

Thematic Course
 PhD in "Scienze Economiche e Statistiche"
 SEAS Department
 University of Palermo

Academic Year	2023-23
Subject	Basi di Programmazione in SAS
Instructor	Giovanni Boscaino
Course Description	SAS, which stands for "Statistical Analysis System," is a software suite developed by SAS Institute Inc. It provides a wide range of tools and capabilities for data management, analytics, and business intelligence. SAS software is commonly used in various industries and sectors for tasks such as data manipulation, statistical analysis, predictive modelling, and reporting. It offers a comprehensive set of features that enable users to extract insights from data and make informed decisions based on the analysis. SAS is known for its powerful data processing capabilities, advanced analytics algorithms, and flexible programming language. The course aims to provide students with skills related to the knowledge of the SAS language and its application to dataset management, manipulation, and analysis. The course is designed as a combination of the SAS Programming 1 and Programming 2 courses required for SAS certification (to be taken independently).
Learning Objectives	<ul style="list-style-type: none"> - Introduction to SAS: Familiarize students with the SAS programming environment and its components. - Data Manipulation: Teach basic data manipulation techniques, such as reading and writing data, creating variables, and filtering observations. - Data Transformations: Cover essential data transformations, including sorting, merging, and aggregating data sets. - Data Analysis: Introduce fundamental statistical procedures for data analysis, such as summary statistics and frequency distributions. - Reporting and Output: Demonstrate how to produce reports and output using SAS procedures and basic formatting options.
Suggested Readings	<p>SAS Certification Prep Guide: Base Programming for SAS 9 - SAS PRESS ISBN 978-1607649243</p> <p>SAS Certified Specialist Prep Guide - Base Programming Using SAS 9.4 - SAS Documentation PDF ISBN #978-1-64295-178-3</p> <p>Marasinghe, Mervyn G., Koehler, Kenneth (2018) Statistical Data Analysis Using SAS. Springer ISBN 978-3319692388</p>
Course Activity (hrs)	52
Credits	10
Assessment Methods	The SAS examination consists of a written programming test and an oral test of SAS knowledge as a supplement to the written test
Teaching Methods	The course will be held with lectures and exercises mainly on PC, actively engaging students in resolving the questions. SAS is used for real data analysis. The course takes place in Italian.
Calendar	April-June 2023
Contacts	giovanni.boscaino@unipa.it