



## **Visiting Professor Program Academic Year 2024/2025**

**TEACHING COMMITMENT:** 20 hours

**COURSE TITLE**

**Lab of Data Visualization**

**TEACHING PERIOD**

2nd term

**SCIENTIFIC AREA**

Statistics

**LANGUAGE USED TO TEACH**

English

**COURSE SUMMARY**

Data visualization is an essential skill required in a data-driven world. Experts in almost every field use visualization to present and tell their findings. This course is not a course of statistical analysis or statistical models but a laboratory course (Lab) whose main objective is to provide the knowledge and tools to visualise data correctly, clearly, attractive, practical and critically. In particular, the Lab prepares attendees to create statistical graphs with ggplot2 (R package) and develop interactive web applications using Shiny (R package).

**LEARNING OBJECTIVES**

At the end of the course, the students will be able to:

- decide which data to show according to the research findings they want to communicate, and to the target audience they want to reach;
- identify which type of graph best represents the data;

- organize the information for visualization;
- create the chosen graphics using ggplot2 package;
- build interactive web applications with Shiny package;
- present live to the target audience (in a presentation) the data making them a pivotal point in an overarching story (storytelling).

The course will be entirely conducted in a PC Lab.

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### **VISITING PROFESSOR PROFILE**

The ideal candidate is an applied statistician with a strong expertise on complex data presentation and full mastery of cutting edge non commercial computer software for data visualization. Experience in dealing with socio-economic and epidemiological data is appreciated.

### **CONTACT REFERENT**

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