

Under graduate compulsory course

Environmental studies

Ability Enhancement compulsory course

Programme Specific Outcome

As a part of their under graduate course both honours general students of all stream have to study this Environmental studies course as ability enhancement compulsory course in their 1st semester honours students and 2nd semester general students as per CBCS system under university of kalyani.

Although it is a compulsory subject but depending on the existing scenario and Global environmental issues in our college ,we use this platform to encourage students to care and love nature and to protect it too.

We also try to create, develop, and expand disciplinary knowledge about earth environment that help students as well as greater society to aware of moral and ethical reasoning for good use of earth resources and a practice of Eco-friendly livelihood.

Course outcome

(Ability Enhancement Compulsory Course)

Course title-Environmental studies

Course code	semester	Full marks	Course credit
UG-ENVS-H(AECC-01)	1 ST SEM(HONOURS)	40 +10=50	2
UG-ENVS-G(AECC-02)	2 ND SEM(GENERAL)	40 +10=50	2

Unit: 1

Introduction to environmental studies, Multidisciplinary nature of environmental studies.

: At the end of this unit students will understand the importance and dimension of healthy environment.

Unit: 2

Ecosystem, structure and function. Energy flow, food chain, food web, ecological succession, Ecosystem of forest, grassland, desert and aquatic ecosystem.

: At the end of this unit students will comprehend the significance and issues related to ecosystem, natural resources and bio-diversity and become aware of the need and ways to protect/preserve them.

Unit: 3

Natural resources: Renewable and non renewable resources.

Land resources : land use change, land degradation, soil erosion and desertification.

Deforestation : cause, impact.

Water : use, over exploitation, flood, drought, conflict.

Energy resources : renewable, non renewable, alternative energy resources.

: After completing this chapter students will be able to understand the value of natural resources, growing energy need, crisis of fresh water and loss of biodiversity.

Unit: 4

Biodiversity and conservation.

Biological diversity, Bio geographic zones, hot spots.

Mega-biodiversity nation, endangered, endemic species.

Threat to biodiversity, habitat loss, poaching, man-wild life conflict, in-situ, ex-situ conservation.

Value of biodiversity : Social, ethical, aesthetic, ecological, informational.

: At the end of this unit students will be aware of the need of biodiversity conservation and ways to protect and preserve them.

Unit: 5

Environmental pollution: Types, causes, control.

Nuclear hazards, solid waste management, e-pollution, urban and industrial waste.

: After completing this unit students will grasp the issues related to environmental pollution and climate change and become conscious and proactive in the discharge of their responsibilities towards the environment.

Unit: 6

Global warming, climate change, ozone layer depletion, acid rain.

Environmental laws: environmental protection-Act, Air (protection and control of Pollution) Act, water (protection and control of pollution) Act, wild life protection Act, forest Conservation Act, Kyoto, Montreal protocols, conservation of biodiversity.

Tribal population and rights, human wildlife conflicts, nature reserve.

: At and become active the end of this unit students will become aware of various environmental issues of global environmental problem to care and love nature and to protect it too.

Unit: 7

Human communities and environment.

Over population. Resettlement, rehabilitation of project affected person.

Disaster management, flood, earthquake, cyclone, landslides.

Environmental movement: chipko , silent valley ,save Narmada ,

: After completing this unit students will become aware and appreciate the value and concern of environmental movement and policies and roll of communities, and act responsibly on environmental- related issues.

Unit: 8

Field work (project paper)

Study of common plants / insects / birds.

Study of simple ecosystem –pond /river /wetland.

Visit to an area document environmental assets river/forest/flora/fauna.

Visit to a local polluted site-urban/rural/industrial/agricultural.

: At the end of this unit students will obtain, expand and reflect their active roll through various practical based activities and also motivate other various environmental activities to be maintained.

Programme outcome

After completing the entire syllabus students are able to -

Articulate the interconnected and interdisciplinary nature of environmental studies.

Demonstrate integrative approaches to various environmental issues with a focus on Think Globally Act Locally.

Use critical thinking, problem-solving, and the methodological approaches.

Communicate complex environmental information to both technical and non technical audience.

Understand evaluate the Global scale of environmental crisis.

Reflect critically on their roles, responsibilities and identities as a citizen, consumer and environmental actors in a complex interconnected world

Create, develop and expand the knowledge of natural resources.

Motivate others about various environmental activities, awareness to be maintained.

And a good practice of eco-friendly livelihood with moral and ethical reasoning.

