

Course Syllabus

INTRODUCTION TO ENVIRONMENTAL MANAGEMENT

Printed by: jfmoncay

Program: Telecommunications Engineering

1. Course number and name

ADSG1001 - INTRODUCTION TO ENVIRONMENTAL MANAGEMENT

2. Credits and contact hours

3 credits and 3 contact hours

3. Instructor's course or coordinator's name

HECTOR IVAN APOLO LOAYZA

4. Text book, title, author, and year

- Erazo Parga, Manuel y Cárdenas Romero, Rocío. Ecología: Impacto de la problemática ambiental actual sobre la salud y el ambiente. (Primera)

5. Specific course information

a. Brief description of the content of the course (catalog description)

This course covers five chapters whose main objective is to promote environmental ethics and a broad education in contemporary issues related to conservation and environmental management within a local and global context. The course is reinforced with autonomous activities, the most important being the Knowledge Concentrator Project. The classes are held indoors and outdoors with activities that includes visits to the Prosperina Protective Forest, the Wastewater Treatment Plant, the Sustainable Development Technological Center all of them within the campus, taking advantage of it as a living lab. The first chapter interrelates the ecology with the environment, identifying the properties of the ecosystem and the potential impacts that the humans can cause. Chapters 2, 3 and 4 deal with the various forms of pollution that occur in the soil, water and air components. Finally, the last chapter addresses the path towards sustainable development based on the UN Sustainable Development Goals.

b. This course is: Required

6. Specific goals for the course

a. Specific outcomes of instruction

1.- Understand the role of the components of ecosystems within the balance of nature for their care

2.- Identify the causes of pollution in the different environmental compartments as a result of human activity for its mitigation

3.- Apply the basic concepts of environmental management to reduce the environmental impacts of their professions

4.- Discuss ethical dilemmas and current environmental issues at the local, regional and global levels



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b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

- An understanding of professional and ethical responsibility
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

7. Brief list of topics to be covered

- 1.- Ecology, Ecosystems and Environment
- 2.- The Soil: Pollution and Control
- 3.- The Water: Pollution and Control
- 4.- The Air: Pollution and Control
- 5.- Sustainable Development