
Course Syllabus, ENVS 1000, Introduction to Environmental Science

Course Learning Objectives

This course is the first part of the undergraduate introductory series in the Environmental Studies Program. It will provide students (you!) interested in continuing in Environmental Studies with an introduction to the skill set they need and will develop in the major to address multi-dimensional environmental issues. Our focus in Fall 2020 will be on developing a stronger science-based understanding of the Earth's environmental systems and how these coupled human-natural systems function.

Overarching learning objectives

1. Demonstrate an understanding of the key biological and physical systems that influence the Earth's environment.
2. Explain how humans are changing the environment and describe the impacts of those changes
3. Evaluate policies and other interventions that can be used to mitigate the impacts of human activity
4. Use Excel to analyze and graph environmental data sets
5. Demonstrate an ability to use quantitative information to evaluate human-natural system change.

Course Structure

In this unusual Coronavirus semester, we will start with a mix of in person and online instruction. The basic elements of this are explained below. All course activities, access to materials, calendar, and updates will be made available on Canvas. For especially urgent issues we may also send full class emails. If we are forced to transition to online only learning, we will shift from in-person to Zoom classes but we will keep the same recitations, times, etc. We will provide updates and guidance if this does happen.

A Changing Planet online text in Revel: All course foundational material is in this textbook. In most cases, we will not be covering this material in lectures and recitations, but we will assume you have learned it from the textbook. There are a series of required quizzes and exercises in the textbook that are designed to check your reading comprehension. These aren't hard but there are a lot of them so keep up with your reading and you will do well keep up with your reading and you will do well.

Asynchronous Videos: There are a series of pre-prepared videos each of which is 5-10 minutes long that explore a variety of topics. These are also required and will be assessed through Canvas Quizzes. These Canvas quizzes are also excellent preparation for monthly online exams.

Synchronous Lectures - ZOOM: We will meet for part of our assigned times on Tuesdays and Thursdays for the lectures.

- **Join via this Zoom.**

We'll use this time to talk about examples, case studies, and to bring in guest speakers to talk about careers in the environment and other topics. All these lectures will also be recorded and made available on Canvas.

Recitations - In person + Zoom: Everyone is assigned to a recitation and most of these will be 'in-person' so long as conditions allow. The recitation focus is on skill development and specifically on using Excel as a tool to explore environmental data. We will also have a designated period of time for questions and discussion of weekly material during these sessions. There will be some online recitations each week that you can attend if you miss the in-person session and we will also have a recorded recitation as a backup in case you are unable to attend for an extended period.

General Class Schedule (detailed schedule available on Canvas)

Week

Week 1 Science of Sustainability

Week 2 Human Population

Week 3 Human Health and Environment

Week 4 Urbanization and land use; Waste Management

Week 5 Biodiversity and Evolution

Exam

Week 6 Populations & Communities; Ecosystems and Biomes

Week 7 Ecosystems and Biomes; Fresh Water

Week 8 Freshwater, Agriculture

Week 9. N and P module from biogeochemistry; Agriculture

EXAM

Week 10. Land use change Atmosphere & Air Pollution

Week 11. Atmosphere & Air Pollution + Sulfur Oceans

Week 12. Ocean & Climate (+ Carbon)

Week 13. Climate; Exam

Week 14. Energy Use

Week 15. Energy Use; Nonrenewable Energy

Week 16. Renewable Energy

Requirements and Grading

The class is 4 credits and the final grade is based on a combination of the recitation and 'lecture' assignments.

Recitation Assignments: 25%

You are expected to attend all classes and engage in discussions and exercises however we also know that this semester may present unique challenges. There will always be a recorded video version of a recitation available if you are unable to attend class. There will also be some opportunities to attend a zoom-based recitation if you can't make your in-person section. Stay in contact with your TA if you need to shift recitations or use the recorded option. Also contact your TA if illness (coronavirus) or otherwise will require an extended absence.

Reading, assessments: 15%

You must complete the online assessments in *A Changing Planet*. *Readings and quizzes must be completed by 11:59PM the date they are due.*

Canvas Quizzes: 16%

Over the course of the semester, you will have canvas quizzes based on lecture material (asynchronous and synchronous videos). These quizzes are also excellent preparation for the online tests.

Exams: 44%

We will have monthly exams approximately every four weeks starting at the end of September. Each exam covers the material in the prior four weeks. The exams will be taken online. More information on this will be provided during the semester. Recognizing the unique challenges of this semester, the final exam will not be cumulative and will be the same weight (11%) as the other monthly exams.

Exam dates

- ◆ Exam 1- Thursday, September 24th
- ◆ Exam 2- Thursday, October 22nd
- ◆ Exam 3- Thursday, November 19th

- ◆ Final Exam-Date TBD

Late Assignments

This course has many assignments but most are relatively small and the class is very manageable IF you stay on top of your work. If you procrastinate on readings, quizzes etc, you will find yourself with a mountain of work to do in a short period of time. We will set deadlines for assignments and expect you to meet those deadlines. For every day that an assignment is late, we will reduce the grade by 5 points or the equivalent of one step in the letter grade scale (i.e., a B becomes a B-). NOTE - in the event of illness or exposure to coronavirus, reach out immediately to your TA and we will work to accommodate you.

Grades are as follows:

93 and greater = A, 90-92.9 = A-, 87-89.9 = B+, 83-86.9 = B, 80-82.9 = B-, 77-79.9 = C+, 73-76.9 = C, 70-72.9 = C-, 67-69.9 = D+, 63-66.9 = D, 60-62.9 = D-, 60 and below = F. We may curve grades upward at the end of the semester when all work is complete. We will not curve grades down. All grades will be posted on Canvas and we try to keep these grades up to date through the semester. Please check your grades frequently so you can let us know if there are any issues. Karen and Jason are always happy to discuss grades and go through any of your assignments or exams with you.

However, we don't discuss grades over email so either come to office hours or set up an alternative time to meet and go over your grade.

Email Etiquette

This course is co-taught by two faculty members. As such, **please email your TAs first** with respect to course matters; if they need our input they will relay your message to us. When you email anyone on the Teaching Team regarding a question or to schedule an appointment, please:

- Include the course number "ENVS-1000" in your email subject line.
- We want you to model professional behavior as that will be required of you when you graduate from CU. So please address us appropriately and treat email as a form of professional communication that everyone could read (your mom, your class mates, future employers, etc. you never know who might unintentionally forward your email to a much larger group).
- When you write an email, the following are unacceptable: "Hey", "Yo", "Dude", "Man" or "Mr. or Ms if someone has a Ph.D. in that case you say Dr. or Prof." You can also use the first names for everyone on the teaching team.

