Visiting Professor Program  
Academic year 2022/2023

TEACHING COMMITMENT: 16 hours

COURSE TITLE
Data management and programming

TEACHING PERIOD
1st term

SCIENTIFIC AREA
Informatics

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The summary of the course is as follows:
1. Introduction to database management and programming. What is a database? What are the softwares used in database management? What types of economic-financial analyzes can be carried out through the use of data? What kinds of data exist (for example, firm-level data, surveys on individuals and households, matched employer-employee data, data relating to patents)?
2. STATA. General introduction to the software. What are .do, .dta, and .log files? How do you import a data set into STATA? How are new variables created? How do you "clean" a data set? How are basic statistical analyzes conducted (for example, univariate statistics, bivariate statistics, graphs, comparisons of means)? Introduction to multivariate analysis in STATA. Programming in STATA, loops, and the use of macro variables.
3. R. General introduction to the software and basic statistical processing with R. Basics of multivariate analysis in R.
LEARNING OBJECTIVES
The objectives of this module are as follows: (i) learn the theoretical basis of data management and programming; (ii) know the basics for managing, organizing, and processing data with the STATA software; (iii) know the basics of the R software.

TUTORSHIP ACTIVITIES
N/A

LAB ACTIVITIES
N/A

OTHER ACTIVITIES BESIDES THE COURSE
N/A

VISITING PROFESSOR PROFILE
The Visiting Professor is ideally an applied economist, with knowledge of data processing and econometric analyses. Specifically, the Visiting Professor should have knowledge of the STATA and R softwares.

CONTACT PERSON AT THE DEPARTMENT
Dott.ssa Elena Grinza
elena.grinza@unito.it