

Government Polytechnic, Dhenkanal

WINTER 2022-2023

Semester:3RD

LESSON PLAN

Subject: Environmental studies

Branch:Civil Engineering

Faculty Name:Bikramsingh Seluni

Subhadarshini Samal

WEEK NO.	DATE	Topic to be covered	PERIODS ASSIGNED PER TOPIC	PERIODS AVAILABLE PER WEEK
W-1	15.09.22 TO 17.09.22	1. The Multidisciplinary nature of environmental studies	4	4
		Definition Of Environmental Studies; introduction to environmental studies		
		Scope Of Environmental Studies		
		Importance Of Environmental Studies		
		Need for public awareness		
		2. Natural Resources :Renewable and non renewable		
W-2	19.09.22 TO 23.09.22	Forest resources: Use and over-exploitation, deforestation, case studies	10	4
		Timber extraction mining, dams and their effects on forests and tribal people		
		Water resources: Use and over-utilization of surface and ground water, floods , Drought, conflicts over water, dam's benefits and problems		
		Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources		
W-3	26.09.22 TO 01.10.22	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture	10	4
		Fertilizers- pesticides problems, water logging, salinity		
		Energy Resources: Growing energy need, renewable and non-renewable energy sources		
		use of alternate energy sources, case studies.		
		Land Resources: Land as a resource, land degradation		
W-4	10.10.22 TO 15.10.22	Man induces land slides, soil erosion, and desertification ,Role of individual in conservation of natural resources, Equitable use of resources for sustainable life styles	2	
		3. Eco-Systems:		

		Concept of an eco system, Structure and function of an eco system		
		Producers, consumers, decomposers : definitions and their role in an ecosystem		2
W-5	17.10.22 TO 22.10.22	Energy flow in the eco systems, Ecological succession, Food chains, food webs	8	4
		Ecological pyramids, Introduction, types, characteristic features Of Forest Ecosystem		
		Structure and Function Forest ecosystem:		
		Introduction and types of Aquatic eco systems		
W-6	25.10.22 TO 29.10.22	Characteristics of Aquatic eco systems	8	2
		Structure and Function of Aquatic eco systems		
		4. Biodiversity and its conservation		
		Introduction-Definition Genetics, Species and Ecosystem diversity		2
W-7	31.10.22 TO 05.11.22	Bio-geographical classification of India	8	4
		Value of biodiversity: consumptive use, productive use		
		Social ethical, aesthetic values		
		Biodiversity at global, national and local level.		
W-8	07.11.22 TO 12.11.22	Threats to biodiversity: Habitats loss	8	2
		Poaching of wild life man wildlife conflicts		
		DISCUSSIONS ON CHAPTERS COVERED		
		5. Environmental Pollution.		
W-9	14.11.22 TO 19.11.22	Definition, Causes& effects of Air Pollution	8	2
		Control measures of Air Pollution		
		Definition, Causes& effects of Water Pollution, Control measures of Water Pollution		
		Definition, Causes&effects of Soil Pollution, Control measures of Soil Pollution		
W-10	21.11.22 TO 26.11.22	CLASS TEST	12	4
		Definition ,Causes & effects of Marine Pollution ,Control measures of Marine Pollution		
		Definition ,Causes& effects of Noise Pollution, Control measures of Noise Pollution		
		Definition, Causes& effects of Thermal Pollution, Control measures of Thermal Pollution		
		Definition, Causes,&effects of Nuclear Hazard, Control measures of Nuclear Hazard		

		Solid waste Management: Causes, effects and control measures of urban and industrial wastes, Role of an individual in prevention of pollution.		
W-11	28.11.22 TO 03.12.22	Disaster management: Floods, earth quake : precautionary measures to be taken during natural calamities	10	2
		Cyclone and Land slides : precautionary measures to be taken during natural calamities		
		6. Social issues and the Environment		
		DISCUSSIONS ON INTERNAL QUESTIONS AND DISTRIBUTION OF EVALUATED ANSWER SHEETS		2
		Form unsustainable to sustainable development , Urban problems related to energy, Importance of Water		
W-12	05.12.22 TO 10.12.22	conservation ,rain water harvesting, water shed management	10	4
		Resettlement and rehabilitation of people; its problems and concern		
		Environmental ethics: issue and possible solutions. Climate change, global warming		
		Acid rain		
W-13	12.12.22 TO 17.12.22	Ozone layer depletion	10	4
		nuclear accidents and holocaust, case studies.		
		Air (prevention and control of pollution) Act		
		Water (prevention and control of pollution) Act		
		Public awareness		
		7. Human population and the environment		
W-14	19.12.22 TO 22.12.2022	Population growth and variation among nations, Population explosion- family welfare program , Environment and human health, Human rights: Equity, Nutrition, health and human rights, Intellectual Property Rights	8	4
	ONWARDS	Value education ,Environmental Values, Valuing Nature, Valuing cultures , Social justice , Human heritage, Equitable use of Resources, Common Property Resources, Ecological degradation, Role of information technology in environment and human health		4

Signature of faculty Member

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