



MWANZA RESEARCH METHODS COURSE 2024

Introduction: Join us for a comprehensive two-week research methods course designed for health researchers and students in professional training programs (MSc, MMed, MPH and PhD). The course is facilitated by experts from the National Institute for Medical Research (NIMR) Mwanza Centre, Mwanza Intervention Trials Unit (MITU), Catholic University of Health and Allied Sciences (CUHAS), and the London School of Hygiene & Tropical Medicine (LSHTM). Eight modules will be covered in the course, including epidemiology, medical statistics, bioethics, field methods and implementation research, laboratory methods, qualitative research methods, clinical trials and critical reading of scientific literature and referencing.

The Course Objectives are:

1. To introduce the main methods used in health research
2. To develop expertise in the use of research methods introduced in the course
3. To enable participants to implement their future research projects using appropriate methodologies

Venue: National Institute for Medical Research, Mwanza Centre, Isamilo area, Mwanza city

Dates: Monday 20th May 2024 to Friday 31st May 2024.

Course Details: Below is an outline of main topics which will be covered in each module: -

1. Epidemiology
 - a. Introduction to epidemiological studies
 - b. Measuring of disease occurrence
 - c. Measure of effects and association
 - d. Epidemiological study designs
 - e. Random errors, bias and confounding
 - f. Addressing confounding in analysis
2. Statistics
 - a. Introduction to biostatistics
 - b. Exploration of data
 - c. Analysis of continuous variables
 - d. Introduction to simple linear regression
 - e. Analysis of binary outcomes
 - f. Introduction to logistic regression
 - g. Sample size determination
3. Implementation research and field methods
 - a. Introduction to implementation research
 - b. Questionnaire design
 - c. Field survey methods
 - d. Interviewing skills
 - e. Survey, timelines and budgeting
4. Laboratory methods
 - a. Introduction and evaluating performance of diagnostic tests
 - b. Planning project laboratory testing
 - c. Good Clinical Laboratory Practice (GCLP)
 - d. Quality management system
5. Qualitative research
 - a. Overview of qualitative research



- b. Common qualitative data collection methods
- c. Key steps in qualitative data analysis
6. Clinical trials
 - a. Introduction to randomized clinical trials
 - b. Analysis of clinical trial data
 - c. Cluster randomized trials
 - d. Reporting of clinical trial results
 - e. Principals of Good Clinical Practice (GCP)
7. Bio-ethics
 - a. Introduction to principles of Bioethics
 - b. Ethics in health research and ethical consideration
8. Proposal writing, critical reading and referencing
 - a. Key steps in preparing a research proposal
 - b. Introduction to critical reading skills
 - c. Searching the internet for referencing

Mode of teaching: Experienced researchers will share their expertise and experiences with the course participants and teach the latest developments in research techniques. This will be done in the form of:

1. Lectures
2. Practical sessions to enhance the understanding of topics and to build skills in key techniques
3. Group activities to facilitate participant interaction

Evaluation

Participants will write an examination at the course conclusion. Those scoring above fifty percent will receive a certificate of performance, while those below 50% will be awarded a certificate of attendance

Mode of Application: Please submit your application letter outlining your current work/engagement(s) and how this course will benefit your work and career. Include with your application a CV and a letter of recommendation from your line manager or supervisor (where applicable). This should be submitted to the following address not later than **Friday, 12th April, 2024, 5.00pm** East African Time.

**The Centre Manager,
NIMR Mwanza Centre
Attention: Research Methods Course Coordinator
P.O Box 1462, Mwanza, TANZANIA
e-mail: rmcourse@mitu.or.tz**

Requirements: Applicants should have at least a Master's degree (or equivalent) in a relevant field of study and either working or doing post-graduate studies in a health-related field.

Registration Fee: Selected participants are required to pay a non-refundable registration fee of 200 USD. Payment details will be provided upon selection.

NOTE: International applicants selected to attend the course are required to observe all health and visa requirements for entry to the United Republic of Tanzania.

*Join us in advancing your research skills and contributing to the future of health sciences.
Don't miss this opportunity! Apply now*