**BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK**

**DEPARTMENT OF CIVIL ENGINEERING**

**LESSON PLAN**

SUBJECT NAME- ENVIRONMENTAL STUDIES (TH-5) TOTAL NO OF WEEK-

SEMESTER – 3rd C TOTAL PERIODS-60 CLASSES ALLOTED PER WEEK-4

NAME OF THE FACULTY-LORA SAGARIKA MOHANTY WINTER SESSION (2020-2021)

Branch-CIVIL ENGG.

SUBJECT-EVS(3rd C)

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| Week | Dates | No.of periods available | Topics to be covered | Topics actually covered | Shortfall if any | Reasons | Date of makeup of shortfalls | Initials of faculty |
| 2nd week of September | 6/9/2020 To 12/9/2020 | 4 | **1. The multidisciplinary nature of environmental studies.**1.1 Definition1.2 scope and importance 1.3 Need for public awareness. |  |  |  |  |  |
| 3rd week of September | 13/9/2020To 19/9/2020 | 3 | **2.Natural resources**2.1 Renewable and non renewable resources**:**Natural resources and associated problems 2.2 Forest resources: Use and over Exploitation, deforestation, case studies, Timber extraction, mining, dams and their effect on forest and tribal people.2.3 Water resources: Use and over utilization of surface and ground water, floods, drought, conflict over water, dam’s benefits and problems. |  |  |  |  |  |
| 4th week of September | 20/9/2020 To 26/9/2020 | 4 | 2.4 Mineral Resources: Use and exploitation, environmental effect of extracting and using mineral resources.2.5 Food resources: World food problem, Changes caused by agriculture and over grazing, effect of modern agriculture, fertilizer pesticides problems, water logging salinity.2.6 Energy resources: Growing energy need, renewable and non renewable energy sources use of alternate energy sources. |  |  |  |  |  |
| 5th week of September | 27/9/2020 To 30/9/2020 | 3 | 2.7 Land resources: Land as resources, land degradation, man induces landslides, soil erosion, and desertification 2.8 Role of individuals in conservation of natural resources.2.9 Equitable use of resources for sustainable life styles. |  |  |  |  |  |
| 1st week of October | 1/10/2020 To 3/10/2020 | 1 | **3. Ecosystem**3.1 Concept of an ecosystem3.2 Structure and function of an eco system |  |  |  |  |  |
| 2nd week of October | 4/10/2020 To 10/10/2020 | 4 | 3.3 Producer, consumers, decomposers3.4 Energy flow in ecosystem3.5 Ecological succession3.6 Food chain, food webs and ecological pyramid |  |  |  |  |  |
| 3rd week of October | 11/10/2020 To 17/10/2020 | 4 | 3.7 Introduction, types characteristics features structure and function of following ecosystem* Forest ecosystem
* Aquatic ecosystem (pond, river, lake, oceans, estuaries)

**Unit-4 Biodiversity and its conservation**4.1-Introduction-Definiton: genetics, species, and ecosystem diversity  |  |  |  |  |  |
| 4th week of October | 18/10/2020 To 24/10/2020 | 4 | 4.2 Biogeographically classification of India. 4.3 Value of Biodiversity |  |  |  |  |  |
| 5th week of October | 25//10/2020 To 31/10/2020 | 3 | 4.4 Biodiversity at global, national, local level4.5 Threats of biodiversity: habitat loss , poaching of wildlife , man-wildlife conflict |  |  |  |  |  |
| 1st week of November | 1/11/2020To 7/11/2020 | 4 | Unit 5: Environmental Pollution: (18 periods)Definition Causes, effects and control measures of:5.1 Air pollution.5.2 Water pollution5.3 Soil pollution |  |  |  |  |  |
| 2nd week ofNovember | 8/11/2020To 14/11/2020 | 4 | 5.4 Marine pollution5.5 Noise pollution5.6 Thermal pollution5.7 Nuclear hazards. |  |  |  |  |  |
| 3rd week ofNovember | 15/11/2020To 21/11/2020 | 4 | 5.8 Solid waste Management: Causes, effects and control measures of urban and industrial wastes. 5.9 Role of an individual in prevention of pollution.5.10 Disaster management: Floods. earth quake, cyclone and land slides |  |  |  |  |  |
| 4th week of November | 22/11/2020To28/11/2020 | 4 | Unit 6: Social issues and the Environment (12 periods)6.1 Form unsustainable to sustainable development.6.2 Urban problems related to energy.6.3 Water conservation, rain water harvesting, water shed management.6.4 Resettlement and rehabilitation of people; its problems and concern. |  |  |  |  |  |
| 5th week ofNovember | 29/11/2020To 30/11/2020 | 0 |  |  |  |  |  |  |
| 1st week ofDecember | 1/12/2020To 5/12/2020 | 3 | 6.5 Environmental ethics: issue and possible solutions. 6.6 Climate change , global warming , acid rain , ozone layer depletion , nuclear accidents and holocaust , case studies. |  |  |  |  |  |
| 2nd week ofDecember | 6/12/2020To 12/12/2020 | 4 | 6.7 Air (prevention and control of pollution) Act. 6.8 Water (prevention and control of pollution) Act6.9 Public awareness.Unit 7: Human population and the environment (09 periods)7.1 Population growth and variation among nations. |  |  |  |  |  |
| 3rd week ofDecember | 13/12/2020To 19/12/2020 | 4 | 7.1 Population growth and variation among nations.7.2 Population explosion- family welfare program.7.3 Environment and human health.7.4Human rights  |  |  |  |  |  |
| 4th week ofDecember | 20/12/2020To 26/12/2020 | 4 | 7.5 Value education7.6 Role of information technology in environment and human health. REVISION |  |  |  |  |  |
| 5th week ofDecember | 27/12/2020To 31/12/2020 | 4 |  |  |  |  |  |  |