

University of Texas at El Paso (UTEP)



**Earth, Environmental, and Resource Sciences
Spring 2023**

MW 05:30 pm – 06:50 pm UGLC room 346

ESCI 1301 (26794) Intro to Environmental Sciences

Instructor: Dr. Musa Hussein

Office: Geology Building 306B

Office hour: Via MS Team. Only by an appointment.

Phone: (915) 747-5424

Email: mihussein@utep.edu (respond time 24-48 hours) or
via class messages on Blackboard (respond time 24-48 hours)

Course Description

The main objective of environmental science class is to provide you with the basic term, science, concept, methodology to understand the interaction between the different spheres and human impact on them. The class will focus on the major environmental problems (over population, global warming, energy resources...etc.) to evaluate the relative risks and hazards associated with these problems, and to examine the possible solutions to reduce the impact of such events and problems. The course is divide into four block each block will discuss certain topics.

Learning Outcome

At the end of the course, students should be able to:

- Describe the field and nature of environmental science, diagnose and illustrate major problems on global environment.
- Describe environmental policy and assess its societal context.
- Describe the scope of human population growth, and explain the challenges of feeding growing human population.
- Explain the goals of environmental health and identify environmental health hazards.
- Describe Earth's internal structure and explain how plate tectonics shapes the surface, and list major types of geologic hazards and methods to mitigate or reduce their impact.
- Describe the fresh water, marine, and costal portions of the interconnected aquatic system.
- Describe the composition, structure and function of the Earth's atmosphere. Identify greenhouse gasses and their influence on the climate.
- Describe the climate system and explain the factors that influence global climate.

- Identify the energy resources that we use. Outline the major sources of renewable energy,
- Manage our waste.

Text: Essential Environment, the Science Behind the Stories. Jay Withgott and Mathew Laposata. Sixth Edition or earlier. Pearson.

Attendance:

It is a key to success in this class. Students who begin the course and then stop participating will not be dropped. It is the responsibility of each individual student to drop this course if they stop participating.

Grading:

1. Four exams (40 points each): 60% of your overall grade.

NO MAKE-UP EXAMS ARE GIVEN UNDER ANY CIRCUMSTANCES. The questions will relate to the textbook. Please do not miss the exam REOPEN IS NOT AN OPTION.

2. Reading assignments (10 points each): 30% of your overall grade.

Every week you will complete one or more reading assignment. I expect that you will provide full detailed answer for each question, short brief answers are not preferred and will not get the full grade, Beside the correct answer I will be looking for the way you express your answers. Late assignment will lose many points, assignment that is two weeks late will not be graded and will earn 0 points.

3. Quizzes and class activity (5 points each): 10% of your overall grade.

Every week you will complete one short quiz. The quizzes serve to reinforce material. I assign them based on how you are doing with the material. If you miss more than two, you might lose up to a letter grade.

Your final lecture grade is based on the total of exams and quizzes

90-100=A

80-89.9=B

70-79.9=C

60-69.9=D

less than 60 =F

Students with Disabilities

If you think you may have a disability or if you are experiencing learning difficulties, please The Center for Accommodations and Support Services (CASS) you contact them Monday through Friday 8:00a.m.-5:00p.m. Phone:(915) 747-5148 Union Building East Room 106 cass@utep.edu. They will provide any necessary accommodations. You should also meet with me in order to facilitate your needs. You are expected to provide documentation of your disability in order to make special arrangements in this class.

Academic Misconduct

Academic dishonesty will be not tolerated in this class (please refer to the student conduct code handbook for details regarding university policy and definitions).

Dishonesty includes, but is not limited to, plagiarism on term papers, unauthorized notes brought into an exam; copying answers from another student or letting another student copy your answers. The penalty for the first offense will be a grade of zero points on the exam or assignment. Penalty for the second offense will be an F for the course.

When someone in an audience is talking, or even whispering, it can be very distracting to those nearby. Since this type of behavior is quite rude and impedes the progress of other students, it will not be tolerated and anyone doing so will be asked to leave the classroom.

Your continued enrollment in this course implies that you have read and understand this syllabus, and that you agree to abide by the conditions herein.

Helpful Hints:

- Review material regularly - multiple short study sessions over a period of weeks are more effective than a single "cram" the night before an exam. Form a study group online. Each member should study material on their own before meeting with the group for discussion and comparison.
- Write out definitions and answers to essay questions; use a computer or something else- don't just passively read your notes!
- Ask questions when you have any
- Combine class notes, textbook, web materials, and old exams when studying – each provides a different perspective.
- Pay attention to the news and current events to see how they related to Geology.
- Do the homework assignments. They will help your grade.
- Read your text in SMALL doses; don't plan on one massive reading session the night before the exam.
- Be sure to look at the pictures and diagrams in the text.
-

Technology Requirements

Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

COVID-19 Accommodations

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible so we can arrange necessary and appropriate accommodations.

(classes with on-campus meetings) Students who are considered high risk according to CDC guidelines and/or those who live with individuals who are considered high risk may contact [Center for Accommodations and Support Services](#) (CASS) to discuss temporary accommodations for on-campus courses and activities.

COVID-19 PRECAUTIONS

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at [screening.utep.edu](#). If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website ([screening.utep.edu](#)) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.

Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 Health and Safety and Section 1.2.2.5 Disruptions in the UTEP Handbook of Operating Procedures.

(classes with on-campus meetings) Please note that if COVID-19 conditions deteriorate in the City of El Paso, all course and lab activities may be transitioned to remote delivery.

COURSE OUTLINE: this schedule is subject to change.

Block Number	Topic	Chapter number
Block 1	-Science and Sustainability: An introduction to Environmental Science	1
	- Environmental Systems: Matter, Energy and Ecosystems	2
	- Economics, Policy, and Sustainable Developments	5
	- Human Population	6
EXAM 1 (TBA)		
Block 2	- Soil, Agriculture, and Future of Food.	7
	- Biodiversity and Conservation Biology	8
	- Environmental Health and Toxicology	10
EXAM 2 (TBA)		
Block 3	- Geology, Minerals and Mining	11
	- Fresh Water, Ocean and Coast	12
	- Atmospheric Science, Air Quality, and Pollution Control	13
EXAM 3 (TBA)		
Block 4	- Global Climate Change	14
	- Nonrenewable Energy Sources, Their impact, and Energy Conservation.	15
	- Renewable Energy Alternatives	16
	- Managing Our Waste	17
EXAM 4 (TBA)		

Important Academic Calendar Dates:

- Classes begin Jan. 17
- Census day Feb. 01
- Spring break March 13 - 17
- Course drop March 30
- Dead Day May 06
- Final Exams May 8 - 12