

COURSE OUTLINE

Revision: Tim Walsh, April 2011

DEPARTMENT:	Environmental Studies
CURRICULUM:	Academic
COURSE TITLE:	Energy and Resources: Now and Future
COURSE NUMBER:	ENVS 170
TYPE OF COURSE:	Academic Transfer
AREA(S) OF KNOWLEDGE:	Individuals, Cultures and Societies Natural World
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	55
LAB HOURS:	0
CLASS SIZE:	35
PREREQUISITES:	Eligible for ENGL 098

COURSE DESCRIPTION:

The study of energy and other resources, including simple descriptions and definitions, personal needs and uses, and worldwide production and consumption now and in the future. Energy and resource alternatives will be discussed.

STUDENT LEARNING OUTCOMES ADDRESSED

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

1. **Communication:** Read and listen actively to learn and communicate. Speak and write effectively for personal, academic and workplace purposes.
2. **Computation:**
3. **Human Relations:** Use social interactive skills to work in groups effectively. Recognize the diversity of cultural influences and values.,

4. **Critical Thinking:** Think critically in evaluating information, solving problems and making decisions
5. **Technology:**
6. **Personal Responsibility:** Be motivated and able to continue learning and adapt to change. Value one's own skills, abilities, ideas and art. Take pride in one's work. Be aware of civic and environmental issues.
7. **Information Literacy:** Access and evaluate information from a variety of sources and contexts. Use information to achieve personal, academic and career goals, as well as to participate in a democratic society

GENERAL COURSE OBJECTIVES--*At the end of the class the student should be able to:*

1. Understand terms in the field of energy.
2. Understand the principles, concepts and processes of matter and energy resources, environmental economics and politics, and environmental worldviews.
3. Understand the interrelationships among the various disciplines that comprise energy issues.
4. Understand the psychological, philosophical, cultural, economic, and political causes of our actions energy and material resource use.
5. Understand the global, national, regional, and local effects of our actions upon the environment.
6. Examine one's own attitudes and actions toward the use of energy and material resource use.

TOPICAL OUTLINE:	APPROX. HOURS
I. Definitions of energy	2
II. History of energy and material resource use	2
III. Energy mechanics	5
IV. Conservation of energy	2
V. Three energy laws	2
VI. Energy from non-renewable resources	10
VII. Energy from renewable resources	12
VIII. Energy conservation and efficiency	10
IX. Energy and a sustainable society	10
Total	55

Originated and Revised by Tim Walsh
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