

5. Manahan, S.E. 2000. Environmental Chemistry, 7th Ed., Lewis Publications, Florida, U.S.A.
6. Sharma, B.K. and Kaur. 1995. Environmental Chemistry, Goel Publishing House, Meerut.
7. Sawyer, C.N., Mc Marty, P.L. and Perkin G.F. 1994. Chemistry for Environmental Engineering, II Ed., Mc Graw Hill.
8. Tyagi, O.D. and Mehra, M. 1990. Environmental Chemistry, Anmol Publications.

ESH464 OCCUPATIONAL HEALTH HAZARDS

52 hrs.

Course Outcomes:

CO1 Gain the knowledge of occupational environment.

CO2 Know the different occupational health hazards.

CO3 Understand the protective measures for health of workers.

CO4 Get the knowledge of occupational diseases.

CO5 Study on health hazards in industrial environment which support employability related to environmental awareness.

UNIT I (13 hours)

Occupational Environment - Occupational hazards- Physical, chemical, Biological. Occupational diseases- Pneumoconiosis- silicosis, Anthracosis, Byssinosis, Bagassosis, Asteatosis, Farmers lung, Lead poisoning, Occupational cancer, Occupational Dermatitis, Radiation hazards.

UNIT II (13 hours)

Occupational hazards of agricultural workers- somatic diseases, accidents, toxic hazards, physical hazards, respiratory diseases, accidents in industry, sickness absenteeism, health issues due to industrialization.

UNIT III (13 hours)

Measures for securing safety and health of workers, prevention of occupational diseases- medical measures, engineering measures. Legislation - The Factories Act, 1948. Human health problems due to pollution, public health programs. Food borne diseases: Types, symptoms and prevention. Food poisoning - types of food poisoning, prevention and control, indicators of health, food safety.

UNIT IV (13 hours)

Airborne allergens, seasonal changes, mode of dispersal, disease intensity and control. Influence of physical environment features on Accidents and Crime. Waterborne diseases - Prevention and protection of community health from waterborne diseases.

References:

1. Beaglehole, R., Bonita, R. and Kjellstrom, T. 2006. Basic epidemiology.
2. Benjamin O. Ali. Fundamental principles of occupational health and safety, Handbook of Occupational Safety and Health.
3. David N. Petley. Environmental Hazards: Assessing Risk and Reducing.
4. Gloria J. Hathaway, Nick H. Proctor, James P. Hughes. Chemical Hazards of the Workplace.