

B.Sc. Environmental Science & Sustainability, Life Science

Programme Specific Outcomes (PSO)

1. Systemic and critical thinking with reference to environment-people-economic-Development attributes
2. Disciplinary knowledge, problem identification in Environment, Analytical reasoning, and interpretation skills to provide appropriate sustainable solutions.
3. Research-related skills such as review of literature, design of experiments, statistical Competence, report writing and communicate their research findings.
4. Programme is designed to build sound knowledge on basic aspects of Biological Science, and furthermore, acquaints the students with the applied aspects of this fascinating discipline as well.
5. Apply modern techniques and instruments for biochemical estimation, cellular and physiological studies of microbes, animals, and plants, molecular biology, and tissue Culture experiments, with an understanding of the applications in human life.
6. Enable the students to apply the knowledge gained for the upliftment of society via addressing health, environmental issues, etc.
7. The student is equipped to pursue higher studies and apply the skills learnt in the programme to solving practical societal problems.

Course: Environmental Science and Sustainability (NEP Batch 2023 onwards)

Course Title DSC1: Semester 1: Divisions of Environment

Course Outcome

CO 1: Demonstrate an entry level competence in understanding the environmental divisions and associated processes.

CO 2: Demonstrate the ability to carry out drinking water quality analysis in the laboratory and interpret the results.

CO 3: Ability to understand and appreciate the role of environmental parameters in specific day-to-day activities.

CO 4 be able to understand the demands and function in work environment dealing with environmental system

CO5: Ability to instil an introductory knowledge of the divisions of Environment and

Develop necessary analytical skills to characterize their variations.

Course : Life Science

Course Title here: SEMESTER I - Diversity of Non-Vascular Plants and Non-Chordates

Course Outcomes (CO)

1. Understand the diversity of microbes, classification of viruses and bacteria.
2. Know the structure, reproduction and economic importance of viruses and bacteria.
3. Understand the general characteristics, classification, reproduction of fungi, lichens, and mycorrhiza. 4. Know the economic importance of fungi, cyanobacteria, and algae.
5. Understand the characteristics, classification, and economic importance of bryophytes.
6. Understand the characters, morphology, and reproduction of Protozoa, Porifera and Coelenterata.
7. Know the salient features and reproduction of Ctenophora, Platyhelminthes and Nematelminthes.
8. Describe the characters and reproductive system in Annelida. Parasitic adaptation of Leec

Course: Environmental Science and Sustainability

Course Title DSC2: Semester II: Ecology – Theory and Practice

Course Outcome

CO 1: Demonstrate an entry level competence in understanding the ecological dynamics and their influence on humans and anthropogenic endeavours.

CO 2: Demonstrate the ability to carry out ecological analysis in field conditions/laboratories and make appropriate judgements.

CO 3: Ability to understand and appreciate the role of ecology and system dynamics in specific habitats/agroecosystems.

CO 4: Be able to understand the demands and function in work environment dealing with ecological balance.

CO 5: Be able to instil a knowledge of the Ecology and develop necessary analytical skills to understand the ecological systems.

Course: Life Science

Course Title here: SEMESTER II – Diversity of Vascular Plants and Non-Chordates-II and Chordates

Course Outcomes (CO)

1. Understand the diversity, affinities, characteristics, and classification of pteridophytes and gymnosperms.

2. To get acquainted with morphology, anatomy, reproduction, and life cycles of pteridophytes and gymnosperms and their ecological and evolutionary significance.

3. Understand and appreciate palaeobotanical records.

4. Understand the general characters, classification and adaptations of Mollusca and Echinodermata.

5. Describe the characteristic features of Protochordates and Agnatha.

6. Understand the general characters, classification and adaptations of Pisces and Amphibia.

7. Know the features, classification and adaptations of Reptilia, Aves and Mammalia

