COURSE OUTLINE OF RECORD

Number: ENVS G100    TITLE: Introduction To Environmental Studies

ORIGINATOR: Instructor Placeholder AAA    EFF TERM: Fall 2010
FORMERLY KNOWN AS:    DATE OF
OUTLINE/REVIEW: 11-20-2006
CROSS LISTED COURSE:    TOP NO: 0946.10

SEMESTER UNITS: 3.0
HRS LEC: 54.0    HRS LAB: 0.0    HRS OTHER: 0.0
CONTACT HRS TOTAL: 54.0
STUDY NON-CONTACT HRS RECOMMENDED: 108.0

CATALOG DESCRIPTION:
An interdisciplinary course designed to give the student a general overview of the environmental studies field. A basic understanding of issues related to the environmental compartments of air, soil and water; historical events, economic, political, and cultural concepts, regulations, and technology will be presented. An overview of career opportunities and paths within the environmental industry will be presented.

JUSTIFICATION FOR COURSE:

PREREQUISITES:

COREQUISITES:

ADVISORIES:

ASSIGNED DISCIPLINES:
Environmental technologies (environmental hazardous material technology, hazardous material abatement, environmentally conscious manufacturing, waste water pretreatment, air pollution control technology, integrated waste management, water treatment, sewage treatment)

MATERIAL FEE: Yes [ ] No [X] Amount: $0.00
CREDIT STATUS: Noncredit [ ] Credit - Degree Applicable [X] Credit - Not Degree Applicable [ ]
GRADING POLICY: Pass/No Pass [X]    Standard Letter [X]    Not Graded [ ]    Satisfactory Progress [ ]
OPEN ENTRY/OPEN EXIT: Yes [ ] No [X]
TRANSFER STATUS: CSU Transferable[ ] UC/CSU Transferable[X] Not Transferable[ ]
BASIC SKILLS STATUS: Yes [ ] No [X]    LEVELS BELOW TRANSFER: Not Applicable
CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable
NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course
OCCUPATIONAL (SAM) CODE: D
REPEATABLE ACCORDING TO STATE GUIDELINES: No [X]    Yes [ ]    NUMBER REPEATS:
REQUIRED FOR DEGREE OR CERTIFICATE: No [ ] Yes [X]
Associate of Arts: Liberal Arts: Emphasis in Business and Technology(Associate in Arts)
Associate of Arts: Liberal Arts: Emphasis in Social and Behavioral Sciences(Associate in Arts)
Energy Auditor(Certificate of Achievement)
Energy Auditor(Certificate of Achievement)
Energy Efficiency and Renewable Energy Degree(Associate in Arts)
Energy Efficiency and Renewable Energy Degree(Associate in Arts)

GE AND TRANSFER REQUIREMENTS MET:
IGETC Area 4: Social and Behavioral Sciences
        4G: Interdisciplinary, Social & Behavioral Sciences
CSU GE Area D: Social, Political, and Economic Institutions  
D7 - Interdisciplinary Social and Behavioral Science

COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. recognize the relationships between economic development and management of natural resources.
2. identify environmental regulatory sources and references.
3. interpret and determine the scope of environmental legislation.
4. analyze generic industrial processes and waste streams.
5. identify types of hazardous materials.
6. appraise the health effects of toxic substances.
7. distinguish between industrial toxicology, industrial hygiene, occupational health hazards and risk management.
8. appraise pollution prevention and waste management techniques.
9. differentiate environmental career opportunities and paths.

COURSE OBJECTIVES:
1. Recognize the relationships between economic development and management of natural resources.
2. Identify environmental regulatory sources and references.
3. Interpret and determine the scope of environmental legislation.
4. Analyze generic industrial processes and waste streams.
5. Identify types of hazardous materials.
6. Appraise the health effects of toxic substances.
7. Distinguish between industrial toxicology, industrial hygiene, occupational health hazards and risk management.
8. Appraise pollution prevention and waste management techniques.
9. Differentiate environmental career opportunities and paths.

COURSE CONTENT:

LECTURE CONTENT:

1. Environmental studies introduction
   a. Historical perspectives
   b. Career path options
   c. Environmental laws and regulations
   d. Environmental compartments

2. Ecology and natural resources
   a. Biosphere interactions
   b. Community and ecosystems
   c. Natural resources management

3. Air
   a. Carbon, Oxygen and Nitrogen Cycles
   b. Air pollution and health
   c. Air pollution control techniques
   d. Regulatory framework

4. Water
a. Hydrologic cycle
b. Water sources
c. Water pollution
d. Wastewater and water treatment processes
e. Water quality laws

5. Land
a. Soil concepts
b. Land pollution
c. Regulatory framework

6. Environmental health and safety
a. Occupational safety
b. Toxicology and Industrial Hygiene
c. Risk management

7. Hazardous materials
a. Hazardous materials and substances
b. Identification and labeling
c. Transportation requirements
d. Disposal of materials
e. Regulations of hazardous materials and substances

8. Pollution prevention
a. Waste management
b. Source reduction and waste minimization
c. Waste reduction technologies
d. Waste management legislation

9. Environment and economic development
a. Ecotourism and sustainable development
b. Renewable energies
c. Industrial ecology
d. Environmental education
e. Environmental justice

METHODS OF INSTRUCTION:

A. Lecture:
B. Online:
C. Independent Study:

INSTRUCTIONAL TECHNIQUES:

COURSE ASSIGNMENTS:

Reading Assignments

Required readings are from required text.

Out-of-class Assignments

1. Attendance at topic-related lectures and trade shows as available.
2. Industry visitations.
3. Participation in service-learning activities as available.

Writing Assignments

Homework assignments dealing with topics in the course.
METHODS OF STUDENT EVALUATION:
Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Objective Examinations
Report
Projects (ind/group)
Problem Solving Exercises
Oral Presentations

Demonstration of Critical Thinking:
Problem-based learning activities (define, analyze, synthesize, communicate, report, evaluate) requiring independent research and group collaboration.

Required Writing, Problem Solving, Skills Demonstration:
Homework assignments dealing with topics in the course.

TEXTS, READINGS, AND RESOURCES:
TextBooks:

Other:
1. Handouts from instructors

LIBRARY:
Adequate library resources include:
Comments:

Attachments:
Attached Files