Formula Practice (10 pts)  
Dichotomous Key and Reproductive Terminology Practice (25 pts)  
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| Module 5 | Lecture: History and Ethics of Plant Collecting  
The Importance of Herbaria  
Families Ranunculaceae, Papaveraceae, Brassicaceae, Saxifragaceae  
| Lab: Explore Online Herbarium Collections (25 pts)  
Reproductive Terminology Quiz (30 pts) (posted 9/19, due 9/22)  
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| Module 6 | Lecture: The Importance of Native Plants  
Families Grossulariaceae, Crassulaceae, Cucurbitaceae, Solanaceae, Convolvulaceae  
| Lab: How to use Colorado Flora (25 pts)  
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| Module 7 | Lecture: Exam 1 (100 pts) (covers modules 2-6, posted 10/3, due 10/6)  
| Lab: Practice Flower Dissection (25 pts)  
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| Module 8 | Lecture: Families Euphorbiaceae, Fabaceae, Rosaceae, Malvaceae  
| Lab: ID Practice #1 (25 pts)  
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| Module 9 | Lecture: The Alpine Tundra  
Families Lamiaeae, Plantaginaceae, Cactaceae, Boraginaceae, Apiaceae  
| Lab: ID Practice #2 (25 pts)  
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| Module 10 | Lecture: Families Apocynaceae, Onagraceae, Ericaceae, Violaceae, Asteraceae  
| Lab: Practice Flower Dissection 2 (25 pts)  
Mounting plant specimens demonstration  
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| Module 11 | Lecture: Exam 2 (100 pts) (covers modules 8-10, posted 10/31, due 11/3)  
| Lab: Plant Collection Label Practice (25 pts)  
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| Module 12 | Lecture: Families Amaranthaceae, Polygonaceae, Monocots part 1: Liliaceae and relatives, Agavaceae, Orchidaceae  
| Lab: ID Practice #3 (25 pts)  
Plant collection (all or part) due Sun 11/12 if you want the opportunity to correct identifications  
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| Module 13 | Lecture: Noxious Weeds  
| Monocots part 2: Areaceae, Juncaceae, Cyperaceae, Poaceae, Typhaceae |
| Lab: | **ID Practice #4 (25 pts)** |
| Week of 11/20 | University closed - have a nice break! |

| Module 14 | Lecture: Flowering tree families: Salicaceae, Betulaceae, Fagaceae, Sapindaceae, Oleaceae, Elaeagnaceae, Anacardiaceae |
| Lab: | **ID Practice #5 (25 pts)** |
| **Plant Collection (and revisions, if applicable) due 12/3 (250 pts)** |
| Week of 11/27 | |

| Module 15 | Lecture: Seedless Vascular Plants, Gymnosperms (families Pinaceae, Cupressaceae, Ephedraceae) |
| Lab: | **Optional: Plant Families in Your Home (bonus 15 pts)** |
| Week of 12/4 | |

| Module 16 | **Exam 3 (100 pts)** (not cumulative - covers modules 12-15, posted 12/11, due 12/14) |
| Week of 12/11 (finals week) | |