

**OHLONE COLLEGE**  
**Ohlone Community College District**  
**OFFICIAL COURSE OUTLINE**

**I. Description of Course:**

1. **Department/Course:** ENVS - 105

2. **Title:** Energy: Development and Sustainability

3. **Cross Reference:**

4. **Units:** 3

**Lec Hrs:** 3

**Lab Hrs:**

**Tot Hrs:** 54.00

5. **Repeatability:** No

6. **Grade Options:** Grade Only (GR)

7. **Degree/Applicability:**

Credit, Degree Applicable, Transferable - CSU (T)

8. **General Education:** District General Education (Plan A)

II. Social Sciences/American Institutions

9. **Field Trips:** May be Required

10. **Requisites:**

12. **Catalog Description:**

The course is an exploration of the conversion and use of energy, on the nature of energy and energy systems, how different cultures use and view energy, and the use of energy in contemporary societies. The course will explain the origin and dimensions of the global energy problem and identify how energy issues and policies affect environmental quality, economic growth and global politics. The course will focus on how energy conservation, energy efficiency and renewable energy sources can be incorporated to create a sustainable society.

13. **Class Schedule Description:**

An examination of global energy use, sources, solutions, and its impact on the environment, economy, and politics.

14. **Counselor Information:**

The course is an exploration of the conversion and use of energy and the use of energy in contemporary societies. It is the required course for the certificate of alternative energies.

**II. Student Learning Outcomes**

The student will:

1. Describe the global energy consumption situation as it exists today and society's response.
2. Comment on the topic of climatic change as it is woven through different social, cultural, and environmental conditions.
3. Define what a non-renewable energy source is and what a renewable energy source is and their role in different cultural settings.
4. Assess non-renewable and renewable energy sources in terms of their viability, efficiency, and useability.
5. Plan and propose a sustainable energy model for the future across broad socio-eco levels and cultures.

**III. Course Outline:**

- A. Non renewable energy resources
- B. Global energy consumption
- C. Environmental regulation
- D. Pollution
- E. Renewable energy resources
- F. Environmental economics of renewable versus non renewable energies
- G. Energy and environmental policy
- H. Scientific research methodology
  - I. Assessing the potential of sustainable energy supplies for a global society
  - J. Creating a new energy consciousness.

**IV. Course Assignments:**

A. Reading Assignments

- 1. Reading assignments per textbook and other referenced sources.

B. Projects, Activities, and other Assignments

- 1. Oral presentation.

C. Writing Assignments

- 1. Social commentary per assigned readings.

**V. Methods of Evaluation/Assessment:**

- A. Exams covering the assigned readings, class lectures, discussions, videos, and
- B. handouts.
- C. Commentary on assigned readings.
- D. Oral presentation.

**VI. Methods of Instruction:**

- A. Lecture
- B. Discussion
- C. Audiovisual
- D. Computer Assisted Instruction

**VII. Textbooks:**

Recommended

- 1. Kimberly K. Smith *Powering Our Future* 1st Edition, Universe Books, 2005 ISBN: 0-595-33929-8

Supplemental

**VIII. Supplies:**