

Syllabus for Environmental Science 12

Course Information

Semester & Year: Spring 2023 Course ID & Section #: Envsc 12 (D5023) 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 wellorganized and scientifically valid discussion of a climate-related issue.

Grading

78%- Summaries (9)-100 pts each, 22%-Current Events (5)-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), Section508 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

Wednesday, February 1- First Assignment Delivered Wednesday, February 8 - First current event summary due Friday, April 28 -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 | 3 | Atmosphere |
| Week 4 | 4 | Water-Oceans and fresh water |
| Week 5 | 5 | Life |
| Week 6 | 6 | Biogeochemical cycles |
| Week 7 | | Spring Break March 13- March 17 |
| Week 8 | 7 | Non-renewable and alternative energy sources |
| Week 9 | 8 | Reconstructing past climates |
| Week 10 | 9 | Climate change |
| Week 11 | 9 | Climate change continued |
| Week 12 | 10 | Global, national, and local solutions |
| Week 13 | | Last Current Event |
| Week 14 | | Late Assignments |

Environmental Science 12: Fall Semester Chapter Readings

Week 1- Unit 1 Introduction and Current Event #1 Chapter 1: Intro, 1.1, 1.2, 1.3, 1.4 Week 2 - Unit 2 Geology Chapter 9: Intro, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7 Week 3 - Unit 3 Earth's atmosphere Chapter 8: Intro, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7 Week 4- Unit 4 Water and Current Event #2 Chapter 7: Intro, 7.1, 7.2, 7.3, 7.6, 7.7, 7.8 Week 5- Unit 5 Life Chapter 3: 3.4, 3.5 Chapter 4: Intro, 4.1, 4.7 Chapter 5: 5.6 Week 6 - Unit 6 Biogeochemical cycles and Current Event #3 Chapter 10: Intro, 10.3, 10.4, 10.5 Chapter 6: Intro, 6.1, 6.2, 6.4, 6.5, 6.6 Week 7- Spring Break March 13-17 Week 8- Unit 7 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 9 - Unit 8 Reconstructing past climates No chapter readings, refer to notes instructor provides Week 10 and 11 - Unit 9 Climate Change and Current Event #4 Chapter 11: Intro, 11.1, 11.2, 11.3, 11.4, 11.5 Week 12 – Unit 10 Global, national, and local solutions and Current Event #5 Chapter 20: 20.7 Week 13- Current Event #5 Week 14- Late Assignments

Environmental Science 12 Correspondence Assignment Due Dates

| Due in Mail By: | Assignment(s): | | |
|--------------------------|-----------------------------------|--|--|
| 2/8 | Current Event #1 | | |
| 2/17 | Summary Unit 2 | | |
| 2/24 | Summary Unit 3 | | |
| 3/3 | Summary Unit 4, Current Event #2 | | |
| 3/10 | Summary Unit 5 | | |
| Spring Break March 13-17 | | | |
| 3/24 | Summary Unit 6, Current Event #3 | | |
| 3/31 | Summary Unit 7 | | |
| 4/7 | Summary Unit 8 | | |
| 4/14 | Current Event #4 | | |
| 4/21 | Summary Unit 9 | | |
| 4/28 | Summary Unit 10, Current Event #5 | | |
| 5/5 | Last date for late assignments | | |