**COURSE CONTENTS**

**Course Title (Symbol and No.):**311 COMM Community Medicine

**Credit Hours                :**4 (4 + 0)

**Contact Clock Hours                   :**  Theoretical:                        54

                                                 Clinical:                             None

                                           Tutorials and Practical:          12

**Pre-requisite                              :**None

**Level                                            :**        3rd year  

**Summary of Course Contents**

The course is mainly concerned with the principles and methods of epidemiology, demography, vital statistics, biostatistics, epidemiology of selected diseases, nutrition health education, mental health and occupational health.

**Specific Course Objectives**

The course affords the theoretical bases that equip the students with the knowledge they can utilize for "community diagnosis", identification of health problems in the community, planning for their solutions, and practice of "population medicine" and health promotion. This course will help prepare students for the individual research project in clinical epidemiology.

**Course Outline**

The course will be conducted in the form of lectures and tutorials covering the following topics:

\*      Ecology and control of disease

       Environment and health. Levels of prevention. Evaluation of control measures including cost-effectiveness and costbenefit.

\*      Principles of demography

        Natality rates - Fertility rates.

\*      Mortality rates

        Crude death rate, infant mortality rate, neonatal mortality rate, perinatal mortality rate, maternal mortality rate, maternal mortality rate, cause-specific death rate, proportional mortality rates, stillbirth rate and ratio, case fatality rate.

\*      Morbidity rates

        Incidence and prevalence.

\*      Population pyramid - Estimates of population - Rate of natual increase.

\*      Demographic Transition.

\*      The International Statistical Classification of diseases, injuries and causes of death.

\*      Role of notification

\*      Medical statistics - levels of measurement

\*      Sampling and sample size, randomization

\*      Collation and tabulation

\*      Graphical presentation

\*      Measures of central tendency

\*      Measures of dispersion

\*      Statistical hypothesis testing

\*      Tests of means

\*      Tests of association

\*      Correlation

\*      Epidemiology-definition, descriptive epidemiology.

\*      Causation association.

\*      Analytical epidemiology - Association and causation

\*      Observational studies.

        Study design, advantages and disadvantages of each design, odds ratio, relative risk and attributable risk.

\*      Intervention studies

        Preventive and therapeutic trials, advantages and disadvantages of experimental versus observational approach, design and application of randomized controlled trials.

\*      Epidemiologic transition.

\*      Chronic disease epidemiology

\*      Investigation of an Epidemic

\*      Epidemiology and control of selected diseases of epidemiological importance.

\*      Evaluation of test results - principles of screening for disease, validity: sensitivity and specificity.

\*      International health

\*      Community health

\*      Environmental health

\*      Health education

\*      School health

\*      Occupational health

\*      Maternal and child health

\*      Health planning revaluation

\*      Health management and Administration

\*      Health surveillance and monitoring

\*      Emerging and re-emerging diseases.

**Evaluation**

**1.     Continuous Assessment**

-       Homework exercise

-       Classroom quizs

-       At least two written interim tests (First continuous Assessment test and Second continuous assessment test).

**2.     Final Written Examination**

**Text Book**

        Mausner and Bahn

        Epidemiology, an introductory test.

        Mausner, J.S. and Kramer, S.

**Additional**

1.     Chin J. Control of Communicable Diseases Manual. 17th edition. An official report of the American Public Health Association 2000.

2.     Hennekens CH, Buring JE. Epidemiology in Medicine, Boston 1987.