

**Lesson Plan of Ability Enhancement Compulsory Course-2 (AECC-2) in Environmental Studies  
Under Graduate Curriculum under Choice Based Credit System (CBCS)**

<b>Semester</b>	2
<b>Subject</b>	Environmental Studies
<b>Course Code</b>	AECC-2 (Ability Enhancement Compulsory Course-2)
<b>Total Marks</b>	100
<b>Marks distribution</b>	50 Theory-MCQ type + 30 Project + 10 Internal Assessment + 10 Attendance [Marks obtained in this course will be taken to calculate SGPA & CGPA]
<b>Credit</b>	2
<b>Stream of students</b>	All students of B.A , B.Sc and B.Com (Honors , General and Major)-2 <sup>nd</sup> Semester
<b>Academic Year</b>	March,2022 to August,2022
<b>Outcome of the course</b>	The course will empower the undergraduate students by helping them: i. To raise awareness regarding different components of the environment, ecosystem, natural resources, biodiversity, environmental pollution, role of environmental education etc. ii. To learn about various contemporary environmental concerns and problems at the national and worldwide levels. iii. To disseminate information regarding various management techniques of natural and man-made disaster.

**Tentative lesson plan, may subject to change:**

Month	Unit	Chapter wise Syllabus Content	Stream	Number of Lectures for Each Stream	Name of the teacher
March,2022	1	<b>Introduction to environmental studies</b> •Multidisciplinary nature of environmental studies; •Scope and importance; Concept of sustainability and sustainable development	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	1	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	1	Ms. Shreya Ghosh
March,2022	2	<b>Ecology and Ecosystems</b> •Concept of ecology and ecosystem, Structure and function of ecosystem; Energy flow in an ecosystem; food chains, food webs; Basic concept of population and community ecology; ecological succession. •Characteristic features of the following: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, wetlands, rivers, oceans, estuaries)	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	2	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	2	Ms. Shreya Ghosh

Department of Environmental Studies,  
Maharani Kasiswari College, Kolkata-700003  
Affiliated to the University of Calcutta

March,2022	3	<b>Natural Resources</b> <ul style="list-style-type: none"> <li>• Concept of Renewable and Non-renewable resources</li> <li>• Land resources and land use change; Land degradation, soil erosion and desertification.</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	1	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	1	Ms. Shreya Ghosh
April,2022	3	<b>Natural Resources</b> <ul style="list-style-type: none"> <li>•Deforestation: Causes, consequences and remedial measures</li> <li>•Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international &amp; inter-state).</li> <li>•Energy resources: Environmental impacts of energy generation, use of alternative and nonconventional energy sources, growing energy needs.</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	2	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	2	Ms. Shreya Ghosh
April,2022	4	<b>Biodiversity and Conservation</b> <ul style="list-style-type: none"> <li>•Levels of biological diversity: genetic, species and ecosystem diversity;</li> <li>• Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots</li> <li>•India as a mega-biodiversity nation; Endangered and endemic species of India</li> <li>•Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions;</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	2	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	2	Ms. Shreya Ghosh
April,2022	<b>Project</b>	<b>Detail guidance for completion of the project namely “Assessment of noise pollution-a case study”</b>			Ms. Paushali Guha Sarkar & Ms. Shreya Ghosh
May,2022	4	<b>Biodiversity and Conservation</b> <ul style="list-style-type: none"> <li>•Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.</li> <li>•Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	1	Ms. Paushali Guha Sarkar
			B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	1	Ms. Shreya Ghosh
	<b>Project</b>	<b>Submission of the Project</b>			Ms. Paushali Guha Sarkar & Ms. Shreya Ghosh

May,2022	5	<b>Environmental Pollution</b> <ul style="list-style-type: none"> <li>• Environmental pollution: concepts and types,</li> <li>• Air, water, soil, noise and marine pollution- causes, effects and controls</li> <li>• Concept of hazards waste and human health risks</li> <li>• Solid waste management: Control measures of Municipal, biomedical and e-waste</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	3	Ms. Paushali Guha Sarkar
		<ul style="list-style-type: none"> <li>• Concept of hazards waste and human health risks</li> <li>• Solid waste management: Control measures of Municipal, biomedical and e-waste</li> </ul>	B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	3	Ms. Shreya Ghosh
June,2022	6.	<b>Environmental Policies and Practices</b> <ul style="list-style-type: none"> <li>•Climate change, global warming, ozone layer depletion, acid rain and their impacts on human communities and agriculture</li> <li>•International agreements: Montreal Protocol, Kyoto protocol and climate negotiations; Convention on Biological Diversity (CBD).</li> <li>•Protected area network, tribal populations and rights, and human wildlife conflicts in Indian context</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	4	Ms. Paushali Guha Sarkar
		<ul style="list-style-type: none"> <li>•Protected area network, tribal populations and rights, and human wildlife conflicts in Indian context</li> </ul>	B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	4	Ms. Shreya Ghosh
	<b>Internal Assessment</b>	MCQ based Internal Assessment for all students of Sem-II on Unit-1 to 6	All streams		Under the supervision of Ms. Paushali Guha Sarkar & Ms. Shreya Ghosh
July,2022	7.	<b>Human Communities and the Environment</b> <ul style="list-style-type: none"> <li>•Human population growth: Impacts on environment, human health and welfare.</li> <li>•Case studies on Resettlement and rehabilitation.</li> <li>• Environmental Disaster: Natural Disasters-floods, earthquake, cyclones, tsunami and landslides; Manmade Disaster-Bhopal and Chernobyl</li> <li>•Environmental movements: Bishnois. Chipko, Silent valley, Big dam movements.</li> <li>•Environmental ethics: Role of gender and cultures in environmental conservation.</li> <li>•Environmental education and public awareness</li> </ul>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	3	Ms. Paushali Guha Sarkar
		<ul style="list-style-type: none"> <li>•Environmental movements: Bishnois. Chipko, Silent valley, Big dam movements.</li> <li>•Environmental ethics: Role of gender and cultures in environmental conservation.</li> <li>•Environmental education and public awareness</li> </ul>	B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	3	Ms. Shreya Ghosh

Department of Environmental Studies,  
Maharani Kasiswari College, Kolkata-700003  
Affiliated to the University of Calcutta

July, 2022	<b>Discuss question and answer</b>	B.A-H-Gr-A, B.A-G-Gr-A, B.Com-H & G	1	Ms. Paushali Guha Sarkar
		B.A-H-Gr-B, B.A-G-Gr-B, B.Sc- H & G	1	Ms. Shreya Ghosh