Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	Information Systems and Data Management
Course code	27269
Scientific sector	ING-INF/05
Degree	Bachelor in Economics, Politics and Ethics
Semester and academic year	2nd semester 2024-2025
Year	1
Credits	2
Modular	No

Total lecturing hours	20
Total lab hours	-
Total exercise hours	-
Attendance	suggested, but not required; for non-attending students additional study material will be provided on the course's website on OLE
Prerequisites	English understanding and reading at level B2. Basic computer usage, in particular Microsoft Windows and file handling.
Course page	The course page will be available from OLE when the course will start. For some extra video materials on lab parts, see www.paolocoletti.it/27000

Specific educational objectives	The course is designed to acquire further computer skills, in particular to raise average skills in computer basics, network usage, and data organization, to provide knowledge of legal requirements when handling data, basic data organization, and extraction techniques.

Lecturer	Andrea Molinari Office E 310 (on office hours) Andrea.Molinari@unibz.it https://www.unibz.it/en/faculties/computer-science/academic-staff/person/3420-andrea-molinari
Scientific sector of the lecturer	ING-INF/05
Teaching language	English
Office hours	6 hours, will be planned in calendar before the start of the course.
Lecturing assistant	None
Teaching assistant	None
Office hours	--
List of topics covered	• File handling, basic computer usage, Windows, computer networks and security requirements,

	data management, information systems • Microsoft Excel, graphs, formulas, functions, data management in Excel • Microsoft Access basic, querying a database.
Teaching format	Frontal lectures in standard classroom, frontal lectures in computer lab with examples and exercises assigned in class, interactive exercises in standard classroom and in computer room held by teaching assistant.

Learning outcomes	Knowledge and understanding: • Basic knowledge of computer network system • Knowledge of threats, security and legal obligations of automatic data handling • Deep knowledge of a spreadsheet program • Basic knowledge of database interaction through queries • Basic knowledge of data management Basic knowledge of information systems Applying knowledge and understanding: • Basic usage of Windows file and cryptographic systems • Advanced ability to analyse and organize economic datasets through spreadsheets • Ability in data extraction from a database management program • Information systems and their role in modern organization Making judgments • Distinguish software types and licences formats • Decide which techniques to use when organizing data Communication skills • Building efficient and appropriate graphs • Building data summaries Learning skills • Extending Excel functions though usage of online help

Assessment	1. Written test to assess knowledge on theoretical concepts (basic computer usage, computer networks and security requirements etc.). 2. Practical assessment to test data organization, handling and modification through Excel. 3. Practical assessment to test data extraction and handling ability on Access. The possibility of having mid-terms on item 1 and 2 will be evaluated during the course.
Assessment language	English
Evaluation criteria and criteria for awarding marks	Grade is the weighted average of assessment 1 (30%), assessment 2 (50%), assessment 3 (20%). File handling and severe basic computer errors count negatively on the

	final grade. Particular emphasis is given to solutions which are optimal, efficient and extensible. No differences in the assessment between attending and non-attending students.

Required readings	• Basic Computer course book, available on www.paolocoletti.it/27000 • Videos on Excel, databases and Access, available on www.paolocoletti.it/27000 • Databases course book, available on www.paolocoletti.it/27000
Supplementary readings	• Excel 2007 for dummies, Greg Harvey, ISBN 978-0-470-03737-9 • Excel 2007 Data Analysis for dummies, Stephen Nelson, ISBN 978-0-470-04599-2 Networking for dummies, Doug Lowe, ISBN 0-7645-1677-9 • Networking: A Beginner's Guide, Bruce Hallberg, McGraw Hill, ISBN 0-0722-2563-7 • Sams Teach Yourself Microsoft Office Access 2003 in 24 Hours, Alison Balter, ISBN 0-6723-2545-4