



BABCOCK UNIVERSITY

SCHOOL: PUBLIC AND ALLIED HEALTH

DEPARTMENT: PUBLIC HEALTH

SEMESTER: First SESSION: 2017/2018

COURSE CODE: PHFC 813 TITLE: Epidemiology, Communicable Disease Surveillance And Public Health Laws
DAY OF CLASS: Elongated Module holds Sundays 2:00 pm to 5:00 pm

NO OF UNITS: THREE, and VENUE FOR CLASS: New Horizon Building Room 9

TEACHER'S NAME: * Professor Nnodimele O. ATULOMAH and **Professor Dora AKINBOYE

OFFICE ADDRESS: Dean's Office, Science Block,
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OUR VISION STATEMENT

A first-class Seventh-day Adventist institution, building servant leaders for a better world

OUR MISSION STATEMENT

Building leadership through Christian education; transforming lives, impacting society for positive change

To achieve our mission, we are committed to:

- Achieving excellence in our teaching, research program, and service delivery
- Imparting quality Christian education
- Instilling Christ-like character to the members of our Community

OUR CORE VALUES

- | | |
|-------------------------------|-----------------|
| • Excellence | -Our Culture |
| • Integrity | -Our Promise |
| • Accountability | -Our Moral |
| • Servant Leadership | -Our Strength |
| • Team Spirit | -Our Dignity |
| • Autonomy and Responsibility | -Our Passion |
| • Adventist Heritage | -Our Commitment |

OUR PHILOSOPHY

Babcock University's philosophy is anchored on the harmonious development of the intellectual, physical, social, and spiritual potentials of our students, inspiring stable and noble character needed for effective leadership and service in the society.

CORPORATE IMAGE STATEMENT: A center of excellence for character development and scholarship; a socially responsive, responsible, and accountable institution in matters of commitment and action.

COURSE DESCRIPTION: A review of the basic epidemiological concepts which provides basis for understanding the host, agent and environment, including other natural history of disease will feature.

Principles of immune mechanism as related to disease process will be taught. The patho-physiology of some major diseases will be considered in the context of disease processes and mechanism. During the course, a study will be made of public health laws/legislations from antiquity to contemporary times and the contributions these legislations have made in limiting the spread of diseases. Further, students will be exposed to epidemiological methods for disease surveillance and investigation techniques, used for defining patterns and development of hypotheses. Epidemiological measurements will feature as methods of disease surveillance to provide the understanding required regarding disease prevalence and incidence in the community. Emphasis would be placed on the epidemiology of lifestyle-related diseases for chronic illnesses..

COURSE CONTENT: This course is a component of Public Health Science that provides explanation of the nature of the distribution of diseases and factors responsible for the distribution, methods of collecting, organizing, and investigating Natural history of disease process and outbreaks in a community, identifying relationship existing between disease causing agents, host and Environment. Identify causative factors in human disease pathogenesis, Epidemiological Principles and Methods for Characterization of Disease and Study Designs.

COURSE OBJECTIVES: This course aims at fulfilling a fourfold objective in the areas of knowledge, belief, values, and attitude towards computational analysis of research data thus:

KNOWLEDGE ----- At the end of this course, each student is expected to:

1. Define and become acquainted with key terms in epidemiology,
2. Identify types of epidemiological processes,
3. Identify and describe causative factors in human disease pathogenesis,
4. Describe specific applications of epidemiological principles in conducting descriptive epidemiology, and Analytical Epidemiology
5. Identify study designs and interpretations of epidemiologic studies,
6. Describe patterns of global infectious and chronic (Non-Communicable Diseases) diseases,
7. Illustrate the applications of principles of Disease Control Measures in Primary, Secondary mode of prevention and control of epidemic,

BELIEFS ----- It is expected that at the end of this course, students would have an understanding that:

- i. When we fail to follow Divine instructions about how to live, we become susceptible to disease outbreaks,
- ii. Disease is caused by poor health habits including poor sanitary practices by individuals and communities,
- iii. The study of epidemiology would provide some insight into disease processes and epidemics in the natural world,
- iv. The epidemiological transition is here with us in Africa with increase prevalence of Non-communicable diseases and prevalence of infectious diseases,
- v. When we follow Divine instructions about empowering lifestyle, environmental concerns and personal hygiene, the disease process can be halted.

VALUES ----- Health is precious and should be protected at all cost.

ATTITUDE ----- At the end of this course each student will:

1. Appreciate the multidisciplinary approach required to implement Epidemiological principles to control diseases.
2. Be willing to use skills acquired in epidemiology to design, develop, carry out empirical studies in public health to reveal important information necessary to address epidemic in the community.

REQUIRED TEXTBOOKS/JOURNALS: Required and recommended texts for the course include:

1. Park K. (2002). Park's textbook of preventive and social medicine. Banarsidas Bhanot: India.
2. Lucas, A. O. and Gilles, H. M. (2003) A short Textbook of Public Health Medicine for the Tropics. Fourth Edition, Arnold, London.
3. Gaimard Maryse (2014). Population and Health in Developing Countries. Springer NY
4. Penny Webb and Chris Bain (2011) Essential Epidemiology: An Introduction for Students and Health Professionals. Second Edition, Cambridge :www.cambridge.org/9780521177313

COURSE REQUIREMENTS:

CLASS ATTENDANCE: "Every student is required to attend classes regularly and punctually, unless ill or prevented by some recognized emergency. Students who absent themselves from class for more than three weeks during the semester shall merit an F grade. Authorized leave of absence from campus does not excuse the student from classes, or relieve the student of the required course work" (*BU Academic Bulletin 2012-2015 p.13*).

PARTICIPATION: -Students are to actively engage in topic discussion and sharing of ideas in class.

TARDINESS/CONDUCT OF STUDENTS IN CLASS: - Lateness to class is unacceptable; students are not allowed to operate their cell phones, iPods and other electronic mobile gargets during classes, except with the permission of the teacher. Eating and chewing off bubble gums and drinking (water exempted) is also not allowed except with the permission of the teacher. Very importantly, students are required to dress in compliance with the university dress code and wear their identity cards while in class.

SHORT DEVOTIONALS/PRAYER: - Spiritual nurture is a part of whole person development, and team spirit is our strength; thus, every student is required to participate in the devotional exercise and prayer in class.

SUBMISSION OF ASSIGNMENT: there are weekly group assignments to be submitted on schedule dates as stipulated on the course outline table below.

LATE ASSIGNMENTS: Assignments could be turned in earlier, but not later than the deadline set by the teacher. Any student found careless in this regard will be penalized in line with the regulations of the Academic Bulletin.

GUIDELINE FOR WRITTEN WORK: **Assignments should be typed or hand-written on A4 paper as stipulated in the course outline table below.**

ACADEMIC INTEGRITY/HONESTY: "Babcock University has a zero tolerance for any form of academic dishonesty. Morally and spiritually, the institution is committed to scholastic integrity. Consequently, both students and staff are to maintain high, ethical Christian levels of honesty. Transparent honest behavior is expected of every student in all spheres of life. Academic dishonesty include such things as plagiarism, unauthorized use of notes or textbooks on quizzes and examinations, copying or spying the test or paper of another student (formal or take-home), talking to another student during examinations. Academic matter would automatically result in a failing grade for the examination, and suspension, or outright dismissal from the university. Academic dishonesty issues are referred to SPEAM (Senate Panel on Examination and Academic Misconduct) who investigates and makes recommendations to Senate. Penalties for examination and academic misconduct are spelt out in the *student's handbook* and in other regulations as published from time to time" (*BU Academic Bulletin 2012-2015 p.18*).

GRIEVANCE PROCEDURE

“Students who believe that their academic rights have been infringed upon or that they have been unjustly treated with respect to their academic program are entitled to fair and impartial consideration of their cases. They should do the following to effect a solution:

1. Present their case to the teacher(s) concerned
2. If necessary, discuss the problem with the Head of Department
3. If agreement is not reached at this level, submit the matter to the School Dean
4. Finally, ask for a view of the case by the Grievance Committee
5. A fee is charged for remarking of scripts. If a student’s grievance is upheld after an external examiner has remarked the script, the grade would be credited to the student. The lecturer will be given a letter of reprimand and will be asked to refund the fees to the student. If the student’s grievance is not sustained, the student will be given a letter of reprimand and the original grade retained” (*BU Academic Bulletin 2012-2015 p.18*).

TEACHING/LEARNING METHODOLOGIES: Teachers are to determine their strategies for teaching their students. However, interactive strategies are encouraged, and there should be integration of faith and BU core values in the learning process.

COURSE ASSESSMENT/EVALUATION

Continuous Assessment:

Class Attendance:	5% }	} =40%
Quizzes & Tests:	10% }	
Assignments:	10% }	
Mid-Semester Exam:	15% }	
Final Semester Exam:	60%	

GRADE SCALE

Currently, the 5-point grading system adopted by the University Senate translates as follows:

Grades	Marks-Quality	Grade Points	Definition
A	80-100	5.00	Superior
B	60-79	4.00	Above Average
C	50-59	3.00	Average
D	45-49	2.00	Below Average
E	40-44	1.00	Pass
F	0-39	0.00	Fail

INCOMPLETE GRADE: An incomplete grade may only be assigned to a student upon request, due to an emergency situation that occurred within that semester, which prevented completion of an/some assignments,

quizzes, or examination. Such a student would complete a contract form, obtainable from the Registrar, after agreement with the teacher. The form must be signed by the teacher, the student, the HOD, the dean, the Registrar, and the Senior Vice President (SVP) before contract begins. The original copy of the incomplete form will be sent to the Registrar with copies to the teacher, the student, the HOD, the dean, and the SVP. An incomplete grade (I) reverts to the existing grade if contract is not completed by the end of the following semester (including summer semester, except for examinations), (*BU Academic Bulletin 2012-2015 p. 20*).

STUDENTS WITH DISABILITY

“Babcock University seeks to provide conducive environment for optimal living and learning experience. While the university is working towards facilities that accommodate persons with disabilities, provisions will be made for students with disabilities under the following conditions. Students with disabilities are to:

- a. Report to Student Support Services for assessment, and obtain a clearance/recommendation at the commencement of the semester or as soon as disabling incidence occurs
- b. Show the clearance/recommendations to relevant university official at the commencement of the semester or as soon as disabling incidence occurs
- c. Maintain ongoing contact with Student Support Services” (*BU Academic Bulletin 2012-2015 p. 20*).

Course Outline:

Sessions	Date	Session Titles and Learning Objectives: By the end of each of the Sessions, learners will:	Contents	Assessments
1*	Sept 3	Epidemiology and Public Health: - Define epidemiology, - Identify and illustrate components of epidemiology. - Identify and explain the basic reasons for the spread of infectious diseases among human populations,	-An introduction to Epidemiology- <i>(Review the terms used in defining epidemiology)</i> . -What is an Epidemic? Is an epidemic a disaster? -Review why epidemiology is a public health science and its relevance today. -What is so characteristic about epidemic and public health? -Who is John Snow and how did his work contribute to modern epidemiology?	Review the work of John Snow 1855; Who is he, what was his work and findings?
2*	Sept 10	Principles of Disease Process; - Identify and explain the basic reasons for the spread of infectious diseases among human populations, -Understand the different stages of disease process, Principles of Disease Control Measures	- Disease causation framework-Host, Agent and Environment, Natural history of disease. - Causative factors in human disease pathogenesis, - Disease processes and Patho-Physiology of infectious diseases, chronic Illnesses, and - The role of the Immune system in disease process, - Levels of Prevention of diseases, - Modes of intervention and control measures.	Review the Public Health Laws and Legislations: Global and Local; Implications for disease prevention and control by legislation.
3**	Sept 17	Epidemiological Principles and Methods for Characterization of Disease: -define descriptive epidemiology, -Explain measure of disease frequency and association, -describe analytical procedure to determine risk, relative risk etc.,	- Procedures for characterization of disease burden in public health, -Descriptive epidemiology, - Measurement of disease frequency and - Measurement of disease association. - Analytical Epidemiology and - Hypothesis testing in epidemiology.	Review the usefulness of measurement of disease occurrence in human population. Provide support for your views.
4**	Sept 24	Epidemiological Methods for Disease Characterization and Study Designs; - Epidemiological study designs, - Implications of study designs to	- Procedures for containing infection Outbreaks, - <i>(Field investigations, sample collection, Laboratory investigations, isolation/quarantine, reporting)</i> - Epidemiological study designs, <i>(Experimental, cohort and longitudinal studies)</i>	

		interpretations of epidemiologic studies.	- Implications of study designs, - Interpretations of epidemiologic studies.	
5 **	Oct 8	Infectious Disease Epidemiology I: - Patterns of global infectious diseases such as GIT-related infections; Arthropod-Borne infections and their preventions,	- Identification of specific Infectious diseases of global epidemiological importance, their patterns, susceptible populations and region; -Gastrointestinal infections, -(<i>protozoa, bacterial viral</i>) - Arthropod-Borne – (Malaria, Onchoceciases etc.) - Prevention and control methods involved.	Mid-Semester Test
6**	Oct 15	Infectious Disease Epidemiology II: - Pattern of global infectious diseases such as Respiratory infections, Blood-Borne infections;	- Identification of specific Infectious diseases of global epidemiological importance, their patterns, susceptible populations and region; - Respiratory infections, -(<i>protozoa, bacterial viral</i>) - Blood-Borne – (<i>Viral, etc.</i>)	
7*	Oct 22	Chronic Disease Epidemiology I: - Pattern of global chronic diseases such as Cardiovascular disease, Metabolic disorders, Cancer,	- Identification of specific Non-communicable diseases of global epidemiological importance, their patterns, susceptible populations and region; - Cardiovascular diseases, - (<i>hypertensive heart disease</i>) - Metabolic disorders – (<i>Diabetes Mellitus.</i>) - Cancer	
8	Oct 29	Revision and Examination	Final Semester Examination	

God bless! UPDATED September, 2017