**EHS 1208 CONTROL OF DISEASES OF PUBLIC HEALTH IMPORTANCE (5 CU)**

**Course description:** The course covers the common communicable and non-communicable diseases prevalent in the East African Region and describes measures for their prevention and control including surveillance and management of disease outbreaks. The course will also cover skills development to be able to actively participate in disease surveillance and in instituting measures for preventing and controlling communicable and non-communicable diseases.

**Course Objectives**

By the end of this course, the student should be able to:

i) Explain the factors influencing spread of communicable diseases

ii) Explain different types of immunity and body defence mechanisms

iii) Explain the principles and terminologies in immunization.

iv) Identify the common communicable and non-communicable diseases prevalent in the East African Region.

v) Describe aetiology, mode of transmission, signs and symptoms, prevention and control of communicable diseases.

vi) Explain environmental factors associated with the spread of communicable diseases.

vii) Advise on appropriate measures related to prevention of communicable diseases.

viii) Describe the roles of different stakeholders in the control of outbreaks.

ix) Plan and execute disease control strategies.

x) Design and execute epidemic preparedness plans.

**Detailed Course Outline**

* Commonly used terminologies in communicable

and non-communicable diseases

* Communicable and non-communicable diseases e.g. Water washed diseases, scabies, contact diseases, Sexually transmitted diseases, HIV/AID, Water borne diseases (e.g. Cholera), Airborne diseases (e.g. Meningitis), Zoonotic diseases (e.g. Anthrax), Faecal-oral diseases, tuberculosis, leprosy, diarrhoeal diseases, acute respiratory infections, measles, meningitis; hepatitis A and B, rabies, plague, heart diseases, mental diseases, and Obesity. Diseases associated with bioterrorism.
* Disease prevention and management at community levels
* Disease surveillance, investigation and control techniques for outbreaks.
* Aetiology of immunizable diseases
* Principles of immunology and immunization
* Characteristics of vaccines
* Cold chain and other equipment for immunization
* The National notifiable and epidemic potential diseases: cholera, dysentery, measles, meningitis, malaria, polio, neonatal tetanus, plague, typhoid fever, yellow fever, rabies, and viral haemorrhagic fever
* General preventive and control measures
* Role of key professionals and organizations responsible for outbreak investigations and control
* Legal framework for control and prevention of diseases. Review of previous outbreak investigations
* Environmental health inspections targeting disease prevention and control
* Management of mass immunization campaigns
* Practical and field work

# Mode of delivery:

* Lectures, Tutorials, Practicals

**Mode of Assessment**

- Continuous assessment **(40%)**

- End of semester exam: MCQ’s, short answer and long assay questions **(60%)**.

**Suggested Reading List**

1. Lecture handouts and additional materials on reserve at the MUSPH Resource Centre.

2. Anderson, RM, RM May (1982). Population Biology of Infectious Diseases. Springer-Verlag

3. Abram S. Benenson, (1990) Control of communicable diseases in Man., APHA.

4. Nelson KE, Williams CM, Grahman NMH, Infectious Disease Epidemiology Theory and Practice (2001). Aspen Publishers, Inc. Maryland USA.

5. Manson-Bahr PEC, Bell DR. (1987). Manson’s Tropical Diseases. ELBS. Suffolk, UK.

6. <http://www.dcp2.org/main/Home.html> : This website is prepared by the World Bank and highlights key priority diseases and recommendations on their control