

29521 - Network and System Management

Syllabus Information

Academic year: 2023/24

Subject: 29521 - Network and System Management

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 625 - Bachelor's Degree in Industrial Processes' Data Engineering

ECTS: 6.0

Year: 2

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The objective of this subject is that the student knows the structure and functions of an operating system, as well as the basic notions of administration in a network environment. It will also introduce the use of free operating systems, which are nowadays a reference in the world of distributed computing and data storage.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), so that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement: Goal 9: Industry, innovation and infrastructure.

2. Learning results

- To know the function and structure of an operating system.
- To obtain the notions of system administration in network environments.
- Know how to use free operating systems of reference in distribution and mass storage services from data, as well as in minimal and on-board systems.
- Create and manage virtual machines.

3. Syllabus

The contents cover:

- Administration of servers, users and data in network environments.
- Start-up, configuration and use of free operating systems.
- Script programming.

Structured in the following modules:

- Part I. Systems administration.
- Part II. Operating systems.
- Part III. GNU/Linux operating system.

4. Academic activities

- Lectures: Sessions with the teacher in which the course syllabus will be explained: 30 hours.
- Practices and workshops: Sessions to solve practical cases presented by the teacher: 24 hours.
- Assessment tests: 6 hours.
- Study and preparation of the subject by the student: 90 hours.

5. Assessment system

Mixed system composed of continuous assessment tests and a global assessment test.

I. Continuous assessment tests:

- Written assessment exams: With a percentage with respect to the overall grade of 70% in total.
- Practical work: They will consist of solving proposed problems. The percentage of the overall grade of for all these works will be 30%.
- In order for the papers and exams to contribute to the final grade, they must have a minimum grade of four out of ten.

II. Global assessment test

- Written assessment exam: It will consist of two parts. A first one that will contain questions on the topics explained at throughout the term, with a weight of 70%; and a second one with questions on the practical work proposed in class, with a weight of 30%.
- In order for both parts to contribute to the final grade, they must have a minimum grade of four out of ten.

In order to pass the subject, students must have a final grade of 5 out of 10, complying with the minimum grades for each of the parts. If this requirement is not met, the maximum grade will be 4.9.