## University of Calcutta Under Graduate Curriculum under Choice Based Credit System (CBCS)

Lesson Plan with Syllabus for Ability Enhancement Compulsory Course-2 (AECC-2) in

## Environmental Studies Sem-II

Total Marks-100(Credit -2)

## (50 Theory-MCQ type + 30 Project + 10 Internal Assessment + 10Attendance)

## [Marks obtained in this course will be taken to calculate SGPA & CGPA]

Tentative,	, may sub	ject to	change:	
Months	Week	Unit	Chapter wise Syllabus Content	No. of Lectures for Each Section
March	2nd	1.	Introduction to environmental studies:	
			•Multidisciplinary nature of environmental studies;	2
			•Scope and importance; Concept of sustainability and	
			sustainable development	
	3rd	2.	Ecology and Ecosystems:	
	0.0		•Concept of ecology and ecosystem, Structure and	2
			function of ecosystem; Energy flow in an ecosystem; food	-
			chains, food webs; Basic concept of population and	
			community ecology; ecological succession.	
	4th	-	•Characteristic features of the following:	2
	401		-	2
			a) Forest ecosystem	
			b) Grassland ecosystem	
			c) Desert ecosystem	
			d) Aquatic ecosystems (ponds, streams, lakes, wetlands,	
			rivers, oceans, estuaries)	
			### Distribution of Project for Data collection:	
			Title:	
			Floral-diversity of West Bengal and its importance	
April	1st		McQ based Test for all 6-section on Unit-1 & 2	
	2nd	3.	Natural Resources:	
			<ul> <li>Concept of Renewable and Non-renewable resources</li> </ul>	2
			• Land resources and land use change; Land degradation,	
			soil erosion and desertification.	
			<ul> <li>Deforestation: Causes, consequences and remedial</li> </ul>	
			measures	
			•Water: Use and over-exploitation of surface and ground	
			water, floods, droughts, conflicts over water	
			(international & inter-state).	
	3rd		•Energy resources: Environmental impacts of energy	1+1
			generation, use of alternative and nonconventional	
			energy sources, growing energy needs.	
			**Student Lecture: On Rain Water Harvesting or Waste	
			Land Restoration	
	4th	4	<ul> <li>India as a mega-biodiversity nation; Endangered and</li> </ul>	2
			endemic species of India	
			<ul> <li>Threats to biodiversity: Habitat loss, poaching of</li> </ul>	
			wildlife, man-wildlife conflicts, biological invasions;	
			<ul> <li>Conservation of biodiversity: In-situ and Ex-situ</li> </ul>	
			conservation of biodiversity.	
			Students' Seminar on Earth Day	22 <sup>nd</sup> April 2022
	5th	4.	•Ecosystem and biodiversity services: Ecological,	
			economic, social, ethical, aesthetic and Informational	2
			value.	-
			McQ based Assessment for all 6-section on Unit-3	

Months	Week	Unit	Chapter wise Syllabus Content	No. of Lectures for Each Section
May	1st	5.	<ul> <li>Environmental Pollution:</li> <li>Environmental pollution: concepts and types,</li> <li>Air, water, soil, noise and marine pollution- causes, effects and controls. Acid rain, Black lung, Black foot, PAN, DDT, BOD, COD, Biomagnification, Minamata</li> </ul>	1+1
			**Student Lecture: On Deep Ecology or Conservation of Nature	
			###Submission of project work start####	
	2nd		<ul> <li>Concept of hazards waste and human health risks</li> <li>Solid waste management: Control measures of Municipal, biomedical and e-waste.</li> </ul>	2
			McQ based Assessment for all 6-section on Unit-4 & 5	
	3rd	6.	<ul> <li>Environmental Policies and Practices:</li> <li>Climate change, global warming, ozone layer deplet ion, acid rain and their impacts on human communities and agriculture</li> <li>Environment Laws: Wildlife Protection Act; Forest Conservation Act. Water (Prevention and control of Pollution) Act; Air (Prevention &amp; Control of Pollution) Act; Environment Protection Act; Biodiversity Act.</li> </ul>	2
	4th		<ul> <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>	1+1
			**Student Lecture: On Agenda 21 or Earth Summit or	
June	1st	7.	Wildlife Conflict Human Communities and the Environment:	
Julie			<ul> <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; Man- made Disaster- <i>Bhopal</i> and <i>Chernobyl</i>.</li> <li><i>Environmental movements: Bishnoi, Chipko, Silent</i> <i>valley, Narmada-Tehri Big Dam movements.</i></li> <li>Environmental ethics: Role of gender and cultures in environmental conservation.</li> <li>Environmental education and public awareness</li> </ul>	2
		luter 1	McQ based Assessment for all 6-section on Unit-6 & 7	
	2nd	Internal Assessment	McQ based Internal Assessment for all Sem-II Honours-section on Unit-1 to 7 McQ based Internal Assessment for all Sem-II General-section on Unit-1 to 7	2
	3rd	Project	Detail guidance for completion of given project	2
	4th		Submission of Project of all section	2
	5th		Submission of Project of all section	2

Section: Semester- II : Arts/Sc (H), Arts/Sc (G), Science (H), Science (G), Commerce (H), Commerce (G)