



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Laboratorio di Informatica (blended)

1920-1-E4102B004

Learning objectives

This course will introduce the SAS system and R, with a special focus on their programming languages, to allow the student to acquire the necessary knowledge and skills to use SAS and R to analyze data.

Knowledge and understanding

This course will provide the basic knowledge and understanding on:

- Structured programming
- Managing tabular data in SAS (dataset)
- Managing tabular data in R (data frame)
- Data analysis in SAS

Ability to apply knowledge and understanding

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

- Write basic SAS programs for data analysis
- Write basic R programs for data analysis

Contents

Introduction to SAS

Managing data with SAS

Introduction to R

Detailed program

Introduction to SAS, Data step e Proc step. import, Proc print

Proc contents, Proc Means, output, maxid

Proc Freq

ODS

Proc Sort, Merge

Proc Format

Introduction to R: syntax and a comparison with SAS

Prerequisites

None

Teaching methods

The course is taught in blended e-learning.

The lectures are in a computer lab and are dedicated to introducing the notions on SAS and R, as well as to analyze a case study.

There are several exercises via e-learning, where the acquired knowledge is applied to solve some problems on tabular data.

Assessment methods

Written exam consisting of writing some short SAS and R programs at the PC, to solve some problems.

The grading is based on correctness, completeness, simplicity of the proposed solution.

Textbooks and Reading Materials

- ["The Little SAS Book"](#), SAS Institute

Semester

Second

Teaching language

Italian
