



FREIE UNIVERSITÄT BOZEN
LIBERA UNIVERSITÀ DI BOLZANO
FREE UNIVERSITY OF BOZEN - BOLZANO

Fakultät für
Wirtschaftswissenschaften

Facoltà di
Economia

School of
Economics and Management

ADVANCED COMPUTER SKILLS Course Description

TEACHING LANGUAGE: English

SEMESTER: Winter 2011-2012

TOTAL LECTURE /LAB HOURS: 30

CREDIT POINTS: 5

SCIENTIFIC FIELD: ING-INF/05 Sistemi di elaborazione delle informazioni

TOTAL HOURS OF EXERCISES: 24

LECTURER: Paolo Coletti, office E203, Paolo.Coletti@unibz.it

TEACHING ASSISTANT: Damiano Somenzi, Damiano.Somenzi@unibz.it

PREREQUISITE: Computer Science and Information Processing, Statistics A, English

COURSE DESCRIPTION: this course presents (1) programming using Visual Basic for Application macros and functions; (2) data entry and handling, descriptive statistics, statistical tests and regression models using Statistical Package for Social Sciences SPSS.

LIST OF TOPICS COVERED: SPSS, basic Visual Basic for Applications.

EDUCATIONAL OBJECTIVES: to give the students knowledge and experience with different computer tools they may find useful in their future work or study career. Students get in touch with the most used statistical package and its powerful statistical tests, learn to organize statistical data and to validate and modify them, practice with simple concepts of programming functions which are the basis for learning any other programming language, learn to rationally organize a flow of activities.

TEACHING FORMAT: the lecturer shows theory, examples and exercises on a computer and students follow and repeat on their computers. Homework will be assigned and then discussed in class. Slides are provided for each lesson, videos are provided for every lesson on computers. Lecturer is in charge of SPSS theory and exercises, programming theory and examples. Teaching assistant is in charge of Visual Basic for Applications theory review and programming exercises.

ASSESSMENT: weighted average of written test on programming exercises and flowchart (60% of the grade) and practical test with a computer on SPSS (40% of the grade).

REQUIRED READINGS:

- Statistical tests for SPSS, PDF book available on <http://www.paolocoletti.it/advancedcomputer>
- Discovering Statistics Using SPSS, Andy Field, 2009, ISBN 978 1847879073
- Writing Excel Macros with VBA, Steven Roman, ISBN 0-596-00359-5

SUPPLEMENTARY READINGS:

- SPSS Survival Manual: A step by step guide to data analysis using SPSS, Julie Pallant, 2010, ISBN 978 0335242399
- Excel 2007 VBA Macro Programming, John Walkenbach and Jan Karel Pieterse, ISBN 978 0470046746