



**FOREST AND RANGELAND
STEWARDSHIP**
COLORADO STATE UNIVERSITY

F 581A3: MULTIPLE RESOURCES SILVICULTURE

COURSE SYLLABUS

Department of Forest and
Rangeland Stewardship
Warner College of Natural Resources

Instructor

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Office Hours:	I will respond to all emails within a 24-hour window. If you are on campus and would like to meet, please email to arrange a meeting time.

Term:	Fall 2017
Class Meeting:	Online
Course Credits:	4 Credit Hours

Course Overview

Multiple Resources Silviculture is designed to introduce you to the concepts and techniques of silviculture and their application to forest ecology in order to meet the wide range of desired conditions and resource objectives. This course will develop your knowledge of ecological applications directed at the management of forests with multiple considerations, including wildlife, recreation, forest health, and timber production. We will explore the biological history of forests and forest systems and assess their requirements to achieve the desired future conditions. We will discuss such topics as site requirements, landscape patterns and processes, silvicultural systems and their components, seed production and dissemination, forest regeneration, and tree mortality.

Multiple Resources Silviculture is designed to prepare you to assess forest conditions and prescribe treatments that will allow you to meet a landowner's objectives, whether it is USDA Forest Service, State Forest Service/Department of Natural Resources, industry, or private landowners. We'll discuss silvics, forest dynamics, intermediate stand treatments, reforestation principles, even-aged and uneven-aged silvicultural systems, and ecological restoration techniques. This course will develop your skills in forest ecological management and silvicultural prescription construction.

As your instructor of Multiple Resources Silviculture, I am committed to providing an open and ongoing dialog that encourages participation and facilitates learning. It is not my intent to create a one-way transfer of information, but rather an engaging, participant-driven session that stimulates

your thinking and rationale of forest management application while also allowing you to interact with your colleagues and gain insight from one another.

Multiple Resources Silviculture is structured to keep your professional needs in mind. Therefore, everything covered in this course can be directly applied to a number of professions in the field of forestry and even wildlife management. This course is intended to provide you the knowledge and tools needed to succeed during the remainder of your academic program, and further into future careers. The point is to build on key concepts and foundational material that we can then apply directly to management decisions and actions. How we manage our forests in the face of future uncertainties (e.g. climatic changes) will directly influence how our forests regenerate, grow, and perform in the future. This course is intended to develop your management 'toolbox' for all of the important considerations and challenges that they will face in a forestry career.

Course Goals and Objectives

- Students should be able to correctly define key silvicultural terms and be able to discuss forest management techniques with other professionals
- Students should have a clear understanding of important forest vegetation management practices and their use in multiple resource management
- Students should be able to enter into a forest setting and be able to accurately diagnose ecological problems and prescribe management to mitigate those issues
- Students will gain a strong foundation in forest stand development and the different stages of succession that will better inform their management choices
- Students should be able to correctly identify the three silvicultural systems and discuss how they are relevant in different forest settings and in unique contexts
- Students should be able to translate a landowner's objectives into a workable silvicultural prescription that can be understood by others in the profession
- Students must be willing to participate online and encourage their peers to learn and discuss the material as a group

Course Prerequisites

F 311 of LIFE 320 of NR 565 or NR 578 or at least one course in ecology Credit allowed for only one of the following: F 325, F 525, of F 581A3

Required Texts and Materials

Silviculture: Concepts and Applications, 3rd edition. Nyland. 2016.

Library & Research Help

The CSU Libraries Help Desk provides research and technical assistance either in person at Morgan Library or by phone at 970-491-1841. Jocelyn Boice is the librarian supporting this course. Contact her by email at jocelyn.boice@colostate.edu or by phone at 970-491-3882 to ask questions or set up an appointment for in-depth research help.

Important Dates to Remember

Please refer to canvas for all important dates and due dates.

Course Schedule and/or Schedule of Assignments

Please refer to canvas for the course schedule and list of assignments and final project description/instructions

Basis for Final Grade

Your grades will be based on a point system (see chart). You will earn your grade depending on how many points you are awarded throughout the semester.

<u>Assessment</u>	<u>Points</u>
Discussion board (every week)	5 points/week (70 points total)
3 quizzes (weeks 2,5,10)	20 points each (60 points total)
7 exercises (weeks 2,3,4,6,9,10,12)	10 points each (70 points total)
Prescription summary (week 7)	Grade included in final project
Final project(week 15)	100 points
Mid-term (week 8)	100 points
Final exam (week 16) –	100 points

Total of 500 Points

A – 500-450

B – 449-400

C – 399-350

D – 349-300

Below 300 is not passing

Course Policies

Late Work Policy

Late work may be submitted for a period of one week after the due date for 50% credit. Submissions that are more than one week late will not be accepted. Make up exams and quizzes **MUST** be approved and scheduled ahead of time. This policy may be relaxed at the discretion of the instructor given reasonable justification for the late work or missed exam/quiz (e.g. illness, family emergency).

Extra Credit Policy

Extra credit assignments may be offered at the discretion of the instructor.

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*]

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 (RDS; <http://rds.colostate.edu/home>) 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 professor at the beginning of the semester to discuss needed accommodations.

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.

Any student who has a conflict with the examination schedule must inform the instructor as soon as possible before the examination. If an agreement cannot be reached between the instructor and student as to the appropriateness of a make-up examination the student should appeal to the department head.

<http://www.registrar.colostate.edu/final-exams>

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. The CSU writing center defines plagiarism this way:

Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due."

Source: [Writing Guides: Understanding Plagiarism.

<http://writing.colostate.edu/guides/guide.cfm?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/> .)

Of course, academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes regular class attendance, careful consideration of all class

materials, and engagement with the class and your fellow students. 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, we will ask to you sign the CSU Honor Pledge as part of completing all of our major assignments. While you will not be required to sign the honor pledge, we will ask each of you to write and sign the following statement on your papers and exams:

"I have not given, received, or used any unauthorized assistance."

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. The web address is <http://www.wqac.colostate.edu/need-help-support>.

Source: <http://oeo.colostate.edu/title-ix-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>