

## Syllabus Course description

Course title	Informatica
Course code	27324
Scientific sector	ING-INF/05
Degree	Bachelor in Economics and Management
Semester and academic year	2st semester 2021-2022
Year	1
Credits	5
Modular	No

Total lecturing hours	50
Total lab hours	0
Total exercise hours	50
Attendance	Required; for non-attending students, extra study material will be provided on the course's website. Non- attending students should contact the professor at the beginning of the course.
Prerequisites	English at level B2. Basic computer usage, in particular Microsoft Windows or Mac and file handling.
Course page	On the Unibz OLE website

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

Lecturer	Andrea Molinari Office Online Andrea.Molinari@unibz.it <u>https://www.unibz.it/it/faculties/economics-</u> <u>management/academic-staff/person/3420-andrea-</u> <u>molinari</u>
Scientific sector of the lecturer	ING-INF/05
Teaching language	English
Office hours	please refer to the lecturer's timetable
Lecturing assistant	None
Teaching assistant	TBD
Office hours	please refer to the teaching assistants' timetables
List of topics covered	<ul> <li>Role of computer in today's organizations, Information Systems and its components, the role of software in Information Systems, Computer networks, Information System Security.</li> </ul>



Teaching format	<ul> <li>Microsoft Excel, basic graphs, formulas, functions, financial and statistical Excel applications. Functions</li> <li>Relational databases, the SQL language, relations, queries, aggregation queries</li> <li>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.</li> </ul>
Learning outcomes	<ul> <li>Knowledge and understanding:</li> <li>Basic knowledge of information systems: hardware, software and computer networks</li> <li>Basic knowledge of data management</li> <li>Knowledge of threats, security and legal obligations of automatic data handling</li> <li>Deep knowledge of a spreadsheet program</li> <li>Basic knowledge of database interaction through SQL queries</li> </ul>
	<ul> <li>Applying knowledge and understanding:</li> <li>Advanced ability to analyse and organize economic datasets through spreadsheets</li> <li>Ability in data extraction from a database management program</li> <li>Information systems and their role in modern organization</li> <li>Basic usage of security systems for personal data</li> </ul>
	<ul><li>Making judgments</li><li>Distinguish software types and licences formats</li><li>Decide which techniques to use when organizing data</li></ul>
	Communication skills <ul> <li>Building efficient and appropriate graphs</li> <li>Building data summaries</li> </ul> Learning skills
	• Extending Excel functions though usage of online help
Assessment	<ol> <li>Written test to assess knowledge on theoretical concept (basic computer usage, computer networks and security requirements etc.).</li> <li>Practical assessment to test data organization, handling and modification through Excel.</li> <li>Practical assessment to test data extraction and handling ability on Access.</li> </ol>
Assessment language	English
Evaluation criteria and criteria for awarding marks	The final grade is the weighted average of assessment on part 1 (50%), part 2 (25%), and part 3 (25%). To be sufficient, student must achieve the minimum



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	grade (18/30) on all the three parts. Non-attending students will have extra parts in the exams, corresponding to the missing hours of attendance according to the European Credit System
Required readings	<ul> <li>Slides and other extra materials provided by the teacher</li> <li>Non-attending students will receive indications about extra materials to be prepared for the written exam</li> </ul>
Supplementary readings	<ul> <li>Basic Computer course book, available on <u>www.paolocoletti.it/27000</u></li> <li>Videos on Excel, databases and Access, available on <u>www.paolocoletti.it/27000</u></li> <li>Databases course book, available on <u>www.paolocoletti.it/27000</u></li> </ul>



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