

**WINTER ECOLOGY**  
**EBIO 4100 & 5100, Section 570**  
**Spring 2023— Syllabus**

Dr. Timothy Kittel & Derek Sweeney, Instructors

### **I. Course Description**

Winter Field Ecology is a survey of physical and biological processes and their interaction in wintertime snow-covered environments. Through classwork, fieldwork, and individual projects, we will focus on the dynamics of high-elevation ecosystems in the western US. Based out of the CU Mountain Research Station's year-round Science Lodge, we will spend 6 weekends exploring the ecology of upper montane, subalpine, and alpine landscapes in winter. We will study plant, vertebrate, and microbial adaptations to winter and the dynamics of terrestrial, aquatic, and snowpack environments. We will consider how winter processes play a role in "growing season" dynamics and are important factors in conservation and management of natural resources of the Rocky Mountains.

### **II. Course Objectives**

Students will gain a basic understanding of physical and ecological dynamics of temperate-latitude mountain systems during winter and how what happens in winter affects processes at other times of the year. Students will develop an appreciation of what these environments are like during the cold and snow season and how organisms are adapted (physiologically or behaviorally) to these conditions. Lastly, students will recognize how changing wintertime regional conditions (e.g., climate change, atmospheric deposition) are changing these systems.

### **III. Outside Assignments**

Outside work will consist of:

- Weekly assigned readings
- Individual research projects – independent field research conducted outside of course meetings

### **IV. Evaluation**

Grades will be based on:

- Field exercises 30%
- Exams 30%
- Individual project 30%
- Participation 10%

Final grades will be assigned as follows:

A 90-100%, B 80-89%, C 70-79%, D 50-69%, F <50%

### **VI. Course Schedule**

Start date: 18 January 2023

End date: 25 February 2023

Times:

Weds – 5:00-6:00p

Sat & Sun – 8:30a-1:00p, 1:30-5:00p

Sat – 7:30-8.30p

6 Weekends (Mountain Research Station): Sat/Sun 21/22 Jan – Sat 25 Feb 2023 (last weekend Sat. only)

6 Wednesday lectures (main campus): 18 Jan – 22 Feb 2023

The schedule for previous year course was held (2023 schedule is TBD) and additional course details are online at: <http://instaar.colorado.edu/~kittel/WinterEcology.html>

## University & Course Policies –

### ***General Course Policy on Absences***

Missing a class can be detrimental to your grade, this is especially so given that there are only 15 class days for a 3-credit course. Each day contributes directly both to your participation grade and any graded activity for the day and cannot be excused or made up unless you have a documented legitimate reason (such as those noted below). Each day works out to be enough points to change your letter grade. In addition, there is an indirect impact from missing skills or other information related to take-home assignments or individual projects covered on any given day. - 7/2018

### ***Classroom Behavior***

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail 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, political affiliation or political philosophy. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#) - 12/2020

### ***Accommodation for Disabilities or Temporary medical condition or injury***

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](mailto:dsinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website. - 12/2020

### ***Preferred Student Names and Pronouns***

CU Boulder recognizes that students' legal information doesn't always align with how you 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 your legal name. - 12/2020

In the case that these records do not reflect your preferences, instructors will gladly honor your request to address you by an alternate name or gender pronouns. Please advise your professor (the Faculty Director) of this preference early in the semester so that we may make appropriate changes to our records. -

12/2018,4/2021

### ***Academic Integrity / 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 policy may include: plagiarism, 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. All incidents of academic misconduct will be reported to the Honor Code ([honor@colorado.edu](mailto:honor@colorado.edu)); 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#). - 12/2020

Students should note that their work may be evaluated with a plagiarism detection service; and that this service retains a copy of the submitted work for future comparisons. - 12/2018

### ***Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation***

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating/domestic violence), stalking, or protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and graduate instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources. - 12/2020

### ***Religious Holidays***

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. See the [campus policy regarding religious observances](#) for full details. - 12/2020

In this class, it is your responsibility to make such requests to your professor at the start of the course. - 7/2018