



## F310: Forest and Rangeland Ecogeography

### COURSE SYLLABUS

Department of Forest and

Rangeland Stewardship

Warner College of Natural Resources

	Instructor	Teaching Assistant
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Office Hours:	TBD	TBD
Website:		
Term:	Fall 2021	
Lecture Meeting Days:	Most Tuesdays	
Lecture Meeting Hours:	10-11:40 am	
Lab Meeting Days:	Tuesday or Thursday	
Lab Meeting Hours:	Section Dependent	
Lab Location:	NR 254	

### Course Overview

Forest and Rangeland Ecogeography is the study of how ecosystems vary spatially across the landscape. Students will learn the mechanisms that drive the variation in ecosystem structure and function that we see across the landscape. Students will be exposed to some examples of different ecosystem types that are represented in the United States and Canada. We will use the concept of an 'ecoregion' to guide our discussion and examples. Finally, students will also learn to identify some of the most common species in the different ecosystems we discuss.

### Course Goals and Objectives

By the end of the course, successful students will know the key characteristics and distribution of approximately 15 forested and rangeland ecosystems in the United States and Canada. They will also be familiar with the climatic variations associated with these ecosystems. Successful students will also know and understand the important

### Course Prerequisites

At this time there are not course prerequisites required for this course other than an interest in learning about plants. We will be using Microsoft Excel for data analysis, and so you will need to ensure you have access to Excel by the beginning of the semester. You can get a free copy of Excel through the university.

## **Communication**

When you send an email about course content, please email both myself and Scott (your TA) and make sure to start your subject with "FRS310 Fall 2021 –". If you have an issue other than content you need to discuss you can email either myself or Scott individually as you see fit, but please still adhere to the subject guidelines I just mentioned. In most circumstances, we will respond to your question within 48 hours, but there are times we will be travelling or working in the field and so it may be a bit longer, but we'll do our best to get back to you ASAP.

## **CSU's Land Acknowledgment Statement**

*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. This was also a site of trade, gathering, and healing for numerous other Native tribes. We recognize the Indigenous peoples as original stewards of this land and all the relatives within it. As these words of acknowledgment are spoken and heard, the ties Nations have to their traditional homelands are renewed and reaffirmed.*

*CSU is founded as a land-grant institution, and we accept that our mission must encompass access to education and inclusion. And, significantly, that our founding came at a dire cost to Native Nations and peoples whose land this University was built upon. This acknowledgment is the education and inclusion we must practice in recognizing our institutional history, responsibility, and commitment.*

<https://landacknowledgment.colostate.edu>

## **This is an Inclusive Classroom**

*Inclusive teaching involves deliberately cultivating a learning environment where all students are treated equitably, have equitable access to learning, and feel valued and supported in their learning. Such teaching attends to social identities and seeks to change the ways systemic inequities shape dynamics in teaching-learning spaces, affect individuals' experiences of those spaces, and influence course and curriculum design.*

– Adapted from <http://crlt.umich.edu/node/90467>

## **CSU's Principles of Community**

- **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.

<https://diversity.colostate.edu/resources/principles-of-community/>

**Important information for students: All students are expected and required to report any COVID-19 symptoms to the university immediately, as well as exposures or positive tests from a non-CSU testing location.**

If you suspect you have symptoms, or if you know you have been exposed to a positive person or have tested positive for COVID, you are required to fill out the COVID Reporter (<https://covid.colostate.edu/reporter>). If you know or believe you have been exposed, including living with someone known to be COVID positive, or are symptomatic, it is important for the health of yourself and others that you complete the online COVID Reporter. Do not ask your instructor to report for you. If you do not have internet access to fill out the online COVID-19 Reporter, please call (970) 491-4600. You may also report concerns in your academic or living spaces regarding COVID exposures through the COVID Reporter. You will not be penalized in any way for reporting. When you complete the COVID Reporter for any reason, the CSU Public Health office is notified. Once notified, that office will contact you and, depending upon each situation, will conduct contact tracing, initiate any necessary public health requirements and notify you if you need to take any steps.

For the latest information about the University's COVID resources and information, please visit the **CSU COVID-19 site:** <https://covid.colostate.edu/>.

### **Required Texts and Materials**

No required textbook for this course but there will have required readings that will be posted on Canvas. There will be a short quizzes associated with the assigned readings.

### **Supplementary (Optional) Texts and Materials**

\*see comment above.

### **Library & Research Help**

The CSU Libraries Help Desk provides basic research and technical assistance either in person at Morgan Library or by phone at 970-491-1841. Virtual assistance is also available via the Libraries' Ask Us chat and email services (<http://lib.colostate.edu/help/ask-us>). Jocelyn Boice is the librarian supporting the Forest and Rangeland Stewardship Department and this course. Contact her for in-depth assistance at: [jocelyn.boice@colostate.edu](mailto:jocelyn.boice@colostate.edu).

### **Important Dates to Remember**

In general, the dates and assignments listed on Canvas will remain as they are currently listed but, depending on how the semester progresses, I may change the dates or assignments. I will, of course, keep you updated on any changes I make. Other important dates are listed below:

#### **Useful websites with important dates to remember**

<https://registrar.colostate.edu/registration-dates/>  
<https://www.online.colostate.edu/faqs/important-dates.dot>

### **Course Schedule and/or Schedule of Assignments**

Below are a list of the primary assignments for the course. There will be other, smaller, assignments that will be assigned as needed during the course of the semester, most of these additional assignments will be in-class activities.

- Climate Terminology. You will research and report on the definition of important terminology to describe climate and climate patterns.
- Introduction to analyzing long-term climate data. You will download and analyze a small data set to look for long-term changes in climate patterns. This assignment will be done in Microsoft Excel to give you more experience handling data and creating figures.
- Advanced analysis of long-term climate data. This assignment will build on the previous assignment and will require you to create climate diagrams used to characterize different regions.

- *Leaf Mass Area lab*. You will learn about using Leaf Mass Area (LMA) to quantify differences among tree growth strategies and will then measure this leaf trait yourself on several species. This data will then be combined with data you collect from scientific literature to investigate the pattern of LMA across different plant functional groups.
- *Specific Root Length lab*. Specific root length is a means of quantifying the root system of plants, you will obtain roots from plants growing in our greenhouse and quantify Specific Root Length on two species and compare the results and provide a mechanistic explanation.
- *Leaf Size/Color/Angle lab* - You will quantify the impact of leaf size, color, and orientation on leaf temperature and boundary layer conductance.
- *Decomposition* - You will measure the impact of leaf quality, soil temperature, and soil moisture on the decomposition rate of tree leaves.

### **Basis for Final Grade**

Assessment	Percent of Final Grade
Exams	~39%
Lecture Quizzes/Activities	~17%
Assignments	~36%
Reading Quizzes	~8%
	~100%

General grading guideline:

GRADE	RANGE
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

### **Course Policies**

#### **Late Work Policy**

There are no make-ups for in-class writing, quizzes, the midterm, or the final exam. Assignments turned in late will be assessed a penalty: a 5% reduction if it is one day late, or a 10% reduction for 2-7 days late. Assignments will not be accepted if overdue by more than seven days.

#### **Grades of "Incomplete"**

Per university policy, an instructor may assign temporary grade of Incomplete to a student who demonstrates that he or she could not complete the requirements of the course due to circumstances beyond the student's control and not reasonably foreseeable. A student must be passing a course at the time that an Incomplete is requested unless the instructor determines that there are extenuating circumstances to assign an Incomplete to a student who is not passing the course. When an instructor assigns an Incomplete, he or she shall specify in writing using the Department Incomplete Grade Form the requirements the student shall fulfill to complete the course as well as the reasons for granting an Incomplete when the student is not passing the course. The instructor shall retain a copy of this statement in his or her grade records and provide copies to the student and

the department head or his or her designee. (Section I.6 of the *Academic Faculty and Administrative Professional Manual*). For more information: <https://registrar.colostate.edu/incomplete-grades/>

### **Disability Access**

Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact the Student Disability Center before requesting accommodations from the professor. The Student Disability Center (SDC; <https://disabilitycenter.colostate.edu/>) is located in room 121 of The Institute for Learning and Teaching (TILT) building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations.

### **Attendance Policy**

I do not take attendance for this class. However, there are in-class activities we will do that are worth a small amount of points. If you miss one of these activities, you will NOT be able to make up these points. Missing one or two of these activities will not have a large impact on your grade. But missing a lot of these activities does add up and impact your final grade in the course.

Students who will miss class due to participation in University-sanctioned extracurricular/co-curricular activities must inform their instructors prior to the anticipated absence and take the initiative to make up missed work in a timely fashion. Instructors must make reasonable efforts to enable students to make up work which must be accomplished under the instructor's supervision (e.g., examinations, laboratories). In the event of a conflict in regard to this policy, individuals may appeal using established University procedures.

For the purposes of this regulation, University-sanctioned activities include competitions, events and professional meetings in which students are officially representing the institution. Appropriate sanctioned activities include:

- a. Intercollegiate athletics;
- b. Collegiate club sports and competitions;
- c. Conferences and workshops recognized by the University not related to academics;
- d. Commitments on behalf of the University (ASCSU, band, etc.); and
- e. Professional activities recognized by the University related to academics.
- f. Department heads or their designated representatives must approve sanctioned professional and departmental activities. Other sanctioned activities must be approved by the appropriate program director on record with the Division of Student Affairs offices or the Department of Athletics.

### **Religious Accommodation**

Participation in official University activities, e.g., an out-of-town athletic event, or special religious observances may provide a legitimate reason for an excused absence. The student is responsible for discussing this with the instructor at the beginning of the semester.

### **Final Exam Policy**

Final examination week is part of the regular semester. Student attendance shall be consistent with University policy. If a student has three or more final examinations (not classes) scheduled for the same day or if conflicts of examination times occur, the student may negotiate a time change with the instructors involved. If the parties involved cannot find a mutually agreeable time, the Registrar's Office indicates which courses must be changed. **Note:** The Registrar's Office must be notified at least one week prior to Final Examination Week to allow instructors time to make appropriate accommodations. It is the student's responsibility to initiate negotiations. <http://www.registrar.colostate.edu/final-exams>

### **Professionalism Policy**

Per university policy and classroom etiquette; mobile phones, iPods, etc. **must be silenced** during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned and may suffer a reduction in their final class grade.

When emailing the instructor or TA, please include your full name, CSU ID, and the course number in your email.

### **Academic Integrity**

The Department of Forest and Rangeland Stewardship takes academic integrity seriously. At minimum, academic integrity means that no one will use another's work as their own. You can find an overview and CSU's definition of plagiarism on the CSU Writing Center website found here:

<https://writing.colostate.edu/guides/page.cfm?pageid=311&guideid=17>.

If you plagiarize in your work you could lose credit for the plagiarized work, fail the assignment, or fail the course. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU General Catalog (under "Academic Integrity/Misconduct": <http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/>)

This course will adhere to the CSU Academic Integrity [Policies and Guiding Principles](#) as found in the General Catalog and the [Student Conduct Code](#).

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course.

Further information about Academic Integrity is available at CSU's Practicing Academic Integrity:

<https://tilt.colostate.edu/Integrity/StudentResources>

### **Title IX Information**

CSU's Student Sexual Harassment and Violence policy, following national guidance from the Office of Civil Rights, requires that faculty follow CSU policy as a "mandatory reporter" of any personal disclosure of sexual harassment, abuse, and/or violence related experiences or incidents shared with the faculty member in person, via email, and/or in classroom papers or homework exercises. These disclosures include but are not limited to reports of personal relational abuse, relational/domestic violence, and stalking. While faculty are often able to help students locate appropriate channels of assistance on campus (e.g., see the CSU Health Network link below), disclosure by the student to the faculty member requires that the faculty member inform appropriate CSU channels to help ensure that the student's safety and welfare is being addressed, even if the student requests that the disclosure not be shared.

For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at: <http://www.health.colostate.edu/>. And, the Sexual Assault Victim Assistance Team is a confidential resource for students that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. Some helpful websites:

<https://safety.colostate.edu/sexual-assault-information/>

<https://wgac.colostate.edu/support/sexual-assault/>

### **Non-Discrimination Statement**

Colorado State University does not discriminate on the basis of race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy. The University complies with the Civil Rights Act of 1964, as amended, related Executive Orders 11246 and 11375, Title IX of the Education Amendments Act of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, the Age Discrimination in Employment Act of 1967, as amended, The Pregnancy Discrimination Act of 1978, Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, the ADA Amendments Act of 2008, the Genetic Information Nondiscrimination Act of 2008, and all civil rights laws of the State of Colorado.

Accordingly, equal opportunity of employment and admission shall be extended to all persons. The University shall promote equal opportunity and treatment in employment through a positive and continuing affirmative action program for ethnic minorities, women, persons with disabilities, and veterans. The Office of Equal Opportunity is located in 101 Student Services. Source: <http://oeo.colostate.edu/non-discrimination-statement>