

Geog. 304 Environmental Geography Cr. Hours (03)
BS Geography 4 Years Programme, University of the Punjab, Lahore

- **Introduction**
 - Scope of the subject
 - Its importance, nature of environments
 - The Structure of Ecosystems
 - Ecosystem Functions
 - Environmental Problems and the Principles of Ecology
- **Material Cycles**
 - The Hydrological Cycle
 - The Atmosphere Cycles
 - Lithospheric Cycles
 - Nitrogen Cycle
- **Energy: Sources and Uses:**
 - Energy Sources
- **Energy Alternatives for the Future: Petroleum, Natural Gas, Solar Energy, Atomic Energy, Hydroelectric Power**
- **Soil resources**
 - soil components; Profile and characteristics
 - Soil classification

- Use and misuse of soil management and conservation
- **Mineral and Water Resources**
 - Mineral Resources and Reserves
 - Water Resources:
 - Conflicts in the uses of water by urban, rural, agricultural, power, industrial and recreational agencies
 - Problems created by shortage/excess of water
 - Water pollution and water treatment by industries
- **Water Pollution**
 - Types of Water Pollutants
 - Sources of Water Pollution
 - The Impact of Water Pollution on Human Health, Animals and Plants
 - Water Pollution Control and Treatment
- **Air Pollution and their Sources:**
 - The Sources of Air Pollution
 - The Factors of Air Pollution
 - The effects of Air Pollution on Human Health
 - The Effects of Air Pollution on Climate
- **Noise Pollution**
 - Noise Pollution:
 - Sources of Noise Pollution
 - The Effects of Noise Pollution
- **Major Environmental hazards and Problems:**
 - Earth Quake
 - Floods
 - Deforestation
 - Environmental Pollution

Books Recommended :

1. Briggs, D. & Courtney, F. 1989 Agriculture and Environment: The Physical Geography of temperate Agricultural Systems, Longman, Singapore
2. Buchman, Harry O. The Nature and Properties of Soils, Macmillan New York.
3. Bunting, B. T. 1967 The Geography of Soil Hutchinson University Library London.
4. Cornelius T.T. & Harold Environmental Education, John Wiley.
5. Eyre, S.R. 1968 Vegetation and Soils, Edward Arnold London.

6. Hamm, R.L. & Nason, 1964 An Ecological Approach to Conservation, Minnesapolias: Burgess Publishing Co.
7. Kuiper, E. 1965 Water Resources Development, Planning, Engineering and Economics, Butterworths, London.
8. Kupchella, C. E. and Hyland, M. C. (1989): Environmental Science: Living Within the system of Nature, Prentice Hall, New Jersey.
9. Miller, C.E. Fundamentals of Soil Sciences, 2nd ed. John Wiley New York.
10. Nebl, B. J. 1999: Environmental Science, Prentice Hall, New Jersey.
11. Nebl, B. J. & Wright, R. T. 1998: Environmental Science The Way the world Works, Prentice Hall, New Jersey.
12. O'Hare, G. 1992: Soils, Vegetation, Ecosystems, Oliver & Boyd, London.
13. Odum, Eugene P. Fundamentals of Ecology, Sauders London.
14. Simmons I.G. The Ecology of Natural Resources, Edward Arnol.
15. Trivedi, P. R. & Raj, G. 1992: Concepts in Environment, Akashdeep, New Delhi.
16. Trudgill, S. T. 1977 Soil and Vegetation Systems: Clarendon Press Oxford.
17. Wellburn, A. 1994: Air Pollution and Climate Change: The Biological Impact, Longman, Singapore.
18. White, I. D., Mottershead & Harrison, S. J. 1992: Environmental System: An Introductory Text, Chapman & Hall, London.