



Code	Subject Title	Cr. Hrs	Semester
ZOOL-317	Environmental Biology Lab	1	VI
Year	Discipline		
3	Zoology		

1. Methods and analysis of population dynamics, Quadrature method:
 - a. Determining frequency of different species (population analysis).
 - b. Determining density of species in habitat.
2. Measurement of pollutants levels:
 - a. In atmosphere (NO₂, SO₂, O₃ and comparison with rural air).
 - b. In soil (toxic chemical, fertilizer, insecticides, pesticides, herbicides); and in plants and animals.
3. Analysis of polluted and freshwater for, Various pollutants; heavy metals, - CO₃, -HCO₃, NO₃, BOD, COD, pH, EC, total, soluble solids.
4. Impact of radiation on microbes and plants.
5. Effects of noise on animal behaviour.

Textbooks

1. M.L. McKinney, 1999. Environmental Science: System and Solution Jones & Bartlett Publication, Boston
2. R. Lloyd, 1992. Pollution and Freshwater Fishing News Books.
3. Manuel C. Moller Jr. 2002. Ecology (Concepts and solutions). McGraw-Hill publishers.

Additional Readings

1. C.E. Mason, 1996. Biology of Freshwater Pollution, Longman Publication.
2. Smith, 1988. Ecology and Field Biology, National Book Foundation.
3. Krebs, 2000. Ecology: The experimental analysis of distribution and application.
4. E.P. Odum, 1996. Ecology: A Bridge between science & society.
5. R.K. Singh, 1998. Human Ecology.
6. Miller, Jr., 2002. Living in the environment. Ed.
7. Peter Stillig, 2002. Ecology (Theories and Applications). Prentice Hall publications.