

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Epidemiology
Course number	BIOL3217
Faculty	
Department	
Course type	College Needs
Course level	3
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 - Knowledge of basic concepts and definitions related to epidemiology
- 2 - Study of epidemiologic triangle that cause disease
- 3 - Study of the methods of disease transmission: direct and indirect
- 4 - Identification of levels of disease prevention
- 5 - Knowledge of the basic measures of morbidity and mortality used in epidemiology
- 6 - Study of epidemiological studies: observational and experimental

Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none">* Knowledge of the aims of epidemiology, and the concepts and definitions related to epidemiology* Knowledge of the role of agent, host, and environment in causing disease* Understanding the differences between epidemiological studies: observational and experimental* Knowledge of some important indices of health and disease such as crude birth rate, fertility rate, infant mortality rate, and case fatality rate* Understanding the differences between the levels of prevention* Understanding the differences between direct and indirect transmission of disease
Intellectual Skills	<ul style="list-style-type: none">* The ability to explain the basic principles underlying different study designs, including descriptive, ecological, cross-sectional, cohort, case-control and intervention studies* Understanding the concept of cause, the factors play a role in causation of disease, and establishing the cause of a disease
Professional Skills	<ul style="list-style-type: none">* The ability to apply observational and interventional epidemiological study designs to a range of health-related issues* The ability to formulate researchable problems* The ability to describe and apply measures of disease incidence and prevalence, and measures of effect e.g. relative and absolute risk* The ability to be aware of criteria that should be met before a screening program is instituted, and the ability to calculate and interpret sensitivity, specificity and predictive values
General Skill	<ul style="list-style-type: none">* The ability to make a small report or research on a point in the course* The ability to communicate and use internet

Course Contents

1 - . The historical context of epidemiology and its aims
2 - Epidemiology of infectious diseases
3 - Direct transmission of disease
4 - Indirect transmission of disease
5 - Control of infectious diseases
6 - Epidemiology and prevention
7 - Measures of morbidity and mortality used in epidemiology
8 - Prevalence and incidence
9 - Some important indices of health and disease
10 - Measurement of risk
11 - screening test
12 - Epidemiological studies: observational studies
13 - Epidemiological studies : experimental studies
14 - Causation in epidemiology
15 - Environmental and occupational epidemiology

Teaching and Learning Methods

1 - lectures
2 - reports
3 - discussion

Teaching and Learning Methods for the Disabled Students

1 - Not applicable

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
First hour exam	60minutes	15
Second hour exam	60minutes	15
Attendance and discussion		10
Final exam	120minutes	50
Reports		10

Books and References

Course note	Lectures
Essential books	Beaglehole, R. Bonita, R. and Kjellstrom, T. 1993. Basic epidemiology
Recommended books	Robert, F.H. and Thomas, S.A. 1999. Epidemiology for Public Health Practice
	Gary, F. D. 1994. Primer of Epidemiology
	Sathe, P.V. 2005. Epidemiology and Management for Health Care for All