



MANGALORE UNIVERSITY
DEPARTMENT OF BIOSCIENCES

M.Sc. ENVIRONMENTAL SCIENCE

ESS453 ENVIRONMENTAL CHEMISTRY

ESS455 ENVIRONMENTAL HEALTH MANAGEMENT

Course Outcomes:

CO1 Gain the knowledge of water borne diseases and prevention.

CO2 Know the different air borne bio-allergens.

CO3 Understand the diseases of man.

CO4 Get the knowledge of food borne diseases.

UNIT I (13 hours)

Environmental health: Criteria, Chemical Safety; Effects of mercury, lead, chromium, cadmium, arsenic and nitrate on human health; Water borne diseases - Prevention and protection of community health from water borne diseases.

UNIT II (13 hours)

Air borne bio-allergens, seasonal changes, mode of dispersal, disease intensity and control. Effects of Physical Environment on Accidents and Crime; Diseases of Man: Effects of temperature, humidity, ionization, ultra violet radiation and acidity of air on skin, lungs, throat, nose, eye, nervous system.

UNIT III (13 hours)

Food borne diseases: Types, symptoms and prevention. Food safety. Environmental sanitation. Effects of weather and climate on human health, working efficiency, traffic and industrial accidents.

References

1. Wisner, B. and Adams, J., 2002. Environmental Health in emergencies and disasters – A Practical Guide, World Health Organization.
2. Paul R. Hunter, 1997. Waterborne disease: Epidemiology and ecology, Chichester John Wiley and Sons Ltd.
3. Eaton, A. D., Clesceri, L.S. & Greenberg, A.E. 1995. Standard Methods for the Examination of Water and Wastewater. APHA, Washington.
4. Moriarty, F., 1975. Pollutants and animals: A factual perspective. George Allan & Unwin Ltd., London.
5. Atlas, RM and Bartha R. Microbial Ecology. Benjamin-Cummings Sci. Press, USA.
6. Beven, K., 2002. Rainfall-Runoff Modeling: The Primer.
7. Beaglehole, R., Bonita, R. and Kjellstrom, T. 2006. Basic epidemiology
8. Environmental Health - Emergency Response Guide, A supplement to local emergency preparedness and response plans, Advanced Practice Centres.

