Course Code :EVNS1001 Course Name: Environmental Science

• **Topic:** Introduction of Environment: Objective, Framework for addressing environmental problem

GALGOTIAS UNIVERSITY

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

- "If you plan for one year, plant rice, if you plan for 10 years plant trees and if you plan for 100 years, educate people" Confucius
- So, if we want to manage our earth, we must make people environmentally educated
- Environment is derived from the French word <u>Environner</u>, which means to encircle or surround. All biological and non-biological entities surrounding us are included in environment.

Name of the Faculty: Dr. Lalit Prasad

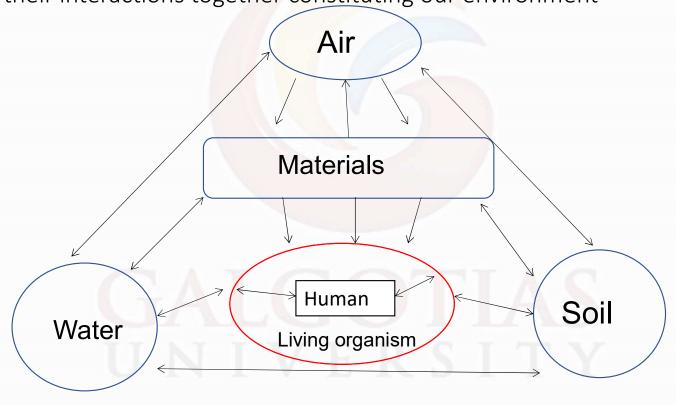
Course Code :EVNS1001 Course Name: Environmental Science

- As per the definition given in Environment (Protection) Act, 1986, Environment includes all the physical and biological surroundings of an organism along with their interactions.
- Environment is thus defined as "the sum total of water, air and land and the interrelationships that exist among them and with the human beings, other living organisms and materials"
- **Environment** can also be defined as the circumstances or conditions that surrounds an organism
- Environmental Studies is the scientific study of the environmental system and the status of its changes on organism
- Environmental Sciences, is the systematic study of our environment and existence in it.

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

Concept of Environment: air, water, land, living organisms and materials surrounding us and their interactions together constituting our environment



Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

Objectives of environmental studies

- Awareness
 - To help people acquire an awareness of and a sensitivity to the total environment and its allied problems
- Knowledge
 - To help people acquire basic understanding of the total environment and associated problems
- Attitude
 - To help people acquire social values, strong feelings of concern for the environment and the motivation to act in protecting and improving
- Skills
 - To help people acquire the skills for identifying and solving environmental problems
- Evaluation Ability
 - Evaluate environmental measures and education programs
- Participation
 - Active involvement at all levels in working towards resolving environmental problems

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001

Course Name: Environmental Science

Framework for addressing environmental problem

• Scientific Assessment:

• Collection of information, data, simulations, model, predict the future

• Risk Analysis:

Results from simulations are analyzed.
Potential effects

Public Education and involvement:

- Through publications, awareness through media
- Explanation of the problem along with probable cost

Political Action:

Course of Action

• Evaluation:

- Actions to be evaluated, monitored
- Improve the initial assessment

Scientific Assessment **Risk Analysis Public Education and** Involvement **Political Action Evaluation**

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

Importance of Environmental Studies

- Conservation of energy by introduction alternate sources, improved technologies, processes compatible with environment
- Increase in economic productivity through improved health of people
- Conservation of fast depleting natural resources
- New ways and means to maintain ecological balance
- Knowledge about waste management, treatment and disposal techniques
- Social responsibility towards control of environmental pollution and protection

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

Environmental studies and its multidisciplinary nature.

- Environmental studies deals with working of earth, its life support systems, its interactions, influences its problems and solutions.
- Keeping in view he complex nature of environment, knowledge and information from various disciplines of science, social science, law and engineering have to be included in environmental studies to understand it completely
- Environmental science is therefore, is a multi-disciplinary subject where we deal with different aspects using holistic approach.

Name of the Faculty: Dr. Lalit Prasad

Course Code :EVNS1001 Course Name: Environmental Science

Major Global Environmental Problems

- Rapid population growth
- Food shortage and famines
- Water Storage
- Depletion of non renewable fossil fuels
- Damage to the environment
 - · Acid Rain
 - Global Warming
- Deforestation
- Disposal of solid and hazardous wastes

Name of the Faculty: Dr. Lalit Prasad

Course Code: ENVS1001 Course Name: Environmental Science

Source & References:

The materials presented in this lectu<mark>re has been taken from various books and internet websites. This instruction materials is for instructional purposes only.</mark>

- -Ranu Gadi, Sunita Rattan and Susmita Mohapatra, Environmental Studies, Publisher: Kataria, S. K., & Sons, ISBN: 9788189757984, 9788189757984
- -Kurian Joseph & R. Nagendran, "Essentials of Environmental Studies", 1st Edition, Pearson Education, 2004.
- -A.K.Dee "Environmental Chemistry" (New Age International Publishers).
- -Smriti Srivastava. "Environment & Ecology" S.K. Kataria & Sons, New Delhi
- -Kaushik and Kaushik "Environmental Studies" (for undergraduate students)
- K.M.Gupta "Environmental Studies", 2nd Edition, Umesh Publications.
- -D.D.Mishra "Comprehensive study on Environmental Science" S.Chand and Company Ltd.
- https://www.sciencedaily.com/releases/2020/06/200625115913.htm
- Online Contents from different sites and sources.

Name of the Faculty: Dr. Lalit Prasad

Course Code: ENVS1001

Course Name: Environmental Science

Thank You!!

GALGOTIAS UNIVERSITY

Name of the Faculty: Dr. Lalit Prasad