

**LESSON PLAN FOR ENVIRONMENTAL STUDIES (TH.4) FOR 3RD SEM ,CIVIL ENGG,
WINTER -2024
W.E.F.01.07.2024**

Faculty Name-Swetapadma Sahoo & Chittaranjan Sahoo

WEEK NO.	Topic to be covered	PERIODS ASSIGNED PER TOPIC	PERIODS AVAILABLE PER WEEK
W-1	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		
W-2	2. Natural Resources :Renewable and non renewable	10	4
	Forest resources: Use and over-exploitation, deforestation, case studies		
	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	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		2
	Man induces land slides, soil erosion, and desertification ,Role of individual in conservation of natural resources, Equitable use of resources for sustainable life styles		
W-4	3. Eco-Systems:		2
	Concept of an eco system, Structure and function of an eco system		

	Producers, consumers, decomposers : definitions and their role in an ecosystem		
W-5	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	Characteristics of Aquatic eco systems	8	2
	Structure and Function of Aquatic eco systems		2
	4. Biodiversity and its conservation		
	Introduction-Definition Genetics, Species and Ecosystem diversity		
	Bio-geographical classification of India		
W-7	Value of biodiversity: consumptive use, productive use	8	4
	Social ethical, aesthetic values		
	Biodiversity at global, national and local level.		
	Threats to biodiversity: Habitats loss		
W-8	Poaching of wild life man wildlife conflicts	8	2
	DISCUSSIONS ON CHAPTERS COVERED		2
	5. Environmental Pollution.		
	Definition, Causes& effects of Air Pollution		
	Control measures of Air Pollution		
W-9	Definition, Causes& effects of Water Pollution, Control measures of Water Pollution	12	4
	Definition, Causes&effects of Soil Pollution, Control measures of Soil Pollution		
	CLASS TEST		
	Definition ,Causes & effects of Marine Pollution ,Control measures of Marine Pollution		
W-10	Definition ,Causes& effects of Noise Pollution, Control measures of Noise Pollution	12	4
	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.		
	Disaster management: Floods, earth quake : precautionary measures to be taken during natural calamities		2

W-11	Cyclone and Land slides : precautionary measures to be taken during natural calamities	10	
	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	conservation ,rain water harvesting, water shed management		4
	Resettlement and rehabilitation of people; its problems and concern		
	Environmental ethics: issue and possible solutions. Climate change, global warming		
	Acid rain		
W-13	Ozone layer depletion		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	8	
W-14	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		4
	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
W-15	REVISION & DISCUSSION	—	—

Faculty Signature

HOD

Department of Civil Engg.