

LESSON PLAN OF ENVIRONMENTAL STUDIES 3RD SEM SECTION A

Department: Civil Engineering	Semester : 3rd SEC- A	Name of the Teaching faculty: Kalyani Mohanty	
Subject :- Th5. ENVIRONMENTAL STUDIES	No.of Days/ week class allotted : 04/week	Semester from date: 15/09/2022 to 22/12/2022	
		No. of Weeks :15	Topics to be covered:-
Week	Class Day	Topics	Remarks
		Unit 1: The Multidisciplinary nature of environmental studies	
1 st Week: (15 th Sept- 17th Sept)	1 st	Definition, scope and importance, Need for public awareness.	
	2 nd	Definition, scope and importance, Need for public awareness.	
2 nd Week: (19 th Sept - 24 th Sept)	1 st	Definition, scope and importance, Need for public awareness.	
	2 nd	Definition, scope and importance, Need for public awareness.	
		Unit 2: Natural Resources	
		Renewable and non renewable resources:	
		a) Natural resources and associated problems.	
	3 rd	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.	
4 th	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.		
3 rd Week: (26 th Sept-1st Oct)	1 st	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	
	2 nd	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	
	3 rd	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity	

3RD WEEK (26/09 TO 1ST OCT)	4 th	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity	
4th week	vacation		
5 th Week: (10 th Oct- 15 th Oct)	1st	Energy Resources: Growing energy need, renewable and nonrenewable energy sources, use of alternate energy sources, case studies.	
	2nd	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.	
	3rd	b) Role of individual in conservation of natural resources.	
	4th	c) Equitable use of resources for sustainable life styles.	
		Unit 3: Systems	
6 th Week: (17 th Oct- 22 nd Oct)	1st	Concept of an eco system. Structure and function of an eco system.	
	2nd	Producers, consumers, decomposers.	
	3rd	Energy flow in the eco systems.	
	4th	Ecological succession.	
		Food chains, food webs and ecological pyramids.	
7 th Week: (25 th Oct- 29th Oct)	2nd	Introduction, types, characteristic features, structure and function of the following eco system:	
	3rd	Forest ecosystem:	
	4th	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).	
		Unit 4: Biodiversity and it's Conservation	
8 th Week: (31st oct- 5th Nov)	1st	Introduction-Definition: genetics, species and ecosystem diversity	
	2nd	Introduction-Definition: genetics, species and ecosystem diversity	
	3rd	Biogeographically classification of India.	
	4th	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optinvalues	
9 th Week: (7 th Nov -12 th Nov)	1st	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optinvalues	
	2nd	Biodiversity at global, national and local level.	
	3rd	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	

	4th	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	
		Unit 5: Environmental Pollution.	
10 th Week: (14 th Nov -19 th Nov)	1st	Definition Causes, effects and control measures of: a) Air pollution. b) Water pollution. c) Soil pollution d) Marine pollution e) Noise pollution. f) Thermal pollution g) Nuclear hazards.	
	2nd	Definition Causes, effects and control measures of: a) Air pollution. b) Water pollution. c) Soil pollution d) Marine pollution e) Noise pollution. f) Thermal pollution g) Nuclear hazards.	
	3rd	Definition Causes, effects and control measures of: a) Air pollution. b) Water pollution. c) Soil pollution d) Marine pollution e) Noise pollution. f) Thermal pollution g) Nuclear hazards.	
	4th	Definition Causes, effects and control measures of: a) Air pollution. b) Water pollution. c) Soil pollution d) Marine pollution e) Noise pollution. f) Thermal pollution g) Nuclear hazards.	
11 th Week: (21st Nov - 26 th Nov)	1st	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
	2nd	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
	3rd	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
	4th	Role of an individual in prevention of pollution.	
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12 th Week: (28 th Nov -3 rd Dec)	1st	Disaster management: Floods, earth quake, cyclone and landslides	
	2nd	Disaster management: Floods, earth quake, cyclone and landslides	
	3rd	Disaster management: Floods, earth quake, cyclone and landslides	
		Unit 6: Social issues and the Environment	
	4th	Form unsustainable to sustainable development.	
13 th Week: (5 th Dec -10 th Dec)	1st	Urban problems related to energy. .	
	2nd	Water conservation, rain water harvesting, water shed management	
	3rd	Resettlement and rehabilitation of people; its problems and concern.	

	4th	Environmental ethics: issue and possible solutions.	
14 th Week: (12 th Dec- 17th Dec)	1st	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust , case studies.	
	2nd	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust , case studies.	
	3rd	Air (prevention and control of pollution) Act.	
		Water (prevention and control of pollution) Act.	
	4th	Public awareness.	
Unit 7: Human population and the environment			
15 th Week: (19 th Dec- 22nd Dec)	1st	Population growth and variation among nations.	
	2nd	Population growth and variation among nations.	
EXTRA CLASSES		Population explosion- family welfare program	
		Environment and human health.	
		Human rights.	
		Value education	
		Role of information technology in environment and human health.	

Kalyani Mohanty

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