School of Technology and Management
Course Unit Syllabus

Level of qualification:
First cycle (EQF level 6) - Bachelor
Study cycle:
Management

Course Unit: **915224/999424** - **Information systems for management**

Year 3 **Semester 5** **ISCED Code: 345** **ECTS: 4,0**

Tipe of Course Unit: Compulsory **Delivery Mode:** Face-to-face **Language of Instruction:** Portuguese

COURSE COORDINATOR: Carlos Manuel Lopes Borralho

HOURS OF WORK

TOTAL HOURS	**Contact Hours**								**Hours in autonomous work**
	Theory	Theory and practice	Practical and laboratory work	Field work	Seminar	Internship	Tutorial guidance	Other	
100		**45**							**55**

Prerequisites (if applicable):

LEARNING OUTCOMES (knowledge, skills and competence)

The purpose of this course is to provide students with the ability to discuss the concepts associated with management information systems, as well as the skills for the design and implementation of these systems.

For this purpose, the following specific objectives are considered here:

1. Understand and contextualize the role of data, information and knowledge in value creation for organizations, presenting examples of application;

2. Understand the components of an information system and the importance of alignment, differentiating the role of technologies, people and processes;

3. Understand the different approaches to planning, development and implementation of information systems, describing critical success factors associated with each phase;

4. Represent data using models, namely data flow diagrams and entity-association model;

5. Understand the working principles of database management applications, highlighting the potential and limitations associated with the use of these

CONTENTS

1. Basic concepts: systems, data, information, knowledge, digital technologies.

2. Information systems architecture: levels and dimensions of analysis

2.1. Business as the foundation for data processing and information generation

2.2. Information Systems Function

2.3. Data organization, modeling and design

3. Information Systems Management

3.1. Information Systems Planning

3.2. Information Systems Development

3.3. Implementation of information systems

4. Microsoft Access Application: Tables, Forms, Queries, Reports, and Macros

5. Enterprise Information Systems: ERPs and CRMs

5.1. Description

5.2. Technology Acceptance

5.3. Critical success factors associated with technology parameterization, adoption and effective use

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

Content 1 is fully aligned with objective 1.

Content 2 is based on objective 2.

Content 3 is aligned with objectives 3 and 4.

Finally, objective 5 is centered on content 4 and 5.

TEACHING METHODOLOGIES

The expository pedagogical method, interrogative pedagogical method and demonstrative pedagogical method will be used.

In the field of pedagogical techniques, particular emphasis will be given to brainstorming.

Two thirds of the teaching time will be used in simulated practice.

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

This course focuses on the development of basic skills to plan, develop and implement information systems that treat information as an economic resource.

Students will be confronted with real or simulated cases and problems where training in applying models and technologies is central and will take up most of the teaching time.

Knowledge is understood here as applied information, encouraging students to reflect on the use of technologies for the collection, processing and timely availability of data and information, effectively oriented to support decision-making processes.

EVALUATION METHODS

Group work and individual written test, specifically:

1. Group work - applying a data model using Microsoft Access: 40%

2. Individual written test: 60%

Final exams are waived for students whose weighted average is greater than 10 values.

MAIN BIBLIOGRAPHY

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Amaral, L., & Varajão, J. (2007). Planeamento de Sistemas de Informação. Lisboa: FCA.

Carvalho, A. (2018). Access Para Gestão: 71 Exercícios. Lisboa: FCA.

Henriques, T. (2019). Gestão de Sistemas de Informação: Pessoas, equipas e mudança organizacional. Lisboa: FCA.

Laudon, K. C., & Laudon, J. P. (2019). Management Information Systems: Managing the Digital Firm (15th Edition ed.). New York: Pearson.

Lemons, M. (2016). Microsoft Official Academic Course: Microsoft Access 2016. New Jersey: Wiley.

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