

# Environmental Science and Sustainability

Held M/W/F, 10:00 to 10:50 AM MST

Offered via Moodle/Zoom

**No textbook required.** All readings will be posted on Moodle.

**Professor:** Dr. Alexander L. Metcalf

**Teaching Assistant:** Mr. Jake Rayapati

## Our hybrid course delivery during COVID-19

All course lectures, announcements, and assignments will be posted on our Moodle course page. Attendance will not be enforced, but participation is strongly encouraged. I will post a “weekly plan” so you know what to do to stay on track. We will meet in small discussion groups over Zoom and, if possible, in person for “mini” field-trips around or next to campus.

For more information, visit:

<https://www.umt.edu/coronavirus>

## Instructor Information

**Alexander L. Metcalf, PhD**

**Please call me:** Dr. Metcalf, Professor Metcalf, or Alex.

**How do you pronounce that:** Like, I “Met” a “Calf” (i.e., a baby cow!).

**How to contact me:** please e-mail at [alex.metcalf@umontana.edu](mailto:alex.metcalf@umontana.edu) (I receive 100-200 emails per day, if I have not replied within 3 days, please e-mail [nicely] again; I do not reply to e-mail on weekends).

**Ask me about:** Anything! Class, research, grad school, jobs, UM, hunting/fishing, public lands

**TA e-mail:**

[jake.rayapati@umconnect.umt.edu](mailto:jake.rayapati@umconnect.umt.edu)

What are the big environmental issues currently confronting humanity ?

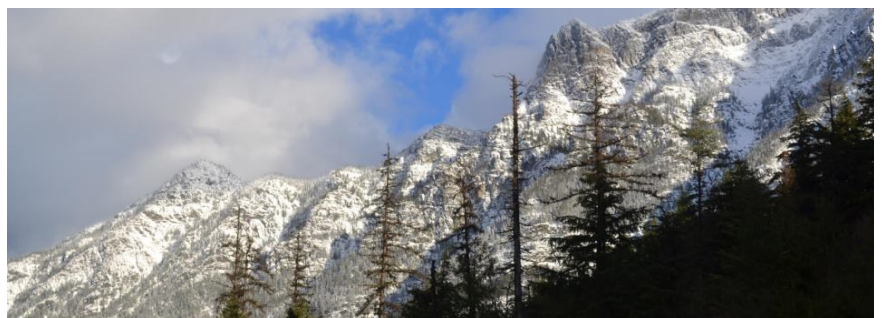
Is population growth really the cause of most environmental problems?

How can the social sciences help us understand and solve environmental challenges?

What different environmental ethics exist and how do they cause “wicked” problems?

If these questions intrigue you, this is the course for you! This course provides a foundation for students to understand the dynamics of human relationships with the environment. We cover a unique combination of material, including environmental ethics, ecological processes, natural history, and current social conflicts regarding human uses of natural resources. We will use the social and ecological setting of Montana, and topical issues in resource management, as focal points for learning.

The course aims to develop an “environmental literacy,” so participants can acquire a foundation of knowledge to address the enormous challenges facing the human relationship with nature. A particular focus will be placed on current environmental controversies – such as endangered species , water policy, and wildfire management - to understand how social demands and political processes affect natural systems and vice versa.



## Learning objectives and assessment

### What will you learn in this class?

This interdisciplinary course will examine a series of concepts in the management of natural resources. Our objectives are threefold:

1. Recognize the impacts of human demands on natural resources and ecosystems.
2. Become familiar with the policies, economic factors, and social dynamics affecting major natural resource issues
3. Understand foundational scientific principles of ecology, environmental processes, and environmental psychology and sociology

### How will you be graded?

	<b>30%</b> DISCUSSION
	<b>25%</b> ASSIGNMENTS
	<b>15%</b> EXAM 1
	<b>15%</b> EXAM 2
	<b>15%</b> FINAL EXAM

## Course Format

This course will be delivered using **online materials**, including recorded lectures, readings, and assignments; **small, zoom-based discussion groups**, which will meet regularly; and **in-person mini field-trips**, if possible.

**Online materials** can be found on our Moodle course site. There are general course materials and weekly course resources. *Students are expected to familiarize themselves with Moodle*, ask clarifying questions if necessary, and become proficient navigating Moodle. Visit [moodle.umt.edu](http://moodle.umt.edu) for more.

**Small, zoom-based DISCUSSION groups** will meet either once or twice during each week on Zoom. *Students are expected to read course material and complete assignments PRIOR to discussion groups*. We will use our meeting time to explore questions related to readings/assignments, engaging in short lectures, and getting to know each other. *Students are expected to actively engage in these discussions*. Attendance is not required, but discussion is a large part of your grade.

**In-person mini field-trips** will be held, if conditions allow. Conditions include weather, status of the COVID-19 pandemic, and student adherence to health guidelines. *Field trips are optional, but strongly encouraged*. *Students will be required to wear an approved mask during field trips*. You may not attend if you are feeling sick in any way.

**Other** resources or means of engagement may be deployed throughout the semester as pandemic conditions change. For example, we will use Qualtrics surveys to collect data; we may invite guest speakers to join the entire class; or we may replace exams with other assignments as necessary.

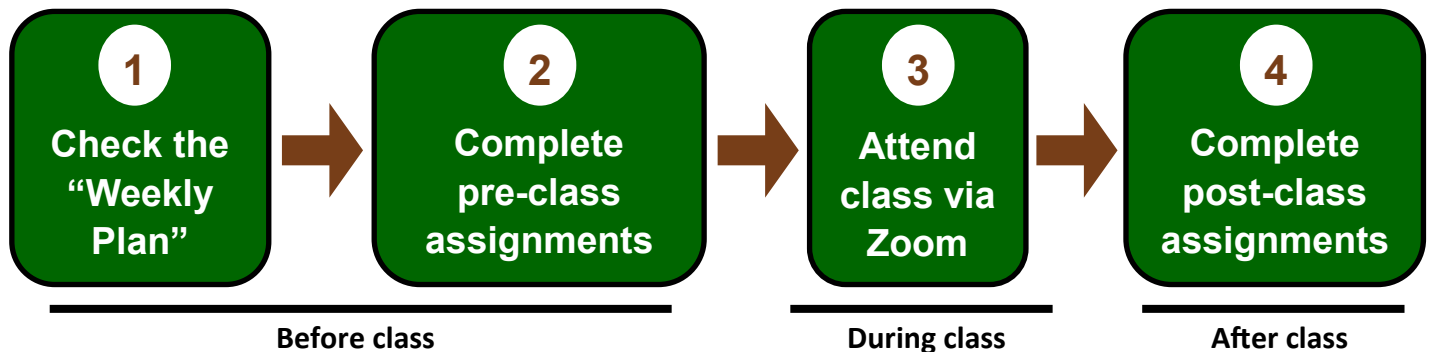
**Accommodations** are available to any student willing to collaborate with the instructor and potentially UM’s office of Disability Services for Students (DSS). If there is an accommodation that would help you learn, please e-mail me with details and we will work together to develop appropriate modifications. You can contact DSS at 406.243.2243.

**ASSIGNMENTS** will be listed in the “weekly plans” under each topic section on Moodle. These assignments will be described on Moodle and sometimes during lecture videos. I will always specify in the weekly plan where you can find assignments.

**EXAMS** will be held online. Time to complete exams will be limited to 50 minutes. Questions will be randomly selected and ordered for each student. Exams will be open book.

## Typical Week in NRSM 121

To prepare for a typical week in NRSM 121 you should log into Moodle and **check the “weekly plan”** listed under the week/topic section. The weekly plan will tell you what you have to do for the week. It will often instruct you to READ a book chapter, article, or website, WRITE responses to a prompt, PREPARE questions for our discussion meetings, WATCH a lecture or video I will provide, COMPLETE a survey or exam, and/or ATTEND a course meeting.



*Before class* you should complete the pre-class assignments listed in the weekly plan.

*During class* we will discuss topics and answer your questions.

*After class* you should complete any remaining post-class assignments.

## Expectations

### What I expect from you, and you can expect from me

I expect each of you to actively contribute to our learning environment. This goes beyond completing assignments and engaging in discussion to include treating your instructors and fellow classmates with utmost respect and care. I also expect you to take an active role in your education. I have eliminated the required textbook from this course in favor of selected and open access resources. I expect you to read these materials on your own time before class periods. I expect you to ask questions and for assistance. If you don't understand something, please ask. I am happy to engage over e-mail or set up individual meetings if necessary. Do not limit your questions to course material - ask me anything that might help you in your pursuits!

I expect you to be honest and demonstrate academic integrity. This includes not reproducing or distributing course materials, following instructions for individualized work, and not copying or plagiarizing other's work. Please visit <http://www.umt.edu/student-affairs/community-standards/default.php> to read the UM Student Conduct Code. Violations are serious and will result in reduced or no credit for the assignment, no credit for the course, and/or references to the Vice President for Academic Affairs.

I expect you to familiarize yourself with all UM policies including the course drop deadlines, which fall on the 15th instructional day, after which you can no longer drop the course with a refund and avoid a “W” on your transcript; and the 45th instructional day, after which you can only drop the class for a few, limited and generally unusual reasons.

You can expect me to create an inclusive and conducive learning environment. You can expect me to be responsive to your concerns and to your questions. You can expect me to be a partner in your learning.