Master of Public Health **Week 42 : October 14 to 28, 2024**

Module 215: "Introduction to R for data sciences"

Coordinator: Nolwenn Le Meur **EHESP 20 Avenue George Sand 93210 LA PLAINE ST DENIS**

R is a language and environment for statistical computing and graphics. R is highly extensible and is free software. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. The course assumes no prior knowledge of R and covers the following topics.
Prerequisite: you are assumed to be familiar with elementary statistical methodology such as hypothesis testing, analysis of variance, regression models etc.

Monday October 14th	**Tuesday October 15th**	**Wednesday October 16th**	**Thursday October 17th**	**Friday October 18th**
9:00 Amphi R & RStudio - R packages - R command and script Data management - Importing (reading) - Data types and structure - Recoding variable - Exporting (saving) Nolwenn Le Meur	9:00 Amphi Quizz Exploratory Data Analysis (EDA) - Summary statistictics - Data visualization Nolwenn Le Meur	9:00 Amphi Quizz Machine learning (1) - Regression modelling with Tidymodels Nolwenn Le Meur	9:00 Amphi Quizz Machine learning (2) - Tree based models - Classification methods Nolwenn Le Meur	9:00 Amphi Project: Dataset analysis Nolwenn Le Meur
12:00 -1:00 Lunch	**12:00-1:00 Lunch**	**12:00-1:00 Lunch**	**12:00-1:00 Lunch**	**12:00-1:00 Lunch**
Practice (Rooms 410 & 413) Nolwenn Le Meur & Briana Destaffan 4 pm	Practice (Rooms 410 & 413) Nolwenn Le Meur & Briana Destaffan 4 pm	Practice (Rooms 410 & 413) Nolwenn Le Meur & Briana Destaffan 4 pm	Practice (Rooms 410 & 413) Nolwenn Le Meur & Briana Destaffan 4 pm	Project: Dataset analysis (Rooms 410 & 413) Nolwenn Le Meur 4 pm

Please note that some small changes could occur