

## **Day 1: Introduction to R programming**

Session 1: Starting with R and RStudio installation (K)

- What is R and how is it different from other statistical analysis software?
- Installation
- package management

Session 2: Creating dataset (K)

- Data structures
- Data input
- Value labels
- Useful functions

Session 3: Data management with dplyr (A)

Session 4: Data management (continued) (A)

## **Day 2: Advance R programming**

Session 1: Graphing (basic and ggplot2) (A)

Session 2: R programming (function and looping) (A)

Session 3: Cross tabulation (2-way, 3-way, n-way) (K)

Session 4: Combining R and Excel for tabulation (K)

## **Day 3: Statistical analysis using R**

Session 1: Basic statistics (including the concept of hypothesis testing) (A)

Session 2: OLS regression (simple and multiple regression) (K)

Session 3: Logistic regression (K)

Session 4: R markdown (A)

## **Day 4: Webscrapping, survey weight handling and workshop**

Session 1: Webscrapping and accessing data from the web (including API) (A)

Session 2: Using weights in survey data (A)

Session 3: Workshop with real data (K)

Session 4: Workshop presentation and reflection (K)