



GOVERNMENT POLYTECHNIC, KORAPUT
DEPARTMENT OF MECHANICAL ENGINEERING

Discipline:
**MECHANICAL
ENGG**

Semester:
3RD

Name of the Teaching Faculty: **DR. P. J. LAXMI BHANU**

Subject:
**ENVIRONMENTAL
STUDIES**

No. of days/per week class allotted:
04

Semester From date: **02/9/20** To Date: **9/3/22**

No. of Weeks: **15**

COURSE OUTCOMES

- After completion of study of environmental studies, the student will be able to:
1. Acquire knowledge about our natural environment, its importance in our life & its benefits.
 2. Gather adequate knowledge of different pollutants, their sources and shall be aware of solid waste management systems and hazardous waste and their effects.
 3. Develop awareness in society & towards preservation of environment.

Week	Class Day	Theory
1 ST	1 ST	-A general discussion with students about their basic knowledge on the topic Environment. -Definition & The Multidisciplinary nature of environmental studies.
	2 ND	-Scope and importance of EVS.
	3 RD	-Need for public awareness.
	4 TH	-Overall discussion and note preparation.
2 ND	1 ST	-Natural Resources, types of natural resources. -Renewable and nonrenewable resources with examples. -Introduction of forest resources.
	2 ND	- Use and over-exploitation of forest resources. - Deforestation, case studies. - Timber extraction mining, dams and their effects on forests and tribal people. - A general discussion on the local cases & importance of conservation of forest resources.
	3 RD	-Water resources, percentage of saline and fresh water present in nature. -Use and over-utilization of surface and ground water.
	4 TH	-Definition of floods, drought. - Conflicts over water, dam's benefits and problems. -Cases observed in local level.
3 RD	1 ST	-Definition of Mineral Resources. Various mineral found from earth crusts. -Use and exploitation. - environmental effects of extracting and using mineral resources
	2 ND	-Food Resources, World food problems.

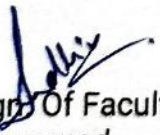
	1 ST	- Disaster management: Floods, earth quake. - Disaster management of cyclone and landslides.
	2 ND	- Summarization and overall discussion of the chapter. Social issues and the Environment: - Discussion on various social issues arising out related to environment. - Form unsustainable to sustainable development with some basic example.
	3 RD	- Urban problems related to energy. - Summarization of resource of water. - Water conservation.
12 TH	4 TH	- Rain water harvesting, water shed management. - Resettlement and rehabilitation of people. - Its problems and concern.
	1 ST	- Environmental ethics: issue and possible solutions. - Climate change.
	2 ND	- Acid rain, ozone layer depletion. - Global warming.
	3 RD	- Nuclear accidents and holocaust. - case studies, Various incident in the past.
13 TH	4 TH	- Air prevention and control of pollution Act. - Water prevention and control of pollution Act.
	1 ST	- Public awareness regarding cause effect and control of environmental pollution. - Summarization of the chapter with related question.
	2 ND	- Human population and the environment: Discussion on current population of different countries. - Population growth and variation among nations.
	3 RD	- Population explosion. - Causes responsible for population explosion. - Problems arising out of population explosion.
	4 TH	- Family welfare program. - Various program carried out by the Govt. of India.
14 TH	1 ST	- Environment and human health. - Human rights.
	2 ND	- Value of education. - Summarization of the chapter.
	3 RD	- Doubt clearing and discussion of topics.
	4 TH	- Doubt clearing and discussion of topics.
15 TH	1 ST	- Probable question discussion for the semester exam.
	2 ND	- Probable question discussion for the semester exam.
	3 RD	- Probable question discussion for the semester exam.
	4 TH	- Probable question discussion for the semester exam.

LEARNING RESOURCES:

1. Fundamental concepts in Environmental Studies by D.D. Mishra. S.Chand & Co-Ltd publication.
2. Text book of Environmental Studies by K. Raghavan Nambiar. SCITECH Publication Pvt. Ltd.


WEBSITE RESOURCES:

1. Wikipedia.
2. YouTube Channel "Lets studies" by Himanshi Singh.


Sign Of Faculty
concerned

Sharmila Sabarwal

Sign. Of HOD I/C


Principal