

BHUBANANANDA ORISSA SCHOOL OF ENGINEERING,CUTTACK

DEPARTMENT OF ELECTRICAL ENGINEERING

LESSON PLAN



SUBJECT : ENVIRONMENTAL STUDIES

FACULTY : SMT. TWINKLE PATTNAIK

ACADEMIC SESSION: 2024-25

SEMESTER:3RD

SECTION:C

Discipline: <b>Electrical Engg.</b>	Semester: <b>3RD (C)</b>	Name of the teaching faculty: <b>Er. TWINKLE PATTNAIK</b>
Subject- ENVIRONMENTAL STUDIES	No. of Days/per week class allotted: <b>04 PERIODS/WEEK (MON,TUE,THU,SAT-1 period each)</b>	Semester: From Date: <b>01/07/2024</b> To Date: <b>08/11/2024</b> No. of weeks: <b>19 WEEKS</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory Class</b>
1 <sup>st</sup> (01/07/2024-06-07-2024)	01/07/2024	<b>1. The Multidisciplinary nature of environmental studies:</b> 1.1 Definition, scope and importance
	02/07/2024	1.1 Definition, scope and importance
	04/07/2024	1.2 Need for public awareness
	06/07/2024	1.2 Need for public awareness.
2 <sup>nd</sup> (08/07/2024-13/07/2024)	08/07/2024	<b>2. Natural Resources:</b> Renewable and non renewable resources:  2.1 Natural resources and associated problems.
	09/07/2024	2.1.1 Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	11/07/2024	2.1.1 Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	13/07/2024	2.1.2 Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.

3 <sup>rd</sup> (15/07/2024-20/07/2024)	15/07/2024	2.1.2 Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems
	16/07/2024	2.1.3 Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	18/07/2024	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.
	20/07/2024	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.
4 <sup>th</sup> (22/07/2024-27/07/2024)	22/07/2024	2.1.5 Energy Resources: Growing energy need, renewable and non
	23/07/2024	2.1.5 Energy Resources: Growing energy need, renewable and non
	25/07/2024	2.1.6 Land Resources: Land resources, land degradation, man induces landslides, soil erosion, and desertification
	27/07/2024	2.2 Role of individual in conservation of natural resources
5 <sup>th</sup> (29/07/2024-03/08/2024)	29/07/2024	2.3 Equitable use of resources for sustainable life styles
	30/07/2024	<b>3.Systems:</b>
	01/08/2024	3.1 Concept of an eco system.
	03/08/2024	3.2 Structure and function of an eco system.
6 <sup>th</sup> (05/08/2024-10/08/2024)	05/08/2024	3.3 Producers, consumers, decomposers.
	06/08/2024	3.4 Energy flow in the eco systems.
	08/08/2024	3.5 Ecological succession.
	10/08/2024	3.6 Food chains, food webs and ecological pyramids.
		3.7 Introduction, types, characteristic features, structure and function of the following eco

		system:
7 <sup>th</sup> (12/08/2024-17/08/2024)	12/08/2024	3.8 Forest ecosystem
	13/08/2024	3.9 Aquatic eco systems (ponds, streams, lakes, rivers, oceans estuaries).
	17/08/2024	<b>4.Biodiversity and it's Conservation:</b> 4.1 Introduction-Definition: genetics, species and ecosystem diversity.
8 <sup>th</sup> (19/08/2024-24/08/2024)	20/08/2024	4.2 Biogeographically classification of India.
	22/08/2024	4.3 Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values
	24/08/2024	4.3 Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values
9 <sup>th</sup> (26/08/2024-31-08/2024)	27/08/2024	4.4 Biodiversity at global
	29/08/2024	4.4 Biodiversity at global
	31/08/2024	4.5 Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts
10 <sup>th</sup> (02/09/2024-07/09/2024)	02/09/2024	4.5 Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts
	03/09/2024	<b>5.Environmental Pollution:</b>
	05/09/2024	5.1. Definition Causes, effects and control measures of: 5.1.1Air pollution. 5.1.2Water pollution.
11 <sup>th</sup> (09/09/2024-14/09/2024)	09/09/2024	<b>Internal Assessment</b>
	10/09/2024	<b>Internal Assessment</b>
	12/09/2024	5.1.3Soil pollution
	14/09/2024	5.1.4 Marine pollution

12 <sup>th</sup> (16/09/2024-21/09/2024)	17/09/2024	5.1.5 Noise pollution.
	19/09/2024	5.1.6 Thermal pollution
	21/09/2024	5.1.7 Nuclear hazards.
13 <sup>th</sup> (23/09/2024-28/09/2024)	23/09/2024	<b>Quiz Test</b>
	24/09/2024	5.2 Role of an individual in prevention of pollution.
	26/09/2024	5.3 Disaster management: Floods, earth quake, cyclone and landslides.
	28/09/2024	<p><b>6.Social issues and the Environment:</b></p> <p>6.1. Form unsustainable to sustainable development.</p> <p>6.2. Urban problems related to energy.</p>
14 <sup>th</sup> (30/09/2024-05/10/2024)	30/09/2024	6.3 Water conservation, rain water harvesting, water shed management.
	03/10/2024	6.4 Resettlement and rehabilitation of people; its problems and concern.
	05/10/2024	6.5 Environmental ethics: issue and possible solutions.
15 <sup>th</sup> (14/10/2024-19/10/2024)	14/10/2024	6.6 Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	15/10/2024	6.7 Air (prevention and control of pollution) Act.
	17/10/2024	6.8 Water (prevention and control of pollution) Act.
	19/10/2024	6.8 Water (prevention and control of pollution) Act.
16 <sup>th</sup> (21/10/2024-26/10/2024)	21/10/2024	6.9 Public awareness.
	22/10/2024	<b>Class Test-2.</b>

	24/10/2024	<b>7.Human population and the environment:</b> 7.1 Population growth and variation among nations
	26/10/2024	7.2 Population explosion- family welfare program
17 <sup>th</sup> (28/10/2024-02/11/2024)	28/10/2024	7.3 Environment and human health.
	29/11/2024	7.4 Human rights
	02/11/2024	7.5 Value education
18 <sup>th</sup> (04/11/2024-08/11/2024)	04/11/2024	7.6 Role of information technology in environment and human health
	05/11/2024	<b>Revision</b>
	07/11/2024	<b>PREVIOUS YEAR QUESTION DISCUSSION</b>