270014 - EEE - Business and Economic Environment

Coordinating unit: 270 - FIB - Barcelona School of Informatics
Teaching unit: 732 - OE - Department of Management
Academic year: 2018
Degree: BACHELOR'S DEGREE IN INFORMATICS ENGINEERING (Syllabus 2010). (Teaching unit Compulsory)
ECTS credits: 6  
Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: - Joan Carles Gil Martin (joan.carles.gil@upc.edu)
- Jose M. Cabré Garcia (jose.cabre@upc.edu)

Others: - Fco. Javier Llinàs Audet (xavier.llinas@upc.edu)
- Joan Subirats Soler (joan.subirats@upc.edu)

Prior skills

Initially, the development of this course doesn't require previous skills.

Degree competences to which the subject contributes

Specific:
CT2.3. To design, develop, select and evaluate computer applications, systems and services and, at the same time, ensure its reliability, security and quality in function of ethical principles and the current legislation and normative.
CT3.1. To understand and explain reasonably the basic economical concepts, the objectives and the instruments of economical politics and their influence in the economical activity.
CT3.2. To know and describe the main processes of the functional areas of a company and the existent links between them, which make possible the coordination and integration in a group.
CT3.3. To be able to find and interpret basic information for evaluating the economic environment of the organization.
CT3.4. To know the basic financial concepts which allow valuing the costs and benefits of a project or different alternatives, monitor a budget, control the cost, etc.
CT3.5. To identify the use possibilities and benefits which can be derived from an application in the different business software typologies and existent ICT services.
CT3.6. To demonstrate knowledge about the ethical dimension of the company: in general, the social and corporative responsibility and, concretely, the civil and professional responsibilities of the informatics engineer.
CT3.7. To demonstrate knowledge about the normative and regulation of informatics in a national, European and international scope.
CT8.1. To identify current and emerging technologies and evaluate if they are applicable, to satisfy the users needs.

General:
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.
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Teaching methodology

It consists of a mix of lectures, reading various documents, preparation of some "Continuous Assessment Practices" (PECs) and debate sessions, where the topics studied until that day are discussed and assessed.

Each topic is accompanied by explanations from the teacher and documentation to study and work; among the documents are notes, videos, readings, case studies, economical press articles, and, what we call, "Continuous Assessment Practices" (PECs). The student performs PECs in group or not, outside of class time and shall submit, individually, through "Racó of the subject", before a certain date. Throughout the course there are 6 control-debate sessions where students can express their concerns and thoughts on the matter seen until then, and the teacher can ask, orally or by writing, about this and about PECs. In each session only are evaluated, obviously, students who participate on their own initiative or those who are asked directly by the teacher. Deliveries of PECs and the answers to the "direct questions" will be decisive for the mark of the course. The voluntary participation can only improve the mark, that is never adversely affect the final grade. However, the absence of "voluntary participation" will do.

The teacher, before informing students can devote some time to ask questions during any class session and will be evaluated as theoretical "direct questions".

Learning objectives of the subject

1. Students must acquire critical thinking that would be allowed to find out what the best economic policy to an adverse situation or not in an economic system and, simultaneously, to understand why we reached this critical situation.
2. El alumno ha de ser capaz de demostrar conocimiento general del concepto de empresa y de organización i del rol del empresario, y clasificar una organización empresarial según los diferentes criterios, en especial, saber identificar las formas jurídicas más adecuadas.
3. El alumno ha de conocer el funcionamiento de la empresa como sistema, los diferentes subsistemas o áreas funcionales, y sus objetivos e identificar los modelos de organización aplicables.
4. El alumno ha de ser capaz de identificar qué tipos de aplicaciones empresariales y servicios TIC puede aplicar una organización dados unos determinados objetivos a conseguir con su uso.
5. El alumno ha de demostrar conocer las dimensiones del proceso de dirección: influencia, estrategia, planificación, organización, dirección de personas, control y decisión.
6. El alumno ha de ser capaz de identificar los intereses de los principales stakeholders de las organizaciones y conocer los principios de buen gobierno y responsabilidad social corporativa.
7. El alumno ha de ser capaz de entender la importancia y los objetivos de la gestión de los recursos humanos para las empresas y demostrar conocimientos básicos de los principales procesos en esta área.
8. El alumno ha de ser capaz de entender la importancia y los objetivos de la gestión financiera en las empresas y demostrar conocimiento básico de los principales procesos en esta área, en especial, la contabilidad, el análisis del ciclo corto -explotación- y del ciclo largo -inversión- y las fuentes de financiación adecuadas.
9. El alumno ha de ser capaz de aplicar los conceptos financieros básicos para analizar la viabilidad económica de un proyecto, analizar económicamente las diferentes alternativas de una decisión y hacer el control de un presupuesto.
10. El alumno ha de ser capaz de entender los principales conceptos comerciales tales como mercado, demanda, competencia, comportamiento del cliente y los principales métodos de su estudio.
11. El alumno ha de ser capaz de demostrar conocimientos básicos de los instrumentos de marketing y su utilización para definir el marketing-mix.
12. El alumno ha de ser capaz de demostrar conocimientos básicos de los principales objetivos de la dirección de operaciones y de los principales procesos en esta área.
13. The student must be able to understand the role that money plays in any economic system, distinguish which are the main variables that determine the well functioning of a monetary system, and find out what happens when these conditions are violated.
14. Students must be able to identify which aspects of a business process is affected and how the main laws governing the use of ICT in organizations.
15. The student should be able to understand and formulate the main concepts of national accounts, able to read and be
critical of economic indicators, know to look for accurate information about them and know the relationships between major economic variables.

16. Students must understand the role the state plays in an economic system, know the guidelines for governing a tax system, the characteristics of the main taxes of the Spanish economy and the Spanish tax system in general, and become familiar with concepts of government budget deficit and public debt.

17. The student should be able to formulate, understand and compare the major tenets of economic policy, namely the origin and evolution, and understand the implications of the application or not thesis defending.

19. The student should be able to formulate the definition of some basic economic concepts and distinguish between instruments and objectives of economic

### Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Theory classes: 45h</th>
<th>30.00%</th>
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</thead>
<tbody>
<tr>
<td>Practical classes: 13h 30m</td>
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</tr>
<tr>
<td>Laboratory classes: 0h</td>
<td>0.00%</td>
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</tr>
<tr>
<td>Guided activities: 7h 30m</td>
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</tr>
<tr>
<td>Self study: 84h</td>
<td>56.00%</td>
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</table>
Content

PART 1 - ECONOMICS

Degree competences to which the content contributes:

1.1 KEY ECONOMICS CONCEPTS

Degree competences to which the content contributes:
Description:
This topic introduces students to the economic world and economic policy, through the definitions of concepts, like inflation, recession, unemployment, active population, rate of inflation, and the analysis of the main economic policy objectives such as economic growth, price stability, efficiency, equitable distribution of income, full employment, etc.

1.2 SPECIALIZATION, EXCHANGE AND MONEY

Degree competences to which the content contributes:
Description:
This topic introduce how specialization take us to efficiency and, in turn, causes the need for the exchange. When the exchange is necessary, barter is inefficient and appears, naturally, the money. We analises the role money plays in any economic system, distinguishing which are the main variables that determine the well functioning of a monetary system and reflects on what happens when these conditions are broken.

1.3 SPANISH TAX SYSTEM

Degree competences to which the content contributes:
Description:
This topic analises the role the state plays in an economic system, studying the guidelines for governing a tax system, the characteristics of the main taxes of the Spanish economy and the Spanish tax system in general, and introduces us to concepts like State budget deficit and public debt.

1.4 THE CALCULATION OF GROSS DOMESTIC PRODUCT

Degree competences to which the content contributes:
Description:
This topic explains how to compare and measure wealth, welfare and development of countries and how ratios, which are used to compare countries, have evolved; while it gives us tools to know how to interpret and be critical of the economic indicators. This lesson finishes talking about the importance of the informal economy.

1.5 INTRODUCTION TO THE FISCAL POLICY AND MONETARY POLICY

Degree competences to which the content contributes:
This topic introduces the concept of the economic cycle. We review the history of the two major schools of economic thought in the Western world: the non-interventionist school (also known as Classical) and the interventionist school (or Keynesian). Through the analysis of New York stock exchange crash in 1929, brings us closer to understanding the functioning of markets stock and common and divergent points in the arguments of both schools.

1.6 FISCAL POLICY

Degree competences to which the content contributes:
Description: This issue introduces us to Keynesian thought. Keynes rejected the classical thesis of non-intervention economy. Keynes argues that in times of economic crisis the state has the capacity and the responsibility to intervene in the economy through fiscal policy. Create a model which show that the economy can be in equilibrium with a situation of mass unemployment; and will explain us, the state, through tax policy, increasing spending or decreasing taxes, can catalyze again economic growth.

1.6 BIS ANNEX TO THE FISCAL POLICY: THE PHILLIPS CURVE

Degree competences to which the content contributes:
Description: In this Annex, Phillips empirically examines the Keynesian theory. Phillips explores the Keynesian thesis. Try to prove that the world is empirically Keynesian. We will see, also, from the 70s of last century, the world stopped being Keynesian.

1.7 THE MONETARY POLICY

Degree competences to which the content contributes:
Description: This topic is an analysis of monetarist thought and how it works monetary policy. The monetarist, as heirs of classical thought, think the state should not intervene in economic activity. They defen in any case, the use of monetary policy. Monetary policy is an economic policy that uses the amount of money as a control variable to ensure and maintain economic stability. We will learn what are the instruments available to inject or withdraw money from an economic system.

PART 2 - BUSINESS

Degree competences to which the content contributes:

2.1 INTRODUCTION TO BUSINESS
### 2.2 MANAGEMENT, ENTREPRENEURSHIP AND INTRA-ENTREPRENEURSHIP

**Degree competences to which the content contributes:**

**Description:**
Introduction to the concept of enterprise and the role of the employer. Criteria for the classification of different types of businesses, legal forms and family business. Description of the company as a system, its subsystems and models and the basic criteria of organization.

**Degree competences to which the content contributes:**

**Description:**
Presentation of the dimensions of the management process: influence, strategy, planning, personnel management, control and decision. Clarify the ethical dimension of the company and its management regarding the influence with stakeholders. Emprendimiento e intra-emprendimiento: contextualización, Modelo de Porter y Business Canvas.

### 2.3 HUMAN RESOURCES

**Degree competences to which the content contributes:**

**Description:**
Describe the importance and objectives of the Human Resources Department, as well as the main processes of this functional area.

### 2.4 FINANCE

**Degree competences to which the content contributes:**

**Description:**
Description of the objectives of the finance Department as well as the main processes of this functional area in the short and long term, as well as funding sources. Description of accounting as an information system and as a process and the basic accounting concepts to analyze the economic viability of a project, the economic impact of a decision and track a budget.

### 2.5 SALES AND MARKETING

**Degree competences to which the content contributes:**

**Description:**
Description of the objectives of the Sales and Marketing Department and of the main concepts such as market, demand, competition, customer behavior and the main methods for market research. Description of the marketing tools and their use to define the marketing mix.

### 2.6 OPERATIONS
Degree competences to which the content contributes:

Description:
Description of the objectives of the Operations Department, as well as the main processes of this functional area.
## Planning of activities

### Unit 1.1: "Basic economic concepts"

**Description:**
Students, also actively participate in class, you must prepare the case, read the proposed articles and go to work the "Continuos assesment practices" (PECs)

**Specific objectives:**
19

<table>
<thead>
<tr>
<th>Hours</th>
<th>Theory classes: 6h</th>
<th>Practical classes: 0h</th>
<th>Laboratory classes: 0h</th>
<th>Guided activities: 0h</th>
<th>Self study: 8h</th>
</tr>
</thead>
</table>

### Unit 1.2: "Specialization, Exchange and Money"

**Description:**
Students must read and prepare the discussion and debate of three cases that will help him enter into the world of money.

**Specific objectives:**
13

<table>
<thead>
<tr>
<th>Hours</th>
<th>Theory classes: 2h</th>
<th>Practical classes: 0h</th>
<th>Laboratory classes: 0h</th>
<th>Guided activities: 0h</th>
<th>Self study: 3h 30m</th>
</tr>
</thead>
</table>

### Continuous Assessment Practice 1

**Description:**
It consists of a group of answers to questions that refer to topics 1.1 and 1.2, and "n" articles of the document "economy lectures". This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.

**Specific objectives:**
13, 19

<table>
<thead>
<tr>
<th>Hours</th>
<th>Guided activities: 0h 30m</th>
<th>Self study: 3h</th>
</tr>
</thead>
</table>

### Debate i Control about Continuous Assessment Practice 1

**Description:**
It consists of a control debate on the subject of topics 1.1 and 1.2, in which only the students involved are evaluated.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Guided activities: 2h</th>
<th>Self study: 0h</th>
</tr>
</thead>
</table>
### Specific objectives:

13, 19

### Unit 1.3: "Taxes in Spain"

**Hours:** 8h  
- Theory classes: 3h  
- Practical classes: 0h  
- Laboratory classes: 0h  
- Guided activities: 0h  
- Self study: 5h  

**Description:**  
Students must watch a video related to the unit 1.3, read the notes and articles related to this topic and actively participate in class.  

**Specific objectives:**  
16

### Unit 1.4: "The measurement of GDP"

**Hours:** 8h  
- Theory classes: 3h  
- Practical classes: 0h  
- Laboratory classes: 0h  
- Guided activities: 0h  
- Self study: 5h  

**Description:**  
Through the study of this topic 1.4, actively attendance in class and completion of PEC2, students will learn about the relativity of economic data and which rates we use to measure the welfare of countries.  

**Specific objectives:**  
15

### Continuous Assessment Practice 2

**Hours:** 3h 30m  
- Guided activities: 0h 30m  
- Self study: 3h  

**Description:**  
It consists of a group of answers to questions that refer to topics 1.3 and 1.4, and several articles of the document "economy lectures". This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.  

**Specific objectives:**  
15, 16

### Debate and Control about Continuous Assessment Practice 2

**Hours:** 2h  
- Guided activities: 2h  
- Self study: 0h
### Description:
It consists of a control debate on the subject of topics 1.3 and 1.4, in which only the students involved are evaluated.

### Specific objectives:
15, 16

<table>
<thead>
<tr>
<th>Unit 1.5: &quot;Introduction to fiscal policy and monetary policy&quot;</th>
<th>Hours: 11h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory classes: 4h</td>
<td></td>
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<tr>
<td>Practical classes: 0h</td>
<td></td>
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<tr>
<td>Laboratory classes: 0h</td>
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<tr>
<td>Guided activities: 0h</td>
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<tr>
<td>Self study: 7h</td>
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</tbody>
</table>

### Description:
Students, by studying the notes of the subject and the "Economy lectures", along with active participation in class, must assimilate the main points of the two main economic thought: Keynesian and classical. In addition, the student must understand the reasons for the necessity or not of the state intervention in economic activity.

### Specific objectives:
17

<table>
<thead>
<tr>
<th>Unit 1.6: &quot;Fiscal Policy&quot;</th>
<th>Hours: 8h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory classes: 4h</td>
<td></td>
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<tr>
<td>Practical classes: 0h</td>
<td></td>
</tr>
<tr>
<td>Laboratory classes: 0h</td>
<td></td>
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<tr>
<td>Guided activities: 0h</td>
<td></td>
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<tr>
<td>Self study: 4h</td>
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</table>

### Description:
The student, through the teacher's explanations in class, the notes of the subject, the proposed readings and the completion of the PEC 3, must assimilate the main tools of Keynesian fiscal policy.

### Specific objectives:
1, 17

<table>
<thead>
<tr>
<th>Unit 1.7: &quot;Monetary Policy&quot;</th>
<th>Hours: 5h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory classes: 2h</td>
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<td>Practical classes: 0h</td>
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</tr>
<tr>
<td>Laboratory classes: 0h</td>
<td></td>
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<tr>
<td>Guided activities: 0h</td>
<td></td>
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<tr>
<td>Self study: 3h</td>
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</table>

### Description:
The student, by the teacher's explanations in class, the notes of the subject, some readings, the completion of the PEC 3 and working on a simulator of economic policy, must assimilate the main instruments of monetary policy.
### Continuous Assessment Practice 3

**Description:**
It consists of a group of answers to questions that refer to topics 1.5, 1.6 and 1.7, and several articles of the document "economy lectures". This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.

**Specific objectives:**
1, 13, 17

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### Debate and Control about Continuous Assessment Practice 3

**Description:**
It consists of a control and debate on the subject of topics 1.5, 1.6 and 1.7, in which only the students involved are evaluated.

**Specific objectives:**
1, 13, 17

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### Unit 2.1 "Introduction to Business"

**Description:**
Students also actively participate in class, must read, view or work on the teaching materials and work on the Continuous assessment practices (PECs).

**Specific objectives:**
2, 3, 4, 14

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### Item 2.2 "Management, Entrepreneurship and Intra-Entrepreneurship"

**Hours:** 10h
- Theory classes: 2h
- Practical classes: 0h
- Laboratory classes: 2h
- Guided activities: 0h
- Self study: 6h
### Item 2.3 "Human Resources"

**Description:**
Students also actively participate in class, must read, view or work on the teaching materials and work on the "Continuous assessment exercises" (PECs).

**Specific objectives:**
5, 6

<table>
<thead>
<tr>
<th>Continuous Assessment Practice 4</th>
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<td>Guided activities: 0h</td>
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<tr>
<td></td>
<td>Self study: 2h</td>
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</tbody>
</table>

**Description:**
It consists in studying the teaching materials that relate to issues 2.1, 2.2 and 2.3 and in response to several questions of these issues apply to the case Quick & Fresh. This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.

**Specific objectives:**
2, 3, 4, 5, 6, 7, 14

<table>
<thead>
<tr>
<th>Debate and Control about Continuous Assessment Practice 4</th>
<th>Hours: 2h</th>
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<tbody>
<tr>
<td></td>
<td>Guided activities: 2h</td>
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<td></td>
<td>Self study: 0h</td>
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</tbody>
</table>

**Description:**
It consists of a session of debate and questions on the subject of topics 2.1, 2.2 and 2.3 and on the issues of Quick & Fresh case, where only students who are questioned or involved are evaluated.

**Specific objectives:**
2, 3, 4, 5, 6, 7, 14
### Item 2.4 "Finance"

**Description:**
Students also actively participate in class, must read, view or work on the teaching materials and work on the "Continuous assessment practices" (PECs).

**Specific objectives:**
8, 9

<table>
<thead>
<tr>
<th>Hours</th>
<th>Theory classes: 6h 30m</th>
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<tbody>
<tr>
<td></td>
<td>Practical classes: 0h</td>
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<tr>
<td></td>
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<td>Guided activities: 0h</td>
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<td>Self study: 12h</td>
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### Continuous Assessment Practice 5

**Description:**
It consists in studying the teaching materials that relate to issue 2.4 and in response to several questions of this issue apply to the case Quick & Fresh. This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.

**Specific objectives:**
8, 9

<table>
<thead>
<tr>
<th>Hours</th>
<th>Guided activities: 0h</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Self study: 2h</td>
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</tbody>
</table>

### Debate and Control about Continuous Assessment Practice 5

**Description:**
It consists of a session of debate and questions on the subject of topic 2.4 and on the issues of Quick & Fresh case, where only students who are questioned or involved are evaluated.

**Specific objectives:**
8, 9

<table>
<thead>
<tr>
<th>Hours</th>
<th>Guided activities: 2h</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Self study: 0h</td>
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### Item 2.5 "Sales and Marketing"

**Description:**
Students also actively participate in class, must read, view or work on the teaching materials and work on the "Continuous assessment practices" (PECs).

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<thead>
<tr>
<th>Hours</th>
<th>Theory classes: 4h</th>
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<tbody>
<tr>
<td></td>
<td>Practical classes: 0h</td>
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<tr>
<td></td>
<td>Laboratory classes: 0h</td>
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<tr>
<td></td>
<td>Guided activities: 0h</td>
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<tr>
<td></td>
<td>Self study: 6h</td>
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### Specific objectives:
- 10, 11

### Item 2.6 "Operations"

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| Specific objectives: | 12 |

<table>
<thead>
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<td>2h</td>
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### Continuous Assessment Practice 6

<table>
<thead>
<tr>
<th>Description:</th>
<th>It consists in studying the teaching materials that relate to issues 2.5 and 2.6 and in response to several questions of these issues apply to the case Munich. This practice can be answered in groups but individually delivered. During the assessment, only the delivery of individual PEC is taken into account.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific objectives:</td>
<td>10, 11, 12</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours:</th>
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</tr>
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<tbody>
<tr>
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<td>0h</td>
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### Debate and Control Continuous Assessment Practice 6

<table>
<thead>
<tr>
<th>Description:</th>
<th>It consists of a session of debate and questions on the subject of topics 2.5 and 2.6 and on the issues of Munich case, where only students who are questioned or involved are evaluated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific objectives:</td>
<td>10, 11, 12</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours:</th>
<th>2h</th>
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<tbody>
<tr>
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<td>2h</td>
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<tr>
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### Conferences

<table>
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<tr>
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<td>Laboratory classes:</td>
<td>0h</td>
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<tr>
<td>Guided activities:</td>
<td>6h 30m</td>
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<tr>
<td>Self study:</td>
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</tbody>
</table>
The assessment will be based on the following items:

- P participation in class
- PEC1
- PEC2
- PEC3
- PEC4
- PEC5
- PEC6

**Participation:** We will assess class participation in discussion sessions such as PECs and other forms of participation that the teacher wants to encourage, as well as attendance at conferences that are organized throughout the year.

**Continuous Assessment System (14 week)**

**Continuous Assessment Grade**

\[
\text{NAC} = P + 0.15 \times \text{PEC1} + 0.15 \times \text{PEC2} + 0.15 \times \text{PEC3} + 0.15 \times \text{PEC4} + 0.15 \times \text{PEC5} + 0.15 \times \text{PEC6}
\]

- P = 0 if participations < 3 or not attendance at conferences.
- P = 1 if participations =,> 3 and attendance the conferences.

PECs involve the development of practices outside the classroom and in classroom answer to a series of questions about the work done in class and view the matter until then. Answer this questions requires had delivered the practice.

**Grade Generic Skill: Innovation and entrepreneurship (level 1)**

The grade from generic skill will be an adjustment of the note from participating and the note from the second part of the course (business part), which is translated as follows:

**The grade from generic skill will be the grade of the second part of the course (business part)**

\[
\text{NCT} = \text{Grade from generic skill} = P + 0.3 \times \text{PEC4} + 0.3 \times \text{PEC5} + 0.3 \times \text{PEC6}
\]

- A in the case of NCT >= 8.5
- B in the case of NCT >= 6.5 < 8.5
- C in the case of NCT >= 5 < 6.5
- D in the case of NCT < 5
Bibliography

Basic:

Cañabate, A. Aplicaciones y servicios TIC para la empresa.

Others resources:

Hyperlink

http://www.eia.doe.gov/emeu/cabs/euro.html

http://www.ine.es/

http://www.ecb.eu/

http://www.e-tributs.net/

http://www.meh.es/

http://www.imf.org/


https://ec.europa.eu/eurostat
http://datos.bancomundial.org/