

## Fees

Participants will pay tuition fees of US\$ 300 if they are Ugandans and US\$ 400 if Non- Ugandans. The fees will cater for course materials, bag, lunch, teas, water and organizational costs. These funds do not cover accommodation, and travel.

## Accommodation

Participants can arrange their own accommodation. There are affordable accommodation facilities near MakSPH namely;

- a. Mulago Hospital Guest House :  
Tel: +256-414-530369
- b. Makerere University Guest House:  
Tel: +256-772-462311, +256-414-534169  
Website : [www.makunivguesthouse.com](http://www.makunivguesthouse.com)

Costs for budget accommodation are between US\$15 - 50 per day. Other costs to consider in Kampala include daily mini-bus transport at US\$3, food US\$5 daily.

## Facilitator

The course will be facilitated by experienced lecturers at MakSPH. During the entire course facilitators will be available for consultation.

## How to apply

Application forms can be obtained from the department of epidemiology and biostatistics Makerere university school of Public Health or from the website:  
<http://www.musph.ac.ug/index.php/study/navigations/short-courses?layout=edit&id=82>

Deadline for applications is **30th May of each year** but the earlier the better. We have limited slots which are offered on first come first served basis as long as one has minimum qualification

For further details contact:

### Short courses administrator

Ms Max Walusimbi

Email: [mwalusimbi@musph.ac.ug](mailto:mwalusimbi@musph.ac.ug)

Tel : +256-772-449555

### Short courses Deputy coordinator:

Prof. Joseph Konde-Lule

Email: [jkonde@musph.ac.ug](mailto:jkonde@musph.ac.ug)

Tel: +256-782-418451

### Short courses coordinator:

Assoc Prof. Nazarius Mbona Tumwesigye.

Email: [naz@musph.ac.ug](mailto:naz@musph.ac.ug)

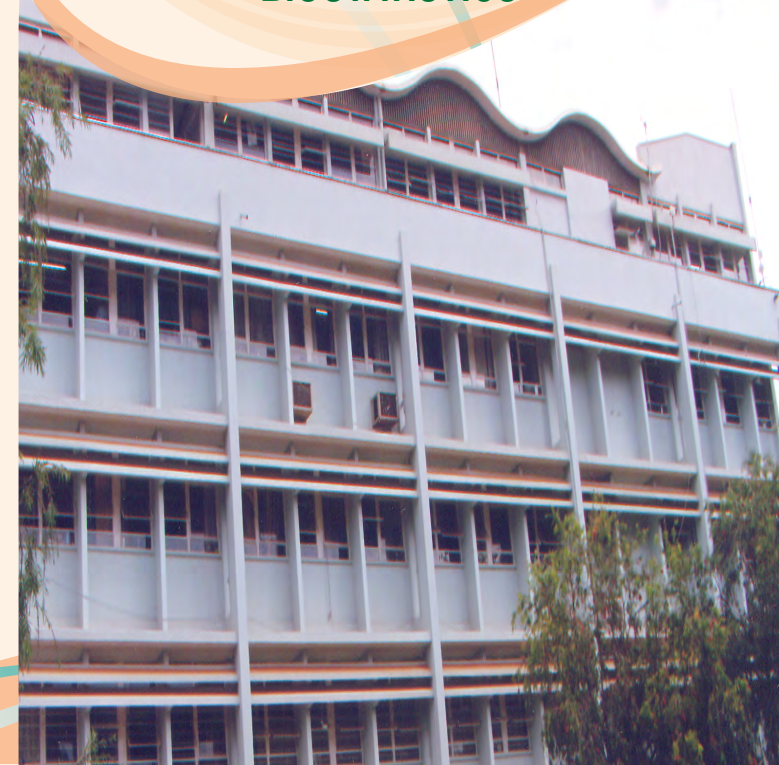
Tel: +256-782-447771

Website: [www.musph.ac.ug](http://www.musph.ac.ug)

# Makerere University College of Health Sciences School of Public Health



## SHORT COURSES IN EPIDEMIOLOGY AND BIostatISTICS



## Introduction

The increasing demand for research and analytical skills at places of work has put many graduates in a situation where they need to refresh their knowledge or acquire completely new skills to cope with the challenges at work. The situation is worse for masters and PhD students for they must have the analytical skills to be able to attain the coveted academic awards. Practical Epidemiology and Biostatistics are some of the most sought after skills. The Department of Epidemiology and Biostatistics at Makerere University School of Public Health has developed and packaged short courses to respond to the expressed training needs by graduate students from various disciplines, researchers and people employed in other sectors. The acquired skills will enhance the participants' productivity at their work places or improve the quality of dissertation or publications in case of student or academic participants.

## Short Courses offered

- Applied Biostatistics I
- Applied Biostatistics II – Logistic regression II
- Principles and Practice of Epidemiology
- Clinical and Community trials

The courses will take place in July and August each year at Makerere University School of Public Health . Over 50% of the time on each course is either practical or field experience.

Dates	Course	
	Epidemiology	Biostatistics
7 <sup>th</sup> – 18 <sup>th</sup> July 2014	Principles and Practices of Epidemiology	Applied Biostatistics I
21 <sup>st</sup> July – 1 <sup>st</sup> August 2014	Clinical and community trial	Applied Biostatistics II Logistic regression

## Course Schedule for 2014

**In 2014 the first level courses will take place from Monday 7th to Friday 18th July 2014 while the second level will take place from Monday 21st July to Friday 1st Aug 2014**

### Brief Contents by the courses

- Applied Biostatistics I
  - Basic concepts in Biostatistics.
  - Descriptive Statistics ( Scales of Measurement, measures of Central Tendency, Measure of spread, correlation coefficient, presentation of Data -2x2 Tables and Mx N Tables)
  - Probability distributions ( Binomial, T-Distribution, Normal Distribution, F-Distribution
  - Hypothesis Testing (P -Values, T- Test, Z-test and F-test)
  - Non- parametric Testing.
  - Sampling methods.
  - Sample size determination.
  - Introduction to data management using STATA (additional computing sessions can be arranged for all short courses participants if needed).
- Applied Biostatistics II - logistic regression.
  - Review of Linear regression.
  - Logit transformation.
  - Model fitting.
  - Confounding and interaction.
  - Interpretation and reporting.
- Principles and Practice of Epidemiology.
  - Introduction to Epidemiology .
  - Measuring disease.
  - Validity of measurements.
  - Standardisation of rates.
  - Disease Surveillance.
  - Outbreak investigation.
  - Descriptive studies.
  - Analytical studies.
  - Causal inference.
  - Overview of interventional studies.
  - Epidemiology in research.

- Clinical and community trials
  - Terminologies and definitions in interventional studies
  - Review of the different intervention study designs
  - Practical issues in the conduct of the interventional studies.
  - Ethical issues in the conduct of interventional studies
  - Types of Data analysis in intervention studies

### Prerequisite for the courses

Participants are expected to have Laptops.

All are encouraged to come with data they wish to work on after the course. Those who don't have their own data will use the data provided during the course.

Requirements specific to the courses are shown below:

**Course:** Principles and Practices of Epidemiology

- Prerequisite
- A university degree
  - Proficiency in verbal and written English

**Course:** Applied Biostatistics I

- Prerequisite
- A bachelor's degree
  - Previous exposure to data management or a background in a mathematics related subject.
  - Basic computer skills
  - Proficiency in verbal and written English

**Course:** Clinical and community trials

- Prerequisite
- A relevant University Degree
  - A basic course in principles of Epidemiology
  - Proficiency in verbal and written English

**Course:** Applied Biostatistics II : Logistic regression

- Prerequisite
- At least a bachelors degree
  - Must have demonstrated knowledge of basic biostatistics, or undertaken Applied Biostatistics level I course of MaKSPH or its equivalent.
  - Proficiency in verbal and written English.