

Course guide

270102 - NE - E-Business

Last modified: 30/01/2024

Unit in charge: Barcelona School of Informatics
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Optional subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: FERRAN SABATE GARRIGA

Others: Primer quadrimestre:
FERRAN SABATE GARRIGA - 10

Segon quadrimestre:
FERRAN SABATE GARRIGA - 10

PRIOR SKILLS

- Knowledge of organizations from different perspectives: organizational, legal and economic.
- Basic knowledge of information systems for companies, especially to know the concept of global business system (ERP).

REQUIREMENTS

- Prerequisite BD
- Prerequisite EEE

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

CSI2.1. To demonstrate comprehension and apply the management principles and techniques about quality and technological innovation in the organizations.

CSI2.4. To demonstrate knowledge and capacity to apply systems based on Internet (e-commerce, e-learning, etc.).

CSI2.7. To manage the presence of the organization in Internet.

CSI3.4. To develop business solutions through the deployment and integration of hardware and software systems.

CSI3.5. To propose and coordinate changes to improve the operation of the systems and the applications.

Generical:

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

TEACHING METHODOLOGY

The methods used are based on the PBL model (Problem Based Learning), resolution of cases, participatory activities and also traditional lectures. Multiple activities are conducted in groups following a stable structure of groups defined at the beginning of the course.

As a general rule is done one Theory+Problems session and one Laboratory session per week:

- Classes of theory and problems have the following dynamics: A first activity related to self-study activities entrusted to previous class, which allows control who has performed and worked into the subject. The following is a theoretical and/or practical work (a case resolution, a debate ...) that is usually in groups.
- The laboratory classes also begin by monitoring the self-study activities when it is appropriate and they are oriented to work in the SCM and CRM workshops and in the e-Commerce project. Always they are worked in group.

Based on the dynamics of class it is calculated a note of participation and a note of self-study activities. Work in the laboratory -the two workshops and the project- is presented in public. These exhibitions are part of the standard evaluation process and also of the evaluation of generic skills.

LEARNING OBJECTIVES OF THE SUBJECT

- 1.To describe the information systems that support the main business functions: sales-marketing, production, finance-accounting and human resources.
- 2.To evaluate the role of information systems serving the various administrative levels in the company and their interrelations
- 3.Explain how enterprise applications and intranets facilitate the integration of business processes and improve the efficiency of the organization.
- 4.Assessing the impact of information systems in organizations.
- 5.Demonstrate how information systems help companies to use synergies, core competencies and network-based strategies to achieve competitive advantage.
- 6.Demonstrate how management systems of the customer relationship (CRM) makes it possible to integrate all the information relating to customers and make it available to the company; and be able to think of improving customer relations with the support of CRM systems.
- 7.Describe how enterprise applications can be used in platforms for new interfunctional services.
- 8.To demonstrate how the construction of new systems produce organizational change.
- 9.Evaluate models to determine the value of business information systems.
- 10.Identify the main factors driving the internationalization of business
- 11.Compare strategies for developing global business and understand how information systems can support these strategies.
- 12.Describe the reality of the use of systems and information technology to small and medium enterprises (SMEs)
- 13.Describe the various types of electronic commerce and how this has changed the retail consumer and business to business transactions.
- 14.To evaluate the role of mobile commerce in business and describe the major e-commerce applications.
- 15.Describe the unique features of e-commerce, digital markets, digital goods and new business models.
- 16.Compare the major payment systems for electronic commerce
- 17.Consider setting up an e-commerce solution on a specific electronic business model, integrating all the theoretical receipts on electronic commerce, using an open source tool
- 18.Ability to solve problems or projects medium-structured, characterized by a lack of information, the existence of time constraints and the ability to offer multiple solutions compatible with certain requirements for improvement, innovation and quality.
- 19.To encourage a high level of demand on the quality of the projects involved, and skills to promote their creation and management.
- 20.Encourage the practice of generating new solutions and vision to bring them to practice in the context of e-business improvement projects, considering their own restrictions and market ones, and trying to achieve innovative solutions in terms of processes or organizational innovations.
- 21.Encourage the practice of having to count on others to take initiatives, making them share in your vision and your projects.
- 22.Demonstrate how systems supply chain management (SCM systems) coordinate planning, production and logistics with suppliers and be able to consider improvements in the supply chain with the support of SCM systems
- 24.Explain the opportunities of globalization and why nowadays the information systems are so vital in business.

STUDY LOAD

Type	Hours	Percentage
Hours large group	15,0	10.00
Guided activities	6,0	4.00
Hours medium group	15,0	10.00
Hours small group	30,0	20.00
Self study	84,0	56.00

Total learning time: 150 h

CONTENTS

Module 1: e-Business and Information Systems and Electronics

1.1 The Information Society and the role of information systems in business at the present time

Description:

It is explained the transforming capacity of information technologies and their implications in different areas of the Company. In this context emphasizes the fit between business and new forms of electronic communication, collaboration and partnership that allows the new IT and the Information Society that is configured.

1.2 Type of enterprise information systems

Description:

Systems are classified from two perspectives, the functional one and the users one. The interrelationship between systems is also described.

1.3 Integrated enterprise systems

Description:

It describes the business applications that supports, in an integrated, way the information needs of the company. It also presents the role of intranets and extranets to make possible the e-business, e-commerce and e-government.

1.4 Influence of information systems in organizations: understanding impacts, obtaining competitive advantages and organizational change

Description:

On the one hand, it is analyzed the economic, organizational and behavior impact of information systems and the Internet. On the other hand, some business concepts such as the Porters' model, chain value, system value are recalled, to have a framework in which to think how information systems and the Internet can help you gain competitive advantages. Finally, we discuss the organizational change that involves the introduction of a business

1.5 Systems for managing the supply chain (SCM systems)

Description:

We present the concept of supply chain and depth: 1) the information relevant to its administration, 2) in applications to support their management and 3) the role of the Internet. Finally we reflect on how to improve business value using SCM systems

1.6 Systems for managing the relationship with the customer (CRM systems)

Description:

It explains what is the management of customer relationships and those information systems to improve the link with the customers (CRM). It also explains how to improve your business through CRM

1.7 Establishment of the financial value of information systems

Description:

It is explained how to approach the financial value of an investment in information systems. Concepts of costs, benefits and capital budgeting are introduced. The financial limitations of the models are also debated.

1.8 Introduction to international information systems for global business

Description:

We present the main strategies for establishing global business, the necessary changes in the organization and the organization of information systems to global systems.

1.9 Information systems for small and medium enterprises (SMEs)

Description:

Small and Medium Enterprises have specific factors and limitations for managing and using information systems. In this context, some strategies are explained in order to make possible for small and medium enterprises to access and use advanced information systems.

Module 2: E-commerce: digital markets and digital goods

2.1 Electronic commerce and Internet

Description:

We present the latest of electronic commerce and the Internet. A key concepts of electronic commerce such as digital markets and digital goods are explained. Finally we Identify the main Business Models of the Internet

2.2 e-Commerce models

Description:

An overview of the different models of electronic commerce is exposed, with particular emphasis on B2B and B2C models.

2.3 The mobile commerce

Description:

According to the increasing importance of mobile commerce the main services and applications are presented. In addition its challenges are debated. Solutions to the problem of accessing to the information from the Webwirelessly is also commented.

2.4 Payment Systems for e-Commerce

Description:

Payment systems for e-commerce and m-commerce

ACTIVITIES

A0. Presentation of the subject and training group

Description:

Take note of the dynamic performance and doubts

Specific objectives:

24

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 2h

Practical classes: 2h

A1.1 The Information Society and the role of information systems in business at the present time

Description:

Group work on the case Accenture

Specific objectives:

1, 2

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 3h 30m

Theory classes: 1h

Practical classes: 1h

Self study: 1h 30m

A1.2 Type of enterprise information systems

Description:

Group work on the case of the "Interactive Session on page 55 of the book of support"

Specific objectives:

3

Related competencies :

CSI11. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 4h

Theory classes: 1h

Practical classes: 1h

Self study: 2h

A2 e-Commerce project

Description:

Implement the electronic store using the PrestaShop module proposed for each session, with the support of a working guide

Specific objectives:

13, 14, 15, 16, 17, 18, 19, 20, 21

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI11. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 52h

Theory classes: 4h

Practical classes: 2h

Laboratory classes: 16h

Self study: 30h

A1.3 Integrated enterprise systems

Description:

Case Discussion (base or alternative)

Specific objectives:

4

Related competencies :

CSI11. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 4h 30m

Theory classes: 1h

Practical classes: 1h

Self study: 2h 30m

A1.4 Influence of information systems in organizations: understanding impacts, obtaining competitive advantages and organizational change

Description:

Group work to integrate individual solutions resulting from self-study activities.

Specific objectives:

5, 8

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 4h 30m

Theory classes: 1h

Practical classes: 1h

Self study: 2h 30m

A1.5 Systems for managing the supply chain (SCM workshop)

Description:

Working Group on the Whirlpool case, SCM Workshop

Specific objectives:

5, 7, 18, 19, 20, 21, 22

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 16h

Theory classes: 2h

Practical classes: 2h

Laboratory classes: 4h

Self study: 8h

NTallerSCM - Presentations at the workshop for SCM

Description:

Each group makes a public presentation of work done in the workshop SCM

Specific objectives:

5, 7, 18, 19, 20, 21, 22

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 5h

Guided activities: 2h

Self study: 3h

A1.6 Systems for managing the relationship with the customer (CRM)

Description:

Working Group on the case IHop, CRM Workshop

Specific objectives:

5, 6, 7, 18, 19, 20, 21

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 16h

Theory classes: 2h

Practical classes: 2h

Laboratory classes: 4h

Self study: 8h

NTallerCRM - Presentations at the workshop for CRM

Description:

Each group makes a public presentation of work done in the workshop CRM

Specific objectives:

5, 6, 7, 18, 19, 20, 21

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 5h

Guided activities: 2h

Self study: 3h

A1.7 Establishment of the financial value of information systems

Description:

Group work on a case (or base alternative)

Specific objectives:

9

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 3h 30m

Theory classes: 0h 30m

Practical classes: 1h 30m

Self study: 1h 30m

A1.8 - A1.9 International information systems and SMEs problems

Description:

Teach concepts; Group work on a case

Specific objectives:

10, 11

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 4h

Theory classes: 0h 30m

Practical classes: 1h 30m

Self study: 2h

NProjecteE-Commerce - Public presentation of the proposed e-Commerce

Description:

Each group makes a public presentation of the proposed e-Commerce

Specific objectives:

13, 14, 15, 16, 17, 18, 19, 20, 21

Related competencies :

G1. ENTREPRENEURSHIP AND INNOVATION: to know and understand the organization of a company and the sciences which govern its activity; capacity to understand the labour rules and the relation between planning, industrial and business strategies, quality and benefit. To develop creativity, entrepreneur spirit and innovation tendency.

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 5h

Guided activities: 2h

Self study: 3h

NExamen - Review

Description:

Examination of the contents of the course

Specific objectives:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 22, 24

Related competencies :

CSI1. To demonstrate comprehension and apply the principles and practices of the organization, in a way that they could link the technical and management communities of an organization, and participate actively in the user training.

Full-or-part-time: 24h

Guided activities: 2h

Self study: 22h

Revision of examen

Description:

Request review of examination

Full-or-part-time: 1h

Self study: 1h

GRADING SYSTEM

Elements of evaluation:

- NSeg: Note for the realization of self-study and class participation at individual level.
- NTallerSCM: Note for the creation and presentation of workshop SCM, which is done in group but evaluate at individual level.
- NTallerCRM: Note for the creation and presentation of workshop CRM, which is done in group but evaluate at individual level.
- NProjecteE-Commerce: Note for the creation and presentation of e-Commerce project, which is done in group but evaluate at individual level.
- NExamen: Note the final exam

The final grade is calculated as follows:

$$NF = 20\% \cdot NSeg + 12,5\% \cdot NTallerSCM + 12,5\% \cdot NTallerCRM + 30\% \cdot NProjecteE-Commerce + 25\% \cdot NExamen$$

Due to the evaluation of the generic competence CG1, it will be based on one or several activities and its presentation in public. The activity chosen for its evaluation will be the e-Commerce project. Your assessment will have an individual grade resulting from two components, which are: 1) Group mark assessing the contingency and 2) Individual mark focused on indicators to assess the "CG1.2-Emprenedoria i Innovació".

Notes for general skills take the values: A, B, C, D, as:

- > A if the note is between 8.5 to 10
- > B if the note is between 6.5 and 8.4
- > C if the note is between 5 and 6.4
- > D if the grade is between 0 and 4.9

The qualification of "not presented" is awarded when the student body has participated in a number of assessment activities that have, as a whole, weighing not more than 12.5% of the final grade.

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