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

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.

Facilitators

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:

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 Tel: +256-772-449555

Short courses Deputy coordinator:

Dr Victoria Nankabirwa Email: vnankabirwa@musph.ac.ug Tel: +256-755-757-460

Short courses coordinator:

Assoc Prof. Nazarius Mbona Tumwesigye. Email: naz@musph.ac.ug Tel: +256-782-447771 Website: www.musph.ac.ug



College of Health Sciences
School of Public Health



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 coupe with the challenges at work. The situation is worse for masters and PhD students for they must have the analystical 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 a.
- Applied Biostatistics II Logistic regression II b.
- Principles and Practice of Epidemiology c.
- Clinical and Community trials d.

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.

Schedules for the courses in 2015			
Dates	Epidemiology	Biostatistics	
6 th - 17 th July 2015	Principles and Practices of Epidemiology	Applied Biostatistics I	
20 th - 31 st July 2015	Clinical and community trial	Applied Biostatistics I I Logistics regression	on

Course Schedule for 2015

In 2015 the first level courses will take place from Monday 6th to Friday 17th July 2015 while the second level will take place from Monday 20th July to Friday 31st July 2015

Brief Contents by the courses

Applied Biostatistics I

Basic concepts in Biostatistics i.

Descriptive Statistics (Scales of Measurement, ii.

measures of Central Tendency, Measure of spread, correlation coefficient, presentation of Data -2x2 Tables and Mx N Tables)

Probability distributions (Binomial, T-Distribution, iii.

Normal Distribution. F-Distribution)

Hypothesis Testing (P – Values, T- Test, Z-test and iv.

F-test)

Non-parametric Testingv.

Sampling methodsvi.

Sample size determinationvii.

Introduction to data managementviii.

Applied Biostatistics II - logistic regression

- Review of Linear regression
- Logit transformation
- Model fiting
- 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 studiess

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

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