BACHELORS WITH WATER MANAGEMENT AS MINOR (CT – I)
8th SEMESTER
WMG822N WATER MANAGEMENT _ WATER SANITATION AND PUBLIC HEALTH
CREDITS: THEORY: 3, PRACTICAL: 1

COURSE OUTCOME:

This course will offer a better understanding of the varied perspectives on sanitation and Health interface. Students are expected to have a better understanding of indicators Water, Sanitation and Hygiene (WASH).

UNIT I: PUBLIC HEALTH

Overview of the importance of clean water; Epidemiology: concept, types, uses and principles; Water borne diseases (cholera, diarrhea, typhoid, amoebiasis, hepatitis, gastroenteritis, giardiasis); Health burden in third world countries

UNIT II: SANITATION PRACTICES

Sanitation practices and their impact on public health; On-site excreta disposal systems: pit latrines, Ventilated Improved Pit (VIP) latrines, pour-flush latrines, composting latrines, septic tanks, soakage systems, ecological sanitation; Urban sanitation: Conventional and low-cost sewerage, container-based sanitation, faecal sludge management; Community engagement and behavior change

UNIT III: WASH AND DEVELOPMENT

WASH: need and importance; Evaluating WASH scarcity across scales (transboundary, national, urban & rural); Common Challenges in WASH - Bureaucracy and Users; Circular economy (transition to Circular sanitation systems) and challenges in implementing; Thirdworld scenario: poor and multidimensional deprivation.

PRACTICAL:

1. Questionnaire based survey for evaluation of some water borne diseases
2. Working and design of septic tank
3. A case study on SWACHHA Bharat Mission
4. WASH fit assessment through checklist method

SUGGESTED READINGS:

1. Bonitha R., Beaglehole R., Kjellstorm, "Basic Epidemiology", 2nd Edition, World HealthOrganization, 2006
2. WHO/UNICEF. Global Water supply and sanitation assessment report. Geneva and NewYork: WHO and UNICEF; 2000.
3. Griffiths JK and Winant E (2007) Environmental health in the global context. In: Markle W,Fisher M and Smego R (eds.) Understanding Global Health. New York: McGraw-Hill Professional.
4. Water, Sanitation and Health (WSH), World Health Organization (WHO). http://www.who.int/water_sanitation_health/en –
5. CDC, C. for D. C. and P.2015. Sanitation & hygiene. https://www.cdc.gov/healthywater/global/sanitation/index.html
6. WHO.2015. Improving nutrition outcomes with better water, sanitation and hygiene: practical solutions for policies and programme. Geneva.
7. Clasen T.2015. Household water treatment and safe storage to prevent diarrheal disease in developing countries. Curr Environ Health Rep. 2(1):69–74. doi:10.1007/s40572-014- 0033-9.

Scanned with OKEN Scanner