

MANGALORE UNIVERSITY
DEPARTMENT OF BIOSCIENCES
M.Sc. ENVIRONMENTAL SCIENCE

ESH 502 ENVIRONMENTAL PROTECTION

52 hrs.

Course Outcomes:

CO1 Demonstrate various methods of wildlife protection and preservation.

CO2 Demonstrate laws of sea.

CO3 Demonstrate the role of environmental institutions in environmental protection.

CO4 Understand water and wastewater management.

UNIT I (13 hours)

Environmental protection principles: Instruments available - economic, social, religious, legal and cultural. Wildlife protection and preservation – IUCN categories of wildlife animals and plants; National parks, wildlife sanctuaries, zoos, bioreserves, botanical gardens; preservation of monuments; Animal rights, Wildlife protection laws.

UNIT II (13 hours)

Environmental protection of coastal environment: Marine environment, laws of the sea, coastal regulatory zone (CRZ), Hazardous wastes and management: Radioactive waste: Definition, types and disposal methods. Pharmaceutical waste: Types and management, Refinery waste: Types and disposal methods. Pesticide waste, detergent waste, plastic pollution and control.

UNIT III (13 hours)

Administrative and judicial remedies: Environmental institutions, Role of pollution control Boards in environmental protection; Sanctions and enforcement bodies of environment law, their jurisdiction and civil suits, specific relief and compensation, public interest and litigation, public participation in environmental decision making and actions.

UNIT IV (13 hours)

Pollution measurement and analysis: Sampling techniques for the analysis of air, water and soil samples; Interaction between man and environment: Environmental movements for environmental protection; Water and wastewater management; Water purification; Contaminated land management. Waste management and utilization (plantation crop wastes, domestic waste, poultry waste).

References:

1. Reddy, P.K., 2000. Wetland Ecology, Cambridge University Press.
2. Environmental Conservation and Planning.
3. Rodgers, W.H., 1977. Environmental Law.
4. The Environment (Protection) Act, 1986.
5. The Environment (Protection) Act, 1985.
6. Diwakar Rao, P.L. 1990. Pollution control Hand book, Utility Publications Ltd., Secunderabad. India.
7. Eaton, A. D., Clesceri, L.S. & Greenberg, A.E. 1995. Standard Methods for the Examination of Water and Wastewater. APHA, Washington.
8. Hommadi, A.H. 1990. Environmental and Industrial safety. Indian Bibliographics Bureau, Delhi.

9. Moriarty, F., 1975. Pollutants and animals: A factual perspective. George Allan & Unwin Ltd., London

