



FOREST AND RANGELAND
STEWARDSHIP
COLORADO STATE UNIVERSITY

NR444 Fire Economics and Policy

Department of Forest and Rangeland Stewardship
Warner College of Natural Resources

Term: Fall 2021
Course Credits: 3
Lecture Hours: Tuesday and Thursday 4:00 - 6:30 P.M.
Course Dates: Begins August 23 through October 17.
Office Hours: Monday 3:00 - 4:00pm; Thursday 1:00 - 2:00pm

Instructor

Dr. Yu Wei Email: yu.wei@colostate.edu

Course Overview

This course introduces fire policy and economics. Economic theory is applied to the context of wildland fire risk mitigation and then integrated with ecosystem restoration. In this context, the course will also include financial analysis of forestry investments and the basics of benefit cost analysis.

Course Goals and Objectives

Upon completing this course, you will be able to:

1. Review and summarize several pieces of academic literature pertaining to fire economics and policy.
2. Develop an operational understanding of the basic model(s) of wildland fire risk mitigation.
3. Understand how to include the beneficial effects of wildland fire into the conceptual basis of fire economics.
4. Gain an exposure to common fire risk management practices.
5. Gain an exposure to the STARFire budgeting and planning system as an example of implementing fire economics including restoration and return on investment.
6. Demonstrate proficiency in financial analysis of forestry and natural resource investments.
7. Demonstrate proficiency in the basics of benefit cost analysis.

Course Prerequisites

While there are no prerequisites for this course, an introductory class in microeconomics is recommended. **The course relies heavily on materials used in undergraduate instruction including Microsoft Excel and Word. The financial analysis and benefit cost modules will rely on basic algebra including exponents.**

Covid

IMPORTANT COVID 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.

Required Texts and Materials (provided through canvas)

Rideout, Douglas, and Hayley Hesselin (2001) *Principles of Forest and Environmental Economics*. 2nd Ed. Fort Collins, CO. Resource and Environmental Management LLC. Four chapters of this text will be used, and those chapters are available in PDF under "Readings and More" in the appropriate modules. Other reading materials from current and classic scientific publications will be provided through Canvas.

Course Modules

The course consists of 7 modules. A Course Schedule is posted in your Canvas and provides the dates that items are due and the dates that homework and discussions are due.

Basis for Final Grade

Assessment	Percent of Final Grade
Homework/Problem Sets (7)	70%
Discussions (3)	30%
Total:	100%

Final Course Grade: 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; 0-59% = F

Grading Expectations

As a student enrolled in this course, **one of your responsibilities is to submit course work by the due dates listed in the Schedule. Homework will be due each Sunday Evening** (except for the first Sunday)!

Assessments of Learning

Homework

Starting in the second week, homework is due weekly (Sunday) for each of the 7 modules. The goal of these assignments will be to demonstrate your understanding of the required readings and practically apply microeconomic principles to the different forest management problems that are addressed by resource and environmental economists. You must submit your own work in your own writing.

Discussions

To be eligible for full credit in the discussion assignments, students should respond to the original question and then later respond to at least two classmates. Deadlines for the original post and the responses are provided in the Course Schedule. To ensure the integrity of discussions, you are not allowed to post all three responses on one day. The purpose of the discussions is to solicit feedback from others in the course in addition to responding to other students. Posting throughout the week enables you to have a richer experience. You should demonstrate quality posting based on the following thread criteria:

- Demonstration of having read the material by volunteering answers to questions and seeking clarification of points in the readings
- Asking questions that extend the thinking of the class
- Contribution of relevant examples that support and justify claims
- Sharing experiences when asked or when relevant
- Maintaining a positive attitude and professional courtesy
- Bringing unique thought, insight, and depth to the topic at hand
- Using proper grammar, spelling, punctuation, and citations where appropriate

***Note:** Late postings in threaded discussions will not be accepted for credit.

Course Policies

Late Work Policy

There are no make-ups for discussion posts, or homework/problem sets. Assignments submitted late may not be graded. If a student cannot avoid missing a deadline due to a sanctioned university or professional event or special religious observances, you are required to inform the instructor prior to the anticipated absence and take the initiative to make up missed work in a timely fashion. Medical issues will require documentation and prior approval.

Grades of "Incomplete"

Per university policy, an instructor may assign a 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*)

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 Resources for Disabled Students before requesting accommodations from the professor. [Resources for Disabled Students](#) is located in room 100 of the General Services Building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the instructor at the beginning of the semester to discuss needed accommodations.

Professionalism Policy

Part of this course relies on sharing opinions and sharing information. Therefore, it is of utmost importance to communicate with courtesy and professionalism. Professional courtesy includes respecting others' opinions, being courteous and respectful, and working together in the spirit of cooperation. Sexist, heterosexist, and racist language should not be used when communicating in the course. Discussions and assignments will be graded on quality and professionalism.

E-mail Procedure: All e-mail sent to the instructor for this course should contain the following in the subject line: Course Name and Number, Your Name, Short Description of your question. Please refrain from sending out emails to large groups of recipients as to be respectful of others. Sending e-mail that violates the rules mentioned above can result in disciplinary action taken by the school.

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>

System, Multimedia, and Software Requirements

Having trouble with the multimedia in this course? See the solutions below.

- Problems with opening PDFs?
 - Download [Adobe Reader](#).

NR 444: Fire Economics and Policy

- Canvas acting funny?
 - Review Canvas guide for [Supported Browsers](#).
- YouTube videos not playing?
 - Download [Flash Player](#).
- Videos not opening or playing on your Mac?
 - Download [Windows Media Components for QuickTime](#).
- Still having issues?
 - Call the **CSU Help Desk at 970-491-7276** or [Email Help Desk Support](#)

You may need access to Microsoft Word, PowerPoint, and/or Excel to complete assignments. If you do not have access to the Microsoft Office applications, you may use one of the following free resources that allow you to save your files with Microsoft Office file extensions (.doc, .docs, .ppt, .xls.):

- [Google Apps for CSU](#)—a free, outsourced communications suite endorsed by The University Technology Fee Advisory Board (UTFAB)
- [Open Office](#)—an open source productivity suite
- [Office 365](#)—the full version of Microsoft Office free of charge for CSU students.

The course requires a basic working knowledge of MS Office especially Word, Excel and PowerPoint.

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

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Source: <https://education.uiowa.edu/office-dean/policies/syllabus-checklist>

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/>

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>

Mental Health and Wellness

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services. Call Counseling Services at (970) 491-6053, and they will work together with you to find out which services are right for you. Visit <https://health.colostate.edu/about-counseling-services> to learn more and <https://health.colostate.edu/mental-health-resources/> for additional student mental health and well-being resources. If you are concerned about a friend or peer, use **Tell Someone** by calling (970) 491-1350 or visiting <https://supportandsafety.colostate.edu/tell-someone/> to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources. Rams Take Care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

Student Case Management

[Student case management](#) is available to help students with extenuating life circumstances and connect them with resources. In some cases, after you and I discuss your situation, I may request [verifiable documentation for class absences](#) from the SCM office if you request considerations for absences or missed coursework.