



Broward Community College

Course Outline

STATUS: A

COMMON COURSE NUMBER: SYG 2212

COURSE TITLE: Society and the Environment

CREDIT HOURS: 3

CONTACT HOURS BREAKDOWN:

Lecture/Discussion 48

Lab

Other

Contact Hours/Week 3

CATALOG COURSE DESCRIPTION:

Prerequisite: None

Corequisite: None

A study of humanity's social systems and the resulting impact of their technologies on the natural environment and natural life support systems.

General Education Requirements - Associate of Arts Degree, meets Area(s):

General Education Requirements - Associate in Science Degree, meets Area(s):

UNIT TITLES:

1. The Sociological Perspective and the Environmental Crises
2. Theoretical Perspectives
3. Basic Ecological Principles
4. Human Populations and Ecosystems
5. Survey of Environmental Problems
6. Social Institutions: Their Functions, Ideologies, and Impact on the Natural World
7. Public Action and Environmental Groups
8. Future Vision and Societal Change

I. Course Overview:

Upon successful completion of this course, the students should be able to describe the basic concepts, perspectives, and problems associated with society's interaction with the Earth's life support systems. The student will understand that the environmental crises the Earth faces are societal in origin and societal in solution. Additionally, students will be able to view both the problems and solutions with both a global societal and local societal perspective.

II. Units:

Unit 1. The Sociological Perspective and the Environmental Crises

General Outcome:

- 1.0 The students should be able to explain and understand why the sociological perspective applied to environmental problems is a useful tool in helping to solve the problems. They will also understand that this social science is usually biased.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Describe the following sociological perspectives:
 - 1.1.1 Constructing reality
 - 1.1.2 The importance of vision
- 1.2 Identify the steps in the scientific method.
- 1.3 Explain why environmental science is not a "pure science" as follows:
 - 1.3.1 Objectivity and subjectivity
 - 1.3.2 Values and bias
- 1.4 Discuss the role of anthropocentrism versus biocentrism in scientific inquiry.

Unit 2. Theoretical Perspectives

General Outcome:

- 2.0 The students should be able to understand how theories are used to explain our notions of reality and that these change over time as new scientific discoveries are made.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Apply the more traditional sociological theories:

- 2.1.1 Functionalism
- 2.1.2 Conflict theory
- 2.1.3 Symbolic interactionism
- 2.1.4 Human ecology

- 2.2 Describe other theoretical perspectives being used to organize study of environmental problems:

- 2.2.1 The Gaia Hypothesis
- 2.2.2 Holism and Systems Theory
- 2.2.3 Chaos theory
- 2.2.4 Entropy
- 2.2.5 The new cosmology

Unit 3. Basic Ecological Principles

General Outcome:

- 3.0 The students should be able to gain an understanding of large-based ecological principles that apply to all ecosystems and to the Earth as a whole.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 3.1 Define ecology.
- 3.2 List and explain some of Earth's basic life support systems, cycles, and their interaction as follows:
- 3.2.1 Biosphere and atmosphere
 - 3.2.2 Carbon and water cycles
- 3.3 Judge the benefits of evolution, particularly biodiversity.
- 3.4 Explain the nature of ecosystems and their tensions as follows:
- 3.4.1 Threshold effect
 - 3.4.2 Rate of change
 - 3.4.3 Carrying capacity
 - 3.4.4 Listing of some effects of environmental stress

Unit 4. Human Populations and Ecosystems

General Outcome:

- 4.0 The students should be able to gain an understanding of the impact of the growth rate of human populations, as well as how technology accompanying the growth has been primarily destructive to the Earth's life support systems.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Chart the exponential growth rate of human population.
- 4.2 Characterize the demographic transition as follows:
- 4.2.1 Stages one, two and three
 - 4.2.2 Crude birth and death rates
 - 4.2.3 Comparison of different countries' growth rates
- 4.3 Delineate the consequences of exceeding carrying capacity including:
- 4.3.1 Topsoil depletion and desertification
 - 4.3.1.1 historical causes of desertification
 - 4.3.1.2 modern farming techniques: short-term maximum yield
 - 4.3.2 Pollution: Industrial nations exceeding carrying capacity.
 - 4.3.3 Rise in numbers of environmental refugees
- 4.4 Name successful strategies to reduce population growth.
- 4.5 Define and explain the advantages of sustainable development.

Unit 5. Survey of Environmental Problems

General Outcome:

5.0 The students should be able to gain an understanding of why particular environmental issues are complex, difficult to solve problems. The students should also develop their own skills at assessing the impact of environmental problems, especially local issues that personally affect them.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

5.1 Describe atmospheric problems:

5.1.1 Atmospheric notions

5.1.1.1 chemical cauldron

5.1.1.2 long life-span of chemicals

5.1.1.3 global experiments

5.1.2 The greenhouse effect

5.1.3 Ozone depletion

5.2 Describe loss of biodiversity:

5.2.1 Habitat destruction

5.2.2 Rate of species loss

5.2.3 Example of rainforests

5.3 Describe land, air, and sea pollution:

5.3.1 Humanity's waste stream

5.3.2 Toxic and hazardous pollution

5.3.2.1 smog and acid rain

5.3.2.2 Love Canal and Cancer Alley

5.4 Assess how local environments are threatened and why.

Unit 6. Social Institutions: Their Functions, Ideologies, and Impact on the Natural World

General Outcome:

6.0 The students should be able to explain the role of social institutions in creating or maintaining environmental dilemmas. Students will also be able to delineate the purposeful function of each institution and suggest ideological and/or structural changes so that they enhance the human-natural relationship rather than undermine it.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

6.1 Describe the role of the economy in the post-industrial and industrial world:

- 6.1.1 GNP and the economy
- 6.1.2 GNP and the use of energy
- 6.1.3 Limits to growth
- 6.1.4 Steady-state economy
- 6.1.5 Transplanting our economical philosophy to Third World nations
- 6.1.6 Military vs. domestic spending
- 6.1.7 Apply environmental sociology paradigms
 - 6.1.7.1 conservative
 - 6.1.7.2 liberal
 - 6.1.7.3 radical

6.2 Describe the role of science and technology in post-industrial and industrial societies:

- 6.2.1 The "Technological Fix"
- 6.2.2 Hard vs. soft technology and energy paths

6.3 Describe the nature of political ideologies and their impact on natural systems:

- 6.3.1 Capitalism
- 6.3.2 Socialism
- 6.3.3 The emerging "green" political party in Europe
- 6.3.4 Centralization vs. decentralization of power and decision-making

- 6.4 Describe the role of educational institutions in modern societies and their effectiveness in addressing environmental concerns:
 - 6.4.1 No Limits to Learning Report
 - 6.4.2 Specialization vs. multi-disciplinary approaches

- 6.5 Describe and contrast the influence of religious traditions on perceptions of environmental problems:
 - 6.5.1 Judeo-Christian: dominance or stewardship
 - 6.5.2 Native Americans and native traditions worldwide

- 6.6 Describe the role of kinship patterns and their interactions with other social structures:
 - 6.6.1 Tribal/village-based societies' impact on the environment
 - 6.6.2 The modern nuclear family
 - 6.6.3 Patriarchy

Unit 7. Public Action and Environmental Groups

General Outcome:

- 7.0 The students should be able to gain an understanding of the role and necessity of public action in addressing environmental concerns. The students should also be able to understand how social movements in general have produced social change.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 7.1 Describe environmental democracy.
- 7.2 List a number of environmental groups, their philosophies and their achievements.
- 7.3 Define the following:
- 7.3.1 Bioregionalism
 - 7.3.2 Grassroots movements
- 7.4 Explain specific social policies addressing environmental issues:
- 7.4.1 Environmental impact statements
 - 7.4.2 Valdez principles
 - 7.4.3 Ballot referendums
- 7.5 Relate the strategies of other successful social movements:
- 7.5.1 Labor
 - 7.5.2 Civil Rights
 - 7.5.3 Women's rights

Unit 8. Future Vision and Societal Change

General Outcome:

- 8.0 The students should be able to gain an understanding of how social change can be motivated by a critical mass demanding change and, importantly, that that change is directed by a common vision. The students should also be able to understand that informed visions based on sound ecological principles are the best approach to long-term life viability for the Earth.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 8.1 Explain the critical mass theory of social change and the diffusion of innovation.
- 8.2 Describe the sociological models of social change as follows:
- 8.2.1 Evolutionary models
 - 8.2.2 Conflict
 - 8.2.3 Functionalist
- 8.3 Delineate at least one sustainable future scenario.
- 8.4 Relate why soft over hard technology is most appropriate in the long-term.
- 8.5 List and explain the advantages and disadvantages of renewable energy sources.
- 8.6 Explain the features of a sustainable development economy for Third World countries.
- 8.7 Explain why transitional strategies can backfire.
- 8.8 Explain some emerging world views:
- 8.8.1 Environmental ethics
 - 8.8.2 Deep ecology and biocentrism
 - 8.8.3 The Greens Ten Key values
 - 8.8.4 Global environmentalism and local action:
"think globally, act locally"
 - 8.8.5 "Social Justice" and solving environmental problems