

27652 - ICT and Databases

Información del Plan Docente

Academic Year 2017/18

Faculty / School 109 - Facultad de Economía y Empresa

Degree 450 - Degree in Marketing and Market Research

ECTS 5.0 **Year** 4

Semester Second semester

Subject Type Optional

Module ---

- 1.General information
- 1.1.Introduction
- 1.2. Recommendations to take this course
- 1.3. Context and importance of this course in the degree
- 1.4. Activities and key dates
- 2.Learning goals
- 2.1.Learning goals
- 2.2.Importance of learning goals
- 3. Aims of the course and competences
- 3.1.Aims of the course
- 3.2.Competences
- 4.Assessment (1st and 2nd call)
- 4.1. Assessment tasks (description of tasks, marking system and assessment criteria)
- 5. Methodology, learning tasks, syllabus and resources
- 5.1.Methodological overview

The learning process designed for this subject is based on the use of active methodologies that require student participation, by proposing and solving exercises and problems, developing and presenting papers, etc. Moreover, in the practices at the computer lab, the student will work with the computer autonomously following the guidelines given by the teacher in order to develop the skills and abilities required by the subject.



27652 - ICT and Databases

5.2.Learning tasks

The program that is offered to students to help them to achieve the expected results includes the following activities:

- **1 Theoretical classes**, where the teacher will combine master sessions with the addition of active methodologies that encourage student participation and involvement in the development of the class.
- 2 Lessons in the computer lab, where the teacher will propose exercises about the different applications that the student must learn to handle.

5.3.Syllabus

1. Introduction.

THEORETICAL PART

- 1.1 The current Information Society.
- 1.2 Databases and Marketing. Requirements, objectives and strategic use.
- 2. Fundamentals of Databases.
- 2.1 Before databases. Data files.
- 2.2 Source of databases.
- 2.3 Defining database.
- 2.4 Characteristics of databases.
- 2.5 The DBMS (Database Management System Data).
- 2.6 Users of Databases.
- 2.7 Evolution of databases. Databases models.
- 3. Relational Databases.
- 3.1 The Relational Model. Features and advantages.
- 3.2 Fundamental concepts of relational databases.
- 3.3 Design Database. Standardization.



* Design and creation of tables.

* Integrity constraints. Validation rules.

* Relations between tables.

27652 - ICT and Databases

4. Information Systems.
4.1 Definition of Information Systems, Objectives.
4.2 Elements of Information Systems.
4.3 Systems government.
* Systems Security. Technical and organizational measures needed.
* Guarantee of privacy and confidentiality.
* Compliance with standards.
4.4 Quality, Audit and Certification.
4.5 Information Systems in Cloud Computing. Advantages and risks of cloud computing.
* Definition of Cloud Computing.
* Features.
* Strengths and weaknesses.
5. Other challenges in data processing.
5.1 Big Data.
5.2 Business intelligence.
PRACTICAL PART
1. Design, creation and updating of databases.



27652 - ICT and Databases

