Teaching guide

IDENTIFICATION DETAILS

Degree:	Computer Engineering
Scope	Computer and Systems Engineering
Faculty/School:	Higher Polytechnic School
Course:	THE COMPANY AND ITS PROCESSES
Type:	Basic Training
ECTS credits:	6
Year:	1
Code:	5613
Teaching period:	Second semester
Subject:	Company
Module:	Basic Training
Teaching type:	Classroom-based
Language:	Inglés
Total number of student study hours:	150

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SUBJECT DESCRIPTION

This course deals with the study of business structures as open social organization and economic unit of production. It presents the different types of companies and their economic, legal and technological factors.
It dedicates an important space to processes and information flows present in any productive structure and to the

contribution from Information and Communication Technologies (ICT), the basis that the future the Graduate in Computer Engineering must master.
It introduces the student to the technological solutions that provide the different levels of the company with integrated information management and support the relations with external related agents.

GOAL

The purpose of this course is to provide students with a basic and solid framework for understanding how organizations work, what areas they comprise, and how technology and data play a strategic role in their development. In this sense, it is a fundamental subject for contextualizing the future professional practice of students, many of whom will end up working in or for companies, either as employees, entrepreneurs or technology consultants.

PRIOR KNOWLEDGE

The ones for access to Grado.

COURSE SYLLABUS

Introduction to the company

What is a company and why does it exist?
Key internal functions of the company
Types of companies and new organizational forms
Basic introduction to economics as a social science
Macroeconomics and microeconomics
Economic models and their impact on the company

Business Development

Introduction
Business model. Business Model Canvas (Alexander Osterwalder)
Business Case.
Business Plan.
Key Performance Indicators (KPIs)

Financial and legal aspects of the company

Income statement and balance sheet
Amortization, Percentage Calculation and Ratios

Analytical accounting (costs). Deadlock

Introduction to Data Analysis

Information systems
Business Intelligence (BI)
Data visualization and collaborative tools

EDUCATION ACTIVITIES

The methodology followed in this course is aimed at achieving significant learning by the student of the fundamental concepts and techniques of the subject. For the development of competencies and abilities in this subject, both individual and group work is carried out and all the study and work carried out by the student is supervised and guided by the teacher through individual or group tutoring. FACE-TO-FACE ACTIVITY (AF1 and AF2) Composed of: 1) Participatory expository classes in which specific contents of the subject will be presented through a master lesson. 2) Solving problems or practical cases, responding to problems and exercises related to the subject, as a link between the theoretical knowledge transmitted and the application to practices or exercises independently by the students. AUTONOMOUS ACTIVITY - NOT IN PERSON (AFA1) In order for the student to achieve the learning results, the face-to-face activity must be completed with their autonomous work, which includes the continuous study of the proposed contents and the other activities proposed by the teacher. ACADEMIC MONITORING AND EVALUATION ACTIVITIES (AFE1) Students should proactively take advantage of the time allotted for resolving questions by requesting tutoring. To verify that the learning results are achieved, a variety of evaluation tests, oral or written, may be included.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
60 Horas	90 Horas
AF1 - Participatory expository lesson 36h AF2 - Problem solving or case studies 20h AFE1 - Tutoring and evaluation activities 4h	AFA1 - Personal work and independent study 90h

LEARNING RESULTS

Adequate knowledge of the concept of company, institutional and legal framework of the company. Organization and management of companies.

SPECIFIC LEARNING RESULTS

Contextualization of the company's structure, operation, organization as a system.

Applying the steps to create a business to a potential case. Evaluation of an investment in a business.

General notions of finance, accounting and business law.

Knowledge of the link between information and business management processes with technological infrastructures and computer applications managing knowledge and change in the computerization of business processes, including the basic notions of intelligence and analysis of a business to identify its current situation and take advantage of the use of data

LEARNING APPRAISAL SYSTEM

CONSIDERATIONS COMMON TO BOTH CALLS (ORDINARY AND EXTRAORDINARY)
The evaluation system includes three components that will be weighted as follows to obtain the final grade:

SE1) One or more theoretical-practical tests (60%)
SE3) Tasks, individual or group work (30%)
SE2) Active monitoring of the subject (10%).

The exams will be carried out in person, as well as the defense of practices and work.

In sections SE1) and SE3) it is necessary to obtain a minimum of 5 points out of 10 in each of the tests taken in order to pass the subject.

To score in section SE2), mere class attendance is not enough. Students must complete the proposed tasks in a timely manner.

SPECIAL CONSIDERATIONS FOR STUDENTS WITH ACADEMIC EXEMPTION

Only those students who have the express authorization of the Degree Management belong to this category. These students are required to follow the pace of the course according to the dates established in the virtual classroom.
Apart from attending, they are only exempt from carrying out the follow-up tasks that are proposed during class hours, requiring them to be carried out asynchronously within a period not exceeding 24 hours.
They can supplement class attendance by requesting and attending at least three tutorials with the teacher responsible for the subject. Like the rest of the students, they have the obligation to complete the proposed tasks in a timely manner.

SPECIAL CONSIDERATIONS FOR THE EXTRAORDINARY CALL
Students who have not passed the ordinary call, because they have not achieved the minimum grade in any of the tests associated with elements SE1 and SE3, must take the tests associated with the suspended element, keeping

the grade of the element approved for the extraordinary call.

TOTAL NUMBER OF CALLS: The student has 6 calls to pass this subject, two per academic year. The UFV Evaluation Regulations include everything related to the evaluation and consumption processes of calls.

ACADEMIC INTEGRITY: Any type of fraud or plagiarism on the part of the student in an evaluable activity will be sanctioned as set out in the UFV Coexistence Regulations. For these purposes, any attempt to defraud the evaluation system, such as copying exercises, exams, practices, works or any other type of delivery, either from another colleague, or from unauthorized materials or devices, in order to make the teacher believe that they are his own, will be considered “plagiarism”.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:
a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.
2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the Guide for the Responsible Use of Artificial Intelligence in Studies at UFV. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.
3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Amat, Oriol Accounting and Finance for Non-Financiers 2a
(Amat, Oriol Accounting and Finance for Non-Financiers 2a , Editorial Deusto||Cameron, R. Neal, L World Economic History. From the Paleolithic to the present.)

Conesa Caralt, J., Curto Díaz, J., & Gómez García, J. L. Foundations and Uses of Big Data - Enabling the Exploitation of Complex Data 2016
(Conesa Caralt, J., Curto Díaz, J., & Gómez García, J. L. Foundations and Uses of Big Data - Enabling the Exploitation of Complex Data 2016 , UOC)