

COURSE CONTENT

Course

Course code: MCB 414

Course title followed by the credit unit: Epidemiology and Public Health
Microbiology (3 UNITS)

Course status if it's either: Compulsory

Course Duration

Three hours per week for 15 weeks (45hours)

Lecturer Data

- (1) Name of the lecturer: Irokanulo, Emenike O
Qualifications obtained: PhD
Department: Biological Sciences
Faculty: Science and Engineering
E-mail: irokanulo.emenike@lmu.edu.ng
Office Location: Room A310, College Building
Consultation Hours: Between 10 am and 2 pm daily

- (2) Name of the lecturer: Dahunsi Olatunde S
Qualifications obtained: MSc
Department: Biological Sciences
Faculty: Science and Engineering
E-mail: dahunsi.olatunde@lmu.edu.ng
Office Location: Room A304, College Building
Consultation Hours: Between 10 am and 2 pm daily

Course Content – Illustration below:

Origin, spread and control of infectious diseases. Methods of determination of morbidity and mortality among different groups in populace. International control of infectious diseases.

Course Description – Illustration below:

This is a course exposes students in the final year of study to the origin, spread medium and mode as well as the public health implications of different diseases found among the human population and the possible ways of combating them. The course also teaches the students the various method and ways of determining morbidity and mortality among different human populations

Course Justification – Illustration below:

Although the students are already familiar with courses like virology, mycology and bacteriology which has given them pre-exposure to the world of microbial infections, they still need to understand the public health importance of different infectious agents within the human populations, the origin and transmission route of diseases and many other public health effects especially those that have high mortality and morbidity tendencies.

Course objectives

At the end of this course, students would be able to:

- (i) *Acquire extensive knowledge on the origin and mode of transmission of different diseases that are related with humans*
- (ii) *Gained understanding about the different microorganisms of public health importance*
- (iii) *Grasp the method for determination of public health parameters like morbidity and mortality.*

Course Requirement – Illustration below:

To derive maximum benefits from the course and for fast grasping of many of the concepts involved, the course requires that the students be familiar with basic biology and microbiology. They specifically need to have pre-knowledge about general microbiology, mycology and virology.

Method of Grading- An example below

S/N	Grading	Score (%)
1.	Test	20
2.	Assignment	10
3.	Final Examination	70
	Total	100

Course Delivery Strategies – Illustration below:

Lecturing method is strictly adopted. Students may sometimes be grouped for the classwork and assignments are given at intervals for efficient understanding.

LECTURE CONTENT

Week	Outline	Description	Lecturer
One	Origin of disease	The epidemiology of different diseases is carefully considered	Dr Irokanulo EO
Two	Infectious diseases 1	Different infectious diseases were examined and discussed in details	Dr Irokanulo EO
Three	Infectious diseases 2	Continuation of week 2	Dr Irokanulo EO
Four	Spread and control of infectious disease 1	The transmission route and control measures against diseases were examined	Dr Irokanulo EO
Five	Spread and control of infectious disease 2	Continuation of week 4	Dr Irokanulo EO
Six	Morbidity 1	Factors favouring morbidity and the various calculations were examined	Dahunsi OS
Seven	Morbidity 2	Same as in week 6	Dahunsi OS
Eight	Mortality 1	Factors favouring morbidity and the various calculations were examined	Dahunsi OS
Nine	Mortality 2	Same as in week 8	Dahunsi OS

Ten	International control of infectious disease	International laws as well as control measures against diseases were taught in details	Dahunsi OS
Eleven	International control of infectious disease	Same as in week 10	Dahunsi OS
Twelve	Joint test	Test for work done so far	Dr Irokanulo EO and Dahunsi OS
Thirteen-Fourteen	Revision	Revision of all work done so far	Dr Irokanulo EO and Dahunsi OS
Fifteen	Examination	Alpha Semester examination	

Reading and reference materials:

1. Lewis R (1998). Life. Third Edition, WBC/McGraw Hill Publishers
2. Akre B et al., (2009). Biology. Flexbook Publishers.