

NIRMA UNIVERSITY
Institute of Commerce
Bachelor of Commerce (Hons.)
[B.Com. (Hons.)]
Semester – III

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Course Code	AECC3
Course Title	ENVIRONMENTAL STUDIES

Course Learning Outcomes (CLO):

At the end of the course, students will be able to:

- 1) Understand the importance of environment protection.
- 2) Think of possible solutions to the environmental problems.

Syllabus

Teaching Hours

<p>Unit I: Multidisciplinary Nature of Environmental Studies</p> <ul style="list-style-type: none"> • Definition, Scope and Importance • Need for Public Awareness 	3
<p>Unit II: Natural Resources</p> <ul style="list-style-type: none"> • Renewable and non-renewable resources • Natural resources and associated problems <ol style="list-style-type: none"> a) Forest, Mineral, Food, Energy and Land resources b) Role of an individual in conservation of natural resources • Equitable use of resources for sustainable lifestyles 	5
<p>Unit III: Eco System</p> <ul style="list-style-type: none"> • Concept, Structure and function of an ecosystem. • Producers, consumers and decomposers. • Energy flow in the ecosystem. • Ecological succession. • Food chains, food webs and ecological pyramids. 	5
<p>Unit IV: Bio Diversity and its Conservation</p> <ul style="list-style-type: none"> • Introduction – Definition: genetic, species and ecosystem diversity. • Biogeographical classification of India • Value, Hot-spots, Threats and Conservation of biodiversity • Biodiversity at global, National and local levels. • India as a mega-diversity nation • Endangered and endemic species of India 	5

<p>Unit V: Environmental Pollution</p> <ul style="list-style-type: none"> • Definition • Cause, effects and control measures of Air, Water, Soil, Marine, Noise, Thermal pollution and Nuclear hazards. Solid waste Management • Role of an individual in prevention of pollution. • Pollution case studies. • Disaster management 	5
<p>Unit VI: Social Issues and the Environment</p> <ul style="list-style-type: none"> • From Unsustainable to Sustainable development, Urban problems related to energy. • Water conservation, rain water harvesting, watershed management • Resettlement and rehabilitation of people; its problems and concerns. Case Studies, accidents and holocaust. Case Studies. • Environmental ethics, Wasteland reclamation. • Climate change, global warming, acid rain, ozone layer depletion, nuclear, Consumerism and waste products. • Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act. • Issues involved in enforcement of environmental legislation. • Public awareness. 	5
<p>Unit VII: Human Population and the Environment</p> <ul style="list-style-type: none"> • Population growth, Population explosion • Environment and human health, Human Rights, Value Education. • HIV/AIDS. • Women and Child Welfare, Role of Information Technology in Environment and human health. • Case Studies. 	7
<p>Unit VIII: Field Work</p> <ul style="list-style-type: none"> • Visit to a local area to document environmental assets river/ forest/grassland/hill/mountain • Visit to a local polluted Site-Urban/Rural/Industrial/Agricultural • Study of common plants, insects, birds. • Study of simple ecosystems-pond, river, hill slopes, etc. 	10

Suggested Readings:

- 1 Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
- 2 Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd.,
- 3 Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
- 4 Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
- 5 Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumabai, 1196p
- 6 Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- 7 Mckinney, M.L. & School, R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.
- 8 Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB)
- 9 Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co. (TB)
- 10 Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
- 11 Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R)