ENVT-1110: Introduction to Environmental Management - Online

Course Information

Here is the access to your Course Modules.

- Read any announcements and the Overview / Objectives in the module
- Read the assigned material from the text and/or additional readings
- Watch the weekly lecture content (StoryMap)
- Complete either an Online Forum or other online assignment that week
- Complete both the Practice & Proctorio assessments
- Complete the weekly Nine-Square assignment

Instructor Contact Information

Professor: Dr. Daren Nelson

E-mail: nelsonda@uvu.edu (best way to contact) but can also contact via Teams

Office Location: SB242c (in the biology suite: enter the suite and then take the first hallway to the right. My office is the last office on the right across from the faculty lounge).

Office Hours: By appointment - I will be working from both home and from campus. I designate Wednesdays as a research day and usually do not have office time available on that day. My best days for a meeting is on Mon or Friday; however, depending on my schedule I could be available on Tues or Thurs as well. It is best to contact me and set up an appointment so that we can schedule where and how (virtually via Teams or face-to-face) we will meet.

Course Description

This class is an introduction to Environmental Science and Environmental Management. Environmental Science & Management can give us the tools to help find solutions to many of today's environmental problems. We will be learning about issues such as sustainable use and management of our natural resources (energy, waste, water, mineral, food...), pollution control, and protecting our climate. We will be examining the basics of Hydrology, Geology, Climatology, and Engineering and how these fields apply to the social and economic interactions within our everyday lives. However, also realize that metacognition skills, campus resources, and other skills that will help you succeed as a college student at UVU will be integrated throughout the course.

General Education Requirement: The factual knowledge and the critical thinking skills you will develop in this course are consistent with the goals and objectives of the General Education Program at Utah Valley University. The General Education Program seeks to help you become a broadly educated and effective citizen. In natural science, you are introduced to the methods of scientific inquiry, learn about the environment, and understand technology's effects on the environment. You will also learn how scientists understand Earth's composition, structure, and processes, and how these processes affect society. This contributes to developing your skill to analyze evidence, to exercise quantitative and scientific skills, to make informed decisions, to write and speak clearly, and to think critically and creatively. In addition, to this course fulfilling the physical science general education requirement this course is a required course within the Environmental Management degree.

Course Outcomes

Upon successful completion of this course, students will be able to:

- 1. Determine how environmental processes are impacted by humanity, how our society is impacted by these issues, and how you can apply these concepts to your everyday lives.
- 2. Articulate how the extraction and use of our natural resources can cause air, water, and soil pollution that harm the environment and impact humanity.
- 3. Describe how societies can sustainably use Earth's resources by reducing/preventing environmental degradation
- 4. Summarize the environmental laws and policies that are designed to prevent environmental degradation, such as pollution.
- 5. Apply the scientific method and analyze current environmental issues by relating these issues to your lives and evaluate how you can live a more sustainable lifestyle.
- 6. Apply life-long learning skills; such as metacognition, communication, quantification, information, and collaborative learning skills.

Materials, Fees and Technology Tools

Required Textbook: <u>*Principles of Environmental Science: A Global Concern*</u> by William P. Cunningham and MaryAnn Cunningham. 15th Edition, published by McGraw-Hill

The e-text that we use is a custom version of the above textbook and only utilizes the chapters of the text that we will be using in this course (see link above). If you purchase it through the link you will be able to get the reduced cost version. You can purchase the text through the bookstore but it will be much more expensive. There are other online sources that allows you to purchase or rent the text but realize the chapter #'s may not align with the custom version we use for our course.

Additional Book for final project: For your final project you will need to read a book throughout the term and then do a research paper regarding the topics within the book. Here is a <u>link to potential books</u> for the project.

The suggested books are usually easy reads that I have either read myself or other faculty at the university have suggested. However, if you want to read a different book you can propose it to me and I will determine if it is appropriate for our class. You can get many of these books from a local library, the university library, or you will need to purchase your own copy of the book. During the third week of class you will need to finalize which book you will read and submit your selection to me in a quiz.

I will be using Microsoft Teams for any virtual meetings (office hours, etc...). UVU Remote Support

Please download the actual application onto your computer, phone, tablet, etc... Yes, you can do it using the web browser instead but you lose functionality of the program and will not be able to fully interact unless you download the application.

How to join: If you cannot join Teams you should contact the <u>UVU Help desk</u> as soon as you can.

To join any Team Meetings there is a link on the left bar. (Microsoft Teams Classes)

We will be using the universities proctoring software called <u>Proctorio</u> to take some of our weekly assessments. For indepth instructions on how to set up and use Proctorio (including videos) you can go to the <u>Office of Teaching and Learning</u> website.

Please download the actual application onto your computer. If you need help with the software please see the <u>Student Installation Instructions</u> or contact the <u>UVU Help Desk</u>.

Technology Expectations

COMPUTER & THE INTERNET

You will need a reliable desktop or laptop computer and a reliable internet connection to take this course. You are required to develop a back-up plan for maintaining access to the internet in case of a computer and/or internet failure – such as locating your local public library in case of emergencies.

COMPUTER & SOFTWARE HELP

If you need help with any computer issues (Adobe, Microsoft, PowerPoint, or Canvas), please contact the UVU Helpdesk. They can assist you with most of the problems you may encounter. Contact the Helpdesk at 801-863-8888 or <u>access online</u>.

How This Course Works

Course Mode: Online Asynchronous

This course is **fully online**. There are no scheduled meetings of the class; however, you can schedule a time to talk over Microsoft Teams.

Description of how course works:

Canvas is where course content, grades, and communications will reside for this course.

For this **three (3) credit-hour** course students should expect to spend up to **9+ hours a week** completing course activities. This time commitment is prescribed by the university and is meant to offer the student a standard for achievement. Hence, enrolled students should examine their work, social, and academic commitments to evaluate whether they might have the required amount of time to devote to the class.

The Professor reserves the right to amend the syllabus and schedule as needed depending on work accomplished and the needs of the class. All changes will be discussed in the announcements and class.

Instructor Responsibilities:

- I treat students as if they are employees and you should treat me as your employer. We should have mutual respect with one another so that we can have a good work environment. My main goal is to mentor you through the course.
- For you to do your work properly, you should expect that I post lecture material and announcements promptly each week.
- You should also expect prompt feedback on your performance. Therefore, I will usually complete any grading within a week of the assignment of any due dates and will respond to any questions as soon as possible (usually within 24 hours).
- I do have a life outside of my teaching; therefore, there are times I am not available. Many work environments have an 8 - 5 workday M-F. Just like in this standard work week I am usually available during these times. However, I devote my weekends and evenings to my family and other endeavors. Therefore, if you send me a message after 5 pm or on the weekend expect a longer response time. If multiple emails are received regarding the same question or concern, they may be responded to with an announcement to the entire class.
- Facilitate an effective learning experience.
- Refer students to appropriate services for issues that are non-course content-specific. For instance, technical issues, writing labs, accessibility services, etc.

Student Responsibilities:

- I expect that you complete your readings and watch the lecture material and complete your activities on time each week. If you continued to turn in reports late or came to work late you would reap the consequences by either "getting fired" or "written up'. In the same way, your work ethic will reflect your performance in the class. You should treat me and your colleagues (fellow students) with respect so that we have a pleasing "work environment" where we can work as a team.
- Be accountable by setting aside a regular time each week to complete course activities and assignments on time as noted per the due dates. When studying an interdisciplinary topic like Environmental Management, it is very important to expose your mind multiple times to the new concepts you are learning. To perform well in this course you should (1) study / read the reading material, (2) participate in our online assignments and assessments, (3) take time to prepare and research your 9-square activities, and (4) review the material periodically. True learners have a positive attitude, demonstrate a real interest, actively participate in the course, and work hard to understand the material.

- You should contact your instructor as early as possible if you are struggling or you have an emergency. DO NOT wait until the last minute to ask for an extension. I want you to succeed but cannot assist if you do not communicate with me.
- Learn how to use Canvas including communication tools (e.g. Proctorio, Canvas inbox, Microsoft Teams, etc.). If you have technology-related problems contact the <u>Service Desk</u>.
- I can make mistakes as well. Please let me know if there is typo, a problem in the assessment questions, etc... I will try to rectify these issues as quickly as possible
- Abide by ethical standards. Your work must be your own.

Grading and Late Work Statement

Grading Policy: Final marks will be earned based on the percentage total (calculated from the total below) converted to a letter grade according to a straight scale. I do not round grades. As an example, understand that this means that if you get an 89.9% you will still get a B+. One or two students are always on the cusp of getting the next highest grade. It would be unethical for me to give you a grade that you did not earn and it would be unethical for you to ask for a grade that you did not earn. Your grade is your responsibility; therefore, please keep track of your grade within Canvas and contact me if any issues need to be addressed before the end of the course.

Depending on the availability of the activities I provide extra credit opportunities periodically throughout the course (i.e. seminars, events, survey requests, etc...) that may come up during the term; however, I usually do not provide any additional opportunities at the end of the term.

The following grading standards will be used in this class:

Grade	Percent
Α	93-100
A-	90-92.9
B+	87-89.9
В	83-86.9
В-	80-82.9

C+	77-79.9
С	73-76.9
C-	70-72.9
D+	67-69.9
D	63-66.9
D-	60-62.9
E	0-59.9

Assignment Categories

Activity	Percent of Grade
Online Activities (i.e. forums, calculator assignments, etc)	25%
Module Assessments (practice and Proctorio)	25%
Nine-Square Assignments	40%
Term Read Project	10%

Late Work Statement: You can turn in late work on most assignments but you will receive a 15% reduction for each day past the due date. Realize that online forums are time sensitive

and require interaction from other students; therefore, you will most likely get additional grade deductions for late forum responses. Realize that after 7 days the late reduction will then be larger than 100%; therefore, you will not receive credit for anything that is that late. The late reduction is prorated so it will mark it off based on how many hours it is late (for example, if you turn it in 1 hour late you will get less than 1% reduction). If you find that you are struggling to get things in for reasons outside of your control please contact me.

Learning and Assessment Activities

1) **Online assessments** are designed to help determine the level of your mastery of the the objectives for each of the modules. You take these assignments in two phases. This 2-phased assessment design should help you study and prepare for the material. These weekly assessments take the place of larger exams. Since they are each lower risk it is not the end of the world if you do poorly on one assessment. However, you should still prepare and study for them to help you focus your learning. **Phase #1 (Open)** is an open book and untimed assessment that can be taken twice for credit. This is designed to help you prepare for the second phase of the assessment. **Phase #2 (Closed)** are closed book timed assessments, via <u>Proctorio</u>. Often questions from the first phase can end up on these assessments. If you have problems with <u>Proctorio please see the following link</u> before you reach out to your instructor. The questions in the assessments are generated from your reading in the module, from the lecture videos and material, and from other activities in the module. Most of the material in the online assessments cover material in the module that you are currently investigating. However, there will also be a few questions from prior modules.

2) In most modules there will either be an **online forum** or another **online activity** that will supplement your content each week. These forums are a way for you to connect with others in the class and to provide opportunities for a more traditional discussion. Usually, for these forums, there will be open-ended question(s) that you will need to answer and post by midweek. Then you will need to respond to other students and faculty within the forum by the end of the week (Sat). As long as you thoughtfully participate you will do well in the forums. I grade on the substance of your argument and how well the argument is thought out and composed. Some weeks we do other online activities besides the forums, such as resource calculator assessments or other online activities.

3) **Nine-Square Activities** are designed to give you the opportunity take some control of what and how you are learning and to explore a variety of activities and topics in many different ways (i.e. complete a service learning opportunity, do a survey regarding a controversial topic, do a research paper, interview a professional, complete a scientific experiment, etc...). **The only catch is that you need to try each one of the options at least once during the term.** Detailed instruction are included in the <u>instructions</u> to explain exactly what is required in each activity. I would suggest that you plan ahead for some of these activities since you may want to start earlier to be able to accomplish the goals of the activity (i.e. it may be good to start some of these activities prior to the week that it is due).

4) The **Term Read Project** is your final project for this term. You need to write a paper or give a presentation regarding a book that you read throughout the term regarding environmental issues. Reading these books will better connect you to how the scientific concepts in this class relate to you. In addition, it will give you the opportunity to do a deep dive into the topic related to the book that you chose. For more instructions regarding this project and for a list of books that you can read go to the the <u>following link</u>. You will be required to notify your instructor by the third week the book that you will read and there sill be periodical check-in's during the term to keep you on track with your reading.

Course Schedule

Link to Course Schedule Canvas page.

UVU Policies and Resources

Policies and Success Strategies

Accessibility Services

 Students who need accommodations because of a disability may contact the UVU Office of Accessibility Services (OAS), located on the Orem Campus in LC 312. To schedule an appointment or to speak with a counselor, call the OAS office at 801-863-8747. Deaf/Hard of Hearing individuals, email nicole.hemmingsen@uvu.edu or text 385-208-2677.

Campus Resources

Additional resources for students

- <u>UVU Equal Opportunity Title 9 (Links to an external site.)</u> (Title IX coordinator for victims of any form of harassment, sexual misconduct, discrimination, or intimate partner violence)
- <u>UVU Ombuds (Links to an external site.)</u> (Student complaint procedures and conflict resolution)
- <u>Academic Tutoring (Links to an external site.)</u> The UVU Tutoring office offers face-to-face peer tutoring, online tutoring, and supplemental instruction for historically difficult classes. Students can sign up for times on the website
- <u>Math Lab (Links to an external site.)</u> The Math Lab provides face-to-face tutoring on a drop-in basis as well as online tutoring by appointment. Students can use this page to check math lab times and sign up for online tutoring.
- Writing Center (Links to an external site.) The Writing Lab provides both in-person and online tutoring that students can sign up for. Their page also has: Links to writing resources like style guides, explanations of common assignment types, grammar help, and writing process guides.

RELIGIOUS ACCOMMODATIONS STATEMENT

UVU values and acknowledges a wide range of faiths and religions as part of our student body, and as such provides accommodations for students. Religious belief includes the student's faith or conscience as well as the student's participation in an organized activity conducted under the auspices of the student's religious tradition or religious organization. The accommodations include reasonable student absences from scheduled examinations or academic requirements if they create an undue hardship for sincerely held religious beliefs. For this to occur, the student must provide a written notice to the instructor of the course for which the student seeks said accommodation prior to the event.

The UVU campus has a place for meditation, prayer, reflection, or other forms of individual religious expression as is described at <u>https://www.uvu.edu/ethics/reflectioncenter/</u>

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Technology Support Services

For 24/7 technical support contact Instructure's Canvas Support Live Chat

(385) 204-4930 (Available 24/7)

This schedule is a general description of the topics that we will discuss during the term.

Your To-Do List and course calendar will have details regarding specific assignments.

Spring Break is March 6-10

Module #	Basic Topics and Questions to Discover (see more detailed objectives in each module and due dates in the calendar)	Discussions and Assignments
1	 What is sustainability and how is this related to Environmental Science and Management? How does understanding the science behind pollution control and environmental degradation influence our environmental decisions? 	 Career Essay Module 1 Assessment
2	 How do human populations influence their environments? How does poverty or wealth influence our environmental decisions? 	 In-class activity & forum: Global Poverty Module 2 Assessment Nine Squares Activity (your choice)
3	• Does living in a rural versus urban environment influence our environmental decisions?	 In-class activity & forum: Utah Smart Growth Term Project Read: Select Book Module 3 Assessment Nine Squares Activity (your choice)
4	 What are the environmental laws and policies that influence pollution and environmental degradation? How can we be advocates for change in environmental law and policy? 	 Module 4 Assessment Midterm Exam 01 (collaborative and Individual)
5&6	 What is Climate Change and how are humans influencing these changes? How do our pollutants influence the changing climate? How can we live sustainably to reduce humanity's impact on the climate? 	 Module 5 In-class activity and forum: Climate Drawdown Module 5 Assessment Nine Squares Activity (your choice)
		Module 6 • Term Project Read: Check In #1 • Module 6 Assessment • Nine Squares Activity (your choice)

7 & 8	How can we sustainably use our mineral resources? How does the extraction and use of these resources cause environmental degradation and pollution?	Module 7 • In-class activity: Mineral Extraction • Module 7 Assessment • Nine Squares Activity (your choice) Module 8 • Module 8 Assessment
		• Midterm Exam 02 (collaborative and Individual)
9 & 10	 How can we sustainably use energy resources? How does the extraction and use of these resources cause environmental degradation and pollution? 	 Module 9 In-class Activity: Carbon Calculator Module 9 Assessment Nine Squares Activity (your choice) Term Project Read: Check In #2 Module 10 In-class activity and forum: Decarbonizing Our Transportation Industry Module 10 Assessment Nine Squares Activity (your choice)
11 & 12	 How can we sustainably use water resources? How does the extraction and use of the resource cause environmental degradation and pollution? 	Module 11 • In-class activity: Water Security • Module 11 Assessment • Nine Squares Activity (your choice) Module 12 • Module 12 Assessment • Midterm Exam 03 (collaborative and Individual)

13	 Where does all of our solid waste go and how does it pollute our environment? What can we do to reduce the amount of waste we produce so that it does not cause environmental degradation? 	 In-class activity: Recycling Module 13 Assessment Nine Squares Activity (your choice) Term Project Read: Check In #3 Plastic Wars Documentary and Assessment (extra credit)
14 & 15	 How much and what do we eat? How does what we eat cause pollution and environmental degradation? How can we sustainably farm, manage our food resources and limit fertilizers and pesticides? 	 Module 14 In-class Activity and forum: Food Choices Module 14 Assessment Nine Squares Activity (your choice) Module 15 Module 15 Assessment (Practice and Proctorio) Midterm Exam 04 (collaborative and Individual)
16	Term Read Project Due during Finals Week	• Term Project Read: Final Report