

Certificate Course in Statistical Package for Social Science (SPSS)

Syllabus

Topics 1: Introduction to SPSS

Introduction to SPSS, Data analysis with SPSS, general aspects, workflow, critical issues,
-SPSS: general description, functions, menus, commands, SPSS file management,
defining variables, - Manual input of data, automated input of data and file import,
Class exercise

Topics 2: Introduction to Statistics

Classification, tabulation, Measures of central tendency, Measures of Dispersion,
Probability and Probability Distribution, Methods of Sampling, DOE.

Topics 3: Data manipulation

Data Transformation, Syntax files and scripts,- Output management
Class exercise

Topics 4: Descriptive analysis of data

Frequencies,- Descriptive, Explore, - Crosstabs, - Charts

Topics 5: Statistical tests

For Means (Large and Small test), T-test, One-way ANOVA, Non parametric tests,
Normality tests, test for proportion, Class exercise

Topics 6: Correlation and regression

- Linear correlation and regression, multiple regressions (linear), Class exercise

Topics 7: Multivariate analysis

Factor analysis, Cluster analysis

Summary and final exercise

Suggested Books

Field A., *Discovering Statistics Using SPSS, Fourth Edition*, SAGE, 2013

Examination Pattern:

- ✓ To evaluate the student's performance test of 200 marks will be conducted.
- ✓ Out of 200 marks there will be written test of 100 marks based on the concept of statistics.
- ✓ Practical examination of students will be conducted for 100 marks which will be based on the case studies.