

NR 782/882: Forest Health

When and where we learn	Tu-Th: 9:40-11:00am, James Hall 140 F: 1:10-3:00pm, James Hall 140
What you get out of this class	4 credits
Who can help you	Caroline Kanaskie (instructor) [REDACTED] (TA)
How you can refer to us	Caroline (she/her) [REDACTED]
How you can contact me	caroline.kanaskie@unh.edu [REDACTED]
When to chat with me outside of class	Tuesday & Thursday 11:00am-12:30pm, and by appointment
Where you can find me outside of class	James Hall 162

*****This syllabus is subject to change. Any potential edits or amendments will be discussed during class meetings*****

Required readings: All readings in this course will be provided as PDFs on Canvas.
No need to buy any textbooks!

Course description

Forests cover over 30% of the land surface of the Earth and are incredibly important ecologically and economically. While forests show great capacity to withstand major disturbances, these ecosystems are increasingly threatened worldwide by climate change, native and introduced insects and disease, poor management practices, land clearing, drought, fire, and pollution. This course offers an overview of the dominant forest health threats, their causes, and their consequences. We will focus on how to monitor and mitigate these threats, and we will evaluate how anthropogenic forces of the past and present influence patterns of forest disturbance.

Teaching Philosophy

My teaching philosophy is rooted in curiosity and reciprocity. This means that as a class, we strive to learn more together, and we respect and support each other. I've designed our course and all assignments based on research in the field of teaching and learning. Throughout the semester, I will share the rationale behind the different learning activities we will engage in—I use activities and assignments to assess how well my students understand course material, and this information helps me redirect the course if needed. I seek to make learning meaningful for my students by helping students connect with course material. This is especially fun to do in forest health, as we relate what we learn to the trees and forests around us here in Durham and in the places that we hold dear. I strive to foster an environment of collaboration and inclusion, not competition.

Learning Objectives

In this course, students will explore, understand, and apply key concepts in forest health. This will require the development and use of critical and practical thinking, as well as an effective strategy to organize information. We will develop strategies for reading and understanding primary literature.

Learning Activities

Outside of lectures and class discussions, the learning activities in this course involve reading, speaking, writing, and thinking. This course relies very little on pure lecture in an effort to better reflect the learning and working experiences of forest health professionals outside the classroom.

- **Learning Target Assessments:** A total of 10 Learning Target Assessments (LTAs) will be released throughout the semester. Each LTA will be released and correspond with particular topics from the course. Each LTA will consist of an overarching problem or question that you must answer in ~1 page of text or calculation. Each LTA can be revised and resubmitted, with a maximum of 2 unique submissions per week.
Objectives: understand and apply key concepts, critical and practical thinking, organize information
- **Discussion Prep:** During some class meetings, we will discuss a scientific paper or other text that we all read. Students can submit discussion questions/points of interest by midnight the night before a discussion session (so that I can read them before class to help guide discussion). A minimum of 3 questions/discussion points per submission is required. *Objective: understand primary literature*
- **Entry/exit tickets:** Writing allows us to reflect on what we're learning and connect it to our own lives. There will be some time to write at the end of class, and submit your thoughts to me as an exit ticket. These exit ticket sessions will begin with a prompt from me. I will use what you write to help me assess how effective my teaching is, what you are interested in, and what our next steps should be as a class. Other times, I will provide prompts for short writing pieces as homework, which will be submitted as entry tickets at our next class meeting. The goal here is to write as a means of organizing your thoughts. I don't expect polished works—just a few sentences, bullet points, or a paragraph so that I can see what you're thinking about. *Objective: explore key concepts*
- **Quizzes:** To accompany reading or other homework activities, quizzes will be available to help guide your efforts and prepare for class. You can take these quizzes as many times as you'd like with no grade penalties. The purpose of this kind of repetitive retrieval practice is to make it easier for you to remember these ideas in the future. As long as you complete them, you will earn full credit. *Objectives: explore and understand key concepts, organize information, understand primary literature.*

- **Speaking Opportunities:** Students will have the opportunity to present to me or to the whole class on various occasions. There will be 3 major types of speaking opportunities available: 1 – leading classroom discussion, 2 – presenting the timeline project, 3 – presenting your research proposal. Additionally, students have the option to schedule a verbal end of semester reflection discussion. See “End of Semester Reflection” below. *Objectives: understand and apply key concepts, critical and practical thinking, organize information, understand primary literature.*
- **Timeline Project:** I want students to understand the history of work and discoveries in the field of forest health. This project gives you the opportunity to organize the information that you found most interesting in the course, in a way that makes sense to them. You will choose your topic of interest, confirm with me that this topic is of appropriate scale, and prepare your timeline as a larger, mid-term assignment. Some options/ideas include audio/visual aids, a written paper, podcasts. This is kinda like a literature review, but you can get really creative with it. The item of choice will be presented to the class. *Objectives: explore and understand key concepts, organize information, understand primary literature.*
- **Research Proposal Project:** This project builds upon the Timeline Project. You will write a short paper on your forest health topic of choice. Instead of focusing on past work, you will bring your topic into the future and propose a new project that will advance knowledge and understanding of your topic. This will take the form of a more traditional research proposal (background, rationale, proposed methods, anticipated results, anticipated outcomes, timeline, budget). Then, during the last week of class, each student will give a short presentation that summarizes their proposal. *Objectives: explore and understand key concepts, organize information, critical and practical thinking, understand primary literature.*
- **End of Semester Reflection:**
 - Option 1: Each student will prepare a short paper reflecting upon their experience in this course, with emphasis placed on the key concepts. I want to know, what are students taking away from this class? What was most memorable or exciting? What was challenging? What is still difficult to understand? Then, during the “final exam” block, we will convene as a group and discuss together.
 - Option 2: Students have the option to schedule a verbal final reflection discussion with me. This will be a 45-minute private appointment in which you present your reflection to me verbally (a white board will also be available for you to use). I expect that students choosing this option will still go through the same reflection process as students choosing option 1. The main difference is that instead of writing to organize your thoughts, option 2 gives you the opportunity to talk it out and receive feedback from me in real time. Students who choose this option do not need to attend the final exam period, but must communicate with me to schedule an appointment for our discussion. I will announce when dates are available. *Objectives: explore and understand key concepts, organize information, critical and practical thinking*

Assessments & Earning Grades

Students earn final grades based on the number of different types of learning assessments that students successfully complete in the course. Students can earn satisfactory (S) or unsatisfactory (U) grades on each individual assignment. Only those assignments that are satisfactory (S) count towards a student's final grade. Each assignment can be revised and resubmitted until an S is achieved (*see Revise & Resubmit fine print). See the *Grade Achievement Scale* (next page) for details on what is required to earn each final letter grade. My reasoning behind this grading scheme is to emphasize that we are striving for competency, not perfection. If your work proves that you have mastered a concept, I am not concerned whether that work is worth an 85 or a 95 on a traditional grading scheme, and I do not think it is a good use of your time to worry about earning points. If your work shows that you have not yet mastered a concept, you will receive feedback to aid in your learning. I do not believe that we should just accept a failing grade and move on—that's not how we learn. That is why I allow for resubmission, and why I require that you earn an S for an assignment to count towards your grade.

Satisfactory (S) grades can be achieved according to the guidelines for each learning activity. When activities are assigned or become available, a detailed rubric will be available as well. General guidelines for each activity include:

- **Learning Target Assessments:** Some LTAs will have clear, numeric answers. Others will test your critical or practical thinking, in which I'm looking to assess your understanding of a topic.
- **Reading assessments:** Students earn an S by completing online quizzes with >90% accuracy. You can take these quizzes as many times as you want, until the deadline. Each assessment corresponds with a reading assignment, and is designed to help you focus your reading. You can read alongside the assessment if you want!
- **Timeline Project:** This project tells a story of a forest health issue. Students who earn an S clearly define the lens for the project, and tell their story using examples of scientists and their work that relate to the chosen focus.
- **Research Proposal Project:** Students earn an S by proposing a study that aims to answer relevant questions about forest health. This piece will have very specific guidelines for formatting and content, just like you were submitting a real research proposal. A satisfactory research proposal provides strong background to justify your proposed study, shows that the author can design and plan a research study logistically, and connect with external partners to bring the idea to fruition in a meaningful way.
- **End of Semester Reflection:** Students earn an S by reflecting on the course in a meaningful way and organizing their thoughts to coherently communicate big ideas.

***Revise & Resubmit fine print:**

- **Reading assessments** can be resubmitted via Canvas until the specified due date.
- In terms of **LTAs, Timeline Projects, and Research Proposal Projects**, you can submit a maximum of two assignments per week to be evaluated. Each of these assignments will have suggested due dates to help you plan your work and gain meaningful, timely feedback.
- The **End of Semester Reflection** is due by our final exam block. You cannot revise & resubmit this assignment.

NR782 Grade Achievement Scale

A (4.0)	10 Learning Target Assessments
	>90% of reading assessments complete
	polished timeline project, polished research proposal
	Present timeline project & research proposal
	Polished final reflection paper & participation in final exam block discussion; OR verbal final
B (3.0)	9 Learning Target Assessments
	>85% of reading assessments complete
	polished timeline project, polished research proposal
	Present timeline project & research proposal
	Detailed outline for final reflection & participation in final exam block discussion; OR verbal final
C (2.0)	8 Learning Target Assessments
	>80% of reading assessments complete
	Complete a detailed, cited outline of timeline project. Polished research proposal
	Present timeline project & research proposal
	Detailed outline for final reflection
D (1.0)	7 Learning Target Assessments
	>70% of reading assessments complete
	Complete a detailed, cited outline of timeline project & research proposal
	1 speaking opportunity (timeline project or research proposal)
	Detailed outline for final reflection

Plus and minus (+/-) grades can also be earned. For (+) grades, students must have gone above the requirements in at least one assessment category. For a (-) grade, students can fall short in one category (but must have completed the requirements for the grade below in that category). Students who do not achieve the minimum course requirements will not receive credit for taking the course.

Grade Achievement Example: A student completes 9 Learning Target Assessments, submits discussion questions 90% of the time, completes a polished timeline project and research proposal, and presents both pieces. This student earns a B+ because they completed the requirements for a base B grade, plus they went above the B level in reading assessments.

Graduate Students – NR 882 Grading & Earning Credit

Graduate students must put in more work in order to receive credit for NR 882. Graduate students must achieve an A based on the NR782 grading scale, lead at least one class discussion, complete additional readings and learning activities, and prepare a 10-minute presentation that shares the link between forest health and their individual research. I will meet one-on-one with graduate students to make these requirements clear—and I welcome your ideas, too! I want this to be a meaningful learning experience, and I want to help you achieve your professional & academic goals. We will make sure the work you do in this class moves you forward on your own path.

Modality

I expect and hope that this course will meet in-person for the entire semester. If it becomes unsafe or impossible to continue the course in this mode, we will transition to online learning. In that case, we will continue to meet synchronously during the usual classroom and lab times unless otherwise stated.

Expectations

Teaching and learning is a two-way street. The expectations I have for my students are much like the expectations students have for me as an instructor. In this course, we will:

- We will arrive to class on time and prepared to participate. For students, this includes completing homework to prepare for discussion and activities, as well as maintaining both physical and mental health. A good night's sleep and breakfast can do a lot to prepare us for a 9:40am class. As your instructor, I will be on time and prepared to lead the class.
- If you'll be absent from class (for whatever reason), please email me so we can make a plan to keep you on track with the course. Uncommunicated absences are unexcused. If I cannot make a class meeting, I will work with our TA to provide instruction in the classroom, or I will provide asynchronous learning activities.
- We will keep cell phones on silent and out of view (unless being used for in-class activity—like searching the web, taking photos with some connection to our learning, etc).
- We will respect each other. This includes listening, not interrupting, and being aware of our implicit and explicit biases.
- _____ (fill in the blank here!) We will brainstorm additional expectations during the first week of class. We are all active and willing participants in this learning community—no one can force you to show up to this class.

How much work is this class?

All courses at UNH must comply with the federal definition of credit hour. This means that for each credit hour you should expect to do 3 hours of academic work. For this 4-credit course, you can expect to engage in learning activities for 12 hours each week. Five of these hours are designated class time, and the other seven hours should be spent preparing for class in the ways described on the course calendar. For more information, see section 04 of the [UNH Students Rights, Rules and Responsibilities Handbook](#) (link also on our course Canvas site). I expect all students to comply with the university's academic honesty policy (section 09 of the [UNH Students Rights, Rules and Responsibilities Handbook](#)). In this course specifically, for Learning Target Assessments, the Timeline project, and the Research Proposal project, I expect you to work on your own to create the original content you submit. Unless otherwise specified, this work is to be original to this course, even if you have done similar work in the past. In other areas of this course, I absolutely encourage and value student collaboration. You are not competing for grades, and thus there is no downside to you working and studying together outside of Learning Target Assessments and the Timeline/Research Proposal projects.

Diversity & Inclusion

I acknowledge and value that every student comes to this class with unique prior experiences. In this class, we respect and value diverse perspectives, which may come from dimensions including race, ethnicity and national origins, gender and gender identity, sexuality, class and religion. We will work to create an inclusive learning environment where every voice can be heard.

If you think you have a disability that requires accommodations, you must register with Student Accessibility Services (SAS). If you have questions about the process, please contact SAS at (603) 862-2607 or sas.office@unh.edu. If you are registered with SAS, and eligible for accommodations that you would like to utilize in this course, please forward that information to me in a timely manner so that we can meet privately in my office to review those accommodations.

Your wellbeing is important to me. Below are additional resources you can find here at UNH to support your wellbeing. If you need help accessing these resources, email me and we can chat privately.

Center for Academic Resources (CFAR) is where students can go to improve their study skills, time management, and understanding of UNH's academic culture. Our [professional educational counselors](#) and [peer academic mentors](#) work within students' course materials to demonstrate best practices for learning concepts and preparing for exams. Find an appointment with an academic mentor of your choice on the CFAR calendar at <https://unh.mywconline.com>. To talk with a [professional educational counselor](#), email at unh.cfar@unh.edu; use Chat Live at <https://www.unh.edu/cfar>; or stop by Smith Hall Second floor, Monday-Friday from 8:00-4:30. The CFAR website also has a large selection of [study tips and tools](#) and [STEM videos](#).

Connors Writing Center offers free, one-on-one writing conferences to current members of the UNH community: students, faculty and staff. Writing assistants work with writers from all disciplines on many different kinds of academic writing (in-person in Dimond Library and virtually via Zoom). The CWC writing assistants support, assist, help, guide, and learn from writers (<https://www.unh.edu/writing/cwc>).

UNH Health & Wellness provides medical services, wellness education, and public health expertise. Your student health fee covers all appointments at H&W (not including prescriptions or other procedures, which are typically very affordable here in comparison to local providers). In addition to caring for your basic physical health (like illness, injury, routine check-ups), H&W has resources and staff specializing in nutrition, sleep, and ANOD (alcohol, nicotine, and other drugs).

Psychological and Counseling Services (PACS): Your mental health is just as important as your physical health. If, during the semester, you find you are experiencing emotional or mental health issues, please contact the University's (3rd floor, Smith Hall; 603-862-2090) which provides counseling appointments and other mental health services. If urgent, you can call PACS M-F, 8 a.m.-5 p.m., and schedule an Urgent Same-Day Appointment.

Sexual Harassment and Rape Prevention Program (SHARPP) provides free and confidential advocacy and direct services to survivors. (<https://www.unh.edu/sharpp>).

Basic Needs Support: Do you need food, housing, money to make ends meet in an emergency, or a loaner laptop? <https://www.unh.edu/dean-of-students/getting-help/housing-food-financial-basic-needs-support>

Affirmative Action and Equity Office provides services for student who experience identity-based bias. <https://www.unh.edu/affirmativeaction/>