Information Systems

Academic Year: (2024 / 2025) **Review date: 06-06-2024**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: CALLE GOMEZ, FRANCISCO JAVIER

Type: Compulsory ECTS Credits : 6.0

Year : 1 Semester : 1

OBJECTIVES

For the student to be able to:

- Interact fluently with the end user. This requires knowledge of the specific language and terms used in the sector.
- Understand the map of systems and/or applications that support the daily work of the most significant business units.
- Comprehend the functions included in the most relevant systems and/or applications.
- Understand the functional causes that lead to the unique technological requirements these applications need.

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction to the Investment Banking Ecosystem
2. Product Life Cycle: (a) Stocks, Bonds, and FX; (b) Derivatives
3. Electronic Markets
4. Risk Management Concepts: Implications of Climate Change
5. Payment Methods
6. Digital Assets
7. Impact of the SDGs on the Sector: Responsible Investment

LEARNING ACTIVITIES AND METHODOLOGY

AF1: Theoretical sessions: Theoretical presentations accompanied by learning materials, such as presentation supporting slides. Presence: 100%
AF3: Theoretical-practical sessions: Combination of theoretical classes accompanied by the resolution of practical exercises. Presence: 100%
AF4: Practical assignments: Practical cases to be developed in specific laboratory sessions. Presence: 100%
AF5: Tutorials: Face-to-face and/or remote tutorials (through videoconference). Presence: 100%
AF2: E-learning activities: Forum of the course, discussion forums, visualization of pre-recorded contents, and other e-learning training activities. Presence: 0%
AF7: Individual student work: Individual learning activities that complement the rest (both face-to-face and non-face-to-face), as well as exam preparation. Presence: 0%

Teaching methodology
MD1: Lecturing with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.
MD2: Critical reading of texts recommended by the lecturer: Press articles, reports, manuals and academic papers, either for further discussion in class, or to extend and consolidate the knowledge of the subject.
MD3: Resolution of practical cases, problems, etc., proposed by the lecturer and to be attained either individually or in teams.
MD4: Exhibition and discussion in class, under the lecturer's moderation, of topics related to the content of the subject, as well as discussion on practical cases.

MD5: Elaboration of work and reports individually or in teams.
MD6: Specific e-learning activities, including watching to videos, tutorials, self-correction activities, participation in forums, and any other online teaching mechanism the lecturer deems appropriate.

In this subject there are both theoretical and practical contents, which are distributed somewhat unbalanced between Information Systems (more theoretical) and the other two courses related to this subject (Financial Sector Technologies and Technological Infrastructures).
For the more theoretical contents of the subject, remote teaching methodologies such as content recording or discussion forums can be used, as well as classic methods such as the development of individual or group work.
The practical component of this subject will focus on practical exercises to be carried out by the student to help them internalize the concepts that are taught in the presential classes. The use of trading platform simulation software is also proposed to allow the student becoming familiar with this type of technology, which is a key element in the Financial Markets.
For these more practical contents, presential attendance at the laboratories can be combined with individual or group assignments out of the classroom, bu combining the Remote Classroom with the monitoring and tutoring of students through forums and other discussion mechanisms. This part will also be carried out with other e-learning strategies, such as the self-evaluation of the achievements, all supported through Aula Global. In the event that in any practice or laboratory it is decided to use licensed software that cannot be easily acquired by students, attendance in these laboratory classes will be promoted, to the detriment of others that are more affordable for a blended methodology.

ASSESSMENT SYSTEM

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals…):	40

Final exam: 60% (minimum mark: 5 out of 10)

Work done during the course including class activities: 40%