





The Department of Epidemiology and Population Health at the Faculty of Health Sciences at the American University of Beirut

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the London School of Hygiene and Tropical Medicine invite you to take part in the short course entitled:

# Introduction to spatial analysis in R

Date: January 17-18, 2019 Location: VanDyck, Computer lab room 105, AUB

## **Description:**

This course demonstrates how to load and interact with spatial data in R. Day 1 will consist of a hands-on introduction to data manipulation and visualization in R. Participants will be shown how to get data in an analysis ready format and create publication quality graphs using the packages *dplyr* and *ggplot2*. Day 2 will introduce spatial data analysis in R. Participants will be shown how to visualize and manipulate spatial data, including creating buffers, performing distance calculations, and creating maps.

#### Software:

The course will be taught entirely in R. It is not necessary to have used R previously, but prior experience will help to get the most out of the course. For those who wish to register in the course, a link to a free four-hour introduction to R will be provided and would give sufficient background. R will be readily installed on the computers available at the course venue.

### **Learning outcomes:**

After this course, participants will have been shown how to:

- Load, manipulate and visualize data in R.
- Load, manipulate, and visualize spatial data in R.
- Perform basic spatial operations such as buffering and distance calculations.

## **About the moderators:**

Dr. John Edmunds is Professor at the Department of Infectious Disease Epidemiology at the Faculty of Epidemiology and Population Health at the London School of Hygiene and Tropical Medicine Dr. Christopher Jarvis is a research fellow at the Department of Infectious Disease Epidemiology at the Faculty of Epidemiology and Population Health at the London School of Hygiene and Tropical Medicine

### **Registration:**

The course is offered for free as part of RECAP, a collaborative project between the American University of Beirut and the London School of Hygiene and Tropical Medicine, funded by the UK Research and Innovation as part of the Global Challenges Research Fund (<a href="https://www.lshtm.ac.uk/research/centres-projects-groups/recap">https://www.lshtm.ac.uk/research/centres-projects-groups/recap</a>)

For more information, please contact Dr. Ghina Mumtaz at 01-350000 ext 4652 or email gm15@aub.edu.lb