

Course Outcomes:

CO1 Study various types of pollution and their impact on different environmental components.

CO2 Learn various pollution mitigation measures.

CO3 Demonstrate the various forms of pollution and its impact on different components of environment.

CO4 Discuss about biopollutants and their effects on humans.

UNIT I (13 Hours)

Thermal pollution- Sources, effects and control methods. Thermal extremes and their health impacts. Marine water pollution: Sources and effects of marine pollution and control. Marine algae and toxic effects. Criteria employed for disposal of pollutants in marine system, coastal management.

UNIT II (13 Hours)

Indoor and outdoor air pollution: Sources, types, effects and control. Industrial air pollution- fugitive emission and source emission, preventive methods. Automobile pollution and mitigation measures. Soil pollution: Sources, physico-chemical and biological properties of soil, effects and control measures. Swachh Bharat Mission.

UNIT III (13 Hours)

Nuclear hazards: Sources, effects – nuclear accidents and ecological impacts, control measures. Light pollution: Definition, types, causes, measurement and prevention. Biopollution: Aeroallergens, biological components - pollen grains, fungi, effects, respiratory diseases and control methods.

References:

1. Ahluwalia, V. K. 2017. Environmental Pollution, and Health. TERI
2. Aswathanarayana, U. Soil Resources & the Environment, Oxford & IBH publishing, New Delhi.
3. Dubey, R.C. and Maheshwari W.K., Text book of Microbiology, S. Chand and Co., New Delhi.
4. Meera Asthana and Astana D.K. 1990. Environmental pollution and Toxicology, Alka Printers.
5. Santra, S.C. Environmental Science, New Central Book Agency (Pvt.) Ltd., Kolkata.
6. Sharma, B.K. and Kaur. 1995. Environmental Chemistry, Goel Publishing House, Meerut.
7. Sharma, P.D. 1994. Environmental Biology and Toxicology, Rastogi Publ.
8. Sharma, P.D. Ecology and Environment, Rastogi Publications, Meerut.