



	Instructor	Instructor
Name:	Kathleen McIntyre	Thomas Timberlake
Office:	Forestry 131	NR 218
E-Mail:	Kat.McIntyre@colostate.edu	Thomas.Timberlake@colostate.edu
Office Hours:	T/Th 2-3 and by appointment	W – 1-2; Th 10-11 and by appointment
	Term:	Spring 2018
	Class Meeting Days:	T/Th
	Class Meeting Hours:	12:30-1:45
	Class Location:	Forestry 127
	Course Credits:	3

Course Overview

We hear a lot about sustainability, collaboration, resilience, and other concepts. These concepts represent key objectives in natural resource management. What do these terms mean? Why do they matter? How do we implement these concepts in specific management settings? This course seeks to address these questions, which present a challenge to practitioners, researchers, and stakeholders involved in natural resource management. Central to answering these questions is an understanding of how public policies link societal objectives and ideas to specific actions. Natural resource professionals today must reconcile a complicated landscape of policies developed in different eras with emerging priorities, such as ecological restoration and climate change adaptation. This course provides students with a toolbox to approach this challenge. It covers several key substantive concepts and policies, while also helping students to develop frameworks for analyzing policy-making, concepts, and policies. These skills become especially useful in light of the urgency created by the current status of forested ecosystems and the impending impacts associated with climate change.

Course Goals and Objectives

This course should prepare students to:

- Define, apply, and analyze key concepts, including sustainability, collaboration, and resilience.
- Understand key policies pertaining to forest planning and management, including the specific requirements of the National Environmental Policy Act and land management planning under the National Forest Management Act.
- Evaluate how these requirements apply in the context of emerging priorities, such as climate change adaptation, restoration, and collaboration.
- Understand generally how federal, state, and local laws and actors intersect to affect forest governance.
- Synthesize understandings of concepts, policies, and other aspects of natural resource governance to examine a contemporary policy issue in a specific setting.
- Develop oral and written communication skills.

Students will demonstrate their proficiency in achieving the above objectives in the following ways:

- In their *writing assignments*, students should provide well-reasoned responses to the prompts that demonstrate clear and error-free writing, appropriate references to relevant readings, a structured argument, and creativity (when applicable).
- In their *NEPA paper*, students should use their knowledge of NEPA's key requirements and other course content to thoroughly read the provided NEPA document, accurately and completely respond to relevant prompt questions, and provide their own reflections on the merits of the document.
- In their *writing assignments and in-class discussion and activities*, students should recount specific policy requirements and discuss how they shape management documents.
- In their *final project*, students should synthesize material from different aspects of the course to provide a coherent, well-reasoned, and engaging account of a contemporary natural resource policy issue in a specific location or case study. Students should use this account and their knowledge of relevant policy tools and concepts to develop a reasonable solution to the controversy.
- In their *presentation of their final project and in-class discussions*, students should demonstrate professional communication skills, including the ability to craft responses to questions, build on others' thoughts, and actively listen.
- Through the *final exam*, students should recall key concepts and their definitions, discuss their merits, and determine how these concepts may guide forest management in light of contemporary challenges.

Course Prerequisites

Students should have strong written and oral communication skills at this point in their academic careers and be able to distill key points from readings and lectures. NR 320 is a prerequisite, as students are expected to have a general understanding of U.S. natural resource policy and law. A background in forestry will be helpful, but is not required.

Required Texts and Materials

There is no assigned book for this class. However, students will need to regularly access Canvas to download/identify relevant readings. We will try to post all readings, but students should also be able to access all readings through the CSU library website, if necessary.

Course Policies

Throughout the course, we hope to develop and maintain a community where respect, curiosity, collaboration, and preparation are central. The quality of our collective experience in the class depends on the quality of your individual contributions. The class will involve frequent discussions; during these discussions, we expect students to be respectful of one another, to actively listen, and to remain focused. We will not tolerate personal attacks. However, we encourage students to respectfully and thoughtfully challenge the instructors and each other about the ideas we explore in class. Disagreement and dialogue are encouraged. We hope that the course offers an opportunity for students to practice and refine professional skills that will be useful in future career and educational settings.

This is a senior capstone course. It is meant to be highly challenging, to stretch you intellectually, and to require complete engagement. We, the instructors, encourage you to communicate early and often with us about what is going well and what is challenging for you in the course. We expect you to come to every class prepared. This means that, prior to the class, you should read the assigned readings, complete the written and other assignments, identify key points to bring up in discussion, and prepare for the in-class activity when relevant. Please be on time and use the class time productively. We recognize that electronic devices (e.g., computers, tablets, cell phones) are helpful learning devices and encourage students to use these devices productively. However, we expect that students practice restraint and respect when using these devices. Please remain focused on the class and silence cell phones during class time. Make every effort not to distract yourself and others.

We reserve the right to change the syllabus with appropriate notice based on student feedback, progress, pace of course, and unforeseen circumstances (e.g., snow days).

Late Work Policy:

Students will be docked 10% per day for all late assignments, except when an approval has been given by the instructor prior to the due date. There will be no makeups for the final exam.

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.

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.wgac.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>

Attendance Policy:

Any student who misses class for any reason will be held responsible for all materials covered and all announcements made during their absence. If you are going to miss an in-class assignment, quiz, or exam, you must discuss this with the teachers and have approval beforehand. If you have a university-approved circumstance that requires flexibility in due dates, testing environments, etc., please let us know toward the beginning of the semester. 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 instructors at the beginning of the semester.

The teachers will be taking attendance daily and use attendance records to further develop participation grades at the end of the semester. Please keep this in mind if you choose not to attend class or need to miss class for any reason.

If you miss more than four class session without an approved excuse you will receive a zero for class participation. Additionally, you will not receive full credit for class participation unless you participate in small-group work and in-class discussions.

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."

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.

Paper and Project Assignments

Note: All written assignments should be in 12-point Times New Roman font, with 1-inch margins (top, bottom, both sides), and double-spaced, and with page numbers on each page. Please include your name and the assignment name in the header or footer on each page.

Weekly Writing Exercises:

Most weeks you will turn in a written summary based on assigned readings. These assignments vary in their format. Some will involve providing a written summary and critical response to the assigned reading or set of readings. Others involve taking on a specific task or simulated exercise. A detailed description of each written assignment will be available on the Canvas assignment page at least one week prior to the assignment's due date.

NEPA Paper:

For this paper, you will analyze an assigned Environmental Assessment and evaluate it as a citizen and according to “standards of review” that NEPA experts and the courts have developed to determine if analyses meet the Act's requirements and intents. More information will be provided on the Canvas assignment page. The paper should be no more than 10 pages (not including references).

Group Project:

For this project, you will work in a small group (4-5 students) to analyze a contemporary natural resource policy issue, conflict, or controversy. Ideally, you will explore this topic through a specific case study or in a particular location. We will collaborate to in-class to determine appropriate topics that interest group members. The project requires you to complete several tasks, including:

- Abstract
- Outline
- Presentation (approximately 15 minutes)
- Final paper (12-14 pages)

More information will be provided through Canvas.

Basis for Final Grade

Points comprising final grade

Assignment	Points	Percentage
Weekly writing assignments (10 total)	250	25%
NEPA paper	200	20%
Group project (total)	200	20%
Final exam	200	20%
Participation	150	15%
Total	1000	100%

Letter grade basis

Lower limit	Upper limit	Letter grade
>98	<100	A+
>93	<98	A
>90	<93	A-
>88	<90	B+
>83	<88	B
>80	<83	B-
>78	<80	C+
>70	<78	C
>60	<70	D
-	<60	F

Important Dates to Remember

Draft NEPA Paper Due: Tuesday 3/6 by 12:30 pm
NEPA Paper Due: Tuesday 3/20 by 12:30 pm
Spring Break: Saturday 3/10 - Sunday 3/18
Group Project Abstract: Tuesday, 2/20 by 12:30 pm
Group Project Outline: Thursday, 3/22 by 12:30 pm
Group Presentations: Thursday 4/26, Tuesday 5/1, Thursday 5/3
Group Papers Due: Thursday 5/3 by 5pm
Final Examination: Wednesday 5/9 from 9:40-11:40 am

COURSE SCHEDULE AND/OR SCHEDULE OF ASSIGNMENTS

1. Sustainability as a Concept

1/16: Introduction—discuss syllabus and course goals

1/18: Sustainability as a concept—understand how organizations conceptualize sustainability

Readings:

- Post Carbon Reader pp. 13-24.
- Floyd et al. 2001. Forest Sustainability: A Discussion Guide for Professional Resource Managers. *Journal of Forestry* Feb (2001): 8-28.

Due: Introduction questionnaire/survey including goals for the semester (Complete on Canvas)

1/23: Sustainability now and into the future

Readings:

- Benson and Craig, Chapter 2

Due: Weekly writing assignment: Reflection on in-class activity regarding concept of sustainability

2. Key Concepts in Natural Resource Policy and Politics

1/25: Introduction to types of law and forest policy history.

In this class, we will also outline the types of law activity for 1/30 and will determine groups and topics for the final project.

Readings: Read one reading (peer-reviewed article, newspaper source, report, etc.) for each topic (2 total); bring a copy of each reading to class.

Due: Come to class with 2 potential group project topics and an article/reading for each.

1/30: Basics of Government, Types of Laws, Rulemaking, etc.

Reading:

- Review and skim. Pages 259-306 from “The Oxford Handbook of US Environmental Policy”
- Review the different branches of government, their roles and responsibilities on the following website: <https://www.usa.gov/branches-of-government>

Due: Prepare Slide with Type of Law, brief description, etc. due 2 hrs. before class

2/1: Issue framing, venue shopping, and interest groups

Reading:

- Pralle, Branching out and Digging In. Chapter 1: The Expansion and Containment of Policy Conflict pages 13-31
- Schneider and Ingram, Policy Design for Democracy. Chapter 5: Social Constructions of Target Populations: Degenerative Policy Designs

Due: Weekly writing assignment: Reflection and applied writing assignment (Pralle)

3. NEPA Planning and Analysis

2/6: NEPA 1- Overview and Introduction

Reading:

- NEPA Act text
- 40 Most Asked NEPA Questions

Due:

2/8: NEPA 2 - Relevant Court Cases

Reading:

- Assigned court case: decision and news articles (Check Canvas)

Due: Bring in 3 questions regarding court case to facilitate in-class discussion

2/13: NEPA 3 - Documents and Details

Reading:

- Luther 2005
- Sample NEPA document (Check Canvas)

Due: Bring news article on NEPA to class.

2/15: NEPA 4 - Response to Comments and Critical Analysis Activity - Sections of the NEPA document/resources needed for NEPA

Reading:

- Same sample NEPA document as 2/13.

Due: Weekly writing assignment: NEPA document critique

4. Forest Planning

2/20: Forest Planning 1 - NFMA, Basics of a Forest Plan, MUSYA

Reading:

- Hirt 1994. *Conspiracy of Optimism* excerpt
- NFMA Legislation

Due: Group project abstract

2/22: 1982 vs 2012

Reading:

- 1982 Planning Rule
- 2012 Planning Rule

Due: Weekly writing assignment: Comparison of 1982 versus 2012 based on prompt questions on Canvas

2/27: Forest Planning and NEPA. In-Class Activity- Walking through a Plan.

Reading:

- Sample forest plan (excerpts)

Due:

3/1: In-Class Activity; forest planning choice topics

Reading:

- Matonis et al. 2016
- Additional assigned readings on Canvas

Due: Weekly writing assignment: Simulated NEPA response to comment based on assigned reading

3/6: Sustainability Requirements in Planning

Reading:

- Bring in 1982 and 2012 rules
- Hoberg 2004 (check reading guide on Canvas)

Due: NEPA paper: send draft of sections 3 and 4 of paper to assigned partner for peer review

3/8: Workshop NEPA Paper: Sit down with partner and review critique and feedback

Mid-semester course evaluation via Canvas

Due: NEPA paper: complete peer review of partner's paper

SPRING BREAK (3/10-3/18)

5. Climate Change and Adaptive Governance

3/20: Intro to climate change adaptation. NEPA Paper Due in Class

Reading:

- Melinda Harm Benson and Robin Kundis Craig, “Conclusion: Living the New Story: Implications for Governance,” in *The End of Sustainability: Resilience and the Future of Environmental Governance in the Anthropocene* (Lawrence, KS: University of Kansas Press, 2017), 160–82.

Due: NEPA paper: final paper due by the beginning of class

3/22: Vulnerability assessments: science support for adaptation

Reading:

- Readings on vulnerability assessments on Canvas
- Charnley et al. 2017 (use reading guide on Canvas)

Due: Group Project Outline Due

3/27: Resilience and Adaptive Governance

Readings:

- Millar et al. 2007
- Abrams et al. 2015

Due:

3/29: Scenario Planning Exercise

Readings:

- Scenario planning guide
- Peer-reviewed article (check Canvas)

Due: Weekly writing assignment: Scenario planning

6. Collaborative Restoration

4/3: Collaborative Governance Introduction

Reading: (Please read in the below order)

- Pro: Wondolleck and Yaffee 2000: Chapter 1 & 2- Building Bridges to a Sustainable Future and Why Collaboration?
- Con: Coggins 1999: Regulating Federal Natural Resources: A Summary Case against Devolved Collaboration

Due:

4/5: CFLRP

Reading:

- Schultz, Courtney A., T. Jedd, R.D. Beam (2012). The Collaborative Forest Landscape Restoration Program: A History and Overview of the First Projects. *Journal of Forestry*. 110(7): 381-391.
- Schultz et al. Strategies for Success Under Forest Service Restoration Initiatives. Page 7-15

Due: Weekly writing assignment: Reflect on the efficacy of CFLRP. How would you operationalize this policy on other types of lands?

4/10: Integrated Resource Restoration and Stewardship Contracting

Readings:

- Schultz et al. 2015. A Third Party Evaluation of the IRR
<https://www.fs.fed.us/restoration/documents/irr/Third-PartyEvaluationIRRPilot-ReportPhase3-WP62.pdf>
- Review the following webpage:
https://www.fs.fed.us/restoration/Stewardship_Contracting/overview.shtml

Due:

4/12: In-Class Activity

Readings: TBD

Due:

7. Fire Policy and State and Local Policy Tools

4/17: Fire borrowing and fire fixes

Readings:

- Check Canvas

Due: Weekly writing assignment: Reflection on in-class activity

4/19: State, local, private, and federal fire

Readings:

- Assigned CWPP
- Peer-reviewed article

Due: Continue working on group project

8. Diversity, Inclusion, and Environmental Justice

4/24: Diversity, inclusion, and environmental justice

Readings:

- Check Canvas

Due: Weekly writing assignment: Op-ed (on either fire issues or diversity/inclusion/environmental justice)

9. Presentations

4/26: Presentations

5/1: Presentations

5/3: Presentations and Wrap Up

Due: All Group Papers are Due at 5pm

10. FINAL EXAM

5/14: FINAL EXAM: Wednesday, May 9th: 9:40 am-11:40am.