30128 - IT Systems for Management

Syllabus Information

Academic Year: 2019/20
Subject: 30128 - IT Systems for Management
Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia
Degree: 425 - Bachelor's Degree in Industrial Organisational Engineering
ECTS: 6.0
Year: 3
Semester: Second semester
Subject Type: Compulsory
Module: ---

1.General information

1.1.Aims of the course

The subject and its expected results respond to the following approaches and objectives:

- This course sets up a solid base for the understanding of the basic vocabulary used by professionals who design, develop, use and maintain Information Systems in organizations. The main objective is that students become familiar with the methodologies and technologies currently used for the construction and management of Information Systems.
- Likewise, the aptitudes and attitudes of students are reinforced so they are able to work and learn autonomously, integrate knowledge, manage information, develop their critical thinking so that they can analyze and solve the problems that arise, related to information management using computer applications.

1.2.Context and importance of this course in the degree

Information Systems for Management (ISD) is a course offered in the third year of the degree. The course on Computer Science Basics, taken by the students in previous courses, is preparatory to ISD. This time location allows students to apply the knowledge acquired in this course, and particularly, use computer tools for information management, in other courses of the degree.

In this course, students are expected to develop a series of information management skills that will be very useful in the management of a company / organization. The use of ICTs is essential for that purpose.

1.3.Recommendations to take this course

Students must learn about the main components of a computer and its basic functioning, be able to search for information and skilled in the analysis of problems and in the design of algorithmic solutions to such problems.

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The learning process designed for this subject is based on the following:

Strong interaction between the teacher/student. This interaction is brought into being through a division of work and responsibilities between the students and the teacher. Nevertheless, it must be taken into account that, to a certain degree, students can set their learning pace based on their own needs and availability, following the guidelines set by the teacher.

The current subject (Information systems management) is conceived as a stand-alone combination of contents, yet organized into three fundamental and complementary forms, which are: the theoretical concepts of each teaching unit, the solving of problems or the resolution of questions and laboratory work, at the same time supported by other activities

The organization of teaching will be carried out using the following steps:

- Lectures: Theoretical activities carried out mainly through exposition by the teacher, where the theoretical supports of the subject are displayed, highlighting the fundamental, structuring them into topics and or sections, interrelating them.

- Practice Sessions: The teacher resolves practical problems or cases for demonstrative purposes. This type of teaching complements the theory shown in the lectures with practical aspects.

- Individual Tutorials: Those carried out giving individual, personalized attention with a teacher from the department. Said tutorials may be in person or online.

4.2.Learning tasks

The course includes the following learning tasks:

Involves the active participation of the student, in a way that the results achieved in the learning process are developed, not taking away from those already set out, the activities are the following:

* **Face-to-face generic activities**:

 - **Lectures**: The theoretical concepts of the subject are explained and illustrative examples are developed as a support to the theory when necessary.

 - **Practice Sessions**: Problems and practical cases are carried out, complementary to the theoretical concepts studied.

* **Generic non-class activities**:

 - Study and understanding of the theory taught in the lectures.

 - Understanding and assimilation of the problems and practical cases solved in the practical classes.

 - Preparation of seminars, solutions to proposed problems, etc.

 - Preparation of the written tests for continuous assessment and final exams.

4.3.Syllabus

The course will address the following topics:

- Introduction to Enterprise Information Systems.
- Capture and representation of information. UML modeling.
- Data management and information systems.
- Information systems for the relation with the environment of the organization.
- Basic concepts of making up information systems and the technological environment they are currently supported by.
- Implementation and maintenance of information systems.
- Success cases of implementation and use of information systems.

 Practical contents

- The initial study of the implementation of an Enterprise Information System.
- Implementation design of an Enterprise Information Systems.

4.4.Course planning and calendar

The timetable of sessions and presentation of the works

The subject has 6 ECTS credits, which represents 150 hours of student work in the subject during the trimester, in other words, 10 hours per week for 15 weeks of class.

A summary of a weekly timetable guide can be seen in the following table. These figures are obtained from the subject file in the Accreditation Report of the degree, taking into account the level of experimentation considered for the said subject is moderate.

Activity _____ Weekly school hours

  Lectures _____ 4

  Practical Activities _____ 6

The following table shows the distribution of the work of the student for this subject (in hours) during the semester:

Classroom work	*60 hours*

Lectures	26 hours
Practice sessions	26 hours
Other activities	8 hours
Autonomous work	***90 hours***
Individual work	50 hours
Team work	40 hours

Nevertheless, the previous table can be shown in greater detail, taking into account the following overall distribution:

 - 52 hours of lectures, with 50% theoretical demonstration and 50% solving type problems.

 - 8 hours of PPT presentations.

 - 90 hours of personal study, divided up over the 15 weeks of the 2nd semester.

There is a tutorial calendar timetable set by the teacher that can be requested by the students who want a tutorial

The dates of the final exams will be those that are officially published at http://eupla.unizar.es/asuntos-academicos/examenes.

The written assessment tests will be related to the following topics:

1. The initial study of the implementation of an Enterprise Information System.
2. Implementation design of an Enterprise Information System.
3. Oral presentation of the project.

4.5.Bibliography and recommended resources

http://biblos.unizar.es/br/br_citas.php?codigo=30128&year=2019