

## 27338 - Business innovation and technological change

### Información del Plan Docente

<b>Academic Year</b>	2017/18
<b>Faculty / School</b>	109 - Facultad de Economía y Empresa 301 - Facultad de Ciencias Sociales y Humanas
<b>Degree</b>	454 - Degree in Business Administration and Management 448 - Degree in Business Administration and Management
<b>ECTS</b>	5.0
<b>Year</b>	4
<b>Semester</b>	Half-yearly
<b>Subject Type</b>	Optional
<b>Module</b>	---

### **1.General information**

#### **1.1.Introduction**

It is an end of degree course that introduce the student in fundamental aspects concerning innovation management. It delves into theories of innovation, adoption and diffusion; the measurement needs; the systemic approach and the links in the innovation process; the identification of the goals and barriers; and the innovation management and performance in companies.

#### **1.2.Recommendations to take this course**

The course is available to any student interested in the understanding of the processes of generation and diffusion of innovations in the business field. Specific previous knowledge is not required but, it is recommended to have previously attended some basic and mandatory training in all areas of business management and economy. The methodology of teaching and learning recommends regular class attendance.

#### **1.3.Context and importance of this course in the degree**

Basic and mandatory training of the degree courses give priority to the learning of the functional areas of the company as production, finance, marketing, human resource management, accounting, etc. Therefore, aspects directly related to the generation and dissemination of innovations are set aside. Innovation management is key factor for business competitiveness. The subject is conceived to cover these training gaps by entering the student into the learning of main elements and tools for innovation management.

#### **1.4.Activities and key dates**

Activities and key dates will be communicated through the appropriate media at the start of the academic year, especially through the ADD at Moodle platform. The official dates of the exams will be available on the faculty Website.

### **2.Learning goals**

#### **2.1.Learning goals**

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The overall objective of the course is to train students of business management on the basics of innovation. Based on the premise that innovation is a fundamental element for business competitiveness, the innovation management process is essential to achieve strategic goals of the firm. The understanding of the innovation framework, the measurement needs and the links with other actors is essential for the management of the innovation process. In the same way it is necessary to identify the objectives, effects and impacts on performance, as well as the factors hindering innovation. Finally, the course provide training for skills acquisition to the proper internal management of innovation at the heart of the company, with particular emphasis both in the basic activities as in the available tools.

### 2.2.Importance of learning goals

Generation and diffusion of innovations are key factors for economic competitiveness. The subject extends the range of elements and specific tools for the proper management of innovation at the company in such a way that it positively impact both in private and social outcomes

### 3.Aims of the course and competences

#### 3.1.Aims of the course

1. To diagnose and argue the main aspects directly linked to the innovation management of the company.
2. To understand the process of generation and diffusion of innovations in the business field.
3. To assess the innovative activity of companies or organizations.
4. To diagnose and identify the goals, barriers and outcomes of innovation.
5. To develop the core activities in innovation management.
6. To identify, develop and implement various tools for innovation management.

#### 3.2.Competences

##### Specific competences:

- S1- Business organisation and management.
- S2- Carry out any management task in functional areas related to business innovation and technological change.
- S3- To assess the situation, evolution and challenges in companies and organizations and how to extract the relevant knowledge related to innovation and technological change.
- S4- Provide advice reports on markets, sectors, organisations and companies regarding to innovation and technological change.
- S5- To understand and apply professional standards and scientific method to economic, business, and organizational

problem solving.

**Transversal competences:**

T1- Problem solving skills.

T2- Organizational and planning skills.

T3- Ability to data collection and analysis.

T4- Ability to make decisions.

T5- Motivation to strive for quality and excellence.

T6- Ability to adapt to changing circumstances.

T7- Ability to put knowledge into practice.

**4.Assessment (1st and 2nd call)**

**4.1.Assessment tasks (description of tasks, marking system and assessment criteria)**

The student must demonstrate that he/she has achieved the learning objectives through the following evaluation activities:

**First call** , offers students two evaluation systems:

1. Ongoing evaluation of the student work from: i) their participation in class, ii) the resolution of practical cases studies submitted in writing, and iii) delivery of teamwork on a final project in writing and its presentation. Each part: participation in class, delivered cases and final project; ponders a third in the final grade. To opt for this system of evaluation, the student must obtain a minimum score of 3 points out of 10 in an exam to be carried out at the end of the semester &#8210; the continuous assessment test. If the student received a score on this test superior to that obtained through the weighted sum of the grades obtained from ongoing evaluation activities, it will prevail the exam note.

2. Global assessment. Students who do not opt for ongoing evaluation or that does not exceed the minimum score (3 out of 10) or want to improve their qualification, shall be entitled to attend the global test, prevailing in any case the best of the grades obtained. This global test consists of a final exam in writing with theoretical / practical questions to demonstrate knowledge assimilation of the theoretical concepts and the application of the practical aspects seen in cases, readings, and examples. As a guideline, the theoretical part is between 50-60% of the note, and between 40-50% the practical one.

In **second call** , the assessment is done through a global exam consisting of a written test of the same characteristics as those identified for the final examination of first call

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### Assessment criteria:

#### In continuous assessment :

1. Continued participation in class and clever contributions to the topics proposed (it will be assessed from 0-10 and will be multiplied by 1/3 in order to compute the final note). The scoring system will be linear with the number of effective entries in such a way that if a student participates the half days gets five points out of 10. It shall be multiplied by 1/3 in order to compute the final score.
2. Preparation of case studies, analysis and management recommendations in writing, and discussion in class (1/3 of the final note). Written reports must be handed in on the designated dates. To obtain the maximum score, delivery in time and form of all reports is mandatory. The lack of a report penalizes 40%, two reports 80% and three or more 100%. For the computation of this part in the final score, the note of this paragraph (0-10 points) will be multiplied by 1/3.
3. Presentation in class and delivery in writing of the teamwork, up to three people (1/3 of the note). The work is scored 0-10 based on the content and presentation and multiply such a note to 1/3 with regard to the calculation of the final grade.

To be eligible for this system of evaluation, the student must obtain a minimum score of 3 points out of 10 in a final exam which will take place at the end of the semester. If the student got a score on this exam superior to that obtained from the sum of the three items outlined above, will always prevail the highest score.

This exam will have three or four questions, theoretical and practical questions where the student should demonstrate knowledge and assimilation of theoretical concepts, complementing the answers with application of practical issues discussed in cases, readings and examples. The theoretical part will be around 50 % and 60 % of the grade, and the practical part between a 40 % and a 50 % of the grade.

#### In the global test :

The grade in which the student has acquired expected outcomes of learning, through their answers to the questions about the basic concepts of the subject, worked in class and contained in the assigned readings and resolution of case studies.

## 5.Methodology, learning tasks, syllabus and resources

### 5.1.Methodological overview

Since the Course is a fourth year course, when students have taken most of the core courses and some of the elective ones, it is understood that the learning objective of knowing how to apply to real business situations what has already been learned, has priority over the objective of learning new, additional concepts. This is why the learning process involves the discussion of case studies and the elaboration of a course Project where students have the opportunity of learning by doing.

### 5.2.Learning tasks

Theoretical classes - 25 hours

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Practical classes - 25 hours

Learning based on problems / Laboratory (ICT tools)/Seminars/Tutorials/Personal work of the student - 75 hours

Total: 125 hours = 5 ECTS

In relation to theoretical classes, they will be lectures in which the professor presents basic concepts for each topic, justifying their relevance and suggesting concepts and tools that are useful to solve case studies

In the applied classes, case studies will be solved, cases that represent business situations that are complex and not structured, so the student should identify the problem, possible ways to solve it, value them, and choose one or some of them depending on his or her decision in class.

In addition, there will be readings of academic papers and chapters that will complement the conceptual aspects of each topic presented by the professor. There will also be a team project in which students will analyze in a real organization the different concepts and issues learnt in class.

Finally, students will have the opportunity to attend individual tutorials.

### 5.3.Syllabus

Lesson 1: Innovation

1. Innovation: types, dimensions and sources
2. The importance of innovation in business
3. Models of innovation process
4. The Challenge of discontinuous innovation
5. Disruptive Technological Change.

Lesson 2: Systems of Innovation and Data - Oslo Manual

1. The OECD and the Oslo Manual
2. Economics of Innovation
3. A Measurement Framework
4. Sectoral and Regional Aspects of Innovation
5. Linkages in the Innovation Process
6. Measuring Innovation Activities: the Components and Coverage.
7. Objectives, Obstacles and Outcomes of Innovation
8. Innovation Systems
9. n-Tuple Helix Approach

Lesson 3: Managing Innovation

1. Innovation as a Learning Process
2. The Innovation Management
3. Innovation Management Tools
4. Protecting Innovation
5. The Culture of Innovation
6. Future technology trends

### 5.4.Course planning and calendar

The calendar of the theoretical and practical sessions of the subject will be public in the website, as well as the dates in which activities and project should be delivered. Evaluations and other activities will be communicated by the professors through Anillo Digital Docente and/or the notice board / website of the faculty of business and economics from the University of Zaragoza.

## 5.5. Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- BB** López Mielgo, Nuria. Cómo gestionar la innovación en las pymes / Nuria López Mielgo, José Manuel Montes Peón, Camilo José Vázquez Ordás. Oleiros (La Coruña) : Netbiblo, [2007]
- BB** Managing innovation : integrating technological, market, and organizational change / by Joe Tidd, John Bessant, Keith Pavitt. Hoboken (New Jersey) : John Wiley , 2005
- BB** Organización de Cooperación y Desarrollo Económico. Oslo Manual. Guidelines for Collecting and Interpreting Innovation Data. 3rd Edition Paris: OECD, 2005
- BB** Schilling, Melissa A.. Strategic management of technological innovation / Melissa A. Schilling.. New York : McGraw Hill Education , cop. 2017.

### LISTADO DE URLs:

Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition  
[<http://www.oecd.org/innovation/inno/oslomanualguidelinesforcollectingandinterpre>