



MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

SHORT COURSE ANNOUNCEMENT

Logistic Regression Analysis



Course Description and Aim

The Muhimbili University of Health and Allied Sciences through the Directorate of Research and Publications and the Department of Epidemiology and Biostatistics will conduct a short course on Logistic regression analysis for all who envision to develop their research skills. The purpose of this course is to provide an understanding of the statistical principles, practical application, and interpretation of results of logistic regression methods using computer software.

Course Content

To attain the objectives of this short course, the following topics will be covered;

1. Summary of basic statistical methods for binary outcomes
2. Introduction to logistic regression
3. Logistic regression with more than one explanatory factor
4. Logistic regression for the analysis of case-control, cross-sectional, and cohort studies
5. Checking model assumptions and fit
6. Investigate and assess confounding and effect modification (interaction) in epidemiological data
7. Logistic regression for outcomes with more than two categories (ordinal and multinomial)
8. Alternative analysis strategies for binary outcomes
9. Interpret appropriately the results of logistic regression analyses

General Course Information

Admission criteria: Participants with at least a bachelor's degree (or equivalent) are eligible for the course. Preference will be given to candidates currently enrolled in MSc by Research and PhD programs, and university faculty.

Pre-requisites:

1. This course is intended for candidates who have basic knowledge on statistics and epidemiology. In particular, participants should be familiar with the major epidemiological study designs, concepts of confounding and effect modification/interaction, interpretation of statistical tests, and confidence intervals. Evidence may be required during application.
2. Personal computer with installed statistical software (STATA or R). We expect a student to be able to comfortably use at least *any* one statistical software eg: SPSS/ STATA/ R/ Python/ SAS.
3. A letter from the head of the department/supervisor confirming that permission has been granted to attend the course for the entire duration.



Course Duration and Dates: Five days; **18th – 22nd June 2024**. Full-time attendance is required.

Venue and Time: MUHAS, Second Floor in CHPE Building; 9.00 am– 5.00 pm.

CPD credits: Equivalent to 30 CPD units

Important dates

1. Advertisement released on **4th June, 2024**
2. Deadline for receiving forms **12th June, 2024**
3. Deadline for receiving payments **18th June, 2024**
4. Course Dates **18th-22th June, 2024**

Language: Only English language and there will be no translation

Course fee: **TShs. 400,000/=** for non-MUHAS Tanzanian citizens and **USD 250** for Foreigners (includes breakfast and lunch).

Award: Certificate of attendance and Continuing Education (CE) Credits will be awarded after satisfactory attendance (>80%) and completion of assignments.

Submit your application through the following link <https://forms.gle/aNf9zz7mDWubQx7Z9> by 04:59 pm on 12th June, 2024.

For inquiries about the course contact the coordinator Dr. Candida Moshiro through candida.moshiro@muhas.ac.tz and Dr. Fransisko Kitali through fransisko.kitali@muhas.ac.tz or Director of Research and Publication-MUHAS, Email: drp@muhas.ac.tz