



## Syllabus for Environmental Science 12

### Course Information

Semester & Year: Fall 2021

Course ID & Section #: Envsc 12 (D2369)

Instructor's name: Lisa Pedicino

Day/Time/Location: Correspondence (Pelican Bay)

Course units: 3.0

### Instructor Contact Information

Correspondence (Via Mail)

**Textbook:** Environmental Science and Sustainability, Montgomery, ISBN: 978-0393422108

### Catalog Description

A planet-scale examination of the Earth's atmosphere and climate. This course will include an in-depth look at the factors controlling climate, its changes over time, and the timeline of global climatic changes. This course is an interdisciplinary introduction to the Earth's climatic systems and interactions

### Course Student Learning Outcomes *(from course outline of record)*

1. Provide examples of positive and negative feedback mechanisms that relate to natural systems.
2. Critically analyze climate change on the Earth.
3. Present both the pros and cons of a particular climatic interpretation, reflecting the complexity of the application of the scientific method to natural systems.
4. Examine the human-induced variations on Earth's natural systems in the context of a well-organized and scientifically valid discussion of a climate-related issue.

### Grading

67%- Summaries (10)-100 pts each, 33%-Current Events (10)-50 pts each

A (>93.3%), A- (90-93.3%), B+ (86.7-89.9%), B (83.3-86.6%), B- (80-83.2%), C+ (76.7-79.9%), C (70-76.6%), D (55-69.9%), F (<55%)

### Accessibility

Students will have access to course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.

College of the Redwoods is also committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or Disability Services and Programs for Students (DSPS).

## **Environmental Science 12 Class Schedule**

Friday, August 27- Book, Assignments Delivered

Friday, September 3- First current event summary due

Friday, December 10-Last summary due

## **Environmental Science 12 Topics/Outline**

	<u>Unit</u>	<u>Topic</u>
Week 1	1	Cover letter course overview, current event articles
Week 2	2	Land-Geology and climate
Week 3	2	Geology and climate continued
Week 4	3	Atmosphere
Week 5	3	Atmosphere continued
Week 6	4	Water-Oceans and fresh water
Week 7	5	Life
Week 8	6	Biogeochemical cycles
Week 9	7	Human Population
Week 10	8	Non-renewable and alternative energy sources
Week 11	8	Non-renewable and alternative energy sources continued
Week 12	9	Reconstructing past climates
Week 13	10	Climate change
Week 14		Thanksgiving Break
Week 15	11	Global, national, and local solutions
Week 16		Late Assignments

# **Environmental Science 12: Semester Chapter Readings**

## **Week 1-** Unit 1 Introduction

Chapter 1: Intro, 1.1, 1.2, 1.3, 1.4

## **Week 2 and 3-** Unit 2 Geology

Chapter 9: Intro, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7

## **Week 4 and 5-** Unit 3 Earth's atmosphere

Chapter 8: Intro, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7

## **Week 6-** Unit 4 Water

Chapter 7: Intro, 7.1, 7.2, 7.3, 7.6, 7.7, 7.8

## **Week 7-** Unit 5 Life

Chapter 3: 3.4, 3.5

Chapter 4: Intro, 4.1, 4.7

Chapter 5: 5.6

## **Week 8-** Unit 6 Biogeochemical cycles

Chapter 10: Intro, 10.3, 10.4, 10.5

## **Week 9-** Unit 7 Human population

Chapter 6: Intro, 6.1, 6.2, 6.4, 6.5, 6.6

## **Week 10 and 11-** Unit 8 Non-renewable and alternative energy sources

Chapter 13: Intro, 13.1, 13.2, 13.4, 13.5

Chapter 14: Intro, 14.1, 14.2

## **Week 12-** Unit 9 Reconstructing past climates

No chapter readings, refer to notes instructor provides

## **Week 13-** Unit 10 Climate Change

Chapter 11: Intro, 11.1, 11.2, 11.3, 11.4, 11.5

## **Week 14-** Thanksgiving Break

## **Week 15-** Unit 11 Global, national, and local solutions

Chapter 20: 20.7

## **Week 16-** Late Assignments

## Environmental Science 12: Assignment Due Dates

<b><u>Due Date:</u></b>	<b><u>Assignment(s):</u></b>
9/3	Current Event #1
9/10	Current Event #2
9/17	Summary Unit 2
9/24	Current Event #3
10/1	Summary Unit 3
10/8	Summary Unit 4 and Current Event #4
10/15	Summary Unit 5
10/22	Summary Unit 6 and Current Event #5
10/29	Summary Unit 7 and Current Event #6
11/5	Current Event #7
11/12	Summary Unit 8 and Current Event #8
11/19	Summary Unit 9 and Current Event #9
12/3	Summary Unit 10 and Current Event #10
12/10	Summary Unit 11