**IT and Information Systems**

## Prof. Georgia Cristiane Maurer

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

Today companies, whose success depends on the effective use of digital innovation, need resources able to understand technology, digitalization trends and the impact that the use of new technologies has on operational and strategic management. The course aims to introduce the key concepts of technological innovation within companies and society, and explore data and information management, the Internet, digital business models, information systems and their implications in terms of organisation and management. Furthermore, it aims to provide students with the fundamental skills they need to work in a business environment - forming independent judgments - and in the academic field - combining their skills with the knowledge acquired also in other university courses.

At the end of the course, students will be able to:

* know and understand the main trends of the digital world and their impact on companies and society;
* understand the relevance of digital tools to carry out business activities and processes, with a focus on marketing and communication;
* make full use of the skills acquired during the course, in order to adopt a professional approach oriented towards the creation of new business models focused on people (from both a synergic and systemic perspective), processes, and technological infrastructures;
* put in place independent judgments on IT security, ethical, and social issues raised by the use of technologies;
* use an appropriate terminology to communicate with both IT experts and final users;
* develop the learning skills that allows to continue the learning path towards more advanced studies regarding information technology in a more autonomous way.

***COURSE CONTENT***

1. *An introduction to the role played by technologies in the business world* as a key element for successful companies;

2. *new digital trends*: digital transformation processes within companies and the technological evolution of information society;

3. *the ethical and social aspects of a digital economy*: ethical issues raised by the use of technology and the fundamental principles of IT security;

4. *from data to knowledge*: the systems for data organisation and management, the collection and processing of information at the basis of the decision-making process, with a focus on the management of Big Data and Data Analytics activities;

5. *digital markets and platforms*: the Internet, e-business, business networks and change;

6. *new media and digital marketing:* online communication and promotion strategies and tools, customer experience;

7. *new digital skills*: the evolution of skills caused by the latest technological transformation, and the introduction of new digital professions;

8. *an introduction to business information systems*: business architecture models supporting the operational, tactical, and strategical needs of companies.

9. *main excel functions*: formulas and functions, charts and usage of excel as a database

***READING LIST***

Textbook of reference:

J. Valacich-C. Schneider-A. Carignani-F. Rajola-V. Gemmo, Sistemi Informativi e Trend Digitali, Pearson Italia, 2019.

Further teaching material will be made available on Blackboard (e.g. slides, papers on relevant topics, textbooks, articles, and websites).

***TEACHING METHOD***

Frontal lectures, based on the presentation of examples, case studies, and meetings with subject matter experts, excel spreadsheets for exercising.

***ASSESSMENT METHOD AND CRITERIA***

Writen exam, consisting in 25 multiple choice questions and 1 open-ended, to be answered in 30 minutes. Each multiple choice questions question scores 1 point, the open-ended question 5 points.

The exam will be based on the topics explained in class by the lecturer and present in the textbook.

Further information will be made available on Blackboard.

***NOTES AND PREREQUISITES***

*IT skills*

The European Computer Driving Licence (ECDL) is not a prerequisite for this course and it will not replace the final exam. The academic calendar and the course programme will be made available by the lecturer during the first class and on Blackboard.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.

**OFFICE HOURS TIME AND PLACE**

The teacher receives students on Saturday mornings, in the weekly lesson’s classroom, upon request for an appointment via e-mail. The tutorial meeting can be agreed with the students also leveraging remote communication tools upon request for an appointment via e-mail.