

MASTERS OF SCIENCE IN CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS (MSc. CEB)

Introduction

Clinical epidemiology and biostatistics is the application of the principles and methods of epidemiology, biostatistics, health economics and health social sciences to clinical medicine. The objective is to develop and apply methods of clinical observation that will lead to valid clinical conclusions; to develop and test appropriate diagnostic tests; to develop test interventions for the prevention and control of diseases; and to provide a rational approach to resource allocation in clinical medicine.

The MScCEB course is designed to build the capacity of health and health related professionals so as to conduct research that defines the population at risk of health problems; shows the efficacy of interventions; and critically examines the functioning of the health systems. These goals are in line with those of the health sector namely to consolidate existing health services and re-orient health services to primary health care to achieve efficiency as well as equity. The primary beneficiaries are Ugandans but also the Africa region since this will be the first time that this course is offered in Africa.

Objectives

The philosophy of this programme will be to develop high quality and sustainable training strategies that will produce clinical epidemiologists, biostatisticians, health social scientists and health economists with the knowledge and skills to address health care challenges with special emphasis on tropical diseases and the tropical environment. The specific objectives of the course are:

1. To train health workers in the areas of clinical epidemiology, biostatistics, health economics, and health social sciences.
2. To equip the health workers with the knowledge and skills to conduct appropriate health research.
3. To produce health researchers with a multi-disciplinary approach to health problems.
4. To develop human research capacity to link research with health policy-makers.

5. To strengthen the research arm of health and allied professionals.

Programme Structure

Year I: Semester I (Core Course)		
Course Code	Course	CU
CEB 7101	Epidemiology I	4
CEB 7102	Fundamentals of Clinical Epidemiology	3
CEB 7103	Biostatistics I	5
CEB 7104	Research Methods	3
CEB 7105	Principles of Demography	2
Year I: Semester II (Core Courses)		
CEB 7201	Clinical Trials & Non-Experimental Designs	4
CEB 7202	Public Health and Preventive Medicine	4
CEB 7203	Fundamentals of Health Economics	2
CEB 7204	Fundamentals of Social Science and Health	2
CEB 7205	Computer Skills & Data Management	4
Recess Term (Core Courses)		
CEB 7301	Epidemiology II	4
CEB 7302	Biostatistics II	4
Year II: Semester I (Core Courses)		
CEB 8101	Health Care Planning, Management & Evaluation	4
CEB 8102	Biostatistics III	4
CEB 8103	Bioethics	4
CEB 8104	Research Proposal	2
Year II: Semester II		
CEB 8201	Dissertation (Filed Work, Report, Defence)	2
CEB 8202	Economic Analysis of Health Services	2
CEB 8203	Scientific Writing and Dissemination	2
Elective Courses		
CEB 8205	Anthropology of Health and Health Care	2
CEB 8206	Pharmacoepidemiology	2
CEB 8207	Injury Epidemiology	2
CEB 8208	Reproductive Health	2