



Syllabus for Forest Health and Protection

Course Information

Semester & Year: Spring 2024

Course ID & Section #: FNR-60-E6183

Instructor's name: Madeleine Lopez

Location: AT 127

Day/Time of required meetings: Tuesday & Thursday 3:00- 4:25 pm

Course units: 3.00

Instructor Contact Information

Office location: AT 123 or *Online: ZOOM*

Office hours: Tues. 4:25 – 5:30 pm, Fri. 2:10 – 3:30 pm, by appointment

Phone number: (707) 476-4131

Email address: Madeleine-lopez@redwoods.edu

Required Materials

Textbook

Author: Edmonds, Agee, and Gara

Title: Forest Health and Protection | Date 2010 | ISBN 978-1-57766-652-3

Notebook: Write in the Rain or other waterproof notebook for field trips.

*Modules on Canvas will provide additional resources such as videos, supplemental reading and web resources.

Recommended Materials

Field trips will require “gear” to keep you comfortable in an outdoor learning environment. This will include hiking boots with ankle protection, raincoat, and warm layers.

Catalog Description

A survey of forest health theory and application in local and regional ecosystems. Discussion topics include pest identification and pest complexes, disease symptoms and recognition, identification of abiotic disorders, and prevention strategies to protect forest values. Field trips will showcase local forest health problems and protection techniques.

***Note:** Weekend field trips required; the College does not provide transportation. These dates will be announced during the semester. *If you cannot attend these trips a mandatory writing assignment will be used as a replacement.*

Course Student Learning Outcomes

1. Articulate a meaningful definition of forest health.
2. Describe the tools, techniques, and organizations involved in forest protection.
3. Discuss the life history characteristics of pests and diseases.
4. Lab specific: Identify common forest health threats in different forest types.

Prerequisites/co-requisites/ recommended preparation

Advisory

FNR51 - Dendrology: the Identification and Study Of Woody Plants

**Students will struggle with identifying pest species if they are unable to correctly identify the host tree species.*

FNR1 - Introduction to Forestry and Natural Resources

**Students may struggle to succeed without a basic understanding of the context of forestry and natural resources management with regards to forest health issues.*

About the Course

Quizzes & Exams: The quizzes are designed to help you stay on top of the readings for the course, and help you study for the exams. We will have multiple 'low stakes quizzes' (LSQ) delivered this semester as an opportunity to practice potential exam material in a low stakes environment that encourages learning and studying. We will cover these quiz answers during class time for immediate feedback. Please be sure to attend class regularly as these cannot be made up. Your lowest quiz score will be dropped. Exams are cumulative and cover lecture, lab, and reading content.

Pest/Disease Presentation: You will be required to prepare a 2-page fact sheet of a local pest/disease of your choosing and you will present this pest to the class via a 6-7 minute presentation. You will be required to include a PowerPoint to accompany this presentation. Please plan ahead as there will be no late submissions accepted for the final project.

Emails: Please reach out using your CR student email whenever you have questions, get stuck, or need to communicate with me directly. When sending an email, please be sure to **label the Subject line as "FNR 60 _additional info_"** to ensure your email gets flagged.

Expected workload: The expected workload for CR Courses is calculated at 3 hours per week for each unit in a standard 16-week course. For the combined lecture and lab, this amounts to nine hours per week. This may be more or less hours depending on your learning style and inevitable technical challenges with internet/software etc.

Course Schedule: Please see Canvas for schedule updates regarding field trips and other important dates. Dates are subject to change, especially in inclement weather.

***Disclaimer:** The specifics of this course syllabus can be changed at any time, and you will be responsible for abiding by any such changes. Significant changes to the syllabus will be communicated to you via Canvas announcements.

Evaluation & Grading Policy

Grading Scheme

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

Type	% Weight of total
Quizzes	15%
Exams	25%
Assignments and Activities	35%
Projects	20%
Professionalism/ participation	5%
Grand Total	100%

Exam Policy

It is required to be in attendance and take the exam on the scheduled date. Exams cannot be recreated particularly with fresh specimens, thus, missing the exam without an excused absence/medical note will result in a 0. The midterm exam must be completed within 1.5 hours. Failure to be aware of exam dates because of class absence does not constitute an excuse – any changes will be posted on Canvas. You may register directly with CR for alternate testing environments.

Late/missing work policy: Assignments and quizzes are to be completed and turned in by the date indicated. Please plan ahead, as late assignments will be penalized and lose 5% for each day they are late. Work submitted 10 or more days past the deadline will result in a 50% deduction. No late work will be accepted after 20 past the due date. If a serious and compelling issue should arise and prevent you from turning in the assignment on time (e.g. death in the family, hospitalization), please contact me in advance and we will work out an alternative plan. Deadline extensions may be granted in the event of excused absences. An excused absence means that you have a) notified me in advance and received confirmation from me that your request has been accepted or b) provided a written medical excuse. My goal is to help every student effectively learn and grow in this course, as such, I will remain open and flexible.

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.

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, bipolar disorder, and ADHD
- 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
- A learning disability (e.g., dyslexia, reading comprehension), intellectual disability, autism, or acquired brain injury
- Vision, hearing, or mobility challenges

Available services include extended test time, quiet testing environments, tutoring, counseling and advising, alternate formats of materials (e.g., audio books, E-texts), assistive technology, on-campus transportation, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Disability Services and Programs for Students \(DSPS\)](#). If you are unsure whether you qualify, please contact DSPS for a consultation: dsps@redwoods.edu.

- Eureka: 707-476-4280, Student Services Building, 1st floor
- Del Norte: 707-465-2324, Main Building, near the library
- Klamath-Trinity: 707-476-4280

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](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)
- [Online Tutoring Resources](#)

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

Admissions deadlines & enrollment policies

Spring 2024 Dates

January 12	Last day to register for classes (day before the first class meeting)
January 13	Classes begin
January 15	Martin Luther King, Jr.'s Birthday Holiday (District-wide closure)
January 19	Last day to add a class
January 26	Last day to drop without a "W" and receive a refund
January 29	Census Date (20% of class)
February 16	Lincoln's Birthday Holiday (District-wide closure)
February 19	President's Day Holiday (District-wide closure)
March 7	Last day to petition to graduate
March 29	Last day for student initiated withdrawal (62.5% of class)
March 29	Last day for faculty initiated withdrawal (62.5% of class)
March 11-16	Spring break (no classes)
April 1	District-wide closure (Cesar Chavez Day) .
May 4-10	Final Examinations
May 10	Last day to file for P/NP Option
May 10	Semester Ends
May 17	Grades due
May 24	Grades available

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](#)) 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](#) and on the [College of the Redwoods website](#).

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](#)) 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](#) and on the [College of the Redwoods website](#).

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.

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](#) 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](#). Please let me know your pronoun preference as well so I can be sure to respectfully address you in class!

Canvas Information

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at [My CR Portal](#)

For help logging in to Canvas, visit [My CR Portal](#).

For help with Canvas once you're logged in, click on the Help icon on the left menu.

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](#)

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 here](#)

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

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](#).

Counseling

[Counseling & Advising](#) can assist students in need of academic advising and professional counseling services. Visit the Welcome Center in the lower level of the student services building Monday –Friday 9am – 4pm (during the semester, summer hours may vary).

Basic Needs Center

[The Basic Needs Center](#) 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 submit a request for services and information [here](#).

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](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)
- [Academic Support Center](#) – offers tutoring and test proctoring for CR students.
- [Student Tech Help](#) – provides students with assistance around a variety of tech problems.

EOPS

[Extended Opportunity Programs & Services \(EOPS\)](#)[Links to an external site.](#) 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 Support Services Program provides eligible students with a variety of services including academic advising, career assessments, assistance with transfer, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#).

Veterans Resource Center

The [Veteran's Resource Center](#) 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 – 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!

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> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the [Redwoods Public Safety Page](#).

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.

Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) 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 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.

Course Outline and Objectives

Course Objectives

- Students should be able to define and use key terms and concepts related to forest health.
- Students should be able to recognize and describe the common tools and techniques for managing forest health problems.
- Students should be able to discuss the organizations and structures responsible for and the regulation of forest health problems.
- Students should be able to recognize common pests and diseases affecting regional forests and discuss management options.
- Students should be able to apply the concepts of Integrated Pest Management to maintain forest health.
- Students should be able to discuss the ecology of forest pests and the different forest types they occur in.

Course Outline

Concepts: What terms and ideas will students need to understand and be conversant with as they demonstrate course outcomes? Each concept should be numbered.

1. Forest health concepts and classifications.
 - A. Abiotic pests (environmental, mechanical, chemical, etc.).
 - B. Vascular plant pests (weeds, mistletoes, etc.).
 - C. Pests of fruits of forest trees (seed weevils, etc.).
 - D. Virus infections of forest trees.
 - E. Phytopathogens (fungi, bacteria, etc.).
 - F. Invertebrate pests (insects, arachnids, etc.).
 - G. Vertebrate pests (deer, bear, beaver, etc.).
 - H. Forest nursery pests.
2. Integrated pest management.

- A. Life history characteristics.
- B. Tree vigor and ecosystem health.
- C. Mechanical and chemical treatments.
- 3. Interactions in ecosystems.
 - A. Difference in forest types and forest pests.
 - B. Climate change impacts on forest health.
- 4. Pest complexes (including anthropogenic injuries on trees).
 - A. Additive and multiplicative impacts on multiple stresses.
 - B. Isolation and treatment of causes.
 - C. Cumulative effects.
- 5. Pest management strategies and decision-making.
 - A. Elements of costs, logistics, and environmental impact.
 - B. Limitations on tools and techniques in sensitive environments.
- 6. Pest management regulatory frameworks.
 - A. Federal rules and regulations.
 - B. Federal regulatory agencies.
 - C. State Agencies and rules.