

Introduction to Environmental Science

Course Number:	ENV 101	Term:	Summer, 2021
Instructor:	TBA	Email:	
Contact Hours: Credits:	48 3.0	Meeting Times:	TBA

Course Description:

This class provides a comprehensive overview of environmental science. This broad introductory course will examine how to understand and interpret the world around you from a scientific and philosophical perspective. Throughout the course, we will examine environmental issues and investigate realistic solutions. By the end of this course, you will have a greater understanding of the relationships between the environmental factors that affect our world.

Learning Objectives:

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

- 1. Define common environmental science terminology
- 2. Explain how components of the Earth system interact
- 3. Describe global, regional, and landscape scale environmental processes and systems
- 4. Explain how climate patterns impact the ecosystems of Earth's biosphere
- 5. Explain the scientific basis of the issue of global climate change
- 6. Propose sustainable strategies to mitigate adverse human impacts on the environment

Required Textbook and Course Materials:

All readings and course materials will be provided.

Language of Instruction:

This course is taught entirely in English, including lectures, homework, assignments and examinations. Teaching assistants will be fluent in both English and Mandarin.

Course Prerequisites:

None

University Policies

Class Format

In Person. Course activities, discussions, assignments and resources will be made available at the start of and during the course.

Attendance, Participation and Deliverables

Courses are very intensive and in order to be successful, students need to attend every class. Attendance is required for all lectures and class activities. Class participation is expected from every student and form a significant portion of the final course grade.

All course deliverables (homework assignments and tests) are due on time as assigned. This course includes no make-ups, postponements or additional assignments, except for verified medical emergencies. If you miss an exam/assignment due to a non-sanctioned absence, your score on that exam/assignment will be zero.

Academic Dishonesty

All cases of academic dishonesty will be diligently pursued. Academic dishonesty includes representing the work of another as one's own work or cheating by any means. Academic dishonesty also includes aiding, abetting, concealing or attempting such activity. The penalty is automatic failure of the course and possible suspension from the university.

Grading Scale

Grading	Scale	(%)
Oracing	Deare	(10)

97 - 100	A+	77 – 79	C+
93 - 96	А	73 – 76	С
90 - 92	A-	70 - 72	C-
87 - 89	B+	67 – 69	D+
83 - 86	В	63 – 66	D
80 - 82	B-	60 - 62	D-
		0 - 59	F

Professor- and Course-Specific Policies (*Tentative*)

Homework:

Assignments will be listed at the beginning of the course. The purpose is to prepare you for the exams. The homework is a very important part of the course. No matter how well you think you understand the material presented in class, you won't really learn it until you do the problems

Exams

No make-ups will be given after the exam. The use of the textbook or any other written reference is not allowed during the exams. The purpose of the exams is to test your understanding of key concepts from the course lectures and materials.

Grade Components:

Test 1	20%
Test 2	20%
Test 3	20%
Test 4	20%
Test 5	20%
Total	100%

Course Schedule (*Tentative*)

Module	Topics
	The Earth System – An Introduction
1	Basic Concepts – Energy and Matter
	Rocks and Minerals
	Plate Tectonics
	Volcanoes and Earthquakes
	Mountain Building
2	Weathering and Soils
	Flowing Water (Rivers and Streams)
	Glaciers and Wind
	Earth's Energy Balance
	Atmospheric Circulation and Winds
3	Cloud Formation and Precipitation
	Weather
	Climate
	Ocean Structure
4	Ocean Dynamics
	Coastal Environments
	Biosphere I (Ecosystems and Net Primary Productivity)

	Biosphere II (Decomposition and Nutrient Cycling)	
5	Global Carbon Cycle (and the Role of Humans)	
	Global Climate Change I	
	Global Climate Change II	