Master of Public Health Week 42 : October 16 to 20, 2023

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 16th	Tuesday October 17th	Wednesday October 18 <sup>th</sup>	Thursday October 19th	Friday October 20th
9:00 AMPHI	9:00 AMPHI	9:00 AMPHI	9:00 GSRDC	9:00 <b>GSRDC</b>
R & RStudio	Quizz	Quizz	Quizz	
- R packages				Project: Dataset analysis
- R command and script	Exploratory Data Analysis (EDA)	Machine learning (1)	Machine learning (2)	
	- Summary statistictics	- Regression modelling	- Tree based models	
Data management	- Data visualization	with Tidymodels	- Classification methods	
- Importing (reading)				
- Data types and structure				Nolwenn Le Meur
- Recoding variable				
- Exporting (saving)		Nolwenn Le Meur		
Nolwenn Le Meur	Nolwenn Le Meur		Nolwenn Le Meur	
		Practical examples		
Practical examples	Practical examples with	with Nolwenn Le Meur	Practical examples	
with Amin Gharbi	Nolwenn Le Meur	& Amin Gharbi	with Nolwenn Le Meur	
	& Amin Gharbi		& Amin Gharbi	
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
<b>408 &amp; 409</b>	408 & 409	408 & 409	GSRDC	GSRDC
Practice	Practice	Practice	Practice	Draiget: Detect analysis
				Project: Dataset analysis
	Nolwenn Le Meur & Amin Gharbi	Nolwenn Le Meur & Amin Gharbi	Nolwenn Le Meur	Nolwenn Le Meur
Nolwenn Le Meur & Amin Gharbi				
	4 pm	4 pm	4 pm	4 pm
4 pm				