**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 Definition  1.2 scope and importance  1.3 Need for public awareness. |  |  |  |  |  |
| 3rd week of September | 13/9/2020  To  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 ecosystem  3.2 Structure and function of an eco system |  |  |  |  |  |
| 2nd week of October | 4/10/2020  To 10/10/2020 | 4 | 3.3 Producer, consumers, decomposers  3.4 Energy flow in ecosystem  3.5 Ecological succession  3.6 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 level  4.5 Threats of biodiversity: habitat loss , poaching of wildlife , man-wildlife conflict |  |  |  |  |  |
| 1st week of  November | 1/11/2020  To  7/11/2020 | 4 | Unit 5: Environmental Pollution: (18 periods) Definition Causes, effects and control measures of:  5.1 Air pollution.  5.2 Water pollution  5.3 Soil pollution |  |  |  |  |  |
| 2nd week of  November | 8/11/2020  To 14/11/2020 | 4 | 5.4 Marine pollution  5.5 Noise pollution  5.6 Thermal pollution  5.7 Nuclear hazards. |  |  |  |  |  |
| 3rd week of  November | 15/11/2020  To 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 | 22/11/2020  To  28/11/2020 | 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 of  November | 29/11/2020  To 30/11/2020 | 0 |  |  |  |  |  |  |
| 1st week of  December | 1/12/2020  To  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 of  December | 6/12/2020  To 12/12/2020 | 4 | 6.7 Air (prevention and control of pollution) Act.  6.8 Water (prevention and control of pollution) Act  6.9 Public awareness. Unit 7: Human population and the environment (09 periods) 7.1 Population growth and variation among nations. |  |  |  |  |  |
| 3rd week of  December | 13/12/2020  To 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 of  December | 20/12/2020  To 26/12/2020 | 4 | 7.5 Value education  7.6 Role of information technology in environment and human health.  REVISION |  |  |  |  |  |
| 5th week of  December | 27/12/2020  To 31/12/2020 | 4 |  |  |  |  |  |  |