



MANGALORE UNIVERSITY

DEPARTMENT OF BIOSCIENCES

M.Sc. ENVIRONMENTAL SCIENCE

ESH452 OCCUPATIONAL HEALTH HAZARDS

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.

UNIT I (13 hours)

Occupational Environment - Physical, Chemical, Biological agent. Occupational hazards- Physical hazards, chemical hazards, Biological hazards. Occupational diseases- Pneumoconiosis - silicosis, Anthracosis, Byssinosis, Bagassosis, Astertosis, 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 problems due to industrialization.

UNIT III (13 hours)

Measures for health protection of workers, preservation 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)

Air borne bio-allergens, seasonal changes, mode of dispersal, disease intensity and control. Effects of Physical Environment on Accidents and Crime. Water borne diseases - Prevention and protection of community health from water borne 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.
5. Jagbir Sing. Disaster Management: Future challenges and Opportunities, I.K. International.
6. Kulakarni, G. K. Implementation of occupational health legislation at work place - Issues and Concerns.
7. Paul R. Hunter, Waterborne disease: Epidemiology and Ecology, John Wiley and Sons Ltd., Chichester (1997)
8. Peter H. Wald, Gregg M., Stave Proctor and Hughes. Physical and Biological Hazards of the work place.
9. Wisner, B. and Adams, J. Environmental Health in emergencies and disasters – A Practical Guide, World Health Organization (2002)