## **DEPARTMENT OF ENVIRONMENTAL STUDIES**

## CURRICULAR PLANNER Academic Session: 2020-2021, SEM 1

Programme Name	All Honours Courses	
Course Name	Environmental Science (AECC)	
Semester and Duration	SEM 1: November, 2020 to March, 2021	

Week	Topic(s)	Learning Outcome and Teaching methodology
1 – 2	<ul> <li>Unit 1: MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES</li> <li>Multidisciplinary nature of environmental studies.</li> <li>Scope and importance of EVS</li> <li>Components of environment.</li> <li>Concept of sustainability and sustainable development.</li> <li>Brief history of environmentalism</li> </ul>	<ul> <li>Learning outcome: Orientation towards the course with special emphasis on history of environmentalism and importance of Environment Studies in contemporary world.</li> <li>Teaching methodology: Discussion and deliberation on real world problems. Forming WhatsApp groups for each section for sharing of articles, videos and news and other information related to environment. Formation of google classrooms for sharing of study material.</li> </ul>
2 – 4	<ul> <li>Unit 2: ECOSYSTEM</li> <li>Definition and concept of Ecosystem</li> <li>Structure of ecosystem</li> <li>Functions of Ecosystem</li> <li>Concepts of productivity, ecological pyramids and homeostasis</li> <li>Types of Ecosystems and Ecosystem services</li> <li>Ecosystem preservation and conservation strategies, Basics of Ecosystem restoration</li> </ul>	<ul> <li>Learning outcome: Orienting the students to help them understand the structure and functioning of any ecosystem and the different types of ecosystem available. Also, aware them about the threats on various ecosystems and importance of protecting and restoring ecosystems.</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, deliberation on articles shared over WhatsApp group, Quizzes and visiting a biodiversity park for real world learning.</li> </ul>

5 – 7	<ul> <li>Unit 3: NATURAL RESOURCES</li> <li>Land Resources</li> <li>Forest Resource</li> <li>Water Resource</li> <li>Energy Resource</li> </ul>	<ul> <li>Learning outcome: Focus on explaining four vital natural resources that we obtain from nature, the importance of use and misuse of natural resources around us, and how to use them in a sustainable manner</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, deliberation on articles shared over WhatsApp group, Quizzes, Critical discussion on important case studies.</li> </ul>
8 – 9	<ul> <li>Unit 4: BIODIVERSITY AND CONSERVATION</li> <li>Definition and Levels of Biodiversity;</li> <li>Biogeographic zones of India and global Biodiversity hotspots</li> <li>Endemic and endangered species of India Value of biodiversity</li> <li>Threats to biodiversity</li> <li>Biodiversity conservation strategies</li> <li>Species reintroduction and translocation</li> </ul>	<ul> <li>Learning outcome: Orienting the students to importance of understanding biodiversity, the threats that biodiversity faces from, humans, strategies for conserving the biodiversity. Through case studies, students will develop an understanding of how biodiversity is being protected and what challenges we are still facing.</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, deliberation on articles shared over WhatsApp group, Quizzes and visiting a biodiversity park or Zoo for real world learning. Critical discussion on important case studies.</li> </ul>
10 - 12	<ul> <li>Unit 5: POLLUTION</li> <li>Environmental pollution (Air, water, soil, thermal, and noise): causes, effects, and controls; Primary and secondary air pollutants; Air and water quality standards.</li> <li>Solid Waste management</li> </ul>	<ul> <li>Learning outcome: Students will develop an understanding about the effects of various types of pollution on their lives, strategies to control, efforts taken by various stakeholders in reducing pollution and responsibility of a citizen in tackling the problem.</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, deliberation on articles shared over WhatsApp group, Quizzes, Critical discussion on important case studies, government policies and initiatives to tackle pollution and motivating the students to contribute individually to controlling pollution.</li> </ul>

13 - 14	<ul> <li>Unit 6: GLOBAL ENVIRONMENTAL ISSUES AND POLICIES</li> <li>Global issues, its causes and impacts: Climate change, Global warming, Ozone layer depletion, and Acid rain.</li> <li>International agreements and programmes related to environment.</li> <li>Sustainable Development Goals and India's National Action Plan on Climate Change</li> <li>Various Environmental Acts in Indian context</li> </ul>	<ul> <li>Learning outcome: Focus on developing a critical understanding and reasoning with respect to various global environmental issues and the measures being taken to tackle them</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, deliberation on articles shared over WhatsApp group, Quizzes, Critical discussion on important policies and Acts.</li> </ul>
15 - 16	<ul> <li>Unit 7: HUMAN COMMUNITIES AND ENVIRONMENT</li> <li>Human population growth</li> <li>Resettlement and rehabilitation</li> <li>Environmental movements</li> <li>Environmental justice and philosophy</li> <li>Environmental communication and public awareness</li> </ul>	<ul> <li>Learning outcome: Students will understand the impacts of human population explosion and how environmental issues can be communicated for generating public awareness. They will also develop a viewpoint about environmental ethics and justice.</li> <li>Teaching methodology: Teaching methods will include classroom lectures, audio visual presentations, Critical discussion on important case studies.</li> </ul>
16 - 17	Revision and Remedial classes	

## Internal Assessment (to be held during Week 9/10 and Week 15/16)

- Question and Answer session
- Students presentations
- Class tests
- Group discussion, Quizzes

## **Study trips**

• Students will be taken to any biodiversity park/ zoological park/ treatment plant etc