

COURSE OUTLINE

Geography 106
Human Impact on the Environment

I. Catalog Statement

Geography 106 is a description and analysis of humanity's impact on the natural environment over time. Natural earth systems and natural climatic change are studied in the context of geologic time, followed by systematic analyses of human impact on the atmosphere, hydrosphere, lithosphere, and biosphere. Emphasis is placed on the human activities that cause environmental change, as well as potential solutions and pathways to sustainability.

Total Lecture Units: 3.0

Total Course Units: 3.0

Total Lecture Hours: 48.0

Total Faculty Contact Hours: 48.0

Recommended Preparation: Eligibility for English 120 or ESL 151.

II. Course Entry Expectations

Skills Level Ranges: Reading 5, Writing 5, Listening/Speaking 5, Math 3.

Prior to enrolling in the course, the student should be able to:

1. understand college-level reading selections;
2. take college-level lecture notes and follow complex oral directions;
3. learn material by participating in class discussions and lectures;
4. perform basic mathematical functions and operations of addition, subtraction, multiplication, and division of signed numbers as well as solve simple equations;
5. communicate learning, conceptual understanding and critical analysis skills through writing research papers, essay exams, or other types of writing assignments.

III. Course Exit Standards

Upon successful completion of the required course work, the student will be able to demonstrate critical thinking skills and an understanding of:

1. the growth in human populations, human technologies, and resource consumption over time and explain regional and historical variation in each;
2. the primary anthropomorphic environmental changes occurring in the atmosphere, biosphere, hydrosphere and soil and their emergence through the ages;
3. the connections between human activities and environmental change, and potential

solutions to global environmental issues.

IV. Course Outline

Total Faculty Contact Hours = 48 hours

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| A. Introduction | 6 hours |
| 1. The four geographic spheres and natural earth systems | |
| 2. The geologic past | |
| 3. Natural environmental change | |
| B. The Human Element | 10 hours |
| 1. Population growth through time | |
| 2. Symptoms of underdevelopment | |
| 3. The international debt crisis | |
| 4. Urbanization, industrialization, and consumerism | |
| 5. Sustainable development and global environmental policy | |
| C. Land Issues | 8 hours |
| 1. Waste production and disposal | |
| 2. Agriculture, agrochemicals, and ranching | |
| 3. Mining, mineral extraction, and large development projects | |
| D. Atmospheric Issues | 10 hours |
| 1. Atmospheric composition | |
| 2. Urban air pollution | |
| 3. Indoor air pollution | |
| 4. Ozone depletion | |
| 5. Global warming | |
| 6. Acid deposition | |
| E. Water Issues | 7 hours |
| 1. Water availability | |
| 2. Dams | |
| 3. Water pollution | |
| 4. Oil spills | |
| F. Biological Issues | 7 hours |
| 1. Habitat destruction and loss of biodiversity | |
| 2. Introduction of foreign species | |
| 3. Hunting, whaling, and over-fishing | |
| 4. Wildlife trade | |
| 5. Ecotourism | |

V. Methods of Instruction

The following methods of instruction may be used in the course:

1. lecture-discussion;

2. small group discussions;
3. audio-visual presentations;
4. student presentations;
5. web-based presentations;
6. field trips.

VI. Out of Class Assignments

The following out of class assignments may be used in the course:

1. creating content in preparation for in-class group presentations;
2. research and writing assignments addressing a topic relative to the course content;
3. directed field trips;
4. online lessons completed with Moodle or another approved LMS.

VII. Methods of Evaluation

The following methods of evaluation may be used in the course:

1. mid-term examinations;
2. online reading response essays (e.g., short written summary and critique of Jared Diamond's 1995 Discover Magazine article *Easter's End*);
3. online quizzes (e.g., multiple-choice quiz on Chapter 1 of the textbook);
4. preparation and presentation of a group project (e.g., poster presentation on human changes to the Los Angeles River since pre-history);
5. final examination.

IX. Textbook(s)

Goudie, Andrew S. *Human Impact on the Natural Environment 6th Edition*.

Malden: Blackwell Publishing Co., 2005. Print.

13th Grade Textbook Reading Level. ISBN 978-1405127042

Withgott, J.H. and Matt Laposata. *Environment Essential Environment: The Science Behind the Stories 4th Edition*. Benjamin Cummings: Pearson, 2012. Print.

13th Grade Textbook Reading Level. ISBN: 978-0321752901

IX. Student Learning Outcomes

Upon successful completion of the required coursework in Human Impact on the Environment, the student will be able to demonstrate critical thinking skills, an understanding of:

1. the growth in human populations, human technologies, and resource consumption over time and explain regional and historical variation in each;
2. the primary anthropomorphic environmental changes occurring today and discuss their emergence through the ages;
3. the primary air, water, and soil pollutants and specify resulting environmental changes;

4. specific major human impacts on the biosphere, including deforestation, reduced biodiversity, wildlife habitat destruction, wildlife trade, over-fishing, and whaling;
5. the causes, mechanisms, and implications of human-induced climate change on ecosystems and human systems;
6. the collection and assessment of data pertaining to measures of demographics and sustainability;
7. the connections between human activities and environmental change and identify potential solutions to global environmental issues.

Justification

Geography 106 is an optional course for the Associate in Arts for Transfer degree in Geography. This course is related to the college goal of continuing the development of AA and AS-T degrees. The Geography AA-T degree is accepted by the California State Universities to which our students most frequently transfer.