

# BUTTE COLLEGE

## COURSE OUTLINE

### I. CATALOG DESCRIPTION

**NR 26 - Environmental World**

**3 Unit(s)**

**Prerequisite(s):** NONE

**Recommended Prep:** Reading Level IV, English Level IV

**Transfer Status:** CSU/UC

51 hours Lecture

This course is an interdisciplinary study of the world environment with a focus on human use and protection of natural resources across ethnic and cultural boundaries. Environmental issues involving the exploitation and conservation of natural resources will be studied for their modern as well as historical, political, economic and social implications. Particular attention is paid to the condition of natural resources, including soil, water, forest, mineral, plant and animal life throughout California. The citizen's role in natural resource conservation is stressed throughout the course. Graded only.

### II. OBJECTIVES

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

- A. Describe environmental issues related to cultural and ethnic diversity, and discuss ideas to reduce the human impact on the environment.
- B. Evaluate ecological inter-relationships between living and non-living components of an ecosystem.
- C. List and evaluate human influences and potential impacts on the conservation of our natural resources.
- D. Identify and describe characteristics and general distributions of major biomes and discuss how humans have impacted each of them.
- E. Explain how the use and misuse of mineral, forest, wildlife, agricultural land and water resources impact our world environments.
- F. List and analyze historical and theoretical factors that have contributed to human population growth, including ethnicity and cultural aspects.
- G. Differentiate between the sources of land degradation and list possible sustainable solutions for each source.
- H. List the sources of air and water pollution and identify how these pollutants are hazardous to the health of humans, plants, and wildlife.

### III. COURSE CONTENT

#### A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Understanding Our Environment	3.00
2. Environmental Systems: Matter and Energy of Life	3.00
3. Evolution, Species Interactions, and Biological Communities	6.00
4. Human Populations	3.00
5. Biomes and Biodiversity	3.00
6. Environmental Conservation: Forests, Grasslands, Parks, and Nature Preserves	3.00
7. Food and Agriculture	3.00

8. Environmental Health and Toxicology	3.00
9. Climate	3.00
10. Air Pollution	3.00
11. Water: Resources and Pollution	3.00
12. Environmental Geology and Earth Resources	3.00
13. Energy	3.00
14. Solid and Hazardous Waste	3.00
15. Economics and Urbanization	3.00
16. Environmental Policy and Sustainability	3.00
Total Hours	51.00

#### **IV. METHODS OF INSTRUCTION**

- A. Lecture
- B. Instructor Demonstrations
- C. Guest Speakers
- D. Collaborative Group Work
- E. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- F. Discussion
- G. Reading Assignments
- H. Multimedia Presentations
- I. Multicultural Case Studies

#### **V. METHODS OF EVALUATION**

- A. Exams/Tests
- B. Quizzes
- C. Oral Presentation
- D. Class participation
- E. Mid-term and final examinations
- F. Short papers
- G. Essays and research papers

#### **VI. EXAMPLES OF ASSIGNMENTS**

- A. Reading Assignments
  - 1. Read the chapter on energy sources and be prepared to discuss in class the issues related to the use of fossil-fuels.
  - 2. Read an article on the United States population trends and present your findings to the class.
- B. Writing Assignments
  - 1. Select a recent news article on environmental issues and write a one page synopsis about the issue.
  - 2. Write a 3 page research paper on the benefits and consequences of "fracking" and be sure to cite your sources.
- C. Out-of-Class Assignments
  - 1. Use the ecological footprint calculator on the Internet to determine your ecological footprint and report your findings during the next class.
  - 2. Attend a local land-use planning meeting and write a brief summary of the meeting.

#### **VII. RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

- A. Enger, E.D., and Smith, B.F. Environmental Science: A Study of Interrelationships. 13th Edition. McGraw Hill, 2013.
- B. Cunningham, P., and Cunningham, M.A. Principles of Environmental Science: Inquiry and Applications. 7th Edition. McGraw-Hill, 2012.

Materials Other Than Textbooks:

- A. Selected readings from library/Internet

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