

UNIVERSITY CORE CURRICULUM

SECTION III. INTEGRATIVE STUDIES - INTERDISCIPLINARY

1. COURSE NUMBER: **ENGR 301i** SEMESTER HOURS: **3**

COURSE TITLE: **Humans and Their Environment**
Start Date: Fall 1996
2. COURSE FORMAT: Lectures (faculty) and discussion/laboratory section (graduate assistant).
Average lecture size: 250; average discussion size: 20.
3. STUDENT LEARNING OBJECTIVES: Students will be able to: (a) understand the complexity of the relationships between humans and their environment; (b) understand the effects humans have had on their environment in the past; (c) understand past and current strategies for minimizing impacts; and (d) understand the possible future implications of past and current human activities on their environment.
4. DETAILED COURSE DESCRIPTION: Humans and Their Environment should provide broad-based coverage of a topic critical to the future of the world--humans and their effect on the environment. The environment, actions which alter the environment, and actions designed to protect the environment are inherently interdisciplinary. Cultural beliefs and customs are major obstacles to achieving a sustainable human population which does not further the destruction of our environment. The standard of living afforded by the technology-based societies of developed nations is a second major obstacle. The sciences afford us methods to evaluate our impact on the environment. Engineering and science provide us limited tools to manage the environmental impact of human society. Economics provide a partial basis for determining which of many possible actions are possible. The discussion/lab sections will concentrate on case studies of actual events related to humans and their environment and how alterations in human activity can reduce the impact we have on the environment. Case studies will be used to show how human attitudes and actions, particularly from concerned citizens, can affect the outcome of environmental issues. Students will be encouraged to analyze events and issues in order to rationalize how the outcomes could be changed.
5. REQUIRED READING: Miller, *Living in the Environment*, 13th edition
6. COURSE REQUIREMENTS AND GRADING:
 - Exam 1, 2, 3 (18% each)
 - Exam 4 (20%)
 - Discussion (16%)
 - Research Paper (10%)
7. ADVANCED UCC COURSE(S): None

11/21/05