

College of the Redwoods



Course Information

Semester & Year: Spring 2025

Course ID & Section #: FNR-54-E7701-2025S

Instructor's name: Valerie Elder

Day/Time of required meetings: Lecture: Tuesday and Thursday 10:05-11:10 AM, Lab:
Tuesday & Thursday's 11:30-2:40 PM

Location: AT 127

Course units: 3



Instructor Contact Information

Office location or *Online: Zoom or In-person at AT 134

Office hours:

M-Th 9:00-10:00 AM in AT 134 or via Zoom by appointment

Office phone number: 707-476-4328

Email address: valerie-elder@redwoods.edu (<mailto:valerie-elder@redwoods.edu>)

Note: Pronto is usually the fastest way to get ahold of me.



Catalog Description

An introduction to the various techniques used in the measurement and inventory of natural resources. Topics include map reading and drawing, land navigation, tree measurement, sampling methods, and data analysis. Students will work with a variety of biometric devices in field settings and gain practical experience in their application and use.



Course Student Learning Outcomes

1. Explain the principles of land descriptions and develop and use functional maps of forest stands that include those land descriptions.
2. Explain common measurement techniques used in natural resource inventories and their strengths and limitations.
3. Use critical thinking to derive appropriate solutions to natural resource inventory problems both in and out of class.
4. Lab specific outcome: Conduct field inventories, analyze field data, and develop useful reports



Prerequisites / Co-requisites / Recommended Preparation

Students will be required to have access to adequate computer and internet access and familiarity with basic computer skills. Examples of this include:

- navigate a class in Canvas
- receive, respond and regularly check) messages sent via the Pronto app
- receive, respond and regularly check) messages sent to your CR email account
- receive, respond and regularly check) announcements sent in Canvas
- download and upload files in Canvas assignments


- use a phone or digital camera (or webcam) to upload “selfies” to your online lab notebook
- use a word processor program (such as Microsoft Word or Google Docs)
- use a webcam or a phone to record and upload videos in Canvas
- use Zoom, email and canvas discussion boards to communicate with peers and instructor




Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center](https://www.redwoods.edu/services/sass/light.php) 

(<https://www.redwoods.edu/services/sass/light.php>), counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Student Accessibility Support Services \(SASS\)](https://www.redwoods.edu/services/sass/index.php) 

(<https://www.redwoods.edu/services/sass/index.php>). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation:

sass@redwoods.edu (<mailto:sass@redwoods.edu>).

Eureka: 707-476-4280, Student Services building, first floor SS113

Del Norte: 707-465-2353, main building, near the Library



Student Support Services

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

The following online resources are available to support your success as a student:

- [CR-Online \(https://www.redwoods.edu/online\)](https://www.redwoods.edu/online) (Comprehensive information for online students)
- [Library Articles & Databases \(https://redwoods.libguides.com/az.php\)](https://redwoods.libguides.com/az.php)
- [Canvas help and tutorials ↗ \(https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD\)](https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD)
(<https://www.redwoods.edu/Portals/72/Documents/Students/CR-OnlineStudentHandbook.pdf>)
- [Online Tutoring Resources ↗ \(https://redwoods.libguides.com/Tutoring/Online\)](https://redwoods.libguides.com/Tutoring/Online)

To learn more about the resources available to you, click on a title bar below, or click the down arrow to expand them all.

Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821



Community College Student Health and Wellness

If you are in distress or are with someone at risk right now, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) or TEXT 741-741

Timely Care

When you're feeling under the weather physically or distressed mentally, you can find the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. Visit [TimelyCARE ↗ \(https://www.timelycare.com/redwoods\)](https://www.timelycare.com/redwoods).

Mental Health Counseling

Students should text, email, or fax Shawna Bell directly for scheduling and/or services.

Contact info

Text: 707-496-2856

Email: shawnabmft@gmail.com (<mailto:shawnabmft@gmail.com>)

Fax: 707-237-2318 (voicemail can be left via fax)

Wellness Central

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Wellness Central](https://cvc.edu/wellness/) [↗](https://cvc.edu/wellness/) (<https://cvc.edu/wellness/>).

Counseling

[Counseling & Advising](https://www.redwoods.edu/services/counseling/index.php) [↗](https://www.redwoods.edu/services/counseling/index.php) (<https://www.redwoods.edu/services/counseling/index.php>) can assist students in need of academic advising and professional counseling services. Eureka Campus-Visit the Welcome Center in the lower level of the student services building Monday –Friday 9am – 4pm (during the semester, summer hours may vary).

Eureka Downtown Site- 525 D St Eureka Phone: 707-476-4500 Email: ace@redwoods.edu

Basic Needs Center

[The Basic Needs Center](https://www.redwoods.edu/services/bnc/index.php) [↗](https://www.redwoods.edu/services/bnc/index.php) (<https://www.redwoods.edu/services/bnc/index.php>) provides for the health and safety of students by providing access to healthy food, financial resources, and referrals to safe and secure housing. Students can also [submit a request for services and information](https://cm.maxient.com/reportingform.php?Redwoods&layout_id=7) [↗](https://cm.maxient.com/reportingform.php?Redwoods&layout_id=7) (https://cm.maxient.com/reportingform.php?Redwoods&layout_id=7) online.

Contact info

Phone: 707-476-4153

Email: the-grove@redwoods.edu

Learning Resource Center

Learning Resource Center includes the following resources for students:

- **[Library Services](https://www.redwoods.edu/library)** (<https://www.redwoods.edu/library>) to promote information literacy and provide organized information resources.
- **[Multicultural & Equity Center](https://www.redwoods.edu/services/mec/index.php)**. [↗](https://www.redwoods.edu/services/mec/index.php) (<https://www.redwoods.edu/services/mec/index.php>)
- **[Academic Support Center](https://www.redwoods.edu/services/asc/index.php)**. [↗](https://www.redwoods.edu/services/asc/index.php) (<https://www.redwoods.edu/services/asc/index.php>) – offers tutoring and test proctoring for CR students.
- **[Student Tech Help](https://www.redwoods.edu/support.php)**. [↗](https://www.redwoods.edu/support.php) (<https://www.redwoods.edu/support.php>) – provides students with assistance around a variety of tech problems.

Extended Opportunity Programs & Services (EOPS) ▲

[Extended Opportunity Programs & Services \(EOPS\)](https://www.redwoods.edu/services/eops/index.php) [↗](https://www.redwoods.edu/services/eops/index.php)

<https://www.redwoods.edu/services/eops/index.php> provides services to eligible income disadvantaged students including: textbook awards, grants, career academic and personal counseling, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!

TRiO Student Success Program ▲

The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in **[Eureka](https://www.redwoods.edu/services/trio.php)**. [↗](https://www.redwoods.edu/services/trio.php) (<https://www.redwoods.edu/services/trio.php>) or in **[Del Norte](https://www.redwoods.edu/services/trio.php)**. [↗](https://www.redwoods.edu/services/trio.php) (<https://www.redwoods.edu/services/trio.php>)

Veterans Resource Center ▲

The **[Veteran's Resource Center](https://www.redwoods.edu/services/vrc.php)**. [↗](https://www.redwoods.edu/services/vrc.php) (<https://www.redwoods.edu/services/vrc.php>) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.

CalWORKS ▲

[CalWORKs](https://www.redwoods.edu/services/calworks/index.php) [↗](https://www.redwoods.edu/services/calworks/index.php) (<https://www.redwoods.edu/services/calworks/index.php>) – California Work Opportunity & Responsibility to Kids (CalWORKs). Provides supportive services to student

parents with children under the age of 18, who are receiving cash assistance (TANF benefits), to become self-sufficient. Services include: transportation assistance, basic student supplies, tutoring, priority registration, laptop and calculator loans, career, academic, and personal counseling, and more!



Evaluation & Grading Policy

Assignments are listed in Canvas modules and are **subject to change**. Changes will be announced in class and posted in Canvas – due dates in Canvas should be considered the most current. Additional assignment due dates will be announced when the assignments are given. Most assignments will be turned in via canvas. You are responsible for knowing when your work is due. I do not recommend relying on the canvas "to-do" section as it can be unreliable for ongoing assignments.

Late Work: Assignments in canvas have a **due date**- when you are expected to turn it in and a **turn-in date** the last possible date you can submit an assignment. If you cannot turn in an assignment by the due date and want to submit by the turn-in date you must email me **before** the assignment is due and describe your plan for submitting the assignment by the turn-in date. Otherwise, 10% per day may be deducted from your assignment grade. After using two turn-in date grace periods late assignments will be deducted 10% per day. Additionally, no late work will be accepted after May 1st.

Drop Policy: You may be dropped from the class if you miss 3 or more weeks of class participation, discussion, assignments or labs prior to the end of week 10. If you stop participating in class after week 10 you will be graded for participation and may receive an F.

Assignments will be graded typically within one week of submission, depending on instructor workload.

CR Grading Scale: A: 94-100, A-: 90-<94, B+: 87-<90, B: 84-<87, B-: 80-<84, C+: 77-<80, C: 70-<77, D: 60-<70, F: <60

Grades:

Grades for this semester will be based on the following assignment categories:

| | |
|-----------------|-----|
| Module quizzes | 20% |
| Problem sets | 20% |
| Lab assignments | 35% |

Field project 15%

Final Exam 10%

The Final Exam is comprehensive and will be held during Finals week.



Fake Student Policy

Fraudulent enrollments are on the rise. To ensure that real students can get seats in the class, no shows will be dropped in the middle of the first week of classes. Also, if you are suspected of being a bot, you will be dropped from the class. If you have been dropped but are a real student, please contact your instructor right away to be reinstated in the class.



Spring 2025 Dates




| Date | To Remember |
|-------------|---|
| January 17 | Last day to register for classes (day before the first class meeting) |
| January 18 | Classes begin |
| January 20 | Martin Luther King's Birthday (All Campuses Closed) |
| January 24 | Last day to add a class |
| January 31 | Last Day to Drop & Receive a Refund |
| February 2 | Last Day to Drop w/out a "W" |
| February 3 | Census Date (20% of class) |
| February 14 | Lincoln's Birthday (All Campuses Closed) |
| February 17 | President's Day (All Campuses Closed) |
| March 6 | Last Day to Petition to Graduate & Petition for Certificate |
| March 17-22 | Spring Break (No Classes) |
| March 28 | Last Day for Student/Faculty Withdrawal |
| March 31 | Cesar Chavez Day (District Wide Closure) |
| May 10-16 | Final Examinations |
| May 16 | Last Day to File P/NP Option |
| May 16 | Semester Ends |

| Date | To Remember |
|--------|---|
| May 23 | Grades Due |
| May 30 | Grades Available for Transcript Release (approximate) |

Important Spring 2025 Academic Dates



Academic Dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](https://go.boarddocs.com/ca/redwoods/Board.nsf/goto?open&id=C9RVCG801790) ) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](https://www.redwoods.edu/academics/catalog.php) ) and on the [College of the Redwoods website](https://www.redwoods.edu/) .






AI Use Class Policy

Recent advancements in generative artificial intelligence (AI) have made large language models such as ChatGPT and Google's Bard widely available. We use some of this technology in our analysis in class. However, overuse of these tools in this class can undermine your learning and curtail the development of your critical and creative thinking skills. In addition, AI outputs are often unreliable and frequently subject to bias. For these reasons, the policy of this class is that **AI cannot be used at any point in the completion of class assignments unless otherwise specified**, including discussion posts. Any or all of your assignment submissions and discussion posts may be screened for AI detection software, but the real penalty for AI misuse is that you will miss out on an opportunity to learn. In Forestry and Natural Resources, we so often reference on the ground conditions to ensure environmental protections- so critical thinking is essential!



Disruptive Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#) ) (<https://go.boarddocs.com/ca/redwoods/Board.nsf/Public?open&id=policies>) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) ) (<https://www.redwoods.edu/academics/catalog.php>) and on the [College of the Redwoods website](#) ) (<https://www.redwoods.edu/>).







Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.



DEIA+A Commitment Statement

Each of us is responsible for creating and maintaining inclusive environments. Inclusive environments require us to work to identify, examine, and limit the ways our implicit social biases impact our actions. Learning can happen when diversity and individual differences are understood, respected, appreciated & recognized as a source of strength, benefit and resource. Incidents of bias, discrimination, and microaggressions do occur, whether intentional or unintentional. These things contribute to creating unwelcoming environments for individuals and groups at our college. CR encourages anyone who experiences or observes

environments at our college that become unfair or hostile on the basis of peoples' identities to speak out for justice and support. Speaking out can take place within the moment of the incident or after the incident has passed. Anyone can share these experiences with a trusted CR faculty/staff/administrator, or by using the following CR resources: [Unlawful Discrimination Complaint Form](https://www.redwoods.edu/Students/Student-Complaint-Process.html#UDC)  (<https://www.redwoods.edu/Students/Student-Complaint-Process.html#UDC>); [Non-Academic Complaint](https://www.redwoods.edu/Students/Student-Complaint-Process.html#NAC)  (<https://www.redwoods.edu/Students/Student-Complaint-Process.html#NAC>); [Title IX](https://www.redwoods.edu/student-services/Home/Title-IX.html)  (<https://www.redwoods.edu/student-services/Home/Title-IX.html>); [Grade Change](https://www.redwoods.edu/Students/Student-Complaint-Process.html#GCC)  (<https://www.redwoods.edu/Students/Student-Complaint-Process.html#GCC>)



Course Information, Outline and Textbook

Field Equipment: You will need appropriate field clothing and traction footwear (closed-toe boots), and **rain gear**. Hard hats will be required as well although the College will supply them for each student if you do not have your own. Additional equipment (e.g. cruising vest, ranger compass, etc.) that will be useful this semester will be covered in the first lab.

Text: *Forest Measurements* 6th Edition by Burkhardt, Avery, and Bullock (ISBN 978-1-4786-3618-2)

Course Objectives: We will learn how to measure trees, estimate biomass, and how to analyze the data to come up with meaningful estimates of natural resources. This will include using spreadsheets and basic statistics. Preliminary coursework in mathematics (statistics) will be helpful but we'll go over the basic math involved. We will also learn field navigation techniques, map reading, sampling strategies and point location and timber cruising. And we'll discuss how to apply these inventory techniques to other kinds of natural resources (i.e. birds, herbaceous plants, etc..). This course is built around lectures and discussions combined with field labs to reinforce concepts. The field labs will be held mostly on campus though a few off-campus field trips may be included.

Topics include:

- Land navigation, boundary descriptions, distance, direction and elevation
- Map sketching, reading, and interpretation
- Area measurements and GPS
- Tree measurements and Log Scaling


- Basic statistics of field data
- Fixed-area plots
- Point sampling
- Cover estimation
- Stand descriptions


Final Field Project: During the last 3-4 weeks of the semester each student will participate in conducting an inventory of an assigned stand from planning to analysis and reporting. This entails working a small group (2-3) in the field on campus and starts with a sketch map of the assigned stand, area calculations, pre-cruise plots, sample design, plot measurements, data analysis and finally report writing. This assignment is 15% of the overall grade.



Canvas Information



Log into Canvas at [My CR Portal](https://myapps.microsoft.com/Redwoods.edu/)  [\(https://myapps.microsoft.com/Redwoods.edu/\)](https://myapps.microsoft.com/Redwoods.edu/)

[\(https://myapps.microsoft.com/Redwoods.edu/\)](https://myapps.microsoft.com/Redwoods.edu/) For help with Canvas visit the [Canvas Help Page](https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD)  [c_role=student&c_accountId=001A000000KMmj5IAD](https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD)

If you cannot log into Canvas or access the CR Portal please submit a [help ticket](https://help.redwoods.edu/support/home)  [. \(https://help.redwoods.edu/support/home\)](https://help.redwoods.edu/support/home).


Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](https://redwoods.instructure.com/courses/6781) [\(https://redwoods.instructure.com/courses/6781\)](https://redwoods.instructure.com/courses/6781)


Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](https://www.redwoods.edu/services/admissions/index.php)  [\(https://www.redwoods.edu/services/admissions/index.php\)](https://www.redwoods.edu/services/admissions/index.php) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. This does not change your legal name in our records. See the [Student Information Update form](https://archive.redwoods.edu/Portals/28/A.R.Forms.Docs/Miscellaneous/Student%20Information%20Updateb9bc.pdf?ver=2022-03-30-165900-813)  [. \(https://archive.redwoods.edu/Portals/28/A.R.Forms.Docs/Miscellaneous/Student%20Information%20Updateb9bc.pdf?ver=2022-03-30-165900-813\)](https://archive.redwoods.edu/Portals/28/A.R.Forms.Docs/Miscellaneous/Student%20Information%20Updateb9bc.pdf?ver=2022-03-30-165900-813).



Emergency Procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into [WebAdvisor](https://webadvisor.redwoods.edu)  (<https://webadvisor.redwoods.edu>) and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu (<mailto:security@redwoods.edu>) if you have any questions. For more information see the [Redwoods Public Safety Page](https://www.redwoods.edu/publicsafety)  (<https://www.redwoods.edu/publicsafety>).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

To learn more about campus-specific Emergency Procedures, click on a title bar below, or click the down arrow to expand them all.



Eureka Campus Emergency Procedures

Please review the [campus emergency map](https://www.redwoods.edu/locations/EurekaEmergencyMap_S24.pdf) 

(https://www.redwoods.edu/locations/EurekaEmergencyMap_S24.pdf) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [CR Police Department Public Safety](https://www.redwoods.edu/about/security/index.php) 

(<https://www.redwoods.edu/about/security/index.php>) It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action
2. Dial 911, to notify local agency support such as law enforcement or fire services.

3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and / or has been deemed safe by the person in command.