Program Specific Outcomes and Course Outcomes

Department of Environmental Studies

Chakdaha College

(University of Kalyani)

B.A, B.Sc and B.com (Honours + Programme) -AECC

Program Specific Outcomes (PSOs)

1. Students will understand fundamental concepts of environment and environmental problems at local, regional and global scale.

2. Students will be able to develop an environmental consciousness with the comprehensive study and analysis of nature and surrounding.

3. Students will be able to develop sustainable societies with fair undersanding of national and international environmental policies and their implimentation strategies.

4. Students will get opportunity for higher studies in environmental related course as the environmental studies is multidisciplinary in nature.

5. Students are future professionals with a strong foundation of theoretical and practical knowledge,which turn them into a skilled manpower suitable for vital positions in various service sectors.

Course Outcomes (COs)	
B.A, B.Sc and B.com (Honours) 1st Semester	
Title of the course	Course Outcomes (COs)
Unit-1 Introduction to Environmental Studies	After completing the course, a student will be able to • obtain the fundamental concept of environmental studies. • acquire knowledge about atmosphere and its components.

	• be concerned about necessity and aware of environment. • obtain the basic concept of sustainable development and sustainability. • understand environmental law and sustainable development.
Unit -2 Ecosystem	After completing the course, a student will be able to • understand the relationship between biotic and abiotic components. • gain knowledge about different types of ecosystem and ecology. • obtain the basic concept of food chain,food web, energy flow and food pyramid. • recognize evolutionary process and adaptations of organisms like animal and plant species. • outline the concepts and key terms of terrestrial and aquatic ecosystem. • write a report on ecological succession. • gain knowledge about bio-geochemical and sedimentary cycles and its importance.
Unit-3 Natural Resources: Renewable and Non-renewabl Resources	After completing the course, a student will be able to • outline the concepts and features of natural resource. • understand the benefits of sustainable use of natural resource. • articulate the concepts of renewable and non-renewable energy resources with its importance and limitations. • discuss the merits and demerits of conventional and non-conventional energy generation technologies. • explain the concepts of alternative energy resource and also judge the future potential of it. • describe the impact of over utilisation of surface and ground water. • demonstrate energy generation technologies by using lab scale

	modes like wind mills, solar devices. • organise educational programs to encourage conservation of natural resource. • gain knowledge about the different types of disaster like land degradation, deforestation, soil erosion, flood and drought.
Unit - 4 Biodiversity and Conservation	After completing the course, a student will be able to • state the concepts of biodiversity and its different types of level. • express primary concept of India as a mega diversity nation. • illustrate the threats to biodiversity in India. • approach for conservation of biodiversity at all levels. • campare in-situ and ex-situ conservation practices. • obtain the basic concept of biodiversity hotspots. • attribute the basic knowledge of endemic and endangered species. • describe the different sanctuaries and related states of India. • examine conservation actions at national and international level. • plan and conduct independent field Work.
Unit -5 Environmental Pollution	After completing the course, a student will be able to • obtain basic concept of environmental pollution. • evaluate the relationship among environment and human health. • correlate the sources, types and effects of water,air and soil pollution. • develop the key idea of contemporary assessment of air,water, noise, soil and radiation pollution. • gain knowledge about acid rain and its consequences. • analyze the noise quality and permissible levels.

	• illustrate physical, chemical and biological impurities in water and soil sample. • acquire knowledge about BOD, COD and eutrophication. • gain knowledge of how to reduce and reuse the solid waste. • create awareness among the people about the impact of solid waste.
Unit-6 Environmental Policies and Practices	After completing the course, a student will be able to • define the concepts of climate change and evaluate the impacts of climate change on environment and also human health. • illustrate the consequences of global warming and ozone layer depletion. • gain knowledge about international agreements like Kyoto Protocol, Montreal Protocol and Convention on Biological Diversity which provides such information to abatement of pollution. • create awareness about environmental act and their implimentation like air (prevention and control of pollution) act, water (prevention and control of pollution) act, environmental protection act, wildlife protection act and forest conservation act. • obtain basic concept of human wildlife conflict. • acquire knowledge about tribal population and tribal rights in India.
Unit -7 Human Communities and the Environment	After completing the course, a student will be able to • acquire knowledge about human population growth and impacts on environment. • discuss the importance of different environmental movement like Chipko movement, Silent Valley movement. • define Bishnoi tribe efforts to conserve biodiversity. • describe the role of government and legal aspects in environmental protection. • learn environmental communication and public awareness (CNG vehicle in Delhi).

Unit -8 Field Work	After completing the course, a student will be able to • gain different activities by learning different types of project provided by teacher like 1. Rain Water Harvesting 2. Global Warming 3. Noise Pollution 4. Acid Rain

Course Outcomes

B.A, B.Sc and B.com (Programme) 2nd Semester

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