

# SHORT COURSE ON



# 28 - 29 APRIL 2024 9:00 AM - 5:00 PM

## **ABOUT THE COURSE:**

Quantitative data analysis skill has become an essential skill for the professionals in the areas of health, economics, sociology, and business. Globally, research organizations and academic institutions are shifting towards coding-heavy statistical software, such as **R** and Python, from menu-software, such as SPSS. A powerful programming language **R** is widely used for quantitative data analysis, including statistical computing and graphics generation. In response to the growing demand for data analysis with **R**, this course is the first of a series of **R** courses to be offered by the Centre for Professional Skills Development in Public Health (CPSD). It is a two-day course designed with a view to helping academics, researchers, data analysts, and professionals from different backgrounds to learn data analysis using **R** and applying this knowledge in their respective fields.

#### ABOUT **R**:

Unlike some other statistical packages like SPSS, SAS and Stata, **R** is an open-source programming language. Therefore, globally, academics, researchers, public health practitioners, and other professionals now-a-days prefer **R** over other commercial software. **R** is a complete, integrated software package which provides everything that a quantative researcher needs, including data management, data analysis, visualization, and automated reporting. Additionally, **R** is one of the most powerful statistical software for creating customized data visualization structures such as graphs, charts, maps, and many others.

#### **DURING THE COURSE YOU WILL LEARN:**

- Installation of **R**, RStudio and different **R** packages
- Use of common base @ functions for data manupulation and graphs
- Basic data management and manipulation skills using
- Use of tidyverse packages for data management and statistical analysis
- Data visualization (creating different types of graphs, charts, etc.) using ggplot2 package
- Applying different inferential statistical techniques (e.g., one-and two-sample tests for mean and proportion, analysis of variance, etc.)

#### Course Fee: BDT 8000

Registration Deadline: **Tuesday, 23 April 2024** Fee Submission Deadline: **Wednesday, 24 April 2024** ENROLMENT ON FIRST COME, FIRST SERVED BASIS WHO CAN APPLY FOR THIS COURSE?

This course is designed for academic researchers, public health professionals, market analysts, and Government/NGO employees who deal with different types of quantitative data arising from different research projects and programmes. Graduate students and PhD candidates who need to apply statistical tools for their research projects as well as who are going to apply for higher studies in developed countries will also find this course useful. The course will also be of interest to non-academic participants who have to analyse data and present research findings using intuitive visual aids to a wider group of audience like program personnel, and policy makers. Indeed, this course suits any enthusiastic learner who wishes to be good at quantitative research. It is **NOT** required to have prior knowledge of any statistical software to attend the course.

### **COURSE FACILITATOR:**



**Dr A.H.M Mahbub Latif** is a Professor of Applied Statistics and Data Science at the Institute of Statistical Research and Training (ISRT), University of Dhaka, Bangladesh. Professor Latif completed his BSc in Statistics from the University of Dhaka, Bangladesh, in 1993 and MSc in Statistics from the University of Dhaka, Bangladesh, in 1995 and the

University of British Columbia, Canada in 2001. He received his PhD. in Applied Statistics from the University of Goettingen, Germany in 2005. Professor Latif has more than 25 years of experience in research and teaching. His research interests and expertise include causal inference, designing and analysis of experiments, medical statistics, statistical computing, and public health. He has been teaching applied statistics at the University of Dhaka since 1996. He also taught Biostatistics at St. Luke's International University, Tokyo, Japan from 2016 to 2019 and was a visiting professor at the University of North Carolina at Chapel Hill, USA from July 2013 to December 2013. Professor Latif teaches Biostatistics (MPH 521) in the Master of Public Health (MPH) Programme at BRAC JPGSPH. So far, Professor Latif supervised more than 30 students for their MS thesis in Applied Statistics at the University of Dhaka. His research students mainly work in the topics of causal inference, survival analysis and optimal design and analysis of experiments. Dr. Latif is a certified instructor of tidyverse and has been using *q* software for his research and teaching for more than 20 years.

This is a non-residential **IN-PERSON** course. Refreshments and lunch will provide duing the course.

Participants are requested to bring their own LAPTOP (64 Bit Operating System) during the course. Wi-Fi facilities are available

HOW TO APPLY: Please follow this Link https://forms.gle/Bj3xedmMf3WsQZuz7 to complete the REGISTRATION FORM and submit by TUESDAY, 23 APRIL 2024. You will be notified about the payment method when your application is accepted.

#### Organised by:

Centre for Professional Skills Development in Public Health BRAC James P Grant School of Public Health 6th Floor, Medona Tower, 28 Mohakhali Commercial Area, Bir Uttom A K Khandakar Road, Dhaka-1213, Bangladesh, Phone: +880-2-48812213-18 Ext: 104; www.bracjpgsph.org Call us for more info: 01843 903011 | E-mail: cpsd@bracu.ac.bd

