

LESSON PLAN FOR ENVIRONMENTAL STUDIES (Th5)		
Discipline: ELECTRICAL ENGINEERING	Semester: 3rd	Name of the Teaching Faculty: SUBHRA PRATIK SAHOO(PTGF)
Subject: ENVIRONMENTAL STUDIES	No. of days per week class allotted: 4	Semester From Date : 15.09.2022 To Date :22.12.2022 No. of Weeks : 13 Session: 2022-23
Week	Class Day	Theory
1st	1st	1.The Multidisciplinary nature of environmental studies: 1.1 Definition, scope and importance.
	2nd	1.2 Need for public awareness.(cont.)
	3rd	1.2 Need for public awareness.
	4th	2. Natural Resources: 2.1 Natural resources and associated problems.
2nd	1st	2.1.1. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	2nd	2.1.2. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	3rd	2.1.3. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	4th	2.1.4. Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers-pesticides problems, water logging, salinity,
3rd	1st	2.1.5. Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	2nd	2.1.6. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
	3rd	2.2 Role of individual in conservation of natural resources.
	4th	2.3 Equitable use of resources for sustainable life styles.
4th	1st	3. System: 3.1. Concept of an eco system.
	2nd	3.2. Structure and function of an eco system.
	3rd	3.3. Producers, consumers, decomposers.
	4th	3.4. Energy flow in the eco systems. 3.5. Ecological succession.
5th	1st	3.6. Food chains, food webs and ecological pyramids.
	2nd	3.7. Introduction, types, characteristic features, structure and function of the following eco system:
	3rd	3.8. Forest ecosystem:3.9. Aquatic eco systems (ponds, streams, lakes, rivers, oceans,

	4th	4. Biodiversity and it's Conservation: 4.2. Biogeographically classification of India.
6th	1st	4.3. Value of biodiversity: consumptive use, productive use, (cont.)
	2nd	social ethical, aesthetic and optin values.
	3rd	4.4. Biodiversity at global, national and local level.
	4th	4.5. Threats to biodiversity: Habitats loss,(cont.)
	1st	poaching of wild life, man wildlife conflicts.
7th	2nd	Question answer session.
	3rd	5.Environmental Pollution: 5.1. Definition Causes, effects and control measures of:
	4th	5.1.1 Air pollution.
	1st	5.1.2 Water pollution.
8th	2nd	5.1.3 Soil pollution
	3rd	5.1.4 Marine pollution 5.1.5 Noise pollution.
	4th	5.1.6 Thermal pollution
	1st	5.1.7 Nuclear hazards.
9th	2nd	5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	3rd	5.3. Role of an individual in prevention of pollution.
	4th	5.4. Disaster management: Floods, earth quake, cyclone and landslides.
	1st	Question answer session.
10th	2nd	6.Social issues and the Environment: 6.1. Form unsustainable to sustainable development.
	3rd	6.2. Urban problems related to energy.
	4th	6.3. Water conservation, rain water harvesting, water shed management.
	1st	6.4. Resettlement and rehabilitation of people; its problems and concern.
11th	2nd	6.5. Environmental ethics: issue and possible solutions.
	3rd	6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	4th	6.7. Air (prevention and control of pollution) Act.
	1st	6.8. Water (prevention and control of pollution) Act.
12th	2nd	6.9. Public awareness.
	3rd	7.Human population and the environment: 7.1. Population growth and variation among nations.
	4th	7.2. Population explosion- family welfare program.
	1st	7.3. Environment and human health.
	2nd	7.4. Human rights.

13th		7.5. Value education
	3rd	7.6. Role of information technology in environment and human health.(cont.)
	4th	7.6. Role of information technology in environment and human health.

14/09/2022
HOD Electrical Engg.

14/09/2022
Academic Co-ordinator

14/9/22
Principal
Govt. polytechnic Nabarangpur