

M: Course Objectives / Learning Outcomes

At the conclusion of the course the successful student will be able to:

1. Collect geographical data using library research and field work and display it in maps.
2. Describe some of the important natural systems that make up the larger world system.
3. Explain some basic ecological concepts (e.g. ecosystems, food chains).
4. Analyze human impacts on various aspects of the natural world.
5. Describe and explain both the antiquity of human intervention and the recent acceleration of rates of change.
6. Evaluate the extent and consequences of modern industrial, post-industrial and agricultural technologies on the Earth and its inhabitants.
7. Understand the relationship between environmental philosophies and attitudes on the one hand and actions on the other.

N: Course Content:**1. Introduction to the Course**

- a) Natural and human-induced change
- b) Some examples of human transformation of the earth
- c) The human-environment tradition in Geography
- d) History of the expression of environmental concern

2. Understanding the Earth

- a) Matter and energy: basic building blocks
- b) Earth's life support system
- c) Roles of species in ecosystems
- d) Energy flows in ecosystems
- e) Matter cycling in ecosystems
- f) Terrestrial and aquatic ecosystems
- g) Responses to environmental stress

3. Sources of Human Impact

- a) Growth of the human population
- b) Theories on the impact of global population growth
- c) Affluence
- d) Technology
- e) Political-economic organization
- f) Attitudes

4. Human Impacts on the Earth

- a) Biosphere
 - fire
 - extinctions in the past
 - biodiversity and extinctions
 - introductions, invasions, explosions
 - desertification
 - deforestation
 - wetland degradation
 - coral reefs
 - parks and park policy

Continued....

Course Content Cont'd.**4. Human Impacts on Earth Cont'd.**

- b) Atmosphere
 - aerosols
 - albedo
 - forests
 - water diversion
 - acid precipitation
 - ozone depletion
 - enhanced greenhouse effect and global warming
 - local air quality issues

5. Hydrosphere

- a) Water pollution by agriculture
- b) Industrial water pollution
- c) Water regulation
- d) Fish stocks
- e) Stream modification
- f) Coastal transformation

6. Lithosphere

- a) Slope instability
- b) Mining industry
- c) Solid waste disposal
- d) Soil modification and degradation

7. Conclusion

- a) Environmental attitudes and actions
- b) Sustainable development
- c) Future trends

O: Methods of Instruction

The course will employ a variety of instructional methods to accomplish its objectives, including some of the following:

- lectures
- small group discussions
- visual presentations – slides and videos
- individual and team projects
- field assignments
- practical in-class exercises

P: Textbooks and Materials to be Purchased by Students

Texts will be updated periodically. Typical examples are:

Middleton, Nick. (1999). *The Global Casino 2nd ed.* London: Arnold Publishers.

Q: Means of Assessment

Evaluation will be based on course objectives and will be carried out in accordance with Douglas College policy. The instructor will provide a written course outline with specific criteria during the first week of classes.

An example of a possible evaluation scheme would be:

Lab Assignments:	10%
Field Assignments:	15%
Tests:	45%
Term Project:	20%
Participation:	10%

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Students may take a challenge exam to apply for recognition of prior learning.

Course Designer(s): Ian Joyce

Education Council / Curriculum Committee Representative

Dean / Director

Registrar