



SEMESTER – II

Course Code: BD2EE	Credits: 5
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ENVIRONMENTAL EDUCATION

COURSE OBJECTIVES

- CO1. Realise the need for environmental education.
- CO2. List the natural resources and its associated problems.
- CO3. Identify the different types of pollution and its management.
- CO4. Appreciate the policies and programmes initiated to protect the environment.
- CO5. Analyse the environmental education curriculum.

UNIT 1 - ENVIRONMENTAL EDUCATION

Concept and Meaning of Environment – Components of Environment – Types of Environment – Environmental Awareness – Environmental Attitude – Ecological Intelligence – Ecological Sensitivity – Environmental Education: Focal Aspects of Environmental Education – Goals of Environmental Education – Objectives of Environmental Education – Need and Importance of Environmental Education – Scope of Environmental Education.

UNIT II: - NATURAL RESOURCES, PROBLEMS, AND SOLUTIONS

Land Resources and Prevention of Soil Erosion – Forest Resources and Prevention of Deforestation – Water Resources and Prevention of Water Scarcity – Mineral Resources, and Prevention and Exploitation of Minerals – Food Resources, Food Crisis, and Increasing Food Production – Energy Resources – Alternative Energy Resources.

UNIT –III: ENVIRONMENTAL POLLUTION, HAZARDS, AND DISASTER MANAGEMENT

Environmental Degradation –Types of Environmental Degradation – Environmental Pollution – Environmental Pollutants – Types of Pollution: Soil/Land Pollution, Water Pollution, Air Pollution, Radiation/Nuclear Pollution, Light Pollution, Solid Waste Pollution – Prevention and Management of Pollution – Hazards and Disaster Management: Earth Quake, Land Slides, Volcanic Eruption, Forest Fire, Tsunami, Cyclone, Flood - Nuclear and Industrial Accidents – Oil Spills

UNIT –IV: ENVIRONMENTAL PROBLEMS, POLICIES, AND PROTECTION OF ENVIRONMENT

Major Environmental Problems: Global Warming, Green House Effect, Climate Change, Ozone Layer Depletion, Acid Rain, Extinction of Flora and Fauna– National Environmental Policies and Programmes: Environmental Legislation, Acts, Rules, Notifications and Amendments, National and Regional Green Tribunals, Pollution Control Board – International NGOs and Environmental Protection: Environmental Foundation for Africa, World Wide Fund for Nature, Conservation International, Green Peace–International Union for Conservation of Nature

UNIT 5 - ENVIRONMENTAL EDUCATION IN SCHOOL CURRICULUM

Status of Environmental Education in School Curriculum – Environmental Education at different levels of School Education –Innovative Methods of Teaching Environmental Education – Problems faced in Teaching Environmental Education – Role of UNEP, CEE and NCERT in promoting Environmental Education

SUGGESTED ACTIVITIES

1. Discussion on the need and importance of protecting the environment
2. Seminar on environmental awareness and environmental attitude
3. Teacher talk on the need and importance of protecting water resources
4. Preparation of a scrap book on issues related to environment
5. Power point presentation on different types of environmental pollutions and its causes

TEXT BOOKS

1. Archana, T. (2011). Environmental education. Kalpaz Publications.
2. Havilah, S. N. (2013). Environmental education. A.P.H. Publishing Corporation.
3. Maria, C. M. (2020). Effect of ecological intelligence on developing ecological sensitivity among prospective teachers. Shashwat Publication.
4. Paachuri, S.C., & Kumar, P. (2013). Environmental education. A.P.H. Publishing Corporation.
5. Palmer, J.A. (1998). Environmental education in the 21st Century: Theory, practice, progress, and promise. Routledge.

SUPPLEMENTARY READINGS

1. Gruenewald, D.A. (2004). A foucauldian analysis of environmental education: Toward the socioecological challenge of the earth charter. *Curriculum Inquiry*, 34(1), 71-107.
2. Malone, K. (1999). Environmental education researchers as environmental activists. *Environmental Education Research*, 5(2), 163-177.
3. Nath, B. (2003). Education for sustainable development: The Johannesburg summit and beyond. *Environment, Development & Sustainability*, 5, 231- 254.
4. Singh, S.R. (2012). *Environmental education and sustainable development*. A.P.H. Publishing Corporation.
5. Stapp, W.B., et al. (1969). The concept of environmental education. *The Journal of Environmental Education*, 1(1), 30-31.

WEB RESOURCES

1. <http://www.epa.gov/sustainability/basicinfo.htm>
2. <http://www.conserve-energy-future.com/current-environmental-issues>
3. http://en.wikipedia.org/wiki/Environmental_education
4. <http://www.yourarticlelibrary.com/environment/forest/forest-resources-in-india-use-over-exploitation-causes-and-effects/28196/>
5. <http://www.yourarticlelibrary.com/environment/the-importance-of-natural-resources-of-planet-earth/9914/>
6. http://wwf.panda.org/about_our_earth/blue_planet/problems/pollution
7. <http://www.brighthub.com/environment/science-environmental/articles/92943.aspx>

COURSE OUTCOMES

After completion of this course, the student-teachers will be able to :

- CO1. understand the need for environmental education.
- CO2. name the natural resources and its associated problems.
- CO3. identify the different types of pollution, its impact and management of pollution.
- CO4. appreciate the policies and programmes initiated to protect the environment.
- CO5. analyse the environmental education curriculum.

OUTCOME MAPPING

COURSE OUTCOME S	PROGRAMME SPECIFIC OUTCOMES																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
CO1									*															
CO2													*											
CO3													*											
CO4							*			*			*							*				
CO5						*					*	*				*		*						